

Corporate Responsibility Report 2021



LIFE IS FOR SHARING.

Contents

This PDF document contains all information on accountability (“Management & facts”) from Deutsche Telekom’s 2021 CR Report.

The themed pages “Green future”, “Digital life”, “New ways of working”, and “Good stewardship” may be downloaded individually using the “Print this page” function or as one document using the “Info basket” function.

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Foreword

Dear Readers,

The year 2021 was an incredible one for Deutsche Telekom. Incredibly intense. Incredibly challenging. Incredibly successful. We invested in the expansion and operation of our networks to the tune of some 18 billion euros. Consequently, by the end of the year, we had made our 5G network in Germany available to more than 90 percent of the population, for example, and we also further increased our 5G network lead over our competitors in the United States. We attracted millions of new customers and delivered strong financial results. Deutsche Telekom is one of the most valuable brands in the world and we are currently the leading European telecommunications provider by a very considerable margin. Once again, successes such as these are a great incentive to me to ensure we also take a leading role in relation to our social and ecological responsibility.

“Act responsibly” is a key and integral component of our Group strategy. To underline the growing relevance of sustainable action, Michael Hagspiel, as Head of Corporate Responsibility, has reported to me directly since January 1, 2022. Our approach of taking Deutsche Telekom in an increasingly sustainable direction is very much meeting with our employees’ approval. According to our 2021 employee survey, 84 percent identify with our ecological and social commitment.

As we all know, climate change is real – and we are all contributors to the problem. At Deutsche Telekom, we are taking action. In 2021, we again set ourselves climate targets that are more ambitious than ever. By as early as 2025, we will be climate-neutral at Deutsche Telekom. What’s more, by no later than 2040, we will be climate-neutral along the entire value chain. We have already achieved one of our initial targets. Our customers are now using our green Deutsche Telekom network to surf the net – and this is the case throughout the Group. We will be judged by our progress. Since 2021, the Board of Management’s remuneration has also been dependent on us meeting our climate targets.

However, we not only want to make Deutsche Telekom more sustainable – we also want to help our customers become more sustainable, too. That’s why we use our #GreenMagenta and #GoodMagenta labels to identify our products and services that make a clear and positive contribution to ecological or social sustainability. We also introduced the Eco Rating initiative in cooperation with four other European mobile communications operators. By the end of 2021, the environmental impact of more than 150 cell phones had been evaluated and made transparent.



Timotheus Höttges, Chairman of the Board of Management, Bonn, Germany

We are working with our suppliers to make our product range more and more sustainable. For example, we have further expanded our collaboration with Fairphone in Germany and Austria, and we have also joined forces with Samsung with the aim of launching a “green” smartphone onto the market by late 2022. Since 2021, sustainable packaging has been used for all new “T”-branded devices launched onto the market in Germany. What’s more, products such as our solutions for working from home are helping customers cut their CO₂ emissions. In 2021, more sustainable products accounted for around 42 percent of our sales.

We need to act quickly to reduce CO₂ emissions and slow down climate change. In 2021, the importance of this was made only too clear by incidents such as the disastrous flooding in Europe. I was deeply impressed by the personal efforts of colleagues immediately after the disaster, as they set out to provide help and distribute free cell phones, power banks, and quick-start packages. Our top priority was to restore the basic supply for mobile communications as quickly as possible so that victims of the flooding could keep in contact with their families and the rescue services. We managed to do this within a matter of days.

Despite the fact that the torrents of water also caused severe damage to our infrastructure in the affected areas, we were able to restore more than 96 percent of fixed network connections by the end of 2021. Our technicians provided interim solutions while the rebuilding work was being carried out.

We won't stop until everyone can #TAKEPART. This means not only ensuring technical access to fast networks, but also boosting people's ability to use digital media proficiently. We are working to ensure that all people have equal opportunity to be a part of the digital society. That's why, in 2021, we continued our campaign against online hate and for more online civil courage.

We report extensively on these and many other sustainability activities in this year's Sustainability Report.

We remain committed to the principles of the United Nations Global Compact and the German Sustainability Code. Both of these frameworks, along with the UN Sustainable Development Goals, guide us in what we do.

Digitalization offers many opportunities – it creates potential for protecting the climate and conserving resources, simplifies our working world, and enriches our personal everyday lives. We at Deutsche Telekom are working to bring about digitalization oriented to people and values. I would like to thank all those who are helping to shape our journey as we advance into a more sustainable digital future – our employees, customers, partners, and shareholders alike.

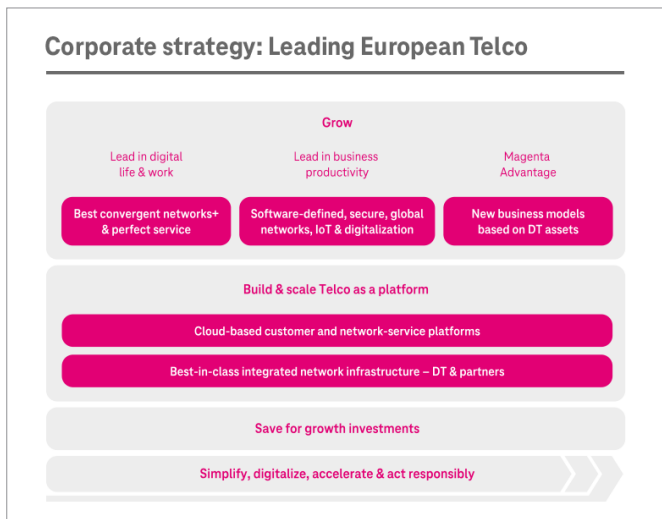
I hope you enjoy an exciting read.

Best regards,
Tim Höttges

CR strategy & management

CR strategy

Sustainability and social responsibility have played a key role in our corporate activities for more than two decades. Today, we consistently organize our core business processes on a sustainable footing. We see ourselves as a responsible company and have made that a core element of our Group strategy. We are committed to implementing sustainability along our entire value chain – and to playing an important role in meeting today’s environmental, economic, and social challenges.



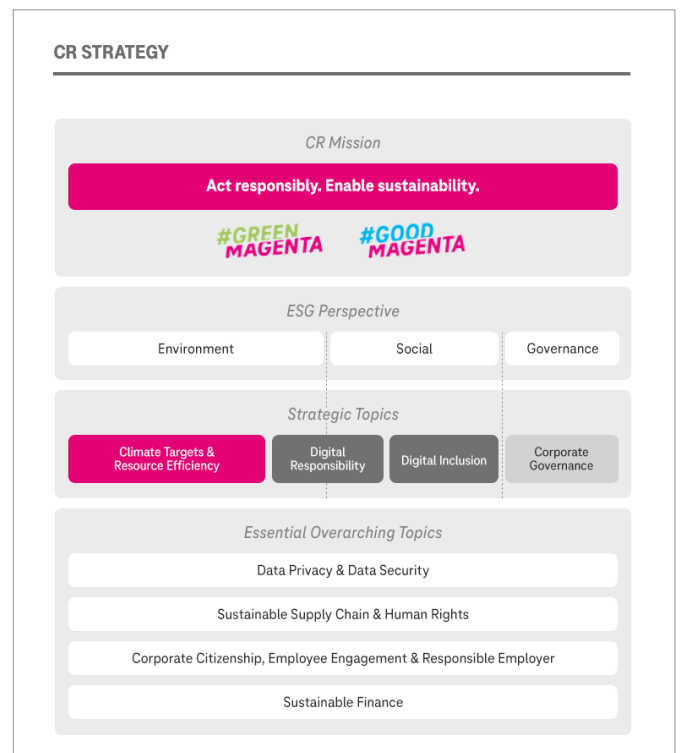
You can find additional information on our Group strategy in the 2021 annual report.



Our CR (Corporate Responsibility) strategy is derived from the Group strategy. During the year under review, we have continued to refine our CR strategy. While the CR strategy’s defining priorities remain the same, the strategy is being refined in keeping with partial overlaps that have emerged between three of the CR strategy’s action areas, “Connected life and work – enabling a sustainable lifestyle in a digital world,” “Connecting the ” and “Low-carbon society.” In particular, “Enabling a sustainable lifestyle

in a digital world” cannot be considered in isolation from the other two action areas. In addition, the issue of corporate digital responsibility has grown more important in recent years. We have acted on these developments by expanding the wording used in our action areas so that it now includes the concepts “Climate protection & resource efficiency,” “Digital responsibility,” and “Digital participation.” Underpinned by clear governance, all three action areas facilitate the company’s sustainable digitalization. Other key areas of our sustainability management remain unchanged: “Data security and data privacy,” “Human rights and sustainable supply chains,” “Sustainable finance,” “Social commitment,” and “Being a responsible employer.” In addition, the principle of responsible corporate governance remains an important component of our sustainability activities.

During the year under review, we brought many of our CR topics together under the headings #GreenMagenta and #GoodMagenta, with the aim of positioning our commitment to sustainability more strongly in our communication with stakeholder groups such as employees and customers. We also use these two categories to label products and initiatives of ours that bring sustainability benefits. These labels help us increase the transparency of our CR communication. We also aim to increase transparency for CR experts by bringing our CR strategy in line with the ESG perspectives.



The national companies use our CR strategy to determine their own sustainability activities. An integrated organizational structure helps us to closely interlink strategic management and operational implementation of our CR strategy throughout the Group. Overall responsibility for sustainability lies with the Deutsche Telekom Board of Management.

Reporting against standards

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

Sustainability targets in Board of Management remuneration

In its efforts to help combat climate change, the company needs to keep its basic energy consumption from rising, even as it continues to expand the telecommunications network. This is a minimum requirement for the medium term. To this end, we are investing in measures and programs to conserve energy, across all of our energy sources. As part of our efforts to live up to our responsibility to conserve resources and protect the climate, we run various initiatives aimed at reducing our carbon footprint. In the year under review, we gave our climate goals added priority by making progress toward the targets a performance-related component of Board of Management remuneration. As of the year under review, the members of the Board of Management are incentivized to ensure that energy consumption remains at least stable in the medium term and that CO₂ emissions are reduced. The basis for assessing progress toward the targets consists of the two ESG KPIs “Energy Consumption” and “CO₂ Emissions” (Scopes 1 and 2). In the year under review, energy consumption, at 13 323 GWh, remained stable with respect to the previous year. As a result especially of the Group's use of electricity from renewable energy sources, on a Group-wide basis, its CO₂ emissions fell sharply against the previous year, and are now at 247 kt CO₂e.

Corporate Digital Responsibility

Digitalization creates many opportunities. For example, it facilitates climate protection and resources conservation via innovations that make products more durable and energy efficient. In addition, the digital transformation is changing the workplace – via automation, for example – and it enhances our own personal everyday lives through innovations such as new mobility solutions and convenient smart-home functions. Thanks to digitalization, we can access unlimited information resources from anywhere, and we can communicate, and carry out organizational tasks, across boundaries more easily than ever before.

Day in and day out, we see our world changing, at ever-faster rates. Computers and artificial intelligence now play indispensable roles in our daily lives. Most of the time, they help us without our even noticing their operation. All of this is the beginning of a development that we can no longer stop – and that we don't

want to stop. All enthusiasm notwithstanding, however, we shouldn't head into the digital future blindly. As we move forward, we should seek to define a clear direction and a binding framework for that future. We at Deutsche Telekom are working to bring about digitalization oriented to people and values. “Corporate digital responsibility” (CDR) refers to efforts to manage the opportunities and risks of the digital transformation responsibly. The goals of our CDR activities are twofold: to prevent negative impacts, and to help shape the digitalization process in a positive way.

Through interdisciplinary collaboration across a variety of business areas, we focus on all facets of corporate digital responsibility.

For example, we take great care to ensure that all processing of our customers' personal data is carried out transparently and responsibly, in ways that also safeguard individual customers' privacy and security. Further information about this area is available in our publications on data privacy, in our status report on data privacy and in our transparency report. Also, in our Digital Ethics Guidelines on AI, we describe our responsible use of artificial intelligence (AI) in connection with our products and services.

Digital participation is a core aspect of our commitment. We are working to ensure that all people have equal opportunity to be a part of the digital society. Our focuses in this regard include the technical aspects of broadband access (“access”), rates and devices that are affordable for all budgets (“affordability”), and users' ability and desire to use digital media competently (“ability”). Many people find it challenging to use the new media, and this can be a barrier to digital participation. Via a diverse range of projects and measures, we are working to help build users' media and democracy competence. For example, our “Teachtoday” and “SCROLLER” initiatives promote media literacy on the part of children. In cooperation with the German National Association of Senior Citizens' Organisations (BAGSO), we are working to help senior citizens navigate the digital world. Our Digitally secure (“Sicher digital”) guide presents ten rules for digital security.

Upholding of human rights such as the rights to freedom from discrimination, to privacy, to data privacy and protection and to freedom of expression and information is a key element of responsible digitalization. We take great care to ensure that all processing of our customers' personal data is carried out transparently and responsibly, in ways that also safeguard individual customers' privacy and security. The obligation to respect human rights is enshrined in our basic rules and guidelines. This obligation applies not only to our company, but also to our business partners – and to our approximately 20 000 suppliers, located in a total of over 80 countries. We expressly require our suppliers to join us in our responsibility, with a view to ensuring that human rights are also respected within the sphere of influence that we have outside of our Group.

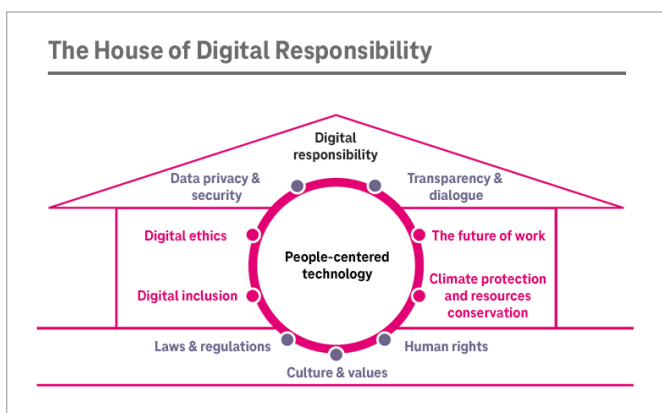
Digital responsibility is also relevant with regard to environmental and climate-protection issues. By developing products that are innovative and sustainable, we help our customers reduce their own carbon footprints – and thereby contribute to climate protection. In addition, to help our customers find sustainable solutions,

we highlight products and services that are environmentally and climate friendly. We do this with our #GreenMagenta Label (for products and services) and our Eco Rating scheme (for mobile phones). Our “Smart Innovations” also contribute to society’s efforts to improve its ecological balance. There is no getting away from the fact that the network infrastructure runs on energy. To ensure that the network’s energy requirements do not contribute to global warming, we draw 100 percent of the energy for our network infrastructure from renewable energy sources, and we are constantly working to improve our energy efficiency. We are constantly striving to reduce our impact on the environment. Our #GreenMagenta environmental program comprises ambitious climate objectives and resources-conservation measures.

Throughout the pandemic of the past two years, the world has seen how digitalization can transform the workplace with new opportunities and modes of work. We are helping to shape the digital transformation in the workplace, in a responsible manner, and we are continuing to support our employees in addressing the challenges the transformation has brought. Our efforts to reinforce our employees’ digital competencies include our “youlearn” training initiative. In addition, in close consultation with our Group Works Council, we have adopted a “Manifesto on Agile Working,” a set of guidelines for the digital workplace.

Our commitment to digital responsibility

The technological development needs to be more value-oriented. We see ourselves as having a responsibility to implement ethics within technologies and to make technologies accessible to everyone. In our Corporate Digital Responsibility framework, which we publish in 2022, we have set forth our perspectives on the far-reaching subject area of digital responsibility. In that framework, we put people in the central focus of our efforts to bring a sense of responsibility to the digital world. The centerpiece of the framework is our “House of Digital Responsibility,” which is all about human-centered technology.



Our CDR framework and our House of Digital Responsibility are both based on our guiding principles. The foundation of this basis is the commitment to act in accordance with laws and regulations, with human rights and with basic values such as cultural values. Conceptually, we place a number of key areas on this foundation – digital ethics, digital participation, the future of work, and climate

protection and resources conservation. These key areas serve as orientational aids for our activities. The foundation and all of these areas, in turn, are housed under the umbrella of principles that constantly guide our efforts, namely data privacy and security, and transparency and dialog.

Outside of our own corporate sphere, our efforts and commitments in this area include active involvement in various alliances and partnerships, such as the German Association for the Digital Economy (BVDW), econsense, a network of internationally operating companies, and the Digital networking charter (Charta digitale Vernetzung). In addition, we are a member of the “Corporate Digital Responsibility” initiative (only available in German) of the Federal Ministry of Justice. In April 2021, we signed the Initiative’s CDR Codex, thereby committing ourselves to observe a set of concrete principles and to regularly publish a relevant progress report. The first report is scheduled to be published in June 2022.

CR controlling – measuring and managing sustainability

We use an IT-based data collection system to record environmental, social, and governance (ESG) data. It supports standardized, mandatory processes at the Group and national levels and enables Group-wide benchmarks.

We use this data primarily to calculate relevant indicators and our ESG KPIs (Key Performance Indicators), which we use to measure and control our CR performance throughout the Group. Our CR controlling ensures that we can collect ESG data and KPIs transparently, and in a timely manner, and report them in the “Management & Facts” section and the interactive benchmarking tool of this CR report.

In recent years, the issue of sustainability has grown increasingly important for our company’s strategic development. This is reflected in the fact, for example, that “Act responsibly” has been a key element of our Group strategy since 2019. Also, since 2021, calculation of Board of Management members’ remuneration takes account of development of energy and CO₂e-emissions KPIs. This is one of the main reasons why, in the year under review, we added CR controlling, as a strategically relevant process, to our Internal Control System (ICS). The ICS principles defined for CR controlling are oriented to high data quality, process timeliness and transparency, and Group-wide coherence of performance indicators. In the coming years, we plan to introduce “transaction controls.” In the most important national companies, such controls will intensify internal auditing of processes relative to energy consumption and the purchase of certificates for renewable energies and CO₂ emissions.

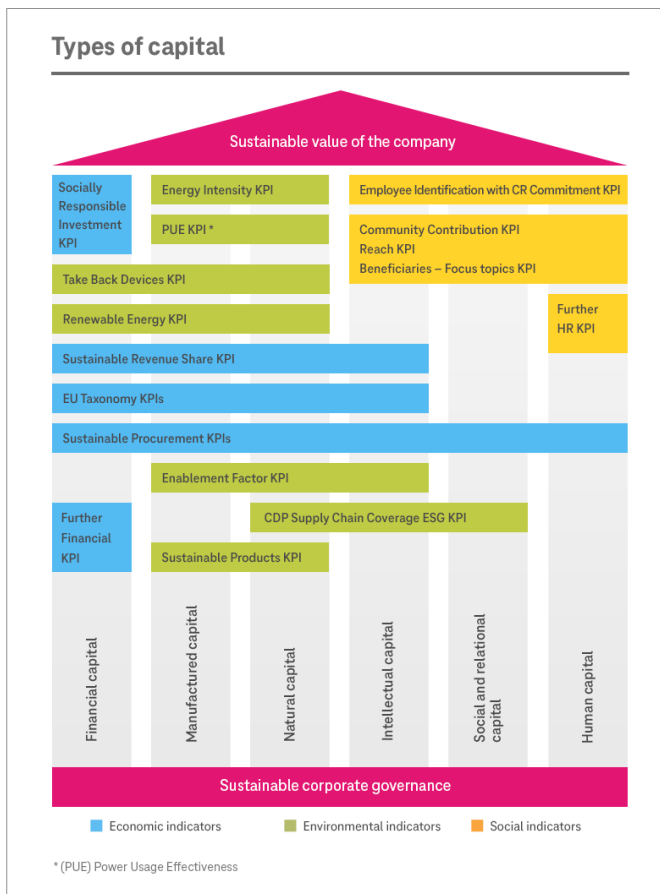
We are continuously improving our performance indicator system on the basis of internal and external requirements. In 2021, we added new performance indicators, for the areas of resource conservation and the circular economy, in order to be able to measure and communicate progress via the #GreenMagenta program transparently.

In addition, we revised the KPIs for our social commitment.

Our management tools – the ESG key performance indicators

ESG KPIs (key performance indicators) are used as management tools for our CR activities. Since they are highly relevant, we also publish them in the combined non-financial statement of our annual report. Our national companies assist in the collection of Group-wide ESG KPIs by recording CR data themselves. These national companies represent 99 percent of the Group's net revenue.

For the purpose of integrated financial and sustainability reporting, the KPIs map all six types of capital (see diagram).



Reporting against standards

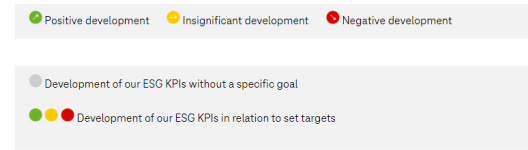
Global Reporting Initiative (GRI)

- GRI 102: General Disclosures

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

Development of our ESG KPIs



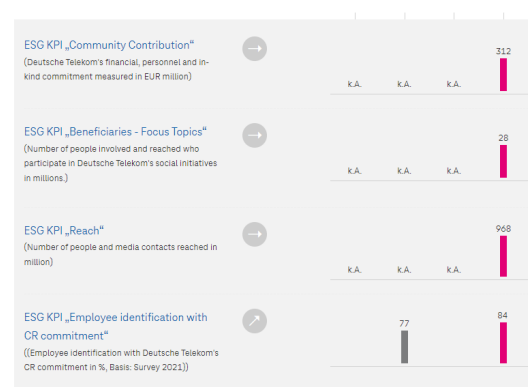
Governance/Economic



Environmental



Social



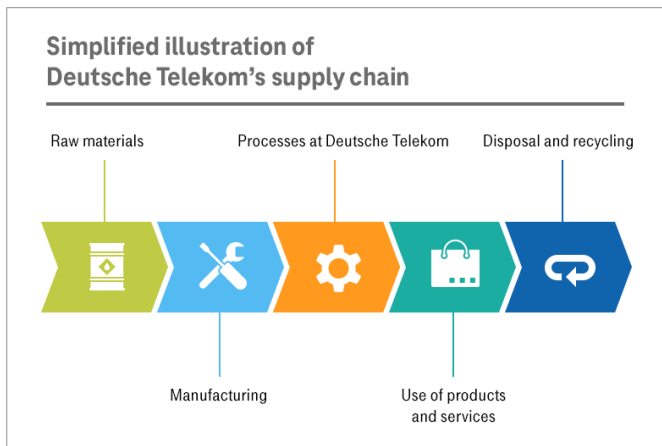
Business activities and organization

Our website presents a description of our business activities, and our 2021 annual report includes detailed information about the development of our business.

Our Group is broken down into five operating segments:



We are convinced that commercial, social, and ecological aspects can complement each other. We aim to make a positive contribution to sustainable development throughout our entire value chain.

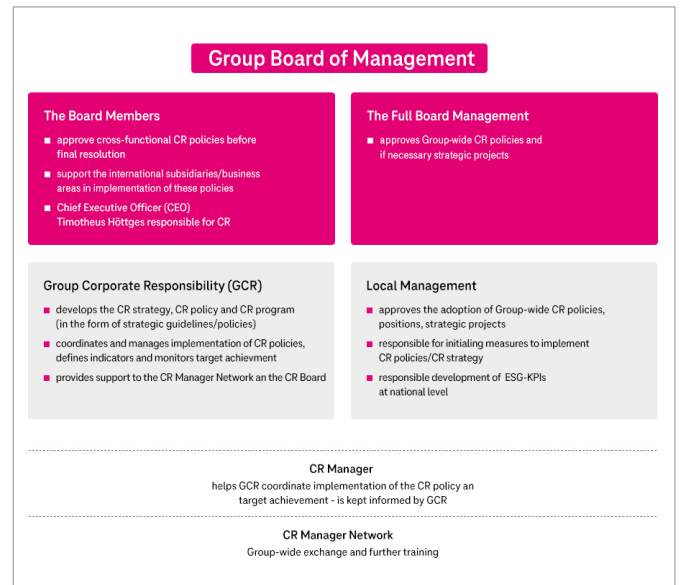


Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-1, GRI 102-2, GRI 102-6, GRI 102-7, GRI 102-18, GRI 102-1, GRI 102-20 (General Disclosures)

Current organizational structure



The overall responsibility for Corporate Responsibility (CR) lies with our Board of Management; it deliberates and decides on important matters pertaining to CR. The Group Corporate Responsibility (GCR) department develops Group-wide policies and guidelines with the goal of steadily advancing the corporate culture with regard to sustainable innovation and social responsibility. As of January 1, 2022, GCR has been transferred from the Human Resources and Legal Affairs Board department into the area of the Chief Executive Officer. By taking this step, and including ESG targets in Board of Management remuneration, we are again highlighting the great importance that Corporate Responsibility has for our Group.

In connection with the move, Birgit Klesper, who has headed the CR department for 13 years, as Senior Vice President for Group Corporate Responsibility, will hand over the leadership of the department to Michael Hagspihl. Birgit Klesper has helped the Group reach key milestones in efforts to enshrine CR in Group principles, and to emphasize the importance of CR. These accomplishments range from development of the company's CR strategy to integration of "Act responsibly" within the Group strategy. Numerous successes such as the following demonstrate that Deutsche Telekom is well on its way to becoming a leading sustainable telco: we are listed in the Dow Jones Sustainability Index, as the third-best telecommunications company worldwide, and as the best in Europe; we are included, for the 6th time in a row, in CDP's "A List for Climate Change," in recognition of our efforts to combat climate change; and we are the recipient of intense media coverage, and of a highly positive public reception, for our policies and activities against online hate speech, discrimination, and fake news. Birgit Klesper retired as of January 1, 2022. In order to always ensure a direct exchange between CR and our core business, the CR Board advises GCR. This board is made up of the heads of the main Group units.

The managements of the different business units and national companies are responsible for implementing our CR strategy. Under the leadership of GCR, they collaborate within the international CR Manager Network, with a view to coordinating their activities and learning from each other. During the year under review, the network included more than 100 CR managers, representing a total of 34 companies, in a total of 20 different countries. The international CR Manager Network's members regularly share best practices and discuss new challenges. The agendas for the body's regular virtual meetings in 2021 included issues relating to the European Green Deal and to the topic of impact assessment.

Our CR Policy provides the formal, mandatory framework for the sustainability management activities at all Group units. The CR Policy has also been successfully introduced in a majority of European national companies since 2017.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–20 (General Disclosures)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

2021 CR program – targets, activities, and deadlines

In the CR program framework, we define targets and report on progress regarding their implementation. In the reporting year, we once again aligned the CR program in accordance with the four pillars of our Management & Facts section – Strategy, Economy, Environment, and Social.

Risk and opportunity management

For us, comprehensive risk and opportunity management also means considering the opportunities and risks arising from ecological or social aspects, or from the management of our company (environment, social and governance – ESG). We actively and systematically involve relevant stakeholders in order to identify which current and potential ESG risks and opportunities are important for Deutsche Telekom. We also participate in a number of working groups and committees. We continuously track ESG issues and systematically ascertain our stakeholders' positions on these matters.

Important tools we use for this purpose are:

- Our risk management system, which systematically identifies, evaluates, and addresses relevant risks
- Our (annual) evaluation of emerging risks, which provides an overview of new and long-term trends in external risks

- Our involvement in working groups and committees, numerous national and international business associations, and social organizations (GeSI, Federation of German Industries, Bitkom, econsense, and the German National Association of Senior Citizen's Organizations, for example)
- Stakeholder dialog formats organized by us
- Our various publications, such as the press review and newsletters
- Our internal compliance evaluation, which also examines the most important sustainability risks
- In the year under review, we refined our annual materiality assessment process by identifying and evaluating sustainability opportunities and risks on the basis of materiality analysis

In our annual report we also provide information about the following issues, which we have defined as key aspects of our risk and opportunity management:

- Climate protection
- Suppliers
- Health

In addition, we welcome the aims behind the Task Force on Climate-related Financial Disclosures (TCFD) and are actively working to implement them. In addition to studying physical risks, we are now also analyzing transitional risks (threats arising from sudden adaptations to climate change made by economic sectors) in detail. Detailed information on the TCFD is available here.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–11 (General Disclosures)
- GRI 102–15 (General Disclosures)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

Emerging risks

Every company needs to strive to predict, and prepare for, any long-term risks that could arise in the future. Although such risks are difficult to identify, they can have considerable impacts. In order to protect our company and our customers against such risks, we therefore need to act early and effectively to identify and evaluate them and to develop strategies for reducing them. The tasks of our risk management system, which systematically identifies, evaluates and manages relevant risks and opportunities, include considering such emerging risks for Deutsche Telekom in a comprehensive way.

Emerging risks are grouped into categories of events, including political, economic, social, technological, ecological and regulatory/legal events. The factors used to evaluate them include a risk's newness, its rate of change, and its relevance for our industry and business in the coming years.

The following emerging risks are becoming increasingly relevant:

Technological risks

Cybercrime is growing extremely rapidly. As computing power grows exponentially, trends tied to that growth – including the digital transformation, use of devices such as computers and smartphones, and machine learning – are outpacing improvements in security. Since the numbers of available points of attack in companies keep growing, and cybercrime keeps getting more and more lucrative, the numbers of cyberattacks will continue to increase.

The risks in this context include hackers' use of ransomware that can block access to data and key systems (hackers can introduce ransomware into target systems by exploiting security vulnerabilities in company networks and by sending phishing emails to trick users into entering login data that hackers can then capture and use themselves). AI-supported cyberattacks are becoming increasingly autonomous and self-propagating, and able to target entire network environments instead of being limited to known or general vulnerabilities.

The security measures currently used to guard against such threats include: putting more-robust IT-control environments in place, to enhance protection against common types of attacks; use of machine-learning techniques (use of artificial intelligence for detection of network penetration, and for reinforcement and enhancement of capabilities for responding to and warding off detected attacks); improvement of malware detection; use of secure user authentication techniques; and efforts to raise users' awareness about cyberthreats.

Environmental risks

Natural disasters such as floods, severe storms (wind, hail, tornadoes, hurricanes), heat waves, wildfires and earthquakes are occurring increasingly frequently. The physical impacts of our changing climate include ocean warming, higher levels of heat and humidity, and increasing average temperatures. Consequently, extreme weather scenarios can be expected to intensify in the future.

As more and more natural disasters occur, certain regions become more vulnerable to floods, storms and heat waves, and this relationship could increase the numbers of network failures in our network infrastructure (direct damage) and put power and water supplies at risk (indirect damage). This, in turn, could lead to losses of revenue and lower customer satisfaction.

The measures for reducing the likelihood of such network failures includes analyzing past disasters, and predicting possible future disasters, in order to identify weaknesses in areas that are particu-

larly at risk in the face of more-severe and more-frequent disasters. Identified weaknesses in our networks would be addressed, and reinforcements introduced, in order to enhance network robustness against disasters. In addition, the company has detailed business-continuity and disaster-recovery plans in place for cases in which such failure events occur nevertheless.

Economic risks

While a given pandemic cannot be predicted, historical data show that regional and global pandemics have occurred increasingly frequently in the past few decades. A new pandemic can drastically hamper global economic growth. It can affect multiple industries and supply chains, and it can have a major impact on the ways in which we live and work.

The related risks can include increases in payment delays and payment defaults on the part of business customers and consumers, leading to increases in our bad debts. Related restrictions on public life could force businesses to close, and related travel restrictions could hamper our customer growth and reduce our roaming-traffic volume. In addition, companies could see a need to reduce their orders of IT services and equipment. Restrictions on social contacts, and requirements that instruction (schools, etc.) go online, could reduce our overall efficiency. In the case of a severe pandemic, such restrictions could reduce the size of our workforce, temporarily or even permanently. All of this could lead to revenue decreases.

Our Group Situation Center monitors all relevant developments that could occur in a pandemic. In the framework of our crisis management, it issues pandemic guidelines, and provides suitable hygiene and health & safety equipment for all of the company's stores, offices and infrastructure locations, in order to protect customers and employees. Other Group-wide measures that are taken to reduce the impacts of a pandemic include ramping up and stabilizing our networks, in order to ensure that they can handle additional peak loads of voice and data traffic. In the interest of minimizing infection risks, employees are permitted to work from home, and our sales and service teams are free to make adjustments to changed conditions and requirements.

You can find more details on our various measures here

Values and Guiding Principles

Corporate responsibility (CR) is based on shared values. To solidify our corporate culture, we convey the basic values of our company to all employees through binding guidelines (Guiding Principles). With various measures, such as reviews and updates, and an annual "Guiding Principles Day," we remind employees of these values again and again, and enshrine them in our everyday work. And the measures have been successful. According to our pulse survey in November 2021, 79 percent of our employees agree that the Guiding Principles are actually being applied to our everyday work (previous year: 80 percent). The corresponding agreement figure among our executive staff was 89 percent.

In addition, we use our Code of Conduct and Code of Human Rights & Social Principles as well as the Supplier Code of Conduct to ensure that everyone at our Group and our partners demonstrates corporate responsibility in their conduct. The Codes also serve as the basis for our compliance management system, which guarantees that our business activities are in compliance with laws and regulations. We also use the Code of Conduct & Social Principles to enshrine ethical standards and, in particular, the protection of human rights, throughout the Group.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)
- GRI 102–16 (General Disclosures)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 4 (Elimination of all forms of forced and compulsory labor)
- Principle 5 (Abolition of child labor)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

Certified health, safety and environmental management: almost all workstations covered

Our integrated management system for Health, Safety and Environment (HSE) contributes at Group level to making sustainability a component of all our business processes and of our employees' everyday lives.

It helps us to systematically plan, implement, and improve our processes in the areas mentioned. This promotes the health of our employees and also has a positive effect on their performance. It also helps us to bid on new projects in which potential commercial customers require their suppliers to provide HSE certificates.

Our Group-level HSE management system is covered by an umbrella certificate based on the international standards ISO 45001 (formerly OHSAS 18001) for occupational health and safety and ISO 14001 for environmental management. For some units, it also covers international standard ISO 9001 for quality management.

Some of the national companies are not covered by an umbrella certificate because they have their own certifications, some of which are even more comprehensive. This is the case in Greece, for example. The OTE Group has an integrated management system. In addition to the above-mentioned standards, it also covers the international standards ISO 50001 for energy management and ISO 27001 for data security.

All of our employees in Germany have ISO 14001- and ISO 45001-certified workstations. We further expanded coverage throughout the Group by the end of 2021. We were able to certify three additional locations of T-Systems ITC Iberia, a further location of Deutsche Telekom Global Business Solutions Iberia and a location of Deutsche Telekom Security GmbH to the ISO 45001 standard. Also, Deutsche Telekom Security received a second ISO 45001 certification. These certifications now cover 98 percent of our employees internationally.

CR program 2021

Strategy

Objectives	Target achievement	Implementation
Further development of the CR strategy	Revision of the key areas in the year under review, with editing of texts to tailor them to specific audiences	CR strategy
Sharpening of the company's "Corporate Digital Responsibility" profile	Existing activities have been harmonized, and made people-centered; work continues on the "Corporate Digital Responsibility" framework, publication of which is planned for 2022	Corporate Digital Responsibility
Contribute to the Sustainable Development Goals (SDGs)	Focus on 2, 3, 4, 5, 7, 8, 9, 11, 12, 13, 15, 16	Our contribution to the Sustainable Development Goals Measures and KPIs relevant to SDGs
Refinement of the impact-measurement scheme	Development of an in-house tool for impact measurement; execution of multiple sets of impact measurements; linking of impact measurement with #GreenMagenta and #GoodMagenta label awards	Impact measurement and control
Implementation of the AI guidelines adopted in 2018	Integration within training programs for our employees; review of AI-based speechbots and chatbots of Telekom Deutschland's business-customer sales area, in keeping with the Federal Office for Information Security's (BSI's) AI Cloud Service Compliance Criteria Catalogue (AIC4; covering the trustworthiness of AI-based services operated in cloud environments); development of a "Professional ethics" guide to help ensure that the company's Guidelines for Artificial Intelligence are applied to development processes	Responsible use of artificial intelligence (AI)
Reporting in accordance with the standards of the Sustainability Accounting Standards Board (SASB)	Preparation of an SASB index with links to relevant report content	SASB
Strengthening of risk assessment in materiality analysis	Intensified integration of risk assessment in document analysis; preparation of a risks & opportunities inventory; linking of such an inventory with risk management processes	Materiality as a basis for evaluation of ESG risks and opportunities
Exemplary CR reporting	In the year under review, Deutsche Telekom's CR reporting received nine awards.	Awards for CR reporting
Linking of Board of Management remuneration to reductions of the company's CO ₂ emissions and energy consumption	In the year under review, the company's energy consumption and CO ₂ emissions were reduced. The reductions achieved lay within the relevant ESG target corridors in Board of Management remuneration. Remuneration report 2021	ESG targets in Board of Management remuneration

CR program 2021

Business

Objectives	Target achievement	Implementation
We aim to have 60 percent of our procurement volume be verified as "uncritical" by 2025	60 percent in 2021 (external procurement volume for Deutsche Telekom, excluding USA and network capacity)	ESG KPI Procurement Volume Verified as Non-Critical
95 percent of our procurement volume should be without an identified CR risk by 2025	99.7 percent of procurement volume in 2021 (external procurement volume for Deutsche Telekom, excluding USA and network capacity)	ESG KPI "Procurement Volume Without CR Risk"
99 percent LTE coverage in Germany by 2020	99 percent coverage in 2021	Progress in network expansion
99 percent LTE coverage in Europe by 2021	98 percent coverage in 2021. We slightly missed the target of achieving 99 percent LTE coverage in Europe by 2021 with a value of 98.2 percent and instead continued to drive forward the further development of our networks with 5G and FTTH.	Progress in network expansion
99 percent 5G coverage in Germany by 2025	As the end of 2021, 5G, the new mobile communications standard, has been available to over 90 percent of all households in Germany.	5G expansion
Increase Group-wide customer retention (measured using TRI*M index)	As of the end of 2021, the Group score (not including T-Mobile US) was 73.4 points (outset value in 2020: 72.2 points).	Measuring customer retention and endorsement
Obtain relevant service awards	This was achieved. The awards included the TÜV quality seal; the "Service King" distinction awarded by the trade magazine Focus Money; "best broadband / fixed-network and mobile-network hotlines" in connect magazine's 2021 hotline test; "best mobile communications shop" in connect magazine's 2021 mobile communications shop test; and an "Excellence Group" rating in the "Top Service Deutschland" ratings	Awards for our service
Greater use of sustainable financial instruments	Detailed evaluation of sustainable finance instruments, and preparation of relevant documents – for a sustainability-linked bond, for example	Sustainable investment at Deutsche Telekom
Integration of requirements from EU Taxonomy	Fulfillment of the EU Taxonomy Regulation's requirements in effect for 2021, via listing of taxonomy-eligible turnover, capital expenditure, and operating expenditure	EU taxonomy
Ensure inclusion in relevant sustainability indices	Listing in key sustainability indices	T-Shares in sustainability ratings and indices

CR program 2021

Environment

Objectives	Target achievement	Implementation
Decrease Group-wide Scope 1 and 2 emissions by up to 95 percent, with respect to their 2017 levels, by the end of 2025. The remaining emissions are to be offset via suitable measures, to enable the company to reach climate neutrality.	Reduction 2017–2021 by 91 percent to around 247 kt CO ₂ e	Climate strategy Climate target achievement; CO ₂ e emissions (Scopes 1 and 2)
Reduction of emissions from the upstream and downstream value chain (Scope 3) by 25 percent per customer, compared to 2017, by 2030	Reduction 2017–2021 by 4 percent to around 51 kg CO ₂ e per customer	Climate strategy Climate target achievement CO ₂ e emissions (Scope 3) at the Deutsche Telekom Group
Climate neutrality by no later than 2040 (Scope 1, 2 and 3)	Total emissions 2021: 15 023 kt CO ₂ e	Climate strategy Climate target achievement CO ₂ e emissions (Scopes 1–3) at the Deutsche Telekom Group
Improvement of the efficiency of our data centers; use of climate-neutral company data centers and externally operated data centers (pursuant to the Climate Neutral Data Centre Pact) by 2030	Global power usage effectiveness (PUE) value for 2021: 1.58 PUE value for Germany in 2021: 1.49 (2008: 1.85) Our high-availability, state-of-the-art data centers operated by T-Systems in Germany are designed to achieve a PUE of 1.30.	ESG KPI "PUE" – lower CO ₂ emissions in data centers Ecological sustainability program at T-Systems
Switch Group-wide power consumption to 100 percent renewable energy by 2021	Target reached, on a Group-wide basis	Climate strategy ESG KPI Renewable Energy Renewable energy in the Group Renewable energy in the national companies
Raise the profile and boost the impact of the Green Pioneers community	320 Green Pioneers in 2021 (2020: 250); working at 53 sites in Germany (2020: 45); more community initiatives in our national companies	Green Pioneers Green Pioneer networks at our national companies
Reduction of CO ₂ emissions tied to customers' use of our products and solutions; in particular, reduction of those emissions' share of our own total emissions	Improvement of our enablement factor in Germany to 4.8 (2020: 7.1); throughout Europe, improvement of the factor to 3.4 (2020: 4.3)	ESG KPI Enablement Factor for DT Group in Germany Enablement Factor ESG KPI for Deutsche Telekom Group in Europe

CR program 2021

Environment

Stabilization of our energy consumption by 2024, via doubling of our energy efficiency (the ratio of network data traffic to the electricity required to move it), in spite of continued strong data-traffic growth and our ongoing network expansion	Energy consumption in 2021: 13.3 million MWh (2020: 12.8 million MWh)	Energy consumption and efficiency
Through 2024, our European national companies (outside of Germany) plan to collect one million used mobile devices and keep them in the circular economy by refurbishing or recycling them.	2021: about 150 000 devices	Our approach for a circular economy Waste management and recycling
We are aiming to ensure that, by 2024, none of the electronic waste produced by Deutsche Telekom in Europe, and no used devices the company collects, such as smartphones, routers or laptops, wind up in landfills.	In Germany, electronic waste and returned devices are already properly managed (refurbished or recycled). Implementation of this policy in our other European national companies is underway.	Waste prevention and recycling
As of mid-2022, packaging for all new Deutsche Telekom-branded products in Germany and Europe is to be sustainable, in keeping with our "Sustainability Packaging Guideline."	Implementation is underway; in 2021, about 1.4 million new Telekom-branded products sold or leased in Germany were already sustainably packaged in line with our criteria.	Sustainable product packaging
By the end of 2022, we aim to ensure that third-party smartphones we sell in Europe have sustainable product packaging.	In 2021, about two-thirds of all smartphones sold by Deutsche Telekom in the EU were sold in sustainable packaging.	Sustainable product packaging
With our Paperless Office project, we aim to completely eliminate paper use wherever possible by 2025.	Implementation of this project is underway; we are carrying out various paper-reduction measures internationally – for example, we are digitalizing our correspondence with our customers. In Germany, we saved some 275 metric tons of paper in 2021.	Paper-free and low-paper work

CR program 2021

Social

Objectives	Target achievement	Implementation
Increase the proportion of women on the Supervisory Board and in top positions in middle and upper management to 30 percent by 2025	Total workforce: 35.7 percent women Middle and upper management: 27.3 percent Board of Management of Deutsche Telekom AG: 37.5 percent Supervisory Board (in Germany): 42.4 percent Supervisory Board (international): 25 percent	Percentage of women on the management board Percentage of women in middle and upper management Percentage of women on Supervisory Boards Commitment to a larger share of women
Maintain the Group-wide high health rate of 95.0 percent	Including persons on extended sick leave: 95.3 percent (2020: 95.0 percent) Not including persons on extended sick leave: 96.7 percent (2020: 96.5 percent)	Health rate Effectiveness of our health and safety measures
Reduce the accident rate in Germany	Accident rate for accidents leading to more than three missed days of work, in 2021: 4.2 accidents per thousand employees (including work-related accidents tied to the COVID-19 pandemic) 3.7 accidents per thousand employees (2020: 3.8) (not including work-related accidents tied to the COVID-19 pandemic)	Effectiveness of our health and safety measures
Boost digital further training	Digital learning rate (share of learning hours completed as online learning) 2021: 89 percent (2020: 69 percent) 83 percent of the training courses offered throughout the Group were available online (2020: 68 percent)	Our approach to training and development Skills development at Telekom Training in Germany
Additional #TAKEPART stories	A new module: "Gaming – where the fun stops"	Promoting media literacy and democratic competence
Improve employee satisfaction	Commitment score in 2021: 77 points (2020: 80 points; old scale: 4.0) The scale used for the commitment score (formerly, the "commitment index") has been changed from "1 to 5" to "1 to 100." The employee survey is conducted at two-year intervals.	Our employee survey Satisfaction and commitment indexes
Performance of Human Rights Impact Assessment (HRIA) and Employee Relations Policy Review (ERR)	Execution of ERR at: OTE Group in Greece Execution of HRIA: Due to the COVID-19 pandemic, we were unable to perform any further assessments abroad in 2021.	Human Rights Impact Assessments Reviewed: Employee relations at our national companies

Materiality

Our process for identifying material CR topics

We annually identify which topics are of particular importance in defining Deutsche Telekom's sustainability management and sustainability-reporting focus from the perspective of our stakeholders as well as from an internal corporate perspective. We have also analyzed and adjusted the material topics for this report. This process factored in changes in stakeholder expectations and current external and internal developments. In the year under review, we focused on identifying and evaluating risks and opportunities – and materiality analysis served as a basis for this focus.

Since 2015, we have carried out materiality analysis on the basis of the methods set forth by the Global e-Sustainability Initiative (GeSI). Those methods cover 55 topics that are relevant for the ICT industry, and place them into nine categories: digital inclusion, employee relationships, climate change, circular economy, sourcing and manufacturing, customer relationships, freedom of expression and privacy, governance and management, and local community and environment impacts. These topics have been developed to pertain to a variety of companies and are therefore recognized in the industry. In addition, our experts review whether any topics need to be added, adjusted or deleted, in keeping with the specific needs of the company.

Document analysis

Document analysis is the starting point for our materiality process. This takes into account new legal texts and draft laws, studies, position papers, and media publications that provide information about the demands and expectations made on Deutsche Telekom with regard to sustainability management. The analysis also considers whether Deutsche Telekom has any influence on the respective topic and whether the expectations have an impact on Deutsche Telekom's business activity. The tables below set out the criteria that determine whether or not a topic is highly relevant.

Stakeholder perspective	
High expectations for the relevant topic when ...	
NGOs	... the majority of NGOs express specific expectations or demand compliance with certain targets or standards.
Competition	... multiple competitors actively communicate a more ambitious strategic objective or development concepts.
Legislation	... there are concrete regulatory objectives, laws or guidelines that directly impact the company.
Financial market	... the topic is part of the criteria for the ratings in question and is considered a top issue in the industry.

Company perspective	
Highly influenced by the relevant topic when ...	
Value creation	... all stages of the value chain are affected by the topic.
Sustainable Development Goals	... the topic is directly related to several SDGs.
Industry	... the ICT has a big influence on it and Deutsche Telekom holds a leading industry position on the topic.

The 2021 document analysis shows a further increase in our stakeholder's expectations, particularly with regard to

- topics related to climate and human rights,
- social relevance of ICT products,
- media literacy and
- employee diversity and anti-discrimination

Both the climate crisis and the COVID-19 pandemic are drivers of these growing demands. In this context, issues regarding digital ethics and ethical business practices are becoming increasingly important.

Internal analysis and validation

In a workshop with experts of our company, the results of the document analysis were compared with an internal estimate.

The result is the basis for our 2021 CR reporting. We are presenting the results of the analysis in a materiality matrix in accordance with the requirements of the Global Reporting Initiative (GRI).

We have included the following topics in our materiality matrix for the 2021 reporting year:

- Biodiversity
- Political and social cooperation
- Easily accessible and affordable products

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-40 (General Disclosures)
- GRI 102-44 (General Disclosures)
- GRI 102-46 (General Disclosures)

Results of the materiality analysis

Topics were rated as “very relevant,” “relevant,” “less relevant” and “not relevant” in the materiality analysis. We translated their weighting results onto a 100-point scale. Here are the results of the analysis.

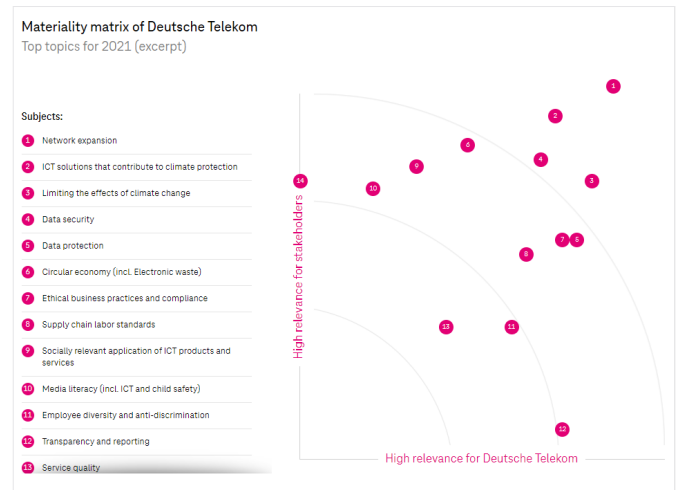
The overall result

The following illustration shows how all of the topics were rated by our stakeholders, and from a corporate perspective, on a scale of 0 to 100.



Top topics with regard to Deutsche Telekom's sustainable business development

We consider all topics that achieved more than 68 points on average in the materiality process to be top topics. The following matrix presents these topics, on a scale of 50 to 100.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-46 (General Disclosures)
- GRI 102-47 (General Disclosures)
- GRI 102-49 (General Disclosures)

Material topics matched with GRI aspects

The following overview indicates in extracts which GRI aspects can be matched with the material topics of the materiality analysis.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-46 (General Disclosures)
- GRI 102-47 (General Disclosures)

#	Material aspects	GRI aspects	Management approach
1	Network expansion	<ul style="list-style-type: none"> ■ Indirect economic impacts 	<ul style="list-style-type: none"> ■ Our approach to infrastructural expansion
2	ICT solutions that contribute to climate protection	<ul style="list-style-type: none"> ■ Products and services 	<ul style="list-style-type: none"> ■ Our approach to sustainable products and services
3	Limiting the effects of climate change	<ul style="list-style-type: none"> ■ Emissions ■ Energy 	<ul style="list-style-type: none"> ■ Our approach to measuring our climate-protection progress ■ Our approach to energy-efficient networks
4	Data security	<ul style="list-style-type: none"> ■ Customer privacy 	<ul style="list-style-type: none"> ■ Our approach to data protection
5	Data protection	<ul style="list-style-type: none"> ■ Customer privacy 	<ul style="list-style-type: none"> ■ Our approach to data protection
6	Circular economy (including electronic waste)	<ul style="list-style-type: none"> ■ Waste and waste water ■ Products and services 	<ul style="list-style-type: none"> ■ Our approach to circular economy
7	Ethical business practices and compliance	<ul style="list-style-type: none"> ■ Socioeconomic compliance ■ Anti-corruption 	<ul style="list-style-type: none"> ■ Our approach to integrity and compliance
8	Supply chain labor standards	<ul style="list-style-type: none"> ■ Procurement practices ■ Forced or compulsory labor ■ Evaluation of suppliers with regard to compliance with human rights 	<ul style="list-style-type: none"> ■ Our approach to sustainable procurement ■ Our approach to protecting human rights ■ Our approach to integrity and compliance
9	Socially relevant application of ICT products and services	<ul style="list-style-type: none"> ■ Products and services 	<ul style="list-style-type: none"> ■ Our approach to sustainable products and services
10	Media literacy (including ICT and child safety)	<ul style="list-style-type: none"> ■ Customer health and safety ■ Customer privacy 	<ul style="list-style-type: none"> ■ Our approach to social responsibility ■ Our approach to data protection
11	Employee diversity and anti-discrimination	<ul style="list-style-type: none"> ■ Non-discrimination ■ Diversity and equal opportunities 	<ul style="list-style-type: none"> ■ Our approach to protecting human rights ■ Our approach to diversity and equal opportunity
12	Transparency and reporting	<ul style="list-style-type: none"> ■ Identified material aspects and boundaries ■ Report profile 	
13	Service quality	<ul style="list-style-type: none"> ■ Stakeholder engagement 	<ul style="list-style-type: none"> ■ Our approach to top service quality
14	Disruptive technologies	<ul style="list-style-type: none"> ■ Products and services ■ Compliance 	<ul style="list-style-type: none"> ■ Our approach to sustainable products and services ■ Our approach to infrastructural expansion

Materiality as a basis for evaluation of ESG risks and opportunities

In the year under review, we used our materiality analysis as a starting point for identifying and evaluating the risks and opportunities that arise in connection with our sustainability issues. In the case of many topics that are highly important, pursuant to our materiality analysis, the pertinent risks for our company are comprehensively evaluated by the responsible person(s) within the Group – such as staff in the areas of Compliance or Data Privacy. Such supplementary analysis gives us a clearer perspective of the relevant impacts on the environment and society, and it helps us to pair our risk analysis with strategic opportunity assessment.

On the basis of the most important sustainability issues involved, we have developed various possible scenarios. In one, for example, disruptive, new products can help solve existing social, economic or ecological problems. On the other hand, adverse environmental impacts, such as larger quantities of produced waste, can increase costs (in this case, costs for waste management). Such scenarios have been evaluated by experts in terms of their probability of occurrence and their financial impacts. On the basis of such evaluation, the risks and opportunities linked to the scenarios have been grouped into the categories “low,” “medium” and “high.”

The analysis indicates that, currently, the supply chain and climate-related issues present high risks for society, for the environment and for us as a company – for example, pollutants released in the supply chain can adversely affect human health, and tighter legal requirements can lead to higher costs for us. For years now, these issues have been taken into account in Deutsche Telekom’s overarching risk-and-opportunity management process, and they are reported in detail each year in our annual report. On the other hand, our products and services can help solve ecological and social challenges. For example, we offer solutions that help reduce energy consumption. Such challenges, therefore, offer opportunities for sustainable development, as well as market opportunities for us.

Impact measurement

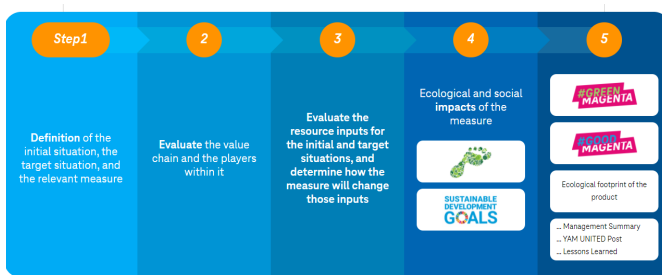
Impact measurement and management

What impacts do our business operations have on society, the economy and the environment? To what extent are we contributing, with our products, solutions and measures, to the achievement of the UN's Sustainable Development Goals (SDGs)? These questions guide us in our impact measurement.

Impact measurement is a strategic area for us. This is because we know we can achieve our overarching aim – to constantly increase our business operations' positive impacts and minimize their negative impacts – only if we can precisely measure the impacts of our activities.

With the support of experts from within and outside of the company, we have developed a four-stage “impact measurement blueprint.” It enables us to identify the impacts of projects, products, and measures on key ecological, social, and economic issues.

We use the results of impact measurement to continually improve our sustainability performance. In addition, they give us valuable findings that help us in transparently communicating the sustainability benefits of our products to consumers and business customers, investors, and other stakeholders.



In keeping with our blueprint, we identify the relevant stakeholders for each initial and target situation and calculate what resources they use. By knowing the resources difference between the initial and target situation, we can evaluate the relevant changes.

To obtain transparent and comparable results, we describe the various impact contributions using established metrics for use of resources, and with the help of external frameworks, such as the SDGs. That allows us to also evaluate our contributions to sustainable development from a global perspective. In doing so, we always ensure that our methods are based on robust data and assumptions, and are effective for several years. We also describe the relevant starting point, or baseline, as accurately as possible so that we can reliably evaluate and account for the concrete external impact.

With the help of this approach, we can efficiently carry out annually growing numbers of analyses within the Group. Each completed impact assessment adds to our understanding of the interactions involved – and does so also with respect to all subsequent analyses.

We are continuing to refine our impact measurement

Group Corporate Responsibility (GCR) is continuously refining our blueprint, taking internal and external requirements into account. In 2021, we developed our own impact-measurement tool for analyses in this context. The tool guides users through the four stages of the blueprint, and it takes account of the ecological, social and economic impacts of projects, products and measures. As a result, the new tool is making the impact-measurement process available to a wider group of users throughout the Group. In the year under review, the tool was used to determine the impacts of a total of 17 projects, products, and measures.

As of 2021, awarding of our #GreenMagenta and #GoodMagenta labels is systematically linked to the execution of impact measurement in keeping with our blueprint. The functions of impact measurement include providing a decision basis for label awards. Every award of a #GreenMagenta label must be preceded by impact measurement relative to environmental impacts, for example. Our labels help us communicate the proven impact of our products, solutions, and activities on the SDGs, and on other sustainability goals, to a wider public. In the following sections, we present examples of qualitative and quantitative impact-measurement results for products, solutions, and measures of Deutsche Telekom.

Impact measurement: More-sustainable management of company devices, with the “Device as a Service” model

Smartphones and tablets play an indispensable role in our everyday working lives. At the same time, companies are finding that the task of managing all of their employees' company-owned devices is becoming more and more complex. In many cases, when devices reach the end of their useful lives within the company, they are simply put away and are no longer used. In addition, in many cases devices are replaced before they have reached the end of their useful lives, and then are neither used nor properly recycled.

In cooperation with the provider “everphone,” we offer our business customers “Device as a Service.” In this service, we assume complete responsibility for device management. This responsibility includes active collection of devices from employees, exchange and proper repair of defective devices, and certified disposal and recycling of devices taken out of service. Overall, the service has the effect of increasing the service lives of devices within companies.

Our impact measurement in this context has found that Device as a Service can reduce emissions by about 50 kg CO₂ equivalents per company smartphone and tablet. The refurbishment rate increases to over 97 percent. Also, employees become more aware of the need to use devices sustainably, throughout the entire value chain. In addition, the high refurbishment rates and longer usage lifetimes associated with the service ease pressures on production, logistics and disposal processes (SDG 12).

The service also contributes to the following SDGs:

- SDG 9: Systematic management of company smartphones and tablets supports more-efficient, and more-sustainable, use of valuable resources.
- SDG 17: Deutsche Telekom and everphone plan to work together to roll out Device as a Service in additional countries, and they are seeking to share their knowledge in this context.

We have awarded our #GreenMagenta label to this service.

Impact measurement: Remote maintenance with augmented reality cuts travel and CO₂

Complex technical systems have to undergo regular maintenance. Long drives by service personnel, for such maintenance, cost time and money – and generate large amounts of CO₂ emissions. Now, we offer the “AR FieldAdvisor” smartphone app, which provides a means of carrying out such service calls remotely – i.e. without a service technician’s having to be present at the service site. This is possible thanks to the use of augmented reality technology. When the app is used, a video call is made, and an employee at the service site pans over the relevant equipment with their smartphone camera.

Our impact measurement has found that use of the AR FieldAdvisor app to eliminate the need for 100 typical on-site service calls can save about 614 kg CO₂ equivalents.

The service also contributes to the following SDGs:

- SDG 11: The calculation is based on elimination of transport-related emissions tied to an average of 2 485 km of road and air travel to and from service sites (for 100 service calls).
- SDG 12: The added electricity consumption for development and use of the product (adverse impacts) was also factored into the calculation.
- SDG 8: Use of the AR FieldAdvisor app has improved service productivity, by enabling larger numbers of service calls to be made within a given period of time. Since the app eliminates travel time, and enables service personnel to work from their homes, its use also enhances the well-being of service personnel. In addition, it facilitates compliance with Covid-related contact restrictions.

- SDG 17: The app’s remote-maintenance functionality makes it easy to provide competent technical support outside of major cities, and in less-developed areas.

We have awarded this solution the #GreenMagenta label.

Impact measurement: Greater customer-service efficiency, with “Mein Telekom Techniker” (“My Deutsche Telekom Service Technician”)

When Deutsche Telekom’s service technicians make service calls, they sometimes find that customers are not at home. Such “empty runs” are inefficient. They produce transport emissions, generate added costs and tend to leave both customers and service staff dissatisfied.

With our web app “Mein Telekom Techniker” (“My Deutsche Telekom Service Technician”), customers simply tap on their phone in order to see when their service technician will arrive; Deutsche Telekom sends an SMS text message in advance to remind them of the scheduled appointment. The SMS includes a link to near-real-time updates on the technician’s probable arrival time. If customers experience a sudden change of plans, they can change scheduled appointments with just a few taps. In short, the app helps prevent empty runs.

For 100 service calls, calculation shows that an average of about 14 kg CO₂ equivalents is saved per call.

The service also contributes to the following SDGs:

- SDG 9 and 12: The digital application saves paper, since it eliminates the need for two thirds of the “sorry we missed you” cards that previously had to be placed in a mailbox when the customer was not home. This supports resource efficiency and makes service processes greener.
- SDGs 3 and 11: Avoidance of empty runs helps reduce air pollution. It therefore has a positive impact on both air quality and human health.

Impact measurement: Improved information exchange with Airport Collaborative Decision Making

International air traffic accounts for a large share of global fuel consumption. “Airport Collaborative Decision Making” is a European concept for improving communication and coordination between airports, air traffic control, ground handling services, and airlines. T-Systems offers airport operators a software system that supports the implementation of this concept, thereby helping to make airport operations more efficient. More-efficient processes mean shorter turnaround times, and fewer delays in air-traffic management, and thus help save fuel and reduce air pollution. Also, reductions in delays benefit passengers.

On average, use of A-CDM can save up to 92 kg of CO₂ emissions per takeoff. Also worthy of note is that T-Systems developed the software with electricity from renewable energies (SDG 13).

The service also contributes to the following SDGs:

- SDG 17: The solution enhances collaboration, and it saves time by optimizing operational and resources management.
- SDG 11: The A-CDM solution also helps reduce air pollution.

We have awarded this solution the #GreenMagenta label.

Impact measurement: Our sustainability platform promotes awareness of mobility-related emissions

Direct and indirect emissions from companies' own or purchased resources (Scope 1 and 2 of the Greenhouse Gas Protocol) can be reduced relatively easily with targeted measures. It is important to note, however, that indirect emissions occurring throughout the value chain (Scope 3) will increasingly be the real key to reducing company-wide emissions. Such emissions include CO₂ emissions generated through employees' business travel and commuting.

T-Systems now offers business customers "EcoShift," a sustainability platform. This business solution shows companies the carbon footprint generated by the mobility of their employees and, on a dedicated platform, translates this data into specific recommendations. On a system dashboard, CO₂ emissions from business travel and commuting can be monitored and analyzed, and suitable reduction measures can be derived.

Impact measurement has shown that use of the sustainability platform can save about 12 tons of CO₂ emissions annually, per 100 employees. The platform's transparent presentation of emissions data helps make employees more aware of their travel-related emissions, and it can inspire them to begin cycling to work or to use public transportation for their commutes. T-Systems developed the platform with electricity from renewable energies (SDG 13).

The service also contributes to the following SDGs:

- SDGs 3 and 11: Helps reduce transport-related emissions and air pollution in cities. It also contributes to employees' health and well-being.
- SDGs 9 and 12: The platform visualizes company-wide mobility-related emissions, and it supports derivation of specific measures to reduce them. It also saves time; its dedicated interfaces facilitate carbon-footprint determination, and its real-time data facilitate preparation of company reports.

We have awarded this solution the #GreenMagenta label.

Impact measurement: "Cyber AwareNessi, The Fantastic Security Activity Book", makes it fun to learn about data security

Children today routinely begin using the internet at very young ages. Not enough is being done to enlighten them about the "facts of data security," however. Deutsche Telekom is now publishing "Cyber AwareNessi, The Fantastic Security Activity Book," a magazine for children between the ages of eight and twelve (and for

their parents) that informs children in a fun and entertaining way – without making them afraid – about the dangers lurking on the internet.

"AwareNessi" helps parents talk with their children about this issue and teach them to use the internet with care (SDG 4).

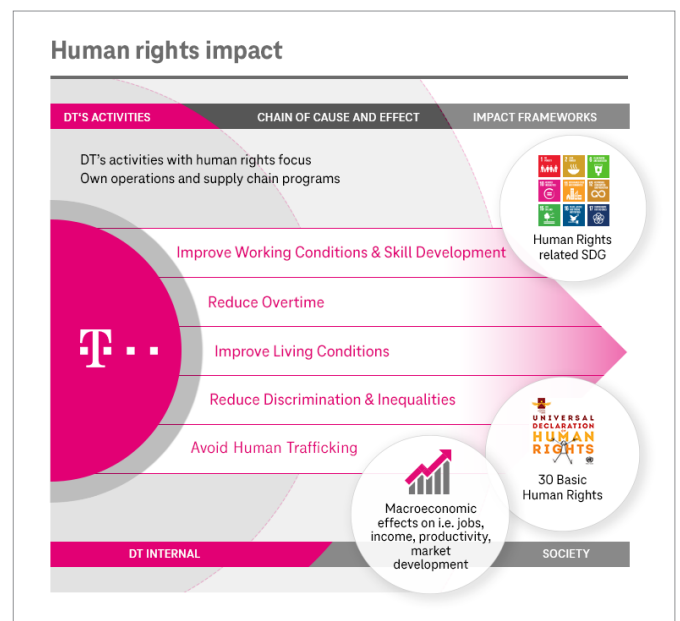
This service also contributes to the following SDGs:

- SDGs 5 and 10: "AwareNessi" is a gender-neutral avatar. The magazine uses gender-neutral language that is appropriate for children.
- SDG 9: "AwareNessi" advises children and parents with regard to use of security tools in cyberspace, without mentioning any brand names.
- SDG 12: Issues of "AwareNessi" are available in digital form, for printout only as necessary. This helps reduce paper waste.
- SDG 16: For each issue of "AwareNessi," our employees volunteer 60 hours of their time (for development, design, and communication). In addition to helping make children aware about data security, "AwareNessi" promotes respectful conduct and interaction online.
- SDG 17: The issues are available in 16 different languages. Consequently, "AwareNessi" provides reliable information about data security internationally.

We have awarded this solution our #GoodMagenta label.

Impact measurement: Our contribution to respect for human rights

The following diagram illustrates the positive impact that can be achieved in our value chain and beyond through our commitment to human rights.



Specific commitment to human rights in the company and in the supply chain

In 2020, we once again conducted a Human Rights Impact Assessment – this time at Crnogorski Telekom in Montenegro. We examined the well-being of our suppliers in terms of working hours and conditions, work-life balance, mental and physical stress, and discrimination in the workplace.

We used the findings to implement changes to the way work is planned. We also initiated various measures to raise awareness, including workshops to explain overtime regulations.

As a result of the COVID-19 pandemic, we were unable to perform any further routine Human Rights Impact Assessments abroad in 2021.

Such assessments also contribute to the following SDGs:

- SDG 3 and 8: With our Human Rights Impact Assessments, we are enacting measures for observance of human rights throughout the company and in the value chain.

In addition, the assessments implement relevant recommendations of the United Nations Office of the High Commissioner for Human Rights. Further information about the topic of human rights is available [here](#).

Impact measurement: Multimedia learning for media literacy

For the topic of media literacy, we analyzed the effectiveness of our “Teachtoday” initiative. Joint research with the auditors from PwC showed that the methods used by Teachtoday are more than twice as effective as conventional forms of learning. The reason: The multimedia learning methods used by Teachtoday incorporate several senses at once, unlike conventional methods.

The Teachtoday activities to improve media literacy have a new motto every year: After “Digital Civil Courage” in 2020, the theme for 2021 was “gaming.”

This initiative contributes to the following SDG:

- SDG 4: The multimedia learning methods used with Teachtoday promote safe and competent media use.

Further information about the topic of media literacy is available [here](#).

Impact measurement: Online billing is more eco-friendly than paper billing

The switch from paper billing to online billing, which is being carried out step-by-step, provides a good example of the sustainability potential inherent in digitalization. We applied our new approach to impact measurement in order to analyze the effects more closely for Deutsche Telekom.

It showed that the adverse environmental impacts of online billing are more than 50 percent lower than those associated with paper billing (SDG 13).

Online billing also contributes to the following SDGs:

- SDG 8, 9, 12: The switch to online billing saves paper, and printer toner, and reduces logistics requirements. We have identified the potential negative consequences of this measure as a drop in sales for the timber and paper industries and logistics sector. However, these consequences are less substantial than the positive effects.

Impact measurement: Sustainable product packaging for remotes

The primary purpose of packaging is to ensure that products are not damaged during transport to their final destinations (customers). When a product is unpacked, its packaging is usually discarded immediately, meaning it becomes trash and a burden on the environment. In this impact measurement, we analyzed the sustainable packaging solution of one of our remotes and compared it with conventional packaging.

This also contributes to the following SDGs:

- SDGs 11 and 12: Use of recycled materials, and avoidance of plastic, reduce waste.
- SDG 6: Use of soy-based printer ink prevents use of environmentally harmful chemicals.

This use case has yielded a blueprint for efficient impact measurement of other sustainable packaging solutions.

We have awarded this solution the #GreenMagenta label.

Sustainable Development Goals

Our Contribution to the Sustainable Development Goals

"Acting sustainably is a core element of our corporate strategy. We are making our contribution to many of the SDGs through our climate- and environmental-protection measures and our work toward a democratic society with equal opportunities. In addition, our digital innovations enable our customers to play their part in overcoming ecological and societal challenges."

We support the 17 Sustainable Development Goals (SDGs) of the United Nations (UN). Various studies have come to the conclusion that 103 (of a total of 169) subgoals associated with the SDGs can benefit from the use of ICT. Examples include the study entitled "ICT-centric economic growth, innovation, and job creation" published in 2017 by the International Telecommunication Union, and the "SMARTer2030" study launched by the GeSI (Global e-Sustainability Initiative) initiative in 2019.

We contribute to society and the environment with many of our products, solutions and measures, and, as a result, to achieving these goals. Our network infrastructure forms the technological foundation; it enables solutions to social and ecological challenges, hence contributing to achieving many SDGs. That is why we believe we can make the biggest impact on SDG 9: "Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation."

In our contributions both in this CR report and our annual report, we draw attention to the SDGs. The relevant sections are marked with the corresponding SDG symbols. In addition, we explain how our commitment to the SDGs benefits our company. Our transparent external reporting in relation to the SDGs has earned special recognition, e.g. from PwC (PricewaterhouseCoopers).

The following overview details how we contribute to implementing the SDGs. It also shows how we measure our contribution, and refers to specific examples from the current CR report.

Value contributions within the company


Our contributions toward achieving the SDGs have a positive effect on our company. To highlight the various internal value contributions we are making along our value chain, in connection with our SDG-relevant commitments, we have divided the contributions into five basic sectors. Each sector has been assigned its own logo. These logos, along with the SDG main logo, figure prominently in our annual report, and in the present "Management & Facts" area of the CR report, in order to highlight the interrelationships between the Sustainable Development Goals and our pertinent internal value contributions.




Birgit Klesper - Senior Vice President, Group Corporate Responsibility & Sustainability, for Deutsche Telekom AG.

Birgit Klesper retired as of January 1, 2022, and handed over the leadership of GCR to Michael Hagspiel.


SUSTAINABILITY GOAL 8
Decent Work and Economic Growth
We provide excellent working conditions for our employees and work continuously to make the supply chain more sustainable. *Our contribution*



SUSTAINABILITY GOAL 11
Sustainable Cities and Communities
Our innovative solutions and the network infrastructure build-out help shape the transformation of cities into smart urban spaces. *Our contribution*




SUSTAINABILITY GOAL 9
Industry, Innovation and Infrastructure
We invest billions in a stable, secure network infrastructure and, in doing so, create the basis for economic performance and participation in the knowledge and information society. *Our contribution*




SUSTAINABILITY GOAL 12
Responsible Consumption and Production
We increase the share of innovative, sustainable products in our portfolio, ensuring transparency about this by identifying these products with our #GoodMagenta and #GreenMagenta labels. Moreover, we reduce the waste volume generated by our Group and are committed to proper recycling. *Our contribution*




SUSTAINABILITY GOAL 3
Good Health and Well-being
We support the health care sector by providing various ICT solutions - from hospital management systems to our contact tracing app, the Corona-Warn-App. We also promote the health and well-being of our employees across the Group. *Our contribution*




SUSTAINABILITY GOAL 13
Climate Action
We contribute to climate protection - within the Group by taking measures to increase energy efficiency and using renewable energy, and outside the Group by providing sustainable products and services. *Our contribution*




SUSTAINABILITY GOAL 4
Quality Education
We support the population's media literacy and democratic skills with various projects and initiatives. We offer our employees a wide range of individual vocational training and development programs. *Our contribution*




SUSTAINABILITY GOAL 15
Life on Land
ICT solutions help increase yields in agriculture and conserve resources. We are committed to conserve biodiversity and call on our suppliers to protect the environment. *Our contribution*




SUSTAINABILITY GOAL 5
Gender Equality
We promote equal opportunities and use targeted measures to increase the share of women in management, in supervisory boards and in STEM professions. We also call on our suppliers to ban gender discrimination. *Our contribution*




SUSTAINABILITY GOAL 1
No Poverty
Our networks provide the conditions for economic and social participation and thus also access to education, the lack of which is one of the main causes of poverty. *Our contribution*




SUSTAINABILITY GOAL 7
Affordable and Clean Energy
We increase the share of green energy of our total energy consumption and use energy-efficient technology. *Our contribution*




SUSTAINABILITY GOAL 2
Zero Hunger
ICT solutions help to boost crop yields while conserving resources such as seeds and water. *Our contribution*




SUSTAINABILITY GOAL 6
Clean Water and Sanitation
ICT solutions help reduce the use of water and fertilizer in agriculture. Smart metering systems enable utilities and customers to manage water consumption in a sustainable way. *Our contribution*




SUSTAINABILITY GOAL 10
Reduced Inequalities
We are clearly committed to diversity and support our employees, irrespective of gender, age, sexual orientation, disability or non-disability, ethnic origin, religious beliefs, and cultural background. In addition, we expect our suppliers to pay minimum wages in line with the ILO Convention. *Our contribution*




SUSTAINABILITY GOAL 14
Life Below Water
Our ICT solutions can help save water. We also take various measures to reduce our own water consumption. *Our contribution*



SUSTAINABILITY GOAL 16
Peace, Justice and Strong Institutions
We are clearly committed to ethical codes and legal provisions and have set up a comprehensive compliance management system. Furthermore, our dedicated efforts and products contribute to data protection and data security. *Our contribution*



SUSTAINABILITY GOAL 17
Partnerships for the Goals
We collaborate with associations, institutions, and companies at national and international level. *Our contribution*



Value contributions within the company

Our contributions toward achieving the SDGs have a positive effect on our company. To highlight the various internal value contributions we are making along our value chain, in connection with our SDG-relevant commitments, we have divided the contributions into five basic sectors. Each sector has been assigned its own logo. These logos, along with the SDG main logo, figure prominently in our annual report, and in the present “Management & Facts” area of the CR report, in order to highlight the interrelationships between the Sustainable Development Goals and our pertinent internal value contributions.

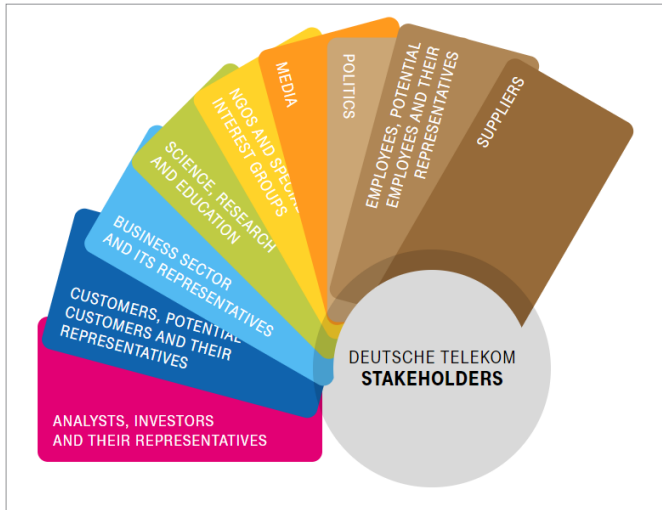


Stakeholder management

Our stakeholders

Our interaction with stakeholder groups helps us find support for the things that matter to us and makes it easier to identify trends early on, thereby fostering our innovation processes.

The following overview sets out who our stakeholders are and what matters to them most:



Analysts, investors and their representatives

TOP-SUBJECTS:

- Data Protection
- Data Security
- ICT solutions that contribute to climate protection
- Ethical business practices and compliance
- Limiting the effects of climate change

STAKEHOLDER GROUPS:

- Private investors
- Funds, asset managers and analysts
- (SRI) rating agencies
- Analyst organizations and associations
- Institutional investors

Customers, potential customers and their representatives

TOP-SUBJECTS:

- Data security
- Employee involvement
- Privacy
- Cyber safety
- ICT Solutions for a Low-Carbon Economy

Stakeholder groups:

- Youngsters and young adults
- Families
- Middle-aged people
- Senior citizens
- Small and medium-sized enterprises
- Large corporations
- Public authorities
- Consumer organizations and segment-specific interest groups
- Telekom Supervisory Board members

Business sector and its representatives

TOP-SUBJECTS:

- All top-subjects of the materiality analysis 2021

Stakeholder groups:

- DAX-listed companies
- Other large corporations
- Small and medium-sized enterprises
- Trade and industry associations
- Cooperation partners
- Competitors

Science, research and education

TOP-SUBJECTS:

- Employee involvement
- Socially relevant application of ICT products and services
- Cyber safety
- ICT Solutions for a Low-Carbon Economy
- Privacy

Stakeholder groups:

- CR and sustainability research institutions
- Political and business research institutions
- Universities
- Schools
- Day care centers
- Student organizations and university associations
- ICT, sociology and design research institutions

NGOs and special interest groups

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Socially relevant application of ICT products and services
- Transparency and reporting
- ICT and child safety

Stakeholder groups:

- Humanitarian organizations and charities
- Business ethics groups
- Multi-thematic organizations
- Churches and their relief organizations as well as other religious and social groups
- Foundations
- Environmental protection organizations

Media

TOP-SUBJECTS:

- All top-subjects of the materiality analysis 2021

Stakeholder groups:

- CR and sustainability
- Players from politics and business
- Education
- Radio broadcasters, daily press, press agencies
- Online media and social networks
- Publishers
- Journalist associations/media groups
- ICT and communications

Politics

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Socially relevant application of ICT products and services
- Transparency and reporting
- ICT and child safety

Stakeholder groups:

- Players at national level
- Embassies and consulates
- Supervisory and regulatory authorities
- Communities and their representatives
- International organizations
- Players at EU level

Employees, potential employees and their representatives

TOP-SUBJECTS:

- Data Security
- Privacy
- Cyber safety
- ICT Solutions for a Low-Carbon Economy
- Employee involvement

Stakeholder groups:

- Employees
- Managers
- Board of Management
- Applicants and prospective employees
- Trade unions and works councils
- Employees and students
- Endowed chairs
- Apprentices/trainees

Suppliers

TOP-SUBJECTS:

- Privacy
- Cyber safety
- Mitigating climate change
- Talent acquisition, retention, development and staff reduction
- Data Security

Stakeholder groups:

- Auditors and certification bodies
- Sub-suppliers
- Consultants
- First-tier suppliers

Formats for stakeholder engagement

We encourage stakeholder engagement in our corporate activities. With this in mind, we developed an appropriate strategy in 2011. It is based on the three AA1000 principles developed by the NGO AccountAbility: materiality, inclusivity, and responsiveness. Our conformity with these principles was investigated and verified by an auditing firm in 2013.

We used a case-based relevance analysis to identify the type and intensity of our stakeholder engagement. The more relevant a stakeholder group is to the topic or project concerned, the more intensive the engagement of that stakeholder group can be. Depending on the intensity, we make a distinction between three types of engagement: participation, dialog, and information.

 **PARTICIPATION**

- [Supplier development program](#)
- “You and Me UNITED” (YAM UNITED): Inform, discuss, make aware
- [Strengthening our corporate culture, encouraging a speak-up culture](#)
- [Collaboration for the protection of minors](#)
- [Cooperating in the name of security](#)
- [Co-designing Deutsche Telekom products and services in the think tank](#) 
- [Green Pioneers](#)
- [Experts’ group on digitalization](#)
- [Telekom hilft/Telekom helps](#)
- [Telekom Ambassadors](#)

 **DIALOG**

- [Expertise in the CR Report: Stakeholders can ask Deutsche Telekom experts questions on selected topics](#)
- [Cyber Security Summit](#)
- [SRI Roadshows](#)
- [Evaluation and implementation of the EMF policy](#)
- [Magenta Moon](#)

 **INFORMATION**

- [#TAKEPART-stories](#) 
- [Data protection tips in our one-pager](#)
- [We Care Magazin](#) 
- [Informationszentrum Mobilfunk \(IZMF\)](#) 
- [Telekom.com](#) 
- [TMTM](#)

The feedback that we receive from our stakeholders is incorporated into our CR activities.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–40 (General Disclosures)
- GRI 102–42 (General Disclosures)
- GRI 102–43 (General Disclosures)
- GRI 102–44 (General Disclosures)

Overview of memberships and collaborations

Overview of memberships and collaborations as part of our sustainability commitment:

Business and industry associations

- BITKOM
- Bundesverband der Deutschen Industrie e.V. (BDI) (Federation of German Industries)
- European Telecommunications Network Operators’ Association (ETNO)
- Forum Nachhaltige Entwicklung der Deutschen Wirtschaft e.V. (econsense) (Forum for Sustainable Development of German Business)
- GSM Association (GSMA)

Climate protection and environmental organizations

- B.A.U.M. e.V.¹ (environmental management organization)
- European School of Management and Technology (ESMT) (Sustainable Business Roundtable)
- Global e-Sustainability Initiative (GeSI)
- Global Compact
- Joint Audit Cooperation (JAC)
- nachhaltig.digital¹ (Germany’s skills forum for sustainability and digitalization among SMEs)
- RE100
- Solar Impulse Foundation
- Stiftung KlimaWirtschaft (German Alliance for Climate and Economy)

Civic and aid organizations

- Aktion Deutschland Hilft e.V.
- Amadeu Antonio Stiftung
- Bundesarbeitsgemeinschaft der Senioren-Organisation (BAGSO) (German National Association of Senior Citizens’ Organisations)
- Bundesnetzwerk Bürgerschaftliches Engagement (BBE) (National Network for Civil Society)
- Charta der Vielfalt (Diversity Charta)
- Charta der digitalen Vernetzung¹ (Digital Networking Charta)
- Correctiv¹ (German investigative newsroom)
- Deutschland sicher im Netz (DsiN) (Making Germany safe on the net)
- Deutschlandstiftung Integration¹ (German foundation for Integration)
- Digitale Helden¹ (Digital Heroes)
- Diskutier Mit Mir e.V.¹ (Discuss with Me)
- European Academy for Women in Politics and Business e.V. (EAF Berlin)
- esports player foundation
- Femtec
- Freunde fürs Leben e.V.¹ (Friends for Live)
- Gesicht Zeigen! (Show your face)
- Global Digital Women
- ichbinhier e.V.¹
- Juuuport e.V.
- Kompetenzzentrum Technik - Diversity - Chancengleichheit e.V. (kompetenz)
- Managerfragen.org¹
- 100% MENSCH¹ (100% Human)

- Nummer gegen Kummer¹ (youth counseling line)
- Seitenstark e. V.¹
- Supplier Development Programme (SDP)
- TelefonSeelsorge¹ (telephone counselling)
- VielRespektStiftung¹ (association for diversity and respect)
- ZDK Gesellschaft Demokratische Kultur (Hass hilft)¹
(society for democratic culture)

¹Website only available in German

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)
- GRI 102–13 (General Disclosures)
- GRI 102–43 (General Disclosures)

Compliance

Holistic compliance management system

We have clearly expressed our commitment to complying with ethical principles and both legal and statutory requirements. We have enshrined this pledge in our Guiding Principles and our Code of Conduct. The Code of Conduct is valid throughout the Group and has been introduced in all of our national companies.

At Deutsche Telekom, compliance means following the rules and always doing the right thing. Integrity – which necessarily encompasses compliance – forms the basis of all our business decisions and activities. It defines the behavior of all our employees in dealings with customers, employees, investors, managers, and Deutsche Telekom’s overall sphere of operations.

We have set up a comprehensive compliance management system with a view to ensuring that all areas of the Group operate lawfully and ethically, and successfully tackle compliance risks. Responsibility for the compliance management system at Deutsche Telekom lies with top management. This underscores the great importance that we assign to this topic. The responsibility for the Group-wide design, development, and implementation of the compliance management system falls under the remit of the Chief Compliance Officer (CCO) of Deutsche Telekom AG and of Group Compliance Management. We also have COs (compliance officers) at each of our operating segments and national companies. It is their job to ensure that the compliance management system and our compliance goals are implemented on site.

We have derived the following objectives for our compliance work:

- Preventing compliance violations and unethical business decisions
- Integrating compliance into business processes at an early stage and on a lasting basis
- Minimizing liability risks for the company
- Being viewed as a dependable partner by customers and business partners
- Adopting a consistent approach to preventing, identifying, and responding to non-compliance
- Fostering a compliance culture and ethical conduct

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–17 (General Disclosures)

Ongoing audit of compliance management continued

In 2021, we continued the regular audits of our compliance management system that began in 2010 in accordance with audit standard 980 of the Institute of Public Auditors in Germany, with “anti-corruption” as its main emphasis. This is how we aim to ensure that we can consistently address corruption risks and maintain relevant effective processes in the company.

Between 2016 and 2018, we verified compliance management at a total of 25 German and international companies. A new audit cycle began in 2020, with a first group of nine German companies undergoing an audit. A total of 13 international companies were then audited in 2021. As a result, a total of 22 companies were audited in the two-year period 2020/2021. Audits in this connection have focused on processes that are exposed to heightened corruption risks, such as processes in the areas of procurement, sales, events, donations, sponsorships, and human resources.

For the companies audited in 2021, auditors again confirmed the appropriateness, functionality, and effectiveness of the companies’ compliance management systems. Please see the relevant audit reports for details.

Further development of the compliance management system through regular risk assessment

Our goal is to systematically identify, analyze and evaluate compliance risks for the company. Risk-oriented measures can then be derived to prevent legal and regulatory violations. For this reason, an overarching compliance risk assessment (CRA) is carried out centrally by Group Compliance Management on an annual basis. It also includes Deutsche Telekom subsidiaries that are selected on a risk basis. For this we have established a Group-wide compliance management process, established responsibilities, and defined assessment criteria. The individual steps are documented transparently. In detail, the CRAs proceed as follows:

- The companies that will take part in the CRA are selected according to the level of maturity of their compliance management system (maturity-based model). In 2021, 112 companies participated. That equates to a coverage level of 98.10 percent (based on the number of employees of the fully consolidated companies as of December 2021; a different CRA system is

used for T-Mobile US). Responsibility for conducting the CRA lies with the respective national company. The central compliance organization also assists with its implementation and provides a standardized methodology. Compliance Management then uses the findings from the CRA to derive risk-oriented Group-wide measures. The Board of Management and Audit Committee of the Supervisory Board of Deutsche Telekom AG are regularly informed about the Group's compliance risk situation.

- The national companies' managements are responsible for the results of the compliance risk assessment. Activities and responsibilities for the following year's compliance program are developed on the basis of these results. The management then passes a formal resolution to approve the program. The measures from the compliance program are monitored closely. Any potential risks for our company are listed in a Group risk map. It enables the various Deutsche Telekom companies, with their different business models, to conduct systematic risk analyses. In 2021, the core risk categories were revised and partly consolidated. In 2021, the risk map covered 21 core risk categories, including such categories as corruption, anti-trust law violations and violations of the Code of Human Rights & Social Principles. In view of the rapid pace of digitalization, we plan to add the topic of "digital ethics" to the risk map in 2021. Each national company can add more categories specific to their business needs and as warranted. This involves defining which specific threat each risk poses to the national company and stating which steps have already been implemented to rule out this risk as far as possible. If necessary, additional measures are developed to reduce the risks to a manageable level.

A clear reference framework: Our Code of Conduct and Guidelines for Artificial Intelligence

Integrity, respect, and compliance with the law – these are the principles on which Deutsche Telekom's business activities are based. Our Code of Conduct is the central reference framework for lawful and ethical conduct. It makes a significant contribution to our business success by providing a solid, ethical foundation for our business activities. The Code of Conduct applies throughout the Group. In the year under review, the foreword for the Code of Conduct was revised, in keeping with the change in the leadership of the Compliance department.

Our AI Guidelines supplement our Code of Conduct at the strategic level. Their status is equivalent to those of our Code of Conduct and our "Code of Human Rights & Social Principles". They set out clear requirements for our policies for addressing and managing AI at Deutsche Telekom. In following the AI guidelines, we have made it our goal to use and refine our AI products and services in a responsible manner. We want to ensure that the company complies with all applicable laws and regulations, and develops AI in human-centered ways, with a view to protecting the basic rights of the people involved in this area, including sovereignty, freedom from discrimination and freedom of expression.

Raising awareness of compliance risks among staff

The goal is to make sure that the conduct of our employees is ethical and legally compliant at all times, which is why we implement the following measures across the entire Group:

- A Group-wide Code of Conduct that sets out clearly how our employees are expected to behave.
- Compliance-related Group policies on areas such as anti-corruption, gifts, invitations and events, and on dealings with consultants and sales partners.
- A policies database that helps staff find and implement applicable regulations.
- Preventive measures that are combined in a compliance program.
- Regular training courses on compliance and anti-corruption – these courses form part of our welcome process for onboarding of new employees (see GRI 205–2); since 2021, a pertinent compliance workshop forms part of the international introductory event for new employees.
- International introduction of the online training course "Compliance Basics" in 2021. Our employees are required to repeat this course every two years.
- The course features short, to-the-point videos on compliance topics of relevance to everyday work procedures. They are available to employees at all times, via the internal portal YAM UNITED and LinkedIn.
- In April 2021, and in the framework of the International Compliance Days, a pertinent live-streamed event was held on the topic of business ethics and ethical leadership. The participants included representatives of Deutsche Telekom and T-Systems, and the speakers included an external guest.
- The "Ask me!" portal for questions relating to compliance. The portal contains FAQs with example cases, as well as information on laws, internal policies, and conduct rules. It also gives users the opportunity to contact the "Ask me!" advisory team, which will provide reliable answers if employees are unsure about what to do in a particular situation. The number of inquiries and the topics covered can be viewed here.
- Annual compliance risk assessment (CRA), which we use to identify and assess compliance risks in the national companies and specify key areas for suitable preventive measures.
- Since 2013, to mark the worldwide UN Anti-Corruption Day on December 9: Implementation of Group-wide communication campaigns and various topic-related activities at the companies
- Regular anti-corruption statements by Deutsche Telekom Board of Management members

Systematic handling of infractions

We follow up on all tip-offs related to a violation of legal or internal regulations, provided the description of the facts is adequate. One of the channels we use to receive tip-offs is the whistleblower portal “Tell me!”

- All tip-offs are treated as confidential, checked for plausibility, and carefully investigated.*
- Any violations we uncover will be rigorously sanctioned, without exception, according to legal provisions, regardless of the rank and position of the persons involved. This also includes possible termination of the employment relationship and an assertion of claims for damages. Any weaknesses identified in the internal control system during the investigation are systematically analyzed and remedied.

Deutsche Telekom is party to proceedings both in and out of court with government agencies, competitors, or other parties. We have reported on what Deutsche Telekom views as key processes in the 2021 annual report.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–17 (General Disclosures)
- GRI 416–2 (Customer Health and Safety)
- GRI 418–1 (Customer Privacy)
- GRI 419–1 (Socioeconomic Compliance)

“Tell me!” whistleblower portal

We have created the “Tell me!” whistleblower portal to uncover non-compliant conduct. Both our employees and external parties such as business partners and customers can use the portal to report misconduct – and can do so anonymously. We have introduced a Group-wide reporting process to control and monitor these activities.

In 2021, 87 compliance-related reports were made to Deutsche Telekom via the “Tell me!” portal (113 reports were made in the previous year). Seven of those are still being reviewed for plausibility (as of December 31, 2021). A total of 47 were confirmed as actual misconduct and were prosecuted accordingly. 62 plausible reports were investigated as compliance cases.

- Most of the tip-offs received in 2021 focused on “financial interests” (possible cases of fraud, breach of trust, manipulation of targets, and unfair sales methods).
- In confirmed cases, we impose systematic sanctions that are proportionate to the act and the guilt of the perpetrator and are in line with applicable legal provisions. A list of the actions taken is published on our website.
- Naturally, we always follow up on all compliance-related tip-offs, even those that reach us through other channels.

Receipt and handling of tip-offs on the “Tell me!” portal*

	2021	2020	2019
Reports (overall)	901	1 060	1 058
Compliance-relevant tip-offs	87	113	122
Thereof anonymous tip-offs	29	57	61
Confirmed misconduct	47	63	38
Under investigation	13	12	13
Non-plausible tip-offs	18	38	35

* Tip-offs received directly by the international companies are only included here if they are relevant to the Group.

Measures to strengthen our corporate culture

In 2019, as part of the Compliance-based Company Culture initiative, we conducted our second ever international employee survey on compliance. The survey provided insights regarding potential ways of improving our corporate culture. We then addressed the potential for improvements by carrying out various measures, such as Management-Board workshops, employee-training events, and e-learning programs for managers. In the workshops, for example, members of the Board of Management and managers considered use cases that presented typical dilemma situations, and discussed how best to handle them. The survey findings, along with the insights gained via the measures, have given us an adequate understanding of Deutsche Telekom’s compliance culture. To obtain additional findings, we regularly analyze the results of various employee surveys (such as pulse surveys).

Also, in 2021 we launched additional measures to strengthen the Group’s compliance culture. For example, we introduced an online course entitled “Compliance Basics” (“Compliance Grundlagen”) that addresses typical compliance-related issues that arise in everyday business. In addition, we carried out in-person training events on the topics of compliance and compliance culture.

Furthermore, we developed new formats for efforts to raise employee awareness about compliance, such as social-media-style “1-minute videos” that provide tips on important compliance topics. Also, we introduced “SimpleShows” – short animated films on various compliance topics – throughout the Group. In yet another effort, at this year’s onboarding event for new employees, we gave a special presentation aimed at raising awareness about compliance and the importance of having a good compliance culture. The presentation was provided in addition to the compliance information normally provided at such onboarding events. Finally, similar presentations were made to additional groups of employees in various segments of “Integrity Workshops.”

Crossing borders: Worldwide cooperation for compliance

Different legal practices and cultural values in the countries where Deutsche Telekom is active represent a significant compliance challenge for us. The increasingly dynamic development of global markets, the emergence of new, digital business models, and intensified international competition also influence our compliance strategy.

In line with the Group’s international orientation, we discuss strategic compliance issues with an internal international compliance advisory team twice a year. In 2021, in keeping with the coronavirus pandemic, compliance officers from the largest and/or strategically most significant international units met with Group Compliance Management in online conferences. Similarly, the company’s annual International Compliance Days were not held in person in 2021, due to the coronavirus pandemic. Monthly international Compliance videoconferences were held in their place. Strategic projects were presented and experiences from compliance activities at our international units exchanged. Topics included “Being Agile and Compliant,” “Digital Ethics” and “Corporate Strategy”.

In the framework of international “best practice calls,” compliance measures of national companies were presented that received especially good assessments in the audits and were upheld as being “best practice” measures and especially exemplary. This was done with a view to promulgating the results of compliance audits pursuant to IDW 980, and to promoting mutual learning in this context, throughout the Group. Examples of such measures include the fraud monitoring system in place at Magyar Telekom (Hungary) and the donation and sponsorship processes in place at OTE Group (Greece). Additional such calls are planned for 2022.

With regard to compliance issues, we also confer with relevant national and international organizations and experts. In addition, we regularly promote the further development of compliance standards and management systems through specialist presentations, publications, and other contributions.

Commitment to anti-corruption initiatives

We participate regularly in the work of national and international organizations that focus primarily on compliance issues. As a member of associations and organizations such as the German Institute for Compliance (DICO e.V.), the Compliance & Integrity forum of ZfW (Center for Business Ethics) and BITKOM, Germany’s digital association, we make use of opportunities to exchange ideas and experiences related to compliance.

For years now we have been using the United Nations International Anti-Corruption Day on December 9 as an opportunity to raise awareness in the Group about the issue of bribery and corruption. In this connection, since 2015 Management Board members have been issuing an annual “Tone from the Top” that speaks out against corruption. In the year under review, Tim Höttges, Chief Executive Officer, and Claudia Nemat, Member of the Deutsche Telekom Board of Management and head of the Board department Technology and Innovation, held an open discussion on anticorruption activities. The Group made a point of carrying out such communication measures during the pre-Christmas period, when many questions arise about the ethical handling of gifts.

Responsible use of artificial intelligence (AI)

Digital responsibility is a task for society as a whole. Deutsche Telekom develops artificial intelligence (AI) and uses it in a variety of products. AI systems have long played an integral role in our operations. For example, they are used to automatically prioritize customer enquiries. Also, we use chatbots in interactions with customers, in order to speed up processing of customer enquiries and concerns.

We are strongly committed to ethical use of AI – meaning use in which people, and their needs, are always in central focus – just as we are committed to high-quality service and to digital self-determination. Last but not least, we have a great interest in ensuring that our customers can trust our products.

Against this backdrop, in 2018 we were one of the first companies in the world to develop management guidelines for the ethical handling of our AI. They clarify how we at Deutsche Telekom intend to use AI responsibly and develop our AI-based products and services. Our AI Guidelines outline an approach in which AI is developed with people and their needs in mind. They are oriented to the pertinent legal foundations – and to our Code of Human Rights & Social Principles, in which we commit ourselves to upholding and promoting human rights.

To support the specifics of implementing our AI Guidelines, we saw a need to take additional steps, issue additional rules, and introduce additional processes. To that end, we have initiated the following measures:

- True to the motto “share and enlighten,” we have created an online training course on “Digital Ethics” for our employees and held presentations on AI-related topics at the German and international levels.
- In keeping with the fact that many companies are involved with AI, the existing Supplier Code of Conduct has been supplemented with corresponding requirements for handling AI.
- As part of our work as a member of various bodies, we share our experiences and insights with other companies. This occurs, for example, in our work in the Federation of German Industries (BDI); the German Association for Information Technology, Telecommunications and New Media (Bitkom); the German Association for the Digital Economy (BVDW); and the Ethisphere Institute.

In the period under review, we implemented additional measures in support of active application of our AI Guidelines:

- We subjected Telekom Deutschland’s AI-based voice and chatbots for business customer sales to review in keeping with the Federal Office for Information Security’s (BSI’s) criteria for trustworthy AI (AI Cloud Service Compliance Criteria Catalogue (AIC4)), thereby becoming one of the first companies to have such review carried out.
- To support our technological experts and project managers in connection with this issue, and in the context of development

of new technologies, we collaborated with them to produce a “Professional Ethics” guide. The guide presents best practices, methods, and tips for applying the AI Guidelines to development processes. With this guide, we are seeking to ensure that all developers who work with AI are able to conform to the AI Guidelines and implement them in the systems and products they develop.

- The Robust AI Assessment project is part of our overarching efforts to link state-of-the-art technologies to ethical standards. In a cooperative effort with experts of Israel’s Ben Gurion University, and the German start-up Neurocat, AI experts of Telekom Innovation Laboratories are working to measure and analyze the robustness of internal and external AI-based products and services, with a view to identifying potential for improvements.
- In addition, we have added the AI Guidelines to the curricula for various training courses for our employees. For example, we have developed relevant training events for our Data Scientist training program and our “Re-Skilling Academy,” and we offer these events in various attractive formats in the framework of Telekom Vocational Training, including virtual tours, online training and “Digital Learning Journeys.”

Further development of the Compliance organization

Due to the increasing challenges in our market environment and changes in the working world, we are constantly adjusting the range of duties covered by Compliance. With means of needs-oriented and ad hoc training courses, we also keep Compliance employees up to date in terms of knowledge and skills.

In 2020, we launched and further developed the “Compliance Next Level” transformation initiative, with a view to preparing our Compliance organization for growing customer requirements, both internal and external, and for digital and agile modes of work. Since October 2021, the Group Compliance Management area has been using agile work processes.

By concentrating training on the topic areas “Innovation,” “Business Ethics” and “Risk Mitigation,” we are seeking to uphold staff’s thoroughgoing customer centricity and their capabilities to respond – collaboratively, quickly and appropriately – to changes in the Compliance sector.

In this context, we have offered employees an extensive range of training measures, such as training focused on agility. These measures have met with broad interest and generated fruitful discussion.

Political advocacy

Commitment to consumers

Deutsche Telekom aims to become the leading European telco. That is why we again gave high priority to consumer-related topics in 2021.

The main topics included:

- Ongoing measures to protect consumer data privacy (in online advertising, for example)
- Efforts to strengthen comprehensive youth protection, across all relevant technical platforms, at the national and EU levels (especially in the framework of the 2021 amendment to the Telecommunications Act)
- Improving customer service standards
- Efforts to ensure consistent, understandable messaging in communications with our customers
- Improving consumer protection in telecommunications (e.g., during the ongoing IP migration and when switching providers for fixed-line and mobile connections).

We are also continuing our commitment in issues of provider switching, with the goal being to make it easy for both fixed-network and mobile consumers to switch providers, largely without any service interruptions. In all these areas, Deutsche Telekom stands for a constructive and solution-oriented approach that is geared to both consumer interests and the interests of our company.

Political advocacy tools

Our partners in parliaments, governments, and non-profit organizations need to uphold their independence and integrity. This principle is codified in Deutsche Telekom’s Code of Conduct. Donations to political institutions, parties, and political representatives are not allowed, for example. Instead, we place importance on factual communication, competence, credibility, and integrity. As a result, politicians and stakeholders feel that the information we provide is authentic and credible and can refer to this information when forming their own opinions. In Brussels, Deutsche Telekom is registered within the EU’s public Transparency Register for lobbyists, and in Germany the company will be registered, as of February 28, 2022, in the Lobbying Register (only available in German) for the Representation of Special Interests vis-à-vis the German Bundestag and the German Government. Within the context of our collaboration efforts in associations and other bodies, we feel that we are under the obligation to comply with all ethical codes and legal provisions.

In 2021, our political advocacy work focused on the following key issues:

- Broadband build-out
- Frequency auctions
- Partnerships in the area of expansion
- Amendment to the Telecommunications Act
- Regulatory procedure
- Net neutrality
- Amendment to the German IT Security Act
- European cloud ecosystem
- Platform regulation
- Data economy
- Consumer protection
- Green ICT
- Amendment to the Patent Act

On the Deutsche Telekom website, under the special topic heading “Public and Regulatory Affairs,” we regularly provide information about current issues and perspectives relative to representation of interests.

Association fees – the main political advocacy outlay

Active involvement in associations is the cornerstone of our political advocacy work. Accordingly, all the various membership fees (for umbrella/trade/industry associations) account for the majority of our outlay in this area. To make our involvement transparent, an overview of the main fees paid in the past three years is provided below.

Category	Institution	2019	2020	2021
Annual total monetary contributions/donations (in EUR)	Trade Associations	< 5 000 000*)	< 5 000 000*)	< 5 000 000*)
	Political Parties	-	-	-
Largest single annual contributions (in EUR)	(Deutsche) Industrie und Handelskammer (IHK/DIHK)	1 082 182	896 506	2 278 611
	Bundesverband der deutschen Industrie (BDI e.V.)	500 000	500 000	500 929
	Bundesvereinigung der Deutschen Arbeitgeberverbände (BDA)	400 407	400 410	400 407
	Bitkom e.V.	360 000	360 000	343 085

* The above figures for contributions to trade associations mean “less than 5 million euros per year” (the actual values may vary from year to year; the value given is a rounded maximum value). Deutsche Telekom does not make contributions, grant advantages or give benefits of any kind, directly or indirectly, to political parties, political movements, or trade unions or their representatives or candidates, except as required by applicable laws and regulations.

Our position on broadband – investment incentives are needed

Having a high-performance, reliable and secure broadband infrastructure is the basis of success for all business sectors and is a key factor in making a business location attractive. For many years now, Deutsche Telekom has been making significant contributions in this area by investing heavily in the infrastructure for mobile internet and the fixed-line network, and especially in our fiber-to-the-home (FTTH) networks. We show more commitment than any other company to providing full-area coverage, including in rural areas.

In order to drive network expansion, network operators in Germany need investment incentives, legal and regulatory planning security, and technological freedom of action. That enables them to respond flexibly to the circumstances of enterprises and households and meet political, economic, and social requirements.

This is the only way to fully harness the potential for cost-effective private network expansion using all available technologies. When it comes to areas where cost-effective broadband expansion is not possible, it is up to the public sector to ensure the gaps are plugged by providing technology- and supplier-neutral funding programs and exercising sound judgment. Legal frameworks and regulatory practice need to actively support private-sector investment in new fiber-optic networks and prevent unnecessary financial burdens and red tape for the network operators investing in networks.

In view of the fact that the internet and telecommunications markets are converging rapidly, and in light of the growing market power of a few global internet players, the sector-specific regulation of telecommunications that has been pursued to date is creating more and more of an imbalance. The same laws and regulations that apply to telecommunications companies also need to apply to internet companies providing the same services. The objective here must be to create equal competitive conditions and enable fair distribution of the financial burden involved in broadband expansion.

Our position on network neutrality – the internet should stay open

As part of the EU Telecoms Package, regulations on the open internet were adopted and came into effect on April 30, 2016. The regulations particularly address permitted traffic management and transparency requirements and limit commercial product and service differentiation on the internet.

Deutsche Telekom remains committed to preserving an open internet. Content and services will continue to be available online in accordance with the best effort principle. This means that data packets are processed on the internet without preferential treat-

ment and forwarded in the best possible way. We are continuing to expand our infrastructure so that we can cope with rapidly increasing amounts of data traffic and facilitate innovation in our network. As a result, we are satisfying our customers' growing demands and meeting the expectations of online content and application providers, who want to be able to provide services meeting high technical-quality standards both now and in the future.

Building on the best effort internet, we are developing an innovative network architecture – 5G networks – which can better and more flexibly meet the various transmission quality requirements of specific services. We thereby fulfill business and regulatory requirements and enable innovation in the services we offer on our networks. Content is not monitored, nor do we have any influence over user or provider content. When competing with other network operators, we will also continue to market services with guaranteed quality features exclusively on a non-discriminatory basis.

Sustainability standards

UN Global Compact – Communication on Progress

The present CR report also serves as a Communication on Progress (CoP) from Deutsche Telekom within the framework of the United Nations Global Compact. The table lists the text passages, in this CR report and in other Group publications, in which we provide information about our commitment to implementing the ten principles of the Global Compact. With these resources, we are also fulfilling the expanded Global Compact Advanced criteria.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)

German Sustainability Code

As part of its Corporate Responsibility report, Deutsche Telekom yearly publishes a comprehensive declaration of conformity with the German Sustainability Code. The German Sustainability Code aims to make companies' commitment to sustainability transparent and comparable under a binding framework.

We will provide links to Deutsche Telekom's declaration of conformity for 2021 following its publication in the present context.

The German Sustainability Code has been approved by the Federal Government's Council for Sustainable Development. Deutsche Telekom was one of the first companies to accede to the Sustainability Code.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)

Sustainability Accounting Standards Board (SASB)

There are various standards for CR reporting for companies. The number of international requirements and frameworks is growing. Our CR report has been based for many years in particular on reporting in accordance with GRI. Since 2017, we have also been using the SDGs to make our performance transparent. However, we want to adequately meet the growing interest of our stakeholders in having comparable sustainability information. For this reason, in the year under review we prepared an index for the sustainability standards of the Sustainability Accounting Standards Board (SASB) – with an industry-specific focus on the information and communications technology sector.

The following section presents this SASB index. It lists the industry-specific SASB criteria that we fulfill (in some cases, it provides links to passages, in our sustainability-oriented communications, in which fulfillment takes place). In addition, we list the SASB criteria at relevant locations within the present report.

We welcome the growing attention being given to sustainability issues, and of course are happy to readily meet growing transparency requirements. At the same time, we are aware of announced efforts to consolidate various relevant standards and frameworks.


Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)

GRI-Index

Deutsche Telekom's 2021 CR Report complies with the Global Reporting Initiative (GRI) guidelines and has been prepared in accordance with the "Core" option.

In the GRI content index, we refer to content pertaining to general and specific standard disclosures and explain the content when necessary. The standard disclosures are based on the very relevant aspects identified in our materiality process. Selected content from various action areas, and information on the materiality process, has been reviewed in this regard; such content is suitably marked in the index (with a ). The index also contains links and explanations relative to other GRI aspects that are covered in the report.

Awards

Awards for climate protection

Climate protection along the supply chain

Working on behalf of investors, the non-governmental organization CDP regularly assesses the climate protection activities of listed companies worldwide and compiles an index of leading companies, referred to as the A List. In 2021, Deutsche Telekom was included in this list for the sixth time in a row.

In 2017, we reported our ESG KPI “CDP Supply Chain Program” for the first time. It shows the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program.

As part of the CDP supplier program, companies ask their key suppliers about their emissions and their climate strategy. And we make use of this: In 2021, we invited 462 suppliers to participate in the CDP Supply Chain Program. The suppliers in question account for more than 80 percent of our procurement volume. Of the suppliers we contacted, 268 participated, a group accounting for 72 percent of our procurement volume (2020: 70 percent).

Through our commitment to climate transparency in supply chains, we were awarded a place in the “Supplier Engagement Leader Board” for the third time in a row in 2021.

Top climate-protection commitment in 2021:

Top marks for our climate protection

A study carried out by FOCUS magazine recognized our commitment to climate protection by giving us 200 out of 200 possible points, along with the special distinction “Top climate-protection commitment in 2021” (“Top-Klima Engagement 2021”). The study team reached its conclusions by comparing companies’ absolute-emissions trends over the course of several years, looking carefully at products’ climate impacts and querying companies about their ambitions with regard to future targets. A total of 130 companies amassed enough points to qualify for the final list, but only two achieved the maximum number of possible points.

Awards for sustainable products and services

Plastics Recycling Award Europe

In the year under review, Deutsche Telekom’s “Speed Home WLAN” router, whose housing consists of over 90 percent recycled plastic, received the Plastics Recycling Award Europe. It came in first, among six finalists, in the category “Automotive, Electrical or Electronic Product.” The international jury of experts was especially impressed with how the device has an esthetically pleasing design, even though its percentage of recycled plastic is extremely high for an electronic product.

Connected Car Award 2021 for the “Digital Guardian Angel”

Readers of the magazines *Autobild* and *Computerbild* chose the “Digital Guardian Angel” app as the winner of the Connected Car Award 2021 in the “Safety” category. The app, which was developed in cooperation with Continental, warns particularly vulnerable road users – such as pedestrians and cyclists – when they are in danger of being hit by a motor vehicle.

The Representative Office in Berlin is certified as a Sustainable Partner

Deutsche Telekom’s Representative Office in Berlin makes event facilities available to internal and external groups / organizations. In 2021, the association *visitBerlin* Convention Partner again audited the Representative Office in Berlin and, as a result, certified it as a Sustainable Partner in its top category, “Leader.” The Office’s sustainability performance was audited in four categories: governance, risk & compliance; environmental aspects; social aspects; and economic aspects.

Awarded the “DigitalPakt Alter” seal of approval

The “DigitalPakt Alter” initiative has recognized our Digital Home Service as senior-friendly. With this service, we offer our customers comprehensive advice by phone or on site - in the case of difficulties with the PC, smartphone, WLAN or TV. The five digital innovations selected from among the 51 solutions submitted were awarded the “DigitalPakt Alter” seal. The initiative honors innovative solutions that promote the digital participation of older people.

Awards for sustainable finance

Best European telco in the S&P Assessment

In 2021, we qualified, for the seventh time in a row, for the renowned sustainability indexes “Dow Jones Sustainability Index World” (DJSI World) and “Dow Jones Sustainability Index Europe (DJSI Europe).” DJSI World represents the top 10 percent of the largest 2 500 companies in the S&P Global BMI based on long-term economic, environmental and social criteria, and selected companies have to requalify each year. In Europe, the Group took first place in the S&P Global Corporate Sustainability Assessment of the telecommunications industry, and we attained the third-highest score at the global level.

Bloomberg Gender Equality Index

In the year under review, we were again selected, as one of 418 companies, for the Bloomberg Gender Equality Index (GEI). Furthermore, our score in the Index was considerably improved over our score in 2020. The GEI measures and evaluates gender-equality performance in a total of five areas:

Female leadership and talent pipeline; equal pay and gender pay parity; inclusive culture; anti-sexual harassment policies; and pro-women brand.

Institutional Assets Awards 2020 & 2021

In the “Institutional Assets Awards 2020 & 2021” of the specialist publishing house for the newspaper Frankfurter Allgemeine Zeitung, Deutsche Telekom Pension Fund took top honors, for its sustainable investment strategy, in the “Equity Strategy” category. For the awards, experts single out successful investment strategies that have been implemented in a particularly coherent manner.

A complete overview of the indexes in which the Deutsche Telekom T-Share is listed, in the year under review, is available here.

Awards for our commitment to digital inclusion

Digital Inclusion Benchmark

In 2021, we were once again listed in the top 10 of the Digital Inclusion Benchmark’s listing of the world’s 150 most influential tech companies on digital inclusion. In Europe, we were even ranked as one of the top three companies. These rankings, which are carried out by the World Benchmarking Alliance, indicate how well information technology and telecommunications companies are doing in providing equal-opportunity access to digital opportunities, as well as how responsibly and proactively they are addressing risks. We received very high marks in the categories “Use” and “Innovation,” and above-average marks in the categories “Access” and “Skills.” These results reflect our long-running commitment to digital inclusion.

Awards for our campaign #TAKEPART – No hate speech

With our campaign “#TAKEPART – No hate speech,” we are working to ensure that people have nothing to worry about as they navigate cyberspace. Our message for the campaign is “Words must not become a weapon.” Via channels such as video and radio spots, workshops and podcasts, we are calling attention to hate speech, social media outrage and cyberbullying, and encouraging people to show “civil courage online” and stand up against such negative trends. In the year under review, we received several awards for this campaign:

Gold at THE BEST AGENCY 2021



Gold for our campaign: The customer jury of “THE BEST AGENCY 2021” – consisting of decision-makers in the marketing and communications sectors – gave us top

honors in the category “Loud and Bold,” which highlights ideas and campaigns that attract attention in creative, innovative ways.

Best national media strategy: Deutscher Mediapreis 2021



In June 2021, our #TAKEPART (#DABEL) campaign won the Deutscher Mediapreis (German media award) in the category “national media strategy” (“Media-Strategie national”

Deutscher Digital Award 2021: Silver



In the Deutscher Digital Award’s “Digital Advertising Campaigns” category, our campaign against online hate speech was honored with “silver” award.

Gold at the Radio Advertising Awards 2021



(#DABEL – Gegen Hass im Netz).

At the Radio Advertising Awards 2021, we received “gold” honors, in the “Best Brand” category, for three radio spots on the topic #TAKEPART – No hate speech

Effie Germany Awards: Bronze



In their “Doing Good” category, the Effie Germany Awards – sponsored by the GWA association of communication agencies – awarded our campaign a “bronze” award.

Awards for our commitment in the area of diversity

1st place in the Boston Consulting Group’s Gender Diversity Index

In 2021, we once again won first place honors in the Boston Consulting Group’s Gender Diversity Index. The Index highlights the percentages of women in management positions at major companies, along with the impacts of those percentages. It has now been published for the fifth time.

Female Allstar Board: Award for Board of Management member Claudia Nemat

At this year’s Female Allstar Board awards, Claudia Nemat was honored as one of Germany’s five outstanding female executives – of its “FAB” She received the award in the category Chief Technology Officer (CTO). The award is designed to enhance the visibility of female executives and to help build a growing network of women in business.

“eg-check” certificate for fair salaries

In 2021, we once again received the “eg-check” seal for our fair remuneration system. Germany’s Federal Anti-Discrimination Agency awards the seal for equal-pay policies – and uses it as a means of highlighting discrimination in the area of remuneration. To determine whether an employer qualifies, it reviews whether the employer pays women and men equally for the same or equivalent work.

Best employer, according to the magazine “Brigitte”

In a study carried out by the magazine “Brigitte,” looking at aspects such as work-life balance, career advancement, transparency, and gender equality, we were named one of the best employers for women – and received five stars, the highest ranking.

Diversity awards for T-Mobile US

For its commitment on behalf of diversity, T-Mobile US received the prestigious honor of being named one of Forbes’

“Best Employers for Diversity 2021.” As part of the honor conferred by Forbes, T-Mobile was listed as one of 500 companies that are recommended by their own employees, have diversity in their boards of directors and among their executives, and carry out initiatives for diversity and inclusion.

Sales & service awards



TÜV quality seal for “proven customer satisfaction” 2021

For the ninth time in a row, and on the basis of a representative survey, TÜV Rheinland, a leading,

independent international provider of technical services, awarded our hotline, our technical service, and the Telekom Shops its “proven customer satisfaction” quality seal. Some 2 550 customers in Germany were polled for the study. Deutsche Telekom received the rating “good,” with an average grade of 2.0 or better in each of the individual categories.



“connect” hotline test: Fixed network 2021

In 2021, our broadband / fixed-network hotlines were “connect” magazine – with excellent scores in the categories of accessibility, waiting time, staff friendliness, and quality of information provided.

With 440 out of 500 points, “connect” named Deutsche Telekom the test winner in the fall – for having the best fixed-network-hotline customer service.



“connect” hotline test: Mobile communications 2021

Every year, “connect” magazine tests the mobile hotlines of various providers and evaluates them in the categories of accessibility, waiting time, staff friendliness, and quality of information provided. In issue 5/2021, “connect” praised Deutsche Telekom’s customer service as “very good.” The magazine certified us as having the best mobile hotline, with 425 out of 500 points.



“connect” survey: Customer satisfaction – internet providers B2B 2021

In 2021, “connect” and the FiT (Specialist institute for technology issues – Fachinstitut für Technik-themen) again surveyed business customers (1 447

in total) about various internet providers. The survey was conducted online in the categories of customer service, brand/provider, network, and hardware and software (e.g., TV app). With a grade of 2.0, Deutsche Telekom emerged as the overall winner, with particularly impressive showings in the network, brand/provider, and hardware and software categories.



“connect” mobile communications shop test 2021

In 2021, Deutsche Telekom won a first place in the “connect” Mobilfunk Shoptest (mobile communications shop test). A total of 14 Shops received a ranking of “very good” for their consultation quality. Three shops set new standards by being ranked “outstanding.” In the overall rank-

ing, Deutsche Telekom received 439 out of 500 possible points, with impressive showings especially in the consultation categories services, rates, and devices.



CHIP mobile communications: Best range of digital services in 2021

2021 was the first time that the computer magazine CHIP tested the online customer services of telecommunications providers. In the area of mobile communications, Deutsche Telekom won first place, with the highest score, 1.1. The company was singled out for its extensive range of contact options, including online chat, video chat and our “Frag Magenta” (“Ask Magenta”) chatbot.



CHIP hosting providers: Best range of digital services in 2021

We also did extremely well in the magazine’s test of hosting providers, taking first-place honors – also with the highest score, 1.3. We were the only provider to receive a “very good” – thanks, in part, to our excellent scores in the categories “accessibility” and “currentness of information.”



CHIP TV & VoD providers: Best range of digital services in 2021

In the area of TV & VoD providers, we received a grade of “very good,” with especially high marks in the categories “accessibility” and “navigation & connectedness.”



CHIP fixed-network and internet providers: Best range of digital services in 2021

Deutsche Telekom’s fixed-network area received a grade “very good.” The primary factors for this honor included high marks in the categories “accessibility,” “range of information” and “presence & currentness.”



Computer Bild: Top Digital Assistant 2021

In 2021, our “Frag Magenta” (“Ask Magenta”) was the telecommunications industry’s best digital assistant, and it earned first place in Computer Bild magazine’s test of such assistants. In the test, Deutsche Telekom’s digital assistant earned high marks in all four categories: “customer experience,” “dialog & expertise,” “user experience” and “security & ethics.”



Chosen “King of Service” 2021 by “Focus Money”

In 2021, and for the sixth time in a row, Deutsche Telekom took first place in the customer satisfaction survey conducted by the magazine “Focus Money.” The trade magazine collected 288 214 customer votes for its survey. Deutsche Telekom placed first in the telecommunications industry, at the national level and in 50 of 56 cities.



Top Service Deutschland 2021

In 2021, Deutsche Telekom once again made it into the “Excellence Group” in the Top Service Deutschland ratings. In the rating process, 678 customers were surveyed regarding their experience with Deutsche Telekom in the past twelve months. Deutsche Telekom earned particularly high marks in the area of service quality.

Awards for our mobile network in Germany



CHIP (edition 1/2021)

We won the “Mobile Network Test” of CHIP trade magazine for the eleventh time in a row in 2021 and were declared the “best network.” In addition, we received the “Best 5G network” (“Bestes 5G-Netz”) logo.



“connect Mobile Network Test” (edition: 1/2021)

We were also the overall winner of the “2021 Mobile Network Test” of “connect” magazine, with a rating of “very good.” Testing focused on the performance and reliability of the networks

for voice (e.g., call setup time) and data (e.g., downloads and uploads).

Awards for our fixed network in Germany



Test winner in CHIP’s fixed network comparison

The trade magazine CHIP tested fixed-network services in Germany in 2021. The result: Telekom took the test victory both nationally and regionally. With an overall score of 1.5, our network is right at the top of the podium in the national comparison and is the only provider to achieve a rating of “very good.” CHIP also tested in Bavaria, North Rhine-Westphalia, Lower Saxony, Hamburg, and Schleswig-Holstein, where there are large regional providers. We won here, too, and came out on top against the regional providers.



Connect test: First place for our fixed network

This year’s fixed network test by trade magazine connect shows: Telekom scored 914 out of a possible 1 000 points, making us the winner of the annual test. With an overall rating of “very good,” we came out on top among providers throughout Germany - with consistently very good scores in all categories. The performance in the language discipline was rated as outstanding. Among other things, we also scored well in data tests on the test server or with short loading times for all tested websites.

Awards for our work in training and development

For employers competing to recruit IT and tech specialists, it is vitally important to have an excellent employer brand. Consequently, we continually aim to improve Deutsche Telekom’s attractiveness, on a lasting basis, as an employer for IT/tech talent. In 2021, we again received various awards for our achievements as an employer and training provider. This strengthens our conviction that we are on the right track with our recruiting and employer-brand strategy.

Most attractive employer for career starters

Universum, an employer-branding company, carries out annual surveys of students in order to identify the most attractive employers for career starters. In 2021, we were chosen as one of the top companies for IT talents, by placing 15th out of 100 companies.

HR Excellence Award for virtual student internship

Also in 2021, we received the HR Excellence Award, in the category “apprentice and university marketing”, for having developed and conducted a virtual student internship program. In order to support young people in finding career and vocational guidance, and in keeping with the constraints of the pandemic, we developed a virtual version of our student-marketing concept. In it, we offer, online, an impression of what everyday training at Deutsche Telekom is like. We provide all kinds of insights into Deutsche Telekom's world, offer assistance for choosing a career, help participants identify their individual strengths and give participants a sense of assurance for their first steps into the workplace.

First place for our career website

In the market research company Potentialpark’s 2021 Talent Communication Rankings, our career website took first-place honors – thereby becoming Germany’s best corporate presence for potential job applicants. We also did well in the other categories (applying online, social media, and mobile), and were awarded second place overall.

Apprentice Communication Study 2021

In addition, we earned second-place honors in the “Azubi-Communication-Studie 2021” (“apprentice communication study 2021”) of Potentialpark and ausbildung.de. In the study, a total of 2 800 school pupils evaluated 100 employers in four different categories: career website, applying online, mobile pages, and social media platforms.

Awards for CR reporting

German Award for Online Communication

In the 2021 Deutsche Preis für Onlinekommunikation (German Award for Online Communication), our 2020 CR report was awarded first place in the “CSR & Annual Report.” The strong features for which the report was singled out included entertaining stories that present complex topics in interesting and understandable ways. Each year, the company Quadriga Media uses the prize to honor outstanding projects, professional campaign planning, and forward-looking strategies in the area of digital communication.

ESG Reporting Awards

The ESG Reporting Awards 2021 prove that our CR reporting is also convincing for experts; in the awards, we won in the category “Best Sustainability Reporting: Technology & Telecoms.” The ESG Reporting Awards rate the best listed companies for their sustainability and climate reporting. For the awards, the jury reviews candidate companies’ overall reporting strategies, along with their commitment and their communication to investors and stakeholders.

ARC Awards

At the 2021 international ARC Awards for business reporting, the concept behind our CR report was upheld in that the report won two prizes. The award winners were selected by independent experts. In the “Cover/Homepage: CSR Report” category, the report won silver, and in the “Interactive Annual Report: CSR Report” category, it won bronze. Submitted reports have to achieve a minimum number of points in order to be eligible for awards. In both of the categories in which it won awards, our report was the only report to be considered.

PR Report Award

Our 2020 CR report received the PR Report Award 2021 in the category “Sustainability and CSR.” The prize is awarded to creatively exceptional communication campaigns. In making the award, the jury praised the playful, interactive elements in the campaign.

CSR Benchmark of NetFederation

In the framework of NetFederation’s CSR Benchmark, we were honored for having the best sustainability communication. The CSR Benchmark is an annual study on the current status of digital sustainability communication. For the 2021 study, the CSR websites of 50 selected companies were analyzed.

MERCURY Awards

At the MERCURY Awards 2021/2022, our Corporate Responsibility Report was twice awarded best report and won silver in both the “Corporate Social Responsibility” and “Interactive” categories. In the “Sustainability Report” category, we achieved third place with bronze. A minimum number of points is required for placement in order to receive an award.

Sustainable finance

Socially responsible investment

SRI investment products consist of securities from companies that have passed an audit based on environmental, social, and governance (ESG) criteria. The development of demand from socially responsible investors for T-Shares serves as an indicator we can use to assess our sustainability performance.

With our ESG KPI “Socially Responsible Investment (SRI)”, we measure how the financial markets perceive our CR activities.

The concept behind the United Nations’ Sustainable Development Goals (SDGs) continues to attract attention on the part of investors. With a view, in part, to evaluating our operations in light of the SDGs, we have introduced a process for assessing the impacts of projects, products and measures.

T-Shares in sustainability ratings and indexes

As part of our CR strategy, we have taken part successfully for many years in ESG ratings, which we select based on reputation, relevance, and independence. When rating agencies give high marks to our social and ecological commitment, the T-Share is included in the financial market’s sustainability indexes.

In 2021, the T-Share was again listed on leading sustainability indexes, including S&P Global’s prominent, and CSA-based, DJSI World and DJSI Europe. Our shares were also listed yet again on the FTSE4Good Index (for the tenth year running) and the UN Global Compact 100 Index. We are also listed on the Euronext Indices.

The table below presents a selection of other T-Share listings.

Rating agency	Indexes/ratings/ranking	Successfully listed in index				
		2017	2018	2019	2020	2021 ●
S&P CSA	DJSI World	✓	✓	✓	✓	✓
	DJSI Europe	✓	✓	✓	✓	✓
	S&P ESG Index Series	-	-	✓	✓	✓
CDP	STOXX Global Climate Change Leaders	✓	✓	✓	✓	✓
	Supplier Engagement A-List	✗	✓	✓	✓	✓
MSCI	ESG Universal Indexes	✓	✓	✓	✓	✓
ISS-oeekom	„Prime“ (Sector Leader)	✓	✓	✓	✓	✓
Bloomberg	Gender Equality Index	✗	✓	✓	✓	✓
Sustainalytics	STOXX Global ESG Leaders	✓	✓	✓	✓	✓
	UN Global Compact 100	✓	✓	✓	✓	✓
FTSE Financial Times Stock Exchange	FTSE4Good	✓	✓	✓	✓	✓
V.E.	Euronext Vigeo World 120	✗	✗	✓	✓	✓

✓ Successfully listed ✗ Not listed - Index did not exist in the relevant year
 ● Data checked by PwC.

Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

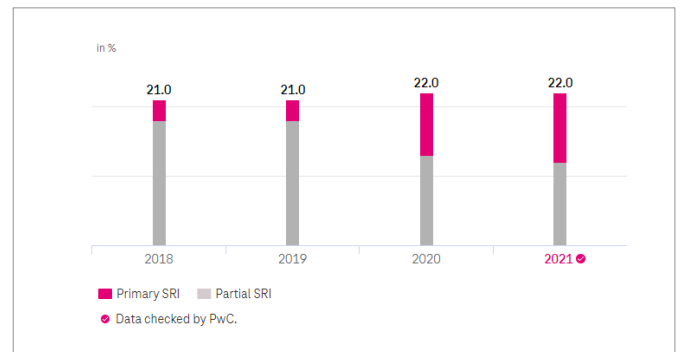
- The most important key figures for measuring and managing climate-related opportunities and risks

ESG KPI “Socially Responsible Investment (SRI)”

The Socially Responsible Investment (SRI) ESG KPI indicates the proportion of shares in Deutsche Telekom AG held by investors who take, among other criteria, environmental, social, and governance criteria into account for their investment strategy („SRI Investment“).

And our commitment for more sustainability pays off: As of September 30, 2021, 12 percent of all T-Shares were held by investors who partially take environmental, social, and governance criteria into account for their investment strategy; 10 percent were held by investors who manage their funds primarily in accordance with SRI aspects.

Our ambition: increase KPI



Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 1 (Strategy)
- Criterion 7 (Control)

Sustainable capital investments & bond issues

In the past years, sustainability criteria have become increasingly important, both politically and economically, with respect to capital investments. And we are among those seeking to make our capital investments increasingly sustainability-oriented. This applies both to money that we invest and to bonds that we issue for the purpose of raising borrowed capital for investments.

To this end, our “Sustainable Finance” working group, working in close consultation with our Group units Corporate Responsibility and Treasury (financial management), regularly evaluates financing models that are attractive and sustainable.

Sustainable capital investments with the Telekom Pension Fund (Telekom-Pensionsfond) and DT Trust

We invest the Telekom Pension Fund’s (only available in German) assets in keeping with our sustainability principles. Besides financial aspects, we have also been factoring in – since 2013 – ecological and social principles, as well as guidelines for good corporate governance, in selecting these investments. This encompasses:

- Targeted efforts to achieve the Sustainable Development Goals (SDGs) by exercising our rights to have a say in decisions as a shareholder
- General ban on all investments in companies that manufacture or do business with “controversial weapons” (e.g., anti-personnel mines, cluster munitions, nuclear weapons, biological or chemical weapons)
- Ban on investments in companies that have repeatedly violated the principles of the UN Global Compact

We pursue a best-in-class approach and therefore focus on investments in companies that are the best in their sector in terms of sustainability performance. Our aim is to reconcile attractive profit expectations with sustainable values.

As a result of this orientation, the Telekom Pension Fund’s sustainable capital investment strategy has been honored by experts: We won the “Equity Strategy” category in the Institutional Assets Award 2020 & 2021 awarded by the specialist publishing house of the German newspaper Frankfurter Allgemeine Zeitung. The award recognizes successful investment strategies that have been implemented in a particularly coherent manner.

Since 2019, Deutsche Telekom’s capital investments (DT Trust) have also been geared toward ecological and social standards. The DT Trust is based on the criteria for the Government Pension Fund Norway (Norges Bank). Among other things, we exclude companies that violate human rights, manufacture certain weapons, or whose core business is considered harmful to the environment.

Sustainable bond issues

In March 2021, our Board of Management approved a framework for sustainability-oriented bond issues – the “Sustainability-Linked Bond Framework.” This financing instrument will enable us to offer investors the opportunity to support our commitment in the fight against climate change. The interest rates for bonds that fall within the Framework are tied to the achievement of the pertinent defined climate targets: In cases in which we do not achieve our targets, we promise to pay higher interest rates.

EU taxonomy: compliance in 2021

The EU Taxonomy Regulation is the outcome of a significant, forward-looking European regulatory initiative. It aims to promote investment flows from the finance sector to businesses that are involved in environmentally sustainable activities. The taxonomy is intended to help the EU to implement the European Green Deal, creating a common understanding of the environmental sustainability of activities and investments. The regulation also lays down corporate reporting obligations in regard to these economic activities. For companies affected by the CSR Directive, this entails new reporting obligations for the 2021 reporting year in regard to taxonomy-relevant environmentally sustainable economic activities.

Six environmental objectives

Criteria were set out in EU legislation in mid-2021 for the first environmental objectives of the taxonomy, “climate change mitigation” and “climate change adaptation.” The taxonomy’s other environmental objectives are “the sustainable use and protection of water and marine resources”, “the transition to a circular economy”, “pollution prevention and control”, and “the protection and restoration of biodiversity and ecosystems.”

To be covered by the taxonomy, an economic activity must contribute substantially to one of these six environmental objectives while at the same time avoiding any negative impact on other objectives (the principle of “do no significant harm” or DNSH principle). The company must also meet minimum social safeguards. The diagram below provides a summary of the taxonomy requirements:



Substantial contribution

to at least one of the six environmental objectives of the EU taxonomy:

1. Climate change mitigation
2. Climate change adaptation
3. The sustainable use and protection of water and marine resources
4. The transition to a circular economy
5. Pollution prevention and control
6. The protection and restoration of biodiversity and ecosystems

Do no significant harm

An activity can only be considered to contribute to one of the six objectives if it has no other significant negative environmental impact (DNSH principle).

Compliance with minimum safeguards

The minimum safeguards are social requirements in accordance with the OECD Guidelines for Multinational Enterprises, the UN Guiding Principles on Business and Human Rights, the Core Labour Standards of the International Labour Organization (ILO), and other requirements of European legislation.

Implementation at Deutsche Telekom

For Deutsche Telekom, as a company in the information and telecommunications industry, the following two of the economic activities currently listed in the EU taxonomy are relevant:

- Data processing, hosting and related activities (8.1. in Annex I + II of the Delegated Regulation (EU) 2021/2139)
- Data-driven solutions for GHG emissions reductions (8.2. in Annex I + II of the Delegated Regulation (EU) 2021/2139)

A complete overview of the economic activities that form part of the EU taxonomy to date is available in the EU Compass.

The EU taxonomy KPIs are applicable to the two environmental objectives that have been published to date: “climate change mitigation” and “climate change adaptation.” We are allocating them to the objective “climate change mitigation.”

The table below shows the taxonomy-eligibility of our economic activities for this reporting year in absolute figures and as a percentage of the Group’s total turnover, capital expenditure, and operating expenditure.

Based on the provisions of the EU taxonomy, the total figures for the Group that are relevant for this calculation in the reporting year are EUR 108.8 billion (turnover), EUR 35.7 billion (capital expenditure), and EUR 0.5 billion (operating expenditure). The definition of turnover from the EU taxonomy is equivalent to net revenue in our Group. The relevant capital expenditures were determined on the basis of the consolidated statement of financial position and are calculated by adding together the following key line items: additions and changes in the composition of the Group under property, plant and equipment, intangible assets (excluding goodwill), and right-of-use assets. The disclosures on capital expenditure do not form part of a capital expenditure plan according to the EU taxonomy guidelines. The definition used in the EU taxonomy for calculating relevant operating expenditure encompasses costs that relate to research and development; building remediation measures; short-term leases; maintenance and repair; and any other direct expenditures relating to the day-to-day maintenance of property, plant and equipment which are presented in the consolidated income statement under other operating expenses. Since we classify our data centers as non-current assets, no direct expenses are incurred in this context. The reported disclosures on capital expenditure and operating expenditure are directly assigned at the level of product groups to either the operation of data centers in accordance with economic activity 8.1. or the provision of ICT solutions in accordance with economic activity 8.2.

An aggregate view of the taxonomy-eligibility of both economic activities provides very low proportions in the reporting year of turnover (1.8 %), capital expenditure (0.1 %), and operating expenditure (2.1 %).

EU taxonomy KPIs – taxonomy-eligibility of the economic activities of the Deutsche Telekom Group

		Turnover		Capital expenditure		Operating expenditure	
		millions of €	%	millions of €	%	millions of €	%
Relevant total figures for the Group		108 794	100.0	35 665	100.0	473	100.0
Of which: taxonomy-eligible	8.1. Data processing and hosting	1 160	1.1	14	0.0	0	0
	8.2. Data-driven solutions for GHG emissions reductions	836	0.8	17	0.1	10	2.1
	Total	1 996	1.8	31	0.1	10	2.1
Of which: not taxonomy-eligible		106 798	98.2	35 634	99.9	463	97.9

* Mobile surveys with selected suppliers as a supplementary, innovative review method

** CDP’s supply chain program is used for direct suppliers with high emission intensity.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-2: (Economic Performance)

EU taxonomy: industry view and outlook

Further development

The EU taxonomy does not currently include criteria for the economic activity “Provision and operation of a network infrastructure for telecommunications.” This means that the key part of our business model is not yet covered by the taxonomy. As a result, we cannot currently describe our core business as taxonomy-eligible. Suitable EU taxonomy criteria with which we could describe our contribution to climate protection as taxonomy-aligned do not yet exist either. We therefore lobby in a range of business and industry associations for the inclusion of suitable, relevant criteria in the EU taxonomy to describe our core activities. Among other initiatives, we have taken on leadership of the Sustainable Finance working group in the European Telecommunications Network Operators’ Association (ETNO), and we represent the ICT industry in the EU Platform on Sustainable Finance. We are also active within the European Round Table (ERT), and at national level we are part of the econsense network and several other organizations and stakeholder dialogs related to the EU taxonomy. We have set out our position in a range of position papers, for example, here with ETNO.

The telecommunications industry is a key building block for the EU Green Deal. IT solutions and products that run on our networks help companies and private individuals to reduce their CO₂ emissions. These include, for example, web and video conferencing, and also “smart” solutions such as smart cities and smart buildings. Services such as these help achieve energy efficiency and reduce CO₂. We therefore think that, for the European Union to meet its climate and energy goals, it is essential to reflect the importance of telecommunications networks when further developing and refining the taxonomy.

The EU taxonomy also addresses economic activities that are relevant, for example, for our fleet and building management activities, but that are not within Deutsche Telekom’s core business. These include the installation, maintenance, and repair of energy-efficient devices, of electric vehicle charging stations, of devices for measuring, regulating and controlling the overall energy efficiency of buildings, and of renewable energy technologies. Activities in these areas largely relate to our capital expenditure and our operating expenditure. It will not be possible to gauge whether the associated turnover of the providers of these services are taxonomy-aligned until early 2023, when our business partners publish reports with the relevant information. Until then, we cannot report any capital expenditure and operating expenditure relating to the procurement of products from taxonomy-aligned economic activities as being taxonomy-eligible.

The table above shows the taxonomy-eligibility of our economic activities for this reporting year in absolute figures and as a percentage of the Group’s total turnover, capital expenditure, and operating expenditure. As of the 2022 reporting year, we will also report the amount and the proportion of our economic activities that are taxonomy-aligned. Below, we explain our approach to the two economic activities that are currently relevant to us.

Minimum social safeguards

The minimum social standards outlined above must be met for the assessment of the taxonomy-alignment of our activities that is to take place in the 2022 reporting year. As a responsible company, we have made an express commitment to upholding the UN Guiding Principles on Business and Human Rights adopted by the United Nations Human Rights Council in 2011 (Ruggie Principles). The obligation to respect human rights is anchored in our core regulations – i.e., our Guiding Principles and our Code of Human Rights & Social Principles policy statement, both of which have been approved by the Board of Management. Our regulations embody our commitment to complying with the principles laid down by the International Labour Organization (ILO), the Organisation for Economic Co-operation and Development (OECD), the Universal Declaration of Human Rights, and the UN Global Compact. We provide transparent reporting on this in the section “Human rights”.

Taxonomy activity 8.1: Data processing, hosting and related activities

The economic activity “Data processing, hosting and related activities” covers “Storage, manipulation, management, movement, control, display, switching, interchange, transmission or processing

of data through data centers, including edge computing”, and pertains to group J.63.1.1. of the same name in the European registry of sectors. Of our Group-wide business activities, our Systems Solutions operating segment (T-Systems) comes under this sector. To evaluate whether activities are taxonomy-eligible, we consider T-Systems’ global business, including data centers operated by other companies in which we lease space (“third-party data centers”). Taxonomy-eligible turnover can be clearly and transparently assigned to specific data centers using a suitable ratio. To do so, we use the proportion that a data center makes up of the total number of T-Systems server IDs. Capital expenditure and operating expenditure can be calculated specifically for all data centers using the relevant IT systems. This analysis shows that a large proportion of the revenue from our Systems Solutions segment is taxonomy-eligible. To avoid double counting under the EU taxonomy, T-Systems’ cloud solutions are not compiled and reported here; they are only included under the economic activities for data-driven solutions.

Based on the relevant total figures for the Group, the taxonomy-eligibility of our business activities for data processing and hosting stands at 1.1 percent (turnover). We do not provide figures for capital expenditure and operating expenditure assigned to this economic activity here due to the lack of materiality. In order to also include a view of taxonomy-eligibility from a segment perspective, we additionally report the KPIs in respect of Systems Solutions. The taxonomy-eligible portion, determined using the same calculation logic, is 36.6 percent in relation to net revenue of the segment, and 4.2 percent in relation to capital expenditure.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-2 (Economic Performance)

Taxonomy activity 8.2: Data-driven solutions for GHG emissions reductions

We apply the definition of the economic activity “Data-driven solutions for GHG emissions reductions” to those solutions and products in the Group that are “predominantly aimed at the provision of data and analytics enabling GHG emission reductions”, which means that they have clear potential to enable users to save CO₂. In this context, we are guided by the key levers of the established ESG KPI “Enablement Factor” and by other solutions with clear potential to enable users to save CO₂ within the ESG KPI “Sustainable Revenue Share” and the #GreenMagenta label. These include first and foremost the following services from among our Group-wide business activities: web- and video-conferencing tools, workplace and cloud solutions, and connected car. We mainly provide these services in the Germany operating segment, in our major subsidiaries in the Europe operating segment, and in the Systems Solutions operating segment. We therefore focus on the relevant companies when evaluating the taxonomy-eligibility of activities. To avoid double counting under the EU taxonomy, T-Systems’ cloud solutions are only reported under this economic activity, and not under data processing and hosting.

The very specific selection of economic activities for this taxonomy environmental objective means that only a small proportion of the

Deutsche Telekom Group's turnover (0.8 %) and operating expenditure (2.1 %) is taxonomy-eligible. As the capital expenditure that can be assigned to this narrowly defined economic activity has little relevance for the business model and is very small, we will forgo detailing the investments more closely here due to their lack of materiality.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-2 (Economic Performance)

Investor communication

We have observed that investors are increasingly incorporating SRI approaches in their investment strategies. In addition, investors, analysts and rating agencies are increasingly inquiring about our CR activities. To meet these requests, we use different formats – both in our reporting and in direct dialogue.

We annually publish this Corporate Responsibility Report and a non-financial statement in the annual report. We also offer ESG information for financial market players on our company website, under "Responsibility", and on our investor relations portal, under "Socially Responsible Investments". In addition, we provide social indicators in our HR Factbook.

We strive to engage in personal dialog with investors and regularly hold national and international information events as SRI roadshows. We also regularly take part in SRI conferences or meetings, and, upon request, present our CR strategy as best practice. In addition, we provide information to interested investors in conference calls, and answer numerous direct inquiries. This year, we again carried out our investor dialogs – such as our SRI roadshows – online, due to the coronavirus pandemic.

Taxes

The Group Tax department is responsible for ensuring that the Deutsche Telekom Group pays taxes at the national and international level in accordance with the applicable laws. This includes the Group's income taxes, which must also be regularly reported in our IFRS financial statements, as well as VAT and income tax on salaries payable within the context of customer transactions and for Group employees.

Group Tax also ensures that the Group has an efficient tax structure within the framework of German and foreign tax laws as applicable in each country (avoidance of any unnecessary tax burden not prescribed by law). The goal is to achieve sustainable tax efficiency for the Group. In the view of Group Tax, transparent, trust-based cooperation with local tax authorities – for example, in connection with operationally advisable company reorganizations – plays an essential role in any efforts toward that goal.

In addition, Group Tax undertakes to contribute as much as possible to the success of Deutsche Telekom's operations, e.g., by providing detailed advice regarding new business models or innovative technological developments. In such matters, it focuses particularly on directly clarifying any unresolved issues related to tax

law, as well as on providing practical solutions to meeting all applicable tax requirements.

The company's "Tax Compliance, Sustainable Tax Efficiency, Tax as Valued Business Partner" tax strategy (incl. tax policy) has been approved by the Deutsche Telekom Board of Management.

For detailed information on the work of Group Tax, its principles, and its responsible approach to taxation, please refer to the detailed document "tax strategy."

Further information with regard to taxation of Deutsche Telekom

Additional information with regard to our taxes – for example, about our country-based reporting, and additional details about tax rates – are provided in the documents „Country-by-Country Report 2020“ and "Cash Tax Rate Reconciliation."

In addition, Deutsche Telekom participates in initiatives aimed at developing a comprehensive approach to determining and publishing meaningful information about tax payments by enterprises and enterprise groups. The aim is to give a full and differentiated view of the various contributions to the financing of the public domain that are made in connection with or otherwise result from enterprises and entrepreneurial activities. In this context, for some years now, Deutsche Telekom has determined "Total Tax Contribution" figures for our key European national companies in the telecommunications sector. This approach is explained in greater detail in the document on Total Tax Contribution, which also contains the respective information relating to our Group. Deutsche Telekom also intends to collect and publish such information in the coming years, and to extend its scope to additional national companies.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 207-1 (Taxes)
- GRI 207-2 (Taxes)

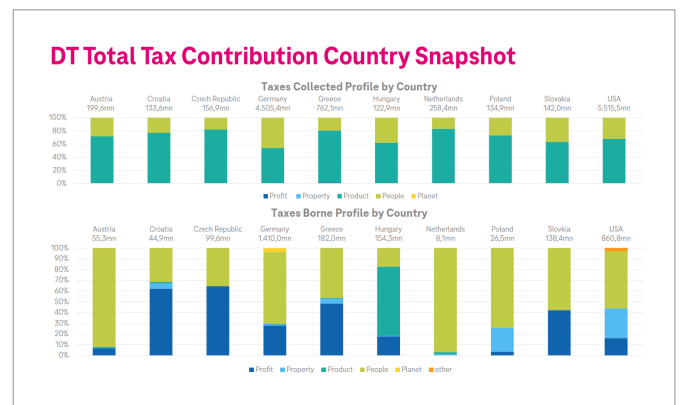
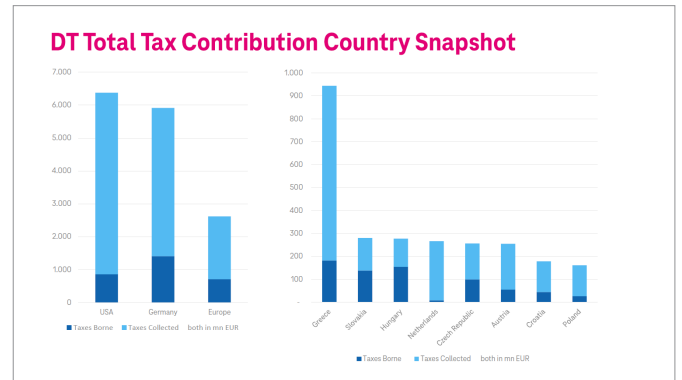
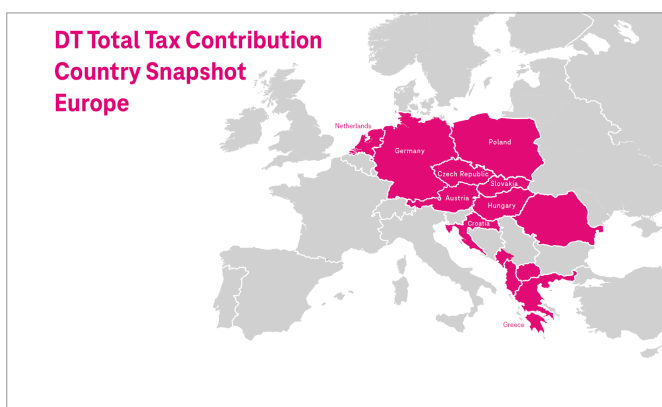
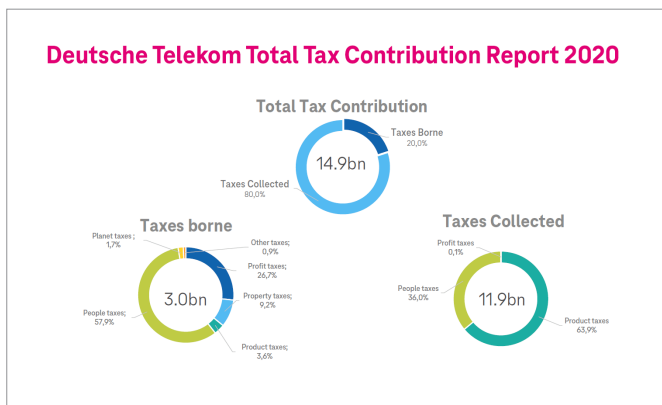
Total Tax Contribution

With its participation in a survey carried out by PwC regarding the Total Tax Contribution, Deutsche Telekom supports an initiative of the European Business Tax Forum (EBTF) for the development and establishment of a comprehensive approach regarding the determination and publication of information relating to enterprises with respect to tax. In this context, so far Deutsche Telekom has taken the main European group companies in the telecommunications sector into account. The figures were compiled for the first time by Deutsche Telekom in cooperation with PwC for the reporting year 2018. The corresponding figures have also been compiled for subsequent reporting years. The figures for 2020 are presented below. Deutsche Telekom intends to determine and publish such information also relating to subsequent years and to potentially extend this to further group companies.

Put simply, the Total Tax Contribution addresses the contributions as a whole to the financing of the public domain that are made in connection with, or are a result of, enterprises and entrepreneurial activities. In this respect not only are the taxes levied on the profit of the enterprise or group of companies taken into account, further types of taxes are also addressed, which can be quite substantial, in particular also in the telecommunications sector. Moreover, the so-called “Taxes Borne” as well as so-called “Taxes Collected” are included in the approach in order to comprehensively visualize the financial weight of the enterprise and its activity for the public domain. For example, it also illustrates the aspects of employment and value-added through the presentation of wage taxes, social contributions and value-added taxes. As a consequence, a differentiated and therefore meaningful picture results regarding the positive financial impact on the public community in connection with the enterprise and its activity. In addition, this approach can also show national differences in the tax frameworks.

Further information regarding the EBTF as well as the PwC survey can be found at <https://ebtforum.org> and <https://www.pwc.com/gx/en/services/tax/publications/total-tax-contribution-framework.html>. Under both links, explanations and details regarding the definition of the Total Tax Contribution are also given, for example with respect to the concepts of Taxes Collected and Taxes Borne and further breakdowns of the Total Tax Contribution, as well as a presentation of the findings of the survey carried out by PwC.

The following charts show the Total Tax Contribution 2020 of the group companies addressed.



Research and development

As a future-oriented telecommunications business, we support and participate in ongoing research. We collaborate with various universities. For example, we established a professorship for software engineering (with a focus on blockchain) at the CODE University of Applied Sciences in Berlin. We invest in various fields of research such as the Internet of Things (IoT). We invested a total of 33 million euros in research and development within the Group in 2021.

We promote young and innovative business ideas. In the framework of our hubraum technology incubator, start-ups benefit from our experience, receive financial support and obtain access to exclusive technologies. We bring young participating companies together with relevant business units within the Group, for the purpose of testing innovative technologies and new business models and bringing them to the market. In 2021, our technology incubator collaborated with about 100 start-ups.

With our Deutsche Telekom hubraum 5G “Sustainability Award,” we highlight efforts by industry and start-ups to bring about a sustainable world. The award honors projects with a focus on the sustainability of 5G networks, such as projects in the areas of smart infrastructure and AI-controlled (AI = artificial intelligence) energy management.

In the year under review, hubraum, in cooperation with Bundesverband Deutsche Startups (German start-ups association), produced a study of AI-oriented start-ups in Germany that highlights the promise and strengths of the German AI ecosystem. The study's

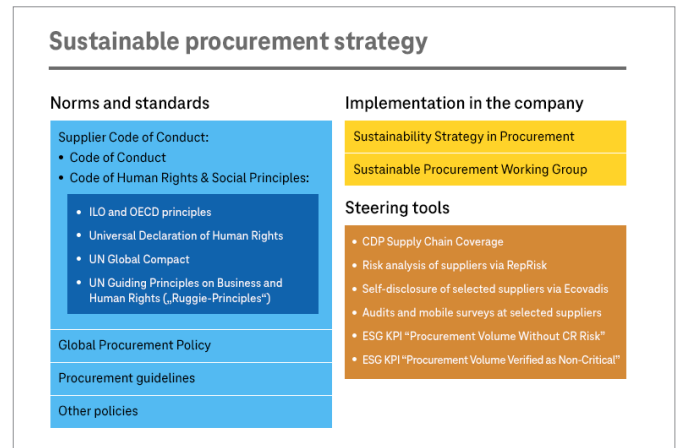
key results include the finding that young AI companies, while enormously ambitious, tend to lack resources and impetus for growth. At the same time, the study also found that women are underrepresented in the AI sector, and that this situation needs to change, in light of the need for participatory, unbiased AI systems – and of the insight that diversity in AI-developer teams reduces bias in the resulting AI systems. In this regard, the study was able to offer a positive outlook, by reporting that 81 percent of AI start-ups believe that AI-technology development needs to take account of ethical issues. [Click here](#) to find out more about current hubraum projects.

Suppliers

Our approach to sustainable procurement

Encompassing the entire procurement process, our Group-wide sustainable procurement strategy is put into action using internal and external performance indicators and management tools.

- Until the end of 2021, the responsibility for ensuring sustainability in procurement lay with the following two Board of Management departments: a) Finance and b) Human Resources and Legal Affairs. As of January 1, 2022, this responsibility now lies with the Chairman of the Board of Management's department and the Board of Management department for Finance.
- Our sustainability criteria are factored into the overall procurement process and given a weighting of 10 percent when choosing suppliers who have responded to tenders. In 2021, we revised our sustainability criteria. We use the criteria in order to assess the sustainability performance of suppliers and products – for example, with regard to carbon footprints, or to the sustainability of packaging. As of 2022, the sustainability criteria are also being applied to selected (high-volume) invitations to tender for supply of IT and network hardware products, and entering into supplier selections, with a weighting of 20 percent.
- In the event of a relevant violation of our requirements, we initiate an escalation process.
- We train our employees throughout the Group using an e-learning tool. In addition, our Global Procurement Policy provides an overview of which CR criteria must be considered at which point in the procurement process.
- In the framework of our working group "Sustainable Procurement Group," which has been internationally oriented since 2021, procurement staff can consult with each other, nationally and internationally, regarding sustainability issues.
- We ensure business partners and suppliers are up to the mark by offering workshops on specific topics and operating our Supplier Development Program.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–12 (General Disclosures)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 4 (Elimination of all forms of forced and compulsory labor)
- Principle 5 (Abolition of child labor)
- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)
- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

Supplier compliance

With our Supplier Code of Conduct, we place our suppliers under an obligation to uphold the principles and values anchored in our Code of Conduct and in the "Code of Human Rights & Social Principles". As of 2020, suppliers of solutions involving artificial intelligence (AI) must also comply with the requirements of our AI Guidelines. Deutsche Telekom suppliers are also under the obligation to do everything necessary to prevent active and passive forms of corruption. We expect our suppliers to impose the same requirements on their subcontractors too.

The Supplier Code of Conduct forms part of our General Terms and Conditions for Purchasing, but does not, of course, supersede the laws and regulations of countries in which our suppliers operate. Rather, it is designed to facilitate compliance with these laws and regulations and ensure that legal requirements are implemented faithfully and effectively. Since 2014, we have offered online compliance training for our suppliers.

When selecting business partners, we conduct compliance business assessments based on the risk of compliance violations. In addition to suppliers, and development and joint venture partners, this applies in particular to certain consultants, such as sales agents. We have created a separate policy for partnerships with them (Consultant Policy).

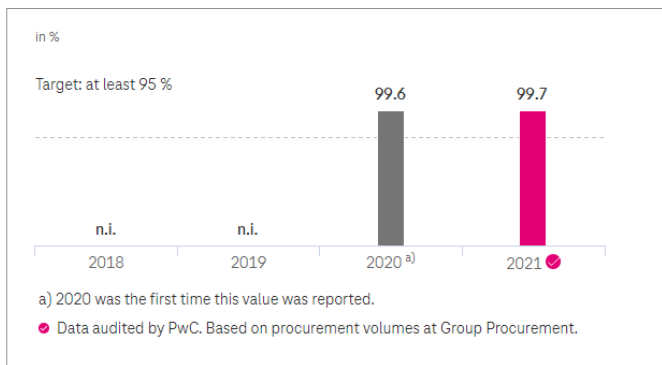
Reporting against standards

Global Compact

- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

ESG KPI “Procurement Volume Without CR Risk”

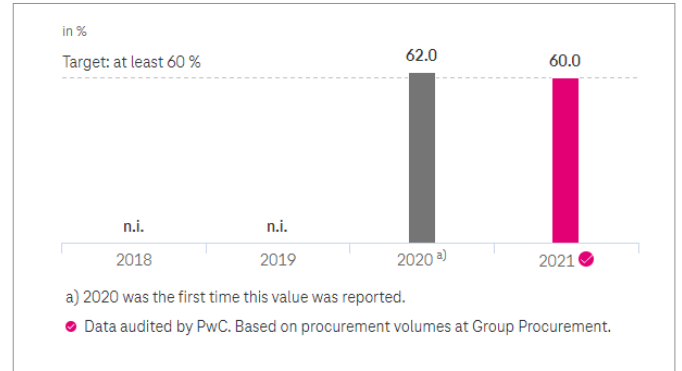
The ESG KPI “Procurement Volume Without CR Risk” – for which the target is 95 percent by 2025 – measures the procurement volume from direct business partners for whom, in the period under review, checks by an established external service provider turned up no negative media reports. It also includes suppliers for whom such reports were identified and who took suitable action to correct the issues involved. The procurement volume so assessed for risks accounted for a 99.7 percent share of the total relevant volume in 2021 (previous year: 99.6 percent). This ESG KPI, along with the ESG KPI “Procurement Volume Verified as Non-Critical”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group’s standardized procurement-report system (not including the category “Network Capacity” and not including T-Mobile US).



ESG KPI “Procurement Volume Verified as Non-Critical”

The ESG KPI “Procurement Volume Verified as Non-Critical” – target for 2025: 60 percent – measures the share accounted for by suppliers checked for social and ecological criteria by means of dedicated reviews – e.g., via EcoVadis, the Carbon Disclosure Project (CDP), social audits, supplier visits, or our Supplier Development Program. In 2021, such CR-verified suppliers accounted for a share of 60 percent (previous year: 62 percent).

This ESG KPI, along with the ESG KPI “Procurement Volume Without CR Risk”, is calculated with respect to the reviewed Group-wide procurement volume shown in the Group’s standardized procurement-report system (not including the category “Network Capacity” and not including T-Mobile US).



Reporting against standards

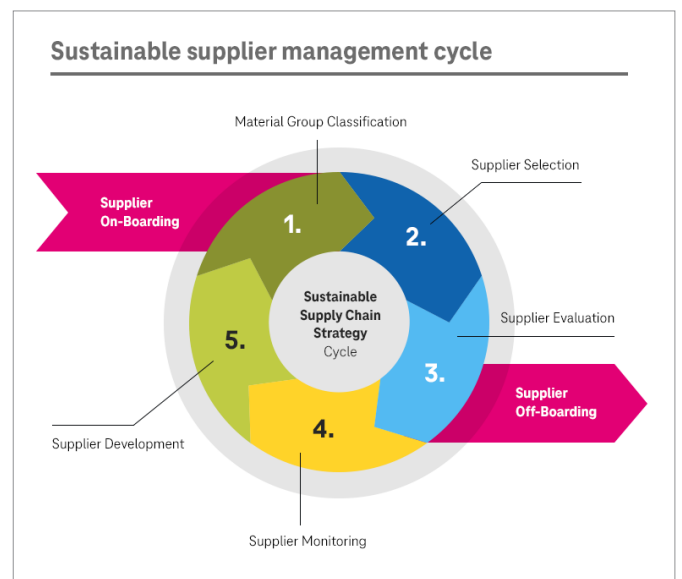
Global Reporting Initiative (GRI)

- GRI 414-1 (Supplier Social Assessment)
- GRI 308-1 (Supplier Environmental Assessment)

Supply chain management

To be able to enter into a business relationship with us, suppliers have to register on our supplier portal and undergo a qualification process. Those who do so are fully informed of Deutsche Telekom’s fundamental principles and values – also regarding corporate responsibility and sustainability.

As a rule, our supplier management runs through a five-step cycle. The aim is to minimize risks in the supply chain and encourage our suppliers to improve their practices.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102–9 (General Disclosures)
-

Global Compact

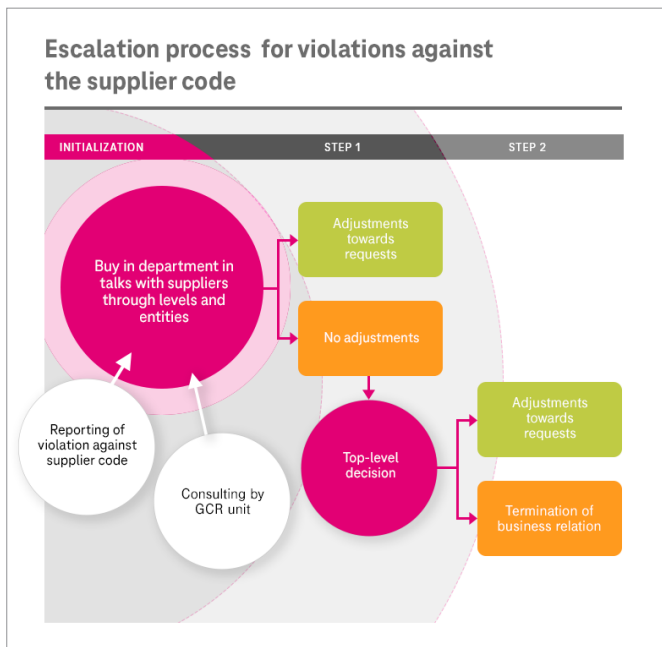
- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 4 (Elimination of all forms of forced and compulsory labor)
- Principle 5 (Abolition of child labor)
- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

Escalation process

If a supplier cannot meet the sustainability requirements anchored in our Supplier Code of Conduct to our satisfaction, we initiate an escalation process.

Our procurement organization is primarily responsible for this process – with support and advice from Group Corporate Responsibility. We hold discussions with the supplier to make our requirements clear to them. If the discussions held on various levels do not lead to the desired outcome, the responsible decision-makers consult with each to reach agreement about how to proceed with the supplier. In the worst case, this could lead to the business relationship with the supplier being terminated.

Everyone who identifies irregularities in our supply chain regarding compliance with laws, internal guidelines, and standards of conduct, can report these – and can do so anonymously if they wish – using our Tell me! portal.



Risk monitoring

In Procurement, we work with a comprehensive supplier risk monitoring scheme. We subject our entire supplier portfolio to an extended risk analysis. Specialized companies evaluate all suppliers with regard to financial, CSR and compliance risks.

Suppliers that present especially high levels of risk are also monitored with regard to global risks (e.g., natural disasters, political risks). For this purpose, we use EcoVadis and carry out special audits on location. Our aim is to address deficits together with the supplier and take appropriate corrective action. Only if no solutions are possible do we have to cut ties with suppliers.

2021 supplier sustainability reviews (excl. T-Mobile US)

In 2021, we conducted a total of 88 supplier reviews – 71 of which were on-site reviews (social audits) and 17 mobile surveys. 34 direct and 54 indirect suppliers were involved in the checks.

For the on-site reviews, we let the supplier know the approximate time of our visit in advance (“semi-announced audit”). This is necessary to make sure that relevant contacts in key functions are present for the audit. The mobile surveys give our suppliers’ employees the opportunity to provide anonymous information about the social and ecological situation at their company. The surveys are primarily used to gain an initial impression of the local working conditions in order to then initiate further measures as needed, such as specific on-site reviews (social audits).

	Number of reviews	Number of findings	Number of completed findings
Social audits (by external audit firms)	71	402	643 (190 findings from 2021 and 453 outstanding findings from previous audits)
Mobile surveys *	17	-	-
EcoVadis (2014–2021)	363	-	-
CDP supply chain **	268	-	-
Total	719	-	-

* Mobile surveys with selected suppliers, in particular to assess the situation of workers at the operating sites

** The CDP supply chain program is used for direct suppliers with high emission intensity.

Auditing procedures

We focus our audit activities on strategically important and particularly risky suppliers. They are routinely audited every two to three years. This group includes roughly 250 of our 20 000 or so active suppliers. Together, they cover around 80 percent of our procurement volume. These audits give us transparency about the risks in large parts of our supply chain.

The majority of the audits are conducted within the scope of Joint Audit Cooperation (JAC). The audits cover the following areas:

- Labor standards
- Social standards
- Living standards
- Environmental requirements

The JAC Guidelines require, among other things, that our suppliers:

- Pay a fair wage that enables employees to enjoy a decent standard of living;
- Respect the right to freedom of association and collective bargaining, and provide a healthy, safe working environment and
- Do not exceed a 48-hour working week and a weekly maximum of twelve hours' overtime, and grant at least one free day after six consecutive days of working.

Compliance with all these requirements is reviewed regularly during our on-site audits. This also includes inspection of the features and quality of the working, sleeping, and cafeteria areas.

Deutsche Telekom does not require its suppliers to obtain external environmental or social certification. But if suppliers cannot show any environmental and social responsibility certificates, we do expect equivalent management systems to be used. Our auditing experience shows, however, that the majority of our relevant manufacturing suppliers have an external certificate or equivalent management systems.

Verification of important social and ecological aspects as well as fundamental human rights during our audits is in line with internationally recognized guidelines and standards such as the ILO core labour standards, the UN Guiding Principles on Business and Human Rights, and the OECD Guidelines for Multinational Enterprises.

Reporting against standards

Global Compact

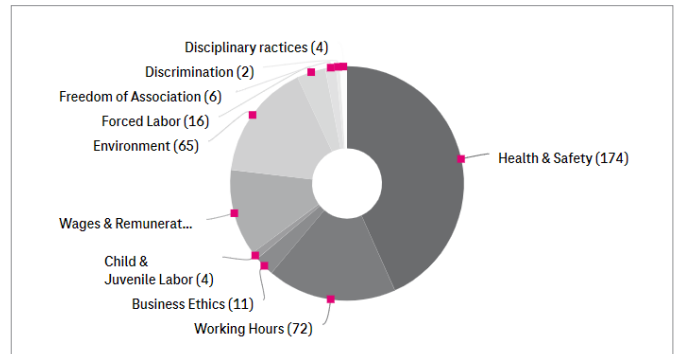
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- Principle 10 (Work against corruption in all its forms of, including extortion and bribery)

2021 audit results

In the audit program, which has been established and is controlled at Group level, a total of 71 on-location audits were carried out in 2021.

As in previous years, we concentrated our auditing activities on suppliers in Asia, Latin America, Oceania, Africa, and Southern and Eastern Europe.

Audited suppliers included manufacturers in the areas of IT hardware, software and services as well as networks and devices. All violations identified in the course of such audits enter into a correction and measures plan, and the timely implementation of measures is regularly monitored. In the audits carried out in the period under review, no serious transgressions in the areas of working conditions and other basic human rights – such as discrimination, forced labor and child labor – were found. In addition, no cases of bribery or corruption, and no critical violations of general compliance rules, such as rules governing the right to intellectual property, were found.



Legend: Area (Number of violations)

- Of the 71 suppliers we audited in 2021 (10 of which were in accordance with the validated audit processes of the Responsible Business Alliance), around 39 percent (28 audits) were direct suppliers and 61 percent (43 audits) were tier 2, 3, and 4 suppliers – that is, indirect suppliers.
- The audits carried out in 2021 revealed a total of 402 violations of Deutsche Telekom's supplier requirements. These findings break down as follows: 174 cases regarding occupational health and safety, 72 cases regarding working hours, 65 cases regarding environmental protection, 20 cases regarding working conditions, 48 cases regarding wages and remuneration, 11 cases regarding corporate ethics, 6 cases regarding freedom of association, 4 cases regarding disciplinary measures and 2 cases regarding discrimination. In addition, the violations included 16 transgressions that needed to be addressed on a priority basis and additional 143 serious findings. A total of 643 violations were corrected in 2021, including several open improvement measures from previous years. Examples of critical violations in 2021 and improvement measures can be found in the table below. As in previous years, most violations (43 percent) were linked to occupational health and safety (2020: 45 percent), followed by violations linked to working hours (2020: 15 percent). At 16 percent, environmental violations constituted the third-biggest issue (2020: 14 percent).

Areas	Findings at suppliers	Initiated improvements	Status (end of 2020)
Environment	The supplier had not identified any measures to reduce greenhouse-gas emissions at its plant, nor had it defined any reduction targets for the facility.	The supplier has developed a process for managing and reducing greenhouse-gas emissions, and it has defined reduction targets.	complete
	The company does not carry out on-site audits and/or evaluations of waste-management companies or of transporters of hazardous waste.	The company carries out regular on-site audits of local service providers engaged to dispose of hazardous waste.	complete
Business ethics	The plant had a control system for conflict minerals in place, but it had no procedures for risk analysis, assessment, monitoring and reporting.	A comprehensive risk-management system has been put in place to ensure compliance with suppliers' due diligence obligations.	complete
Child Labour & Juvenile workers	Some of the company's employees had no employment contracts. In addition, employment contracts were concluded neither with companies that posted workers nor with the workers posted by such companies.	All employees at the permanent establishment have received an employment contract that complies with legal requirements. The company's human-resources department reviews the contracts of all employees and checks whether all posted workers have concluded an employment contract with the posting company.	complete
Forced Labour	Annual inspections of fire-extinguishing equipment, and fire drills, were not carried out as legally required.	Fire-extinguishing equipment is inspected annually, and fire drills are carried out regularly, for the entire permanent establishment, in fulfillment of fire safety regulations.	complete
Occupational health and safety	Some emergency exits and evacuation routes were blocked.	The emergency exits and evacuation routes were cleared and are now completely accessible.	complete
	No water-quality report was available for the drinking water provided in dormitories.	A water sample from the dormitory area was sent to an external laboratory for analysis, and a report documenting that the water meets water-quality standards is now available.	complete
	Workers' monthly working time exceeded the legally permitted maximum.	The permanent establishment has prepared a plan for gradual reduction of work time and overtime, to ensure that workers' monthly working time complies with national laws.	complete
Working hours	The permanent establishment did not pay workers their normal wages on public holidays.	Workers' wages on public holidays were suitably adjusted.	complete
Wages & salaries	During the audit, it was found that wage payments for workers were delayed. Wages of departed workers were also delayed.	The date of salary payment has been adjusted in accordance with local law requirements. In addition, the leaving salary must now be paid within three working days.	complete

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 414-1 (Supplier Social Assessment)
- GRI 308-2 (Supplier Environmental Assessment)
- GRI 408-1 (Child Labor)
- GRI 409-1 (Forced or Compulsory Labor)

Supplier Development Program

We collaborate as partners with our suppliers to make sure they are able to meet our high sustainability criteria.

Since 2018, we have continued the former Deutsche Telekom supplier development program as an industry approach (Sustainable Development Program, SDP). Telefónica and Swisscom have since joined this program. We expect more telecommunications providers and other ICT companies to join us in the near future. The diagram shows the areas in which we audit the suppliers participating in our program. Based on these audits, we work with the respective supplier to develop a plan for remedying any issues. All activities and findings are documented so that we can gauge the effectiveness of the measures employed.



Expenditure analysis 2021

Our suppliers come from various industries and countries. To capture the diversity of our more than 20 000 suppliers, the following graphic depicts the types of suppliers we commission; the overview includes the share of our expenditure (CapEx and OpEx) attributable to them and their geographical distribution.

Supplier Category	Proportion of Spend %	Number of Consolidated Suppliers	Number of domestic subsidiary suppliers	Number of foreign subsidiary suppliers	Number of critical subsidiary suppliers	Number of risky subsidiary suppliers
Building, facilities, furniture and rel. services	5.7%	3 444	624	3 285	117	0
Civil Works	13.9%	5 227	5 018	1 678	336	0
Consulting,contracting, temp. labour and service center	2.9%	1 316	367	1 126	55	0
Electrodomestic appliances	0.0%	105	28	89	6	0
Enduser communication technology and equipment	17.8%	1 392	456	1 301	94	0
Energy, fuel, gas, water	2.5%	163	45	129	3	0
FinancialServices,insur,fees,inv estig,cert	2.9%	860	213	832	53	2
Fleet and travel	0.5%	546	166	414	44	2
Food and catering	0.1%	347	60	311	41	1
HR services, training and translation	0.7%	2 530	1 094	1 744	158	2
Information technology	15.1%	5 394	2 212	5 055	400	3
Logistics and mail	1.1%	643	261	518	46	0
Marketing, media, content, print, fairs	8.8%	5 004	2 147	3 519	282	4
Network capacity	9.6%	1 139	177	1 550	88	1
Network infrastructure	11.9%	2 426	1 081	2 325	171	0
Office equipment, office technology and stationery	0.2%	738	403	452	40	0
Service platforms	2.6%	782	334	631	55	2
Sim cards	0.0%	112	39	99	4	0
Tools and protection equipment	0.2%	632	250	460	23	1
Undefined/Undefined	3.5%	740	70	707	18	0
TOTAL	100%				1 613	10
		Unique consolidated suppliers: 24 030	Unique local/subsidiary suppliers: 32 320		In total with no regards to the corresponding category	In total with no regards to the corresponding category

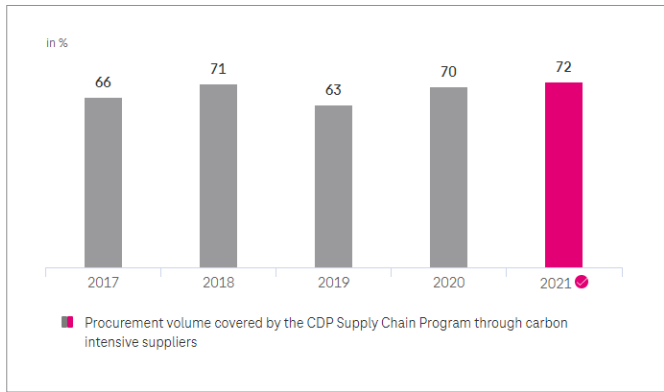
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 204-1 (Procurement Practices)

ESG KPI “CDP Supply Chain Program”

Since as early as 2016, we have been disclosing our activities to bring on board suppliers as part of CDP’s supplier engagement rating. This rating assesses how well companies have been able to integrate the topic of climate protection into their supply chain. In 2021, we were awarded an A rating, as in the previous year. This has secured our place on the Supplier Engagement Leader Board. An important step in achieving this was calculating the supplier-specific emission intensities based on supplier responses to the CDP Supply Chain Program. This involved calculating the ratio between a supplier’s overall emissions (Scopes 1 and 2 and Scope 3 for the upstream supply chain) and the supplier’s overall sales. The ESG KPI “CDP Supply Chain Program” indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program. In 2021, 72 percent of the procurement volume was covered by the CDP Supply Chain Program.



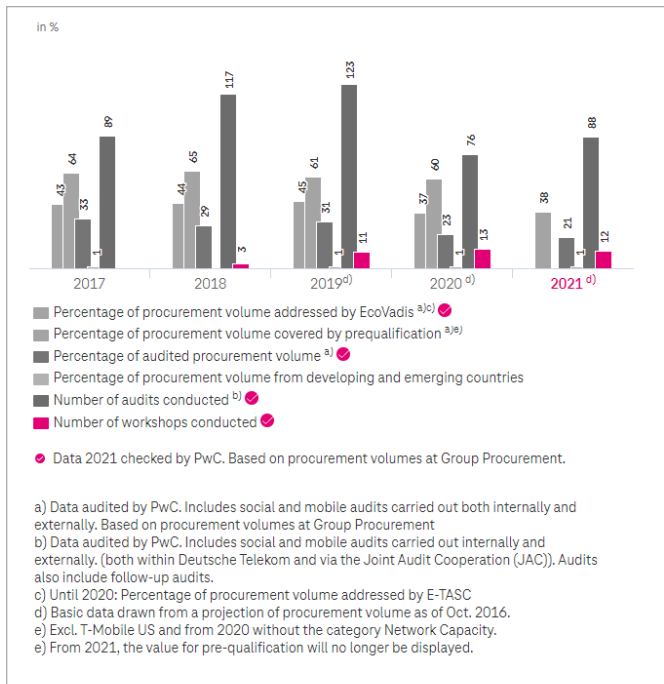
Reporting against standards

Global Reporting Initiative (GRI)

- RI 308-1 (Supplier Environmental Assessment)

Supplier relationship

The percentage of audited procurement volume decreased from 23.2 percent in the previous year to 20.6 percent in 2021. At the same time, the percentage of procurement volume covered by EcoVadis increased slightly to 38 percent.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 414-1 (Supplier Social Assessment)

German Sustainability Code

- Criterion 1 (Strategy)
- Criterion 3 (Objectives)
- Criterion 4 (Depth of the Value Chain)
- Criterion 6 (Rules and Processes)
- Criterion 17 (Human Rights)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)
- Principle 5 (Abolition of child labor)

European Federation of Financial Analysts Societies (EFFAS)

- V28-04 (Supply Chain)

Responsible procurement of raw materials

We require our suppliers to protect the environment and use resources responsibly. This requirement is enshrined both in our “Code of Human Rights & Social Principles” and in our Supplier Code of Conduct.

As a form of verification, we request our suppliers to disclose information about their activities and we perform supplier audits (social audits). In these audits, we check whether our suppliers use an environmental management system, including a waste management system, and review how they manage their energy and water consumption. In addition, we always check whether there is a management system in place to address the issue of conflict resources.

When selecting suppliers and products, we review and evaluate, for example, the use of hazardous and conflict materials – especially in light of the OECD Due Diligence Guidance for Responsible Supply Chains. In 2021, we reviewed and adjusted our sustainability criteria. As of 2022, the new criteria are also being applied to selected (high-volume) invitations to tender for supply of IT and network hardware products, and entering into supplier selections, with a weighting of 20 percent.

Reporting against standards

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

Sustainable and innovative products

Our approach to sustainable products and services

Our core business consists of operating and expanding our network. It provides the foundation for digital participation. As of 2021, Deutsche Telekom's entire network is "green," with 100 percent of its power coming from renewable sources. Also, by providing innovative, network-based solutions, we support our customers in reducing their own CO₂ emissions and contributing to climate protection.

We want to make our entire product range more and more sustainable. Furthermore, we take a holistic perspective on this issue, a perspective that extends to the rates and devices we offer, and that includes a comprehensive approach to achieving a circular economy that covers a product-life-cycle spectrum from production and sustainable packaging to product use and product recycling. This requires thoroughgoing measures along all stages of the value chain. Consequently, we begin with procurement and strive to ensure that our suppliers comply with our ecological, social, and ethical sustainability requirements.

Recognized ecolabels

A number of our products are certified by recognized ecolabels such as the Blue Angel and the TÜV Certified Green Product label. The strict requirements of these labels help us see how we can further improve our products. They also help us inform our customers of the benefits of choosing sustainable products. In addition, we have introduced #GoodMagenta and #GreenMagenta, our own labels for sustainable products, services, and initiatives from Deutsche Telekom.

Also, during the period under review, and in cooperation with other mobile network operators, we developed a sustainability ranking system for mobile phones – the Eco Rating. It enables customers to see at a glance which products score well with regard to durability, reparability and recyclability, climate compatibility and resources conservation.

Packaging

We have also been making our product packaging more and more sustainable. In 2021, about 1.4 million new Telekom-branded products sold or leased in Germany were sustainably packaged. As of mid-2022, product packaging for all new Deutsche Telekom-branded products introduced to the German and European market will be converted to sustainable alternatives. Wherever possible, we reduce package sizes with the help of special packaging machines. Increasingly, we are relying on PaperFoam, a bio-based and biodegradable alternative to conventional packaging materials, as a means of protecting devices within packages.

For example, the packaging for our Speedport Smart 4 router contains no plastic whatsoever and is thus easy to recycle. Most of the paper used is already recycled, or comes from sustainable forestry (FSC®-certified).

Responsible use of resources

Our efforts to use resources responsibly in connection with products include efforts in their production phase. In the Speedport Smart 4 router, for example, we limit use of harmful substances (such as in electronic components) above and beyond the extent required by law. Furthermore, a total of 90% of the housing of the Speedport Smart 4 consists of recycled material.

At the end of products' life cycles, we help to ensure that they are reused or properly recycled. In fact, we began accepting returned used mobile devices for this purpose back in 2003. Since then, in Germany, we have helped to conserve resources by recycling, or providing for reuse, more than 3.3 million used devices.

In Germany, persons interested in giving used smartphones a second life can sell them to us, via the "Trade MyMobile" portal, for refurbishment. Via the "ReUse MyMobile" portal, we sell products that are fully refurbished and completely free of any technical defects. Each such product comes with a fresh 24-month warranty. Such offers are marked with the #GreenMagenta label.

To promote sustainability, we are also committed to ensuring that routers and media receivers are not simply disposed of after being replaced. With our "Rent instead of Buying" rental service, we conserve resources, reduce the volume of electronic waste, and thus avoid carbon emissions. Last year, we returned around one million refurbished devices to our customers in Germany.

Subsidized rates

In Germany and at several national companies, we offer various subsidized rates to enable customers on low incomes and people with disabilities to make calls at reasonable prices.

Measuring progress

We measure our progress by means of various KPIs:

- We use the ESG KPI "Sustainable Revenue Share" to determine the proportion of sales generated with products and services that are classified as more sustainable, based on a risk-benefit analysis.
- With our "Ecologically sustainable products" KPI, we show what share of our entire product range consists of sustainable products.

- We measure the impact of our circular economy concepts with our ESG KPI “Take Back Mobile Devices” and ESG KPI “Take Back CPEs”.
- We use the ESG KPI “Enablement Factor” to calculate the positive CO₂ effects generated as our products are used by customers.
- With the “Sustainable Product Packaging” KPI, we show what share of Deutsche Telekom-branded products consists of products with sustainable packaging.

Continued analysis of our products’ sustainability benefits

To date, there is no industry-wide established system that provides sustainability information about ICT products and services. Since 2014 at Deutsche Telekom, we have been using an in-house analysis method to assess the sustainability of our products. This includes, for example, examining the safety of the products, or how well they can be recycled.

We inform our customers about how our products are contributing to sustainability. The results of our analyses also allow us to position ourselves as a responsible company with respect to the competition. In the reporting year, we also included selected products in the analysis along the criteria of the EU taxonomy.

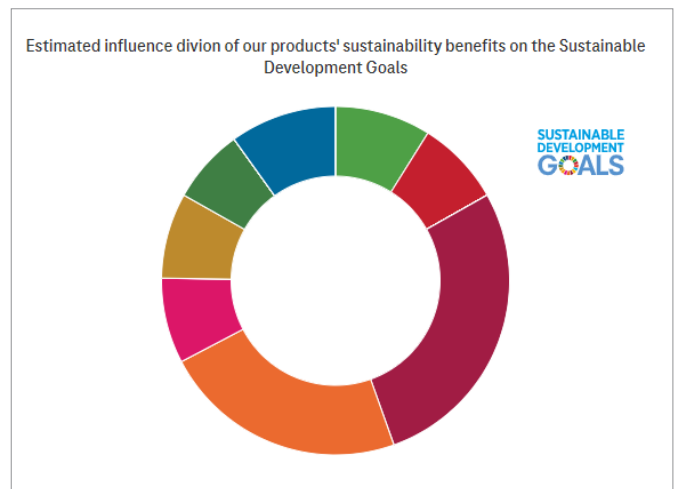
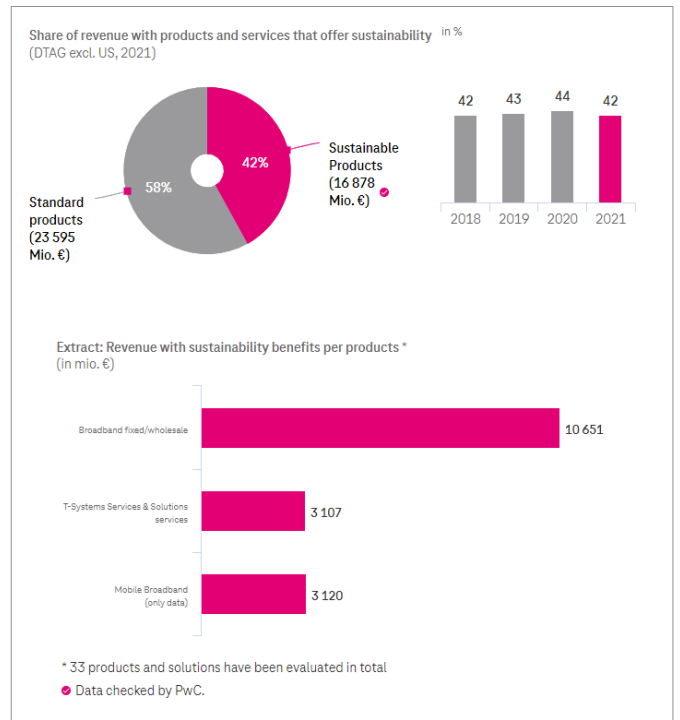
Correlation with SDGs

In the year under review, we reviewed – with support from experts – the sustainability benefits of a number of our products in light of the targets of the Sustainable Development Goals (SDGs). The degree of detail depended on the revenue generated with the product under review. If revenues were high, we considered the impact on all SDGs. Where revenues were limited, we only took the impact on the most relevant SDG into account.

Results of the analysis

In 2021, we studied 33 product groups in detail, analyzing both their contribution to sustainability and their business potential (as of the end of 2021).

We measure the result of this analysis with the ESG KPI “Sustainable Revenue Share”. The share of revenue from more-sustainable products was around 42 percent in 2021 (excluding T-Mobile US). This is a slight decrease compared to the prior year (44 percent in 2020). A key reason for the slight percentage decrease seen in this area is that total revenue (not including revenue in the United States) grew more strongly than did sustainability-related revenue.



#GoodMagenta and #GreenMagenta labelling

To help our customers make sustainability-oriented decisions, and to highlight our commitment in this area, we label sustainability-oriented products, services and initiatives of Deutsche Telekom with our own #GoodMagenta and #GreenMagenta labels. Deutsche Telekom employees are welcome to suggest offerings that should receive the label. Their suggestions are reviewed by a committee of experts, in an extensive award process.

Since 2020, these labels are called #GoodMagenta and #GreenMagenta. The #GoodMagenta label has been awarded to more than 40 initiatives that promote media literacy and respectful cooperation, while the #GreenMagenta label has been awarded in ways that show we take climate change and its consequences seriously. As part of our #GreenMagenta program for sustainability, we address climate-protection and resource-efficiency issues throughout our value chain, in a variety of ways.

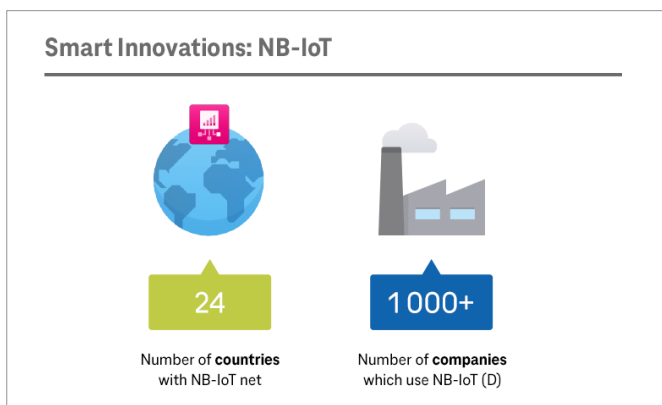
Smart Innovation

In this section, we will introduce some “Smart Innovation” solutions. The associated business models are based on the most advanced technology and provide an immediate value-add for our customers. At the same time, these solutions are also making an ecological and/or social contribution to society.

We are, for example, utilizing future-oriented and widely available technologies to make cities viable for the future and to develop solutions for social challenges. For this, we are relying on innovative NarrowBand IoT (NB-IoT) technology, with which we are paving the way for the Internet of Things. NB-IoT devices have a large operating range and long battery service lives. Consequently, this technology provides the basis for many innovative uses that are both cost- and energy efficient. Particularly useful areas of application for NB-IoT are, for instance, smart parking, smart cities, smart meters, as well as transport and logistics solutions. One example is the networking of irrigation systems.

For example, we have entered into close cooperation with the Free and Hanseatic City of Hamburg in the area of urban mobility. At the ITS 2021 transportation and logistics congress, we jointly presented solutions for improved mobility in road traffic - for example, to measure and display available parking spaces using sensors and intelligent dashboards. Another technology enables mobility stations and trucks in the Port of Hamburg to be networked and smartly controlled. These innovations go a long way toward optimizing traffic. Similar projects are also being developed in other cities, for example in Pforzheim.

End of 2021, NB-IoT was available in all cities and towns in Germany. Deutsche Telekom has rolled out NB-IoT in 24 countries (in Europe as well as the USA, Russia and Taiwan), most of them have countrywide rollout.



Accessible products and services

We want to make it easier for people with disabilities to have access to the knowledge and information society. To that end, we offer services specially tailored to them. Our national companies also strive to provide barrier-free access to their services. Further information is available in the respective country profiles.

Digital assistant for accessibility

The nora Notruf App (nora emergency-call app), which has been available since 2021, is a digital assistant with one-tap emergency calling functionality. It is a boon for people who have speech or hearing impediments that make it difficult or impossible to make phone calls the usual way. The app is especially attractive by virtue of its versatility. In addition to simply alerting first responders (police, fire department or paramedics), the user can also tap to identify the type of emergency involved, such as a crime in progress, accident, fire, severe illness, flooding, person in distress, or animal in distress. While people with speech or hearing impediments can report emergencies by using the Tess Relay services or sending an emergency fax, those options can wind up wasting valuable time.

We review other products for accessibility as well, and adapt them as necessary. In September 2020, for example, we published an update for the German government's Corona-Warn-App (Covid warning app) that improves the app's accessibility. Among other things, a note was added indicating that the app hotline supports Tess Relay services for the hearing impaired.

Services for the hearing impaired

In 2003, we set up a hotline ("Deaf Hotline") for deaf and hearing-impaired customers. Every day, up to 50 people contact the hotline. Customers and consultants can see each other using a video-based live chat application and can communicate with each other in sign language.

For deaf customers and members of the German deaf association, Deutscher Gehörlosen-Bund e.V., we operate a special online distribution site (only available in German). There we offer a discounted mobile communications and fixed-line portfolio that is tailored to the exact needs of deaf people. Customers can order their desired plans directly on the website, can contact the employees of the Deaf Hotline or be forwarded to the information exchange platform Deaf Café in the Telekom Hilft community.

Since 2018, hearing-impaired people in Germany have had access to a 24-hour emergency call service with sign language interpreters for emergency situations. The service is jointly financed by the mandatory social security contribution paid by Deutsche Telekom to Germany's Bundesnetzagentur (Federal Network Agency).

Supporting users with simplified language

According to studies, 12 percent of people in Germany are not able to grasp complicated texts. In our endeavor to make it easier for them to access our products, we also offer some of our product information in simpler language. Our #TAKEPART stories and selected pages from our CR report are also made available in simplified language.

Deutsche Telekom supports companies, municipalities, and schools in accessing financial support available for forward-looking investments

Digitalization offers enormous opportunities. Throughout a spectrum ranging from the Internet of Things (IoT) to big data and artificial intelligence, digital technologies and solutions are facilitating the development of innovative products that have greater energy efficiency and/or durability and can simplify production and work processes. Also, as the COVID-19 pandemic has shown, digitalized companies and municipalities are more resilient – and better able to handle challenges and crises.

In summer 2020, the German Government approved a “Future Package,” an extensive economic stimulus package designed to stabilize the German economy and equip Germany for the future. The package, which includes a raft of measures aimed at supporting digitalization in private-sector companies, the public sector, and education, boosts Germany’s existing funding scene with far-reaching additional impetus. Under the effort, Germany’s federal and Länder (state) governments are subsidizing digitalization projects at rates of up to 70 percent of the relevant costs (and even more, in some cases).

Deutsche Telekom is also seeking to provide additional impetus in the area of funding, and thereby support companies, municipalities, and schools even more effectively in their digital transformation processes. Our Group program “Schubkraft” (“Thrust”) (only available in German), for example, offers free pertinent advising, along with practical support in accessing funding opportunities. With our Quick-Check service (only available in German), companies can quickly determine, at no charge, whether their projects are eligible for funding, as well as what funding programs are suitable for the projects. The service is available both online and in the “Meine Förderung” (“My Funding”) app. In addition, we offer individual consultations, provide support (in cooperation with partners) for application processes and assist companies in preparing digitalization plans that can serve as a basis for obtaining funding.

Our efforts on behalf of the non-profit association BePro Velbert e. V. provide a good example of our activities in this area. Thanks to the funding it received, this association has been able to move forward significantly with digitalization. For example, it is now using a digital point of sale (POS) system. BePro Velbert offers job opportunities to long-term unemployed persons, and thereby helps them to re-enter the workplace. In order to stay in touch with the modern workplace, the association regularly invests in new equipment. One case in point involved the said digital POS system. Via a contact to Deutsche Telekom’s sales area, the association was put in touch with the company’s “Schubkraft” team. Then, in a customer workshop, the vision and the framework for the association’s project were discussed. In a next step, “Schubkraft” researched the available funding programs and helped the association submit its application. Shortly thereafter, the association’s funding application was approved.

Network expansion

Our approach to infrastructural expansion

Deutsche Telekom is Germany's largest investor when it comes to expansion of the network infrastructure. We are continuously expanding our networks, increasing the efficiency of our network systems and further strengthening our role as a leader in network quality.

We follow the coverage requirements of Bundesnetzagentur (BNetzA, Federal Network Agency) in expanding the mobile network. By the end of 2021, we provided almost 99 percent of households with LTE coverage. In addition, we have been providing broadband service, with bandwidth of 50 or 100 Mbps, along more and more traffic routes. Already, over 90 percent of people in Germany now have access to Deutsche Telekom's fast, new 5G mobile network. Our goal: By the end of 2025, we will provide 5G coverage to 99 percent of the population.

We have almost completed our FTTC (fiber to the curb) expansion in the fixed network. With our FTTH (fiber to the home) expansion, we are installing fiber-optic connections directly in customers' homes. Our aim is to close gaps in the network in rural areas and provide urban centers with the high bandwidth they require. We want to continue this rollout efficiently and, to this end, are also participating in funding programs. In the coming years, we expect to provide FTTH to an additional 2.5 million households, on average, per year.

More information on network expansion can be found in our Annual Report.

Reporting against standards

Global Reporting Initiative (GRI)

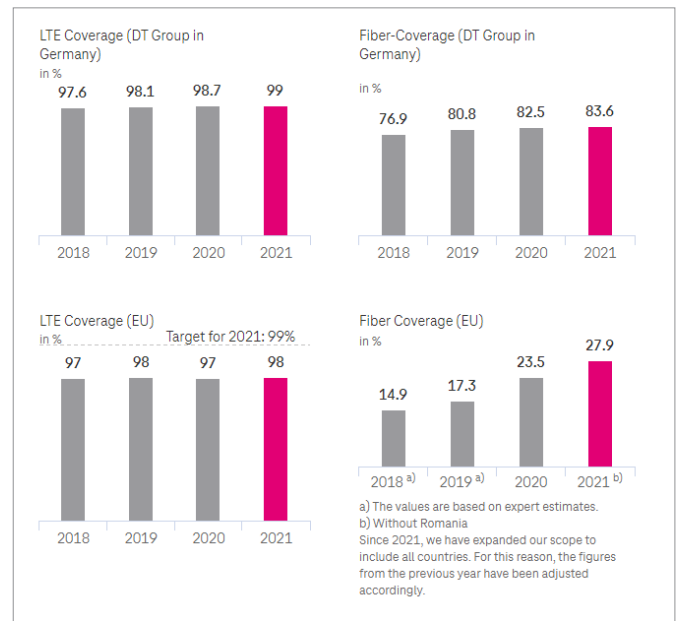
- GRI 203-1 (Indirect Economic Impacts)

Progress in network expansion

Part of our network strategy is to also systematically build out our mobile networks with 4G/LTE technology to increase transmission rates in all national companies. Thanks to investments in our 4G/LTE network, our customers enjoy better network coverage with fast mobile broadband. In 2021, for example, we were already providing LTE coverage to approximately 99 percent of households in Germany and more than 98 percent in Europe. We slightly missed the target of achieving 99 percent LTE coverage in Europe by 2021 with a value of 98.2 percent and instead continued to drive forward the further development of our networks with 5G and FTTH.

Furthermore, more than 34.5 million households in Germany can already order a rate with up to 100 Mbit/s on our fixed network.

This figure keeps growing daily. Our progress can be followed in our online expansion tracker (only available in German). Information on 5G expansion is available here.



Updating and stabilizing the network architecture

The fundamental aim is to operate our networks in the most stable and failure-free manner possible. Major events such as festivals and summits place the network under particular strain. We make sure, however, that voice calls and data are still transmitted in the quality our customers have come to expect by temporarily setting up extra mobile masts or laying additional fiber-optic cables.

In emergency situations, it is especially important for networks to function properly, so that emergency calls can be made and responses organized. In emergencies, such as floods or large fires, in which network equipment is damaged to the point that normal recovery processes are unable to quickly restore cellular and fixed-line service, our Disaster Recovery Management (only available in German) comes into play. It operates mobile containers with communications equipment that can quickly stand in for disrupted cellular and fixed-line service.

The disastrous floods of July 2021 damaged large portions of the telecommunications infrastructure in Germany. An interdepartmental task force was established to manage the restoration effort. The team was able to quickly restore operations at 180 of the 300 cellular base stations that had suffered flood damage. A total of 120 base stations had suffered major damage, however,

and wireless service for 250 000 people was temporarily disrupted. Cellular capacities were then increased using mobile masts and special antennas fitted to existing masts. As a result of these efforts, cellular service was completely restored in the flood-damaged areas within the space of only a week. In addition, some 97 percent of the 103 000 fixed network accesses that had been destroyed were repaired by the end of the year. As a stopgap measure, we provide affected customers with free LTE or hybrid routers, along with unlimited data allowances for calling and internet usage.

In the hardest-hit regions, existing copper-wire accesses that had been damaged or destroyed are not being restored; instead, they are being replaced with fiber-to-the-home (FTTH) fiber-optic accesses. As part of these efforts, we plan to install some 40 000 new fiber-optic accesses in the states of Rhineland-Palatinate and North Rhine-Westphalia. In January 2022, we began this fiber-optic expansion in the cities of Dernau, Mayschoss, and Rech. In 2022, an additional 25 000 FTTH accesses will be added.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- TC-TL-550a.2 (Managing Systemic Risks from Technology Disruptions)

Rollout of the new 5G mobile generation

A total of 63 000 antennas are now operating at the 5G standard in Deutsche Telekom’s network (as of December 2021). As of the end of 2021 this new mobile communications standard was available to over 90 percent of all households in Germany. Most of the antennas transmit on the 2.1 GHz frequency, both in large cities and in smaller communities and rural areas.

5G on the fast 3.6 GHz frequency band is available in more than 140 cities (as of December 2021). 3 600 antennas are now in place, at a total of over 1 200 locations. As a result, more and more people are now able to enjoy high-speed 5G service.

Deutsche Telekom decommissioned its 3G network in Germany in 2021. The frequencies that have become available as a result are now being used for 5G and LTE service. In other words, more bandwidth is now available for these two newer, and considerably more powerful, technologies.

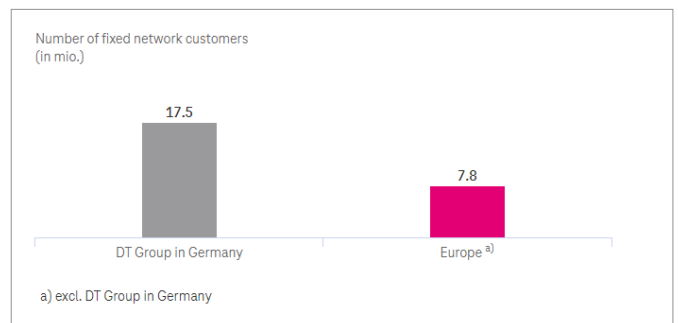
Continuing expansion of the fiber-optic network

Deutsche Telekom’s fiber-optic network is the largest in Europe, with a length of over 650 000 kilometers in Germany alone (as of December 2021). As global data traffic continues to grow rapidly, we are continuing to expand our fiber-optic network. To do this as quickly and efficiently as possible, we use planning software and modern deployment methods such as trenching. We use our expansion tracker for Germany (only available in German) to illustrate our progress.

To expand the fiber-optic network, we are using FTTC (fiber to the curb) technology with super vectoring and are expanding FTTH (fiber to the home) as well.

	DSL ■ 16000	FTTC with super vectoring	FTTH
Download	up to 16 Mbit/s	up to 250 Mbit/s	up to 1,000 Mbit/s
Upload	up to 2.4 Mbit/s	up to 40 Mbit/s	up to 500 Mbit/s

Number of fixed network customers



Customer satisfaction

Our approach for top service quality

We strive to offer our customers impeccable service. We work constantly to improve our service, with the aim of ensuring our customers enjoy a positive customer experience. Our approach in this regard is to devote more time to customers, answer their queries on the spot and with a smile, and be there when they need us. In the year under review, we restructured our company in Germany accordingly. In May of that year, our sales and service operations were consolidated as “Sales and Service” within Telekom Deutschland GmbH. This consolidation, yielding an organization headed by our managing director for Sales & Service, improves the connections between our local stores, field-service technicians, technical customer service and back offices. The various areas now work together more closely, and we are able to provide better service to our customers and offer them faster solutions and a more-complete customer experience.

Very active service in 2021

In 2021 in Germany, we had a total of 30 000 employees providing service to our mobile and fixed network customers, and making a total of 90 million personal contacts in the process. Also in the year under review, callers to our service hotline had to wait less than two minutes on average to speak with a service representative. In the same year, the percentage of service technician appointments that failed to take place was considerably less than one percent. Our good service is paying off: Since 2017, we have been able to cut the number of customer complaints in Germany by a total of 80 percent.

Always available – even in a crisis

We are always there for our customers – even in challenging times such as the COVID-19 pandemic. In 2021, when pandemic lockdowns forced our Telekom Shops to close, some 900 of our Shops’ staff volunteered to do hotline duty from their homes, in order to ensure that the increasing numbers of customer concerns that were resulting could be handled. When the Shops reopened, we returned to providing our usual friendly and competent in-person service – in compliance with all measures imposed to protect against the coronavirus. Also in 2021, our field service staff continued to provide service calls to our customers, throughout Germany, with infrastructure-sales and “Servicemobil” vehicles. They provided personal, on-site service in Germany’s flood-stricken areas, for example.

During the disastrous floods of July, our service staff in Germany immediately launched aid and relief measures. Volunteers brought needed equipment such as cell phones and power banks to affected areas, for example. Our customer service team was also

on location, to help local residents with any questions related to the restoration of their phone service. Three mobile service stations went regularly to affected communities and offered fixed periods of availability for consultations. Also, customers in the affected areas were encouraged to contact our service hotline, where our experienced hotline staff addressed their concerns with special priority and consideration.

Customer service for the region – and from the region

Nationwide, we are establishing a total of 14 regional centers, known as “Regiocenters,” in major cities. These centers’ service teams will serve customers throughout their pertinent regions, including customers in both urban and rural areas. Each such center will offer a full range of service expertise and products, including back-office support, technical customer service, field service, stores (Telekom Shops) and equipment. We will then automatically forward customer calls to the relevant Regio team, which will be able to directly handle all types of concerns – mobile network, fixed network, service disruption, or a field service request. A total of six new Regiocenters opened in 2021, bringing the total number of centers in operation to nine. Ultimately, with a view to getting as close to our customers as possible, we plan to operate a total of 14 Regiocenters, with each offering a complete range of service.

Promoting competence

We continuously provide our service employees with training on products and services. They can learn about and try out the latest solutions in specially equipped rooms at our service centers. We have also intensified our personal coaching by team leaders in everyday work. Knowledge databases and digital tools are enabling our employees to address customers’ concerns more and more quickly.

The high quality of our services has been independently verified by numerous successes in tests. For example, in 2021 the business magazine Focus-Money once again honored us as a “Service King.” For its awards, Focus-Money conducted a survey of over 288 000 persons, and asked which companies they thought gave them the best service. Awards such as these show that we are on the right track.

Improving our contact and process quality

We want to offer all customers the best-possible service experience. To meet that goal, several million responses from our customers are annually collected and analyzed by our quality management team. Customer satisfaction and resolving their request on first contact are our top priorities.

Our surveys are conducted either directly after a contact (for example, via the hotline, in a shop, on a field service call, or after an online inquiry by email or chat) or a completed process (for example, after service provisioning).

If a customer tells us in a survey that their request has not yet been resolved, a callback offer is made to clarify the request once and for all. The results of customer surveys are also used for internal training of our customer advisors.

Measuring customer retention and endorsement

We use the TRI*M index to gauge customer retention and regularly participate in benchmarking. The recorded data is based on a customer survey conducted in all markets and segments (except T-Mobile US). To measure the TRI*M value, customers are asked four standardized questions – for example, whether they would recommend Deutsche Telekom to others; their answers are compiled in a key performance indicator. The TRI*M value for the Deutsche Telekom Group is calculated as an overall value from the individual measurement results of the countries or segments.

At the end of the year under review, the indicator for the Group (excluding T-Mobile US) came in at 73.4 points versus an adjusted value of 72.7 points at the start of the year (both determined on a comparable basis). As a result, the index value improved, and we achieved our Group aim of increasing it slightly. The Germany and T-Systems operating segments contributed to the positive development with improvements in customer loyalty.

The TRI*M index for Germany, at 69.2 points, is slightly higher than in the previous year (69.0). Also, it is considerably higher, for both consumers and business customers, than the comparable figures of the competition. In our EU business segment, we experienced a slight decrease, from 68.6 to 68.4, while the TRI*M index for T-Systems increased from 87 to 90 points. In sum, we once again reached our overall goal of a slight increase for the Group as a whole. Our goal for 2022 is to achieve another slight increase for the Group as a whole.

Customer satisfaction and loyalty scores are factored into both the long-term variable remuneration scheme for our board members and, to an extent, the performance assessments of our managers, meaning some of their variable salary components are linked to these ratings.

Consumer protection

Our approach to consumer protection

Consumer protection is a multi-faceted topic at Deutsche Telekom. A core element is keeping our customers' data safe and secure. Data protection and data security are therefore top priorities for us.

Children and young people, in particular, need to be shielded from dangers online. That's why protecting children and young people also plays a big part in what we do. We take youth protection aspects into consideration in our product and service design. When we develop services that are relevant in terms of youth protection in Germany, we consult our youth protection officer for suggestions of restrictions or changes. We have appointed a child safety officer (CSO) at each of our national companies within the EU who is responsible for issues pertaining to the protection of minors. The CSO acts as a central contact for stakeholders from the community in the respective country and plays a key internal role in coordinating issues related to youth protection. We thereby strengthen Deutsche Telekom's lasting and transparent commitment to protecting minors.

In addition, we strive to ensure that our network and mobile devices are safe to use. We study the latest scientific research on mobile communications and health, and we provide our customers with transparent updates in this regard.

Our approach to protection of minors in the media

We want to protect children and young people when using digital media. We pursue a three-pillar strategy to do this:

- We provide attractive, age-appropriate offers for children. We give parents and legal guardians the information they need in order to be able to protect their children against inappropriate content.
- We participate in combating child abuse and its depiction to the extent that this is permitted within the national legal framework.
- We implement various measures to ensure that young people acquire media skills and can interact safely with online content.

We also collaborate closely with prosecuting authorities and NGOs as well as other partners from business, politics, and society to ban online content that is harmful to children and young people. We have anchored our commitment to protecting minors from unsuitable media content in Germany in relevant codes and introduced minimum standards. In 2007, we committed ourselves to fighting

child pornography on the internet throughout the European Union. GSMA (an association representing the interests of mobile operators worldwide), of which we have been a member since 2008, pursues the same objectives at a global level.

To better coordinate our activities within the Group, we have been following binding general guidelines since 2013 for our activities to help protect minors against inappropriate media content, and thereby setting standards in our markets in the process. In consideration of their particular cultural situation and business model, each international subsidiary in the European Union can further specify these measures and adopt additional measures to determine their own strategic focal points.

Cooperation with organizations for the protection of minors

Protecting minors from unsuitable media content poses a challenge that affects many industries. We therefore work together with different organizations for the protection of minors and participate in coalitions that coordinate the involvement of companies and organizations from the internet and media sector.

- For example, we are a member of the "Alliance to better protect minors online," which has set out to make the internet a safer place for kids.
- We have also taken a leading role in the "ICT Coalition for Children Online." In this coalition, we pursue a comprehensive and cross-industry approach based on six principles that expressly includes helping young people learn media skills.

Since 2013, in the framework of the two cooperative efforts, we have been implementing an EU-wide package of measures based on the principles of the ICT Coalition. We provide transparent and regular information on its implementation. Most recently, we provided such information in 2021, in our ICT Coalition report. The ICT Coalition had first published an annual report in 2014 on the implementation of corresponding measures at all of the companies represented in the ICT coalition. This report was written by an independent expert from the Dublin Institute of Technology, and comes to the conclusion that Deutsche Telekom's approach to implementing the ICT Coalition's principles is exemplary.

Online Park – A social experience

During the coronavirus pandemic, everyone is using the internet more – including children. In a social experiment, the national company Telekom Romania wanted to raise parental awareness about the risks their children are exposed to, and it created an "Online Park" to bring online dangers into the real world. In that

project, online threats were recreated in an amusement park in Bucharest in such a way that they became tangible and visible – as a supposed balloon stand or hall of mirrors, for instance. These “attractions” allowed parents to see what their children can be confronted with online and how they would react to cyberbullying, criminals in disguise (e.g., digital data predators) or inappropriate content. In 2021, the campaign was honored with three Effie Awards for effective brand communication.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-220a.1 (Data privacy)

Our approach to safe mobile communication

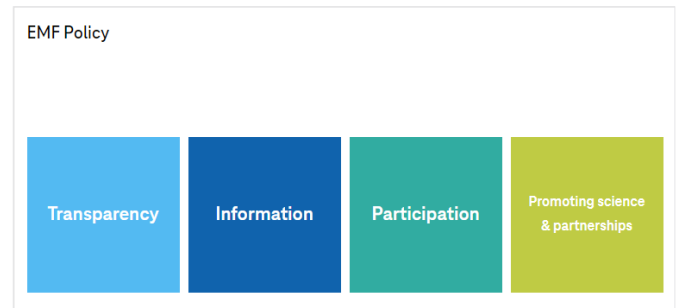
We want to make our mobile communications infrastructure and our products, as well as the processes on which they are based, as resource-efficient, secure, and safe for health as possible. In Germany these activities are based in particular on voluntary commitments by mobile communications providers and an agreement with local authorities’ associations. Compliance with these voluntary commitments is reviewed every two years by external experts. In 2020, we submitted the current annual mobile communications expert report (only available in German) to the German Federal Government, which was coordinated by Deutsches Institut für Urbanistik (German Institute for Urban Studies) and eventually published by the Federal Ministry of the Environment. According to the report, mobile communications expansion is progressing for the most part free of conflict. The report surveyed municipalities throughout Germany, and 92 percent of them reported they had few or no controversial cases to decide.

In June 2020, working in cooperation with the leading municipal associations and other German network operators, we revised and updated the existing agreement on information exchange in connection with the expansion of mobile networks that had been in place since 2001. Its goal is to ensure that municipalities are involved in establishing the 5G networks and in a swift and conflict-free expansion of the network infrastructure. In addition, the four network operators added a regulation for the expansion of small cells to the 2020 agreement with the municipal associations. Network operators had already agreed to this in February 2020 in their voluntary commitment to the German government.

Policy on Electromagnetic Fields

The policy on electromagnetic fields (EMF) in force throughout the Group since 2004 plays a primary role: Our EMF Policy contains uniform minimum requirements for mobile communications and health that go far beyond the national legal requirements. Our policy provides our national companies with a mandatory framework that makes sure that the topic of mobile communications and health is addressed in a consistent, responsible way throughout the Group. All of our national companies have officially accepted the EMF Policy and implemented most of the required measures.

Our EMF Policy stipulates the following principles and measures:



Transparency

We place importance on openly discussing issues involved in mobile communications. We make all relevant information regarding our mobile communications equipment in Germany accessible to the public, e.g., on the EMF database operated by the German Federal Network Agency.

Information

We provide consumer information that is easy to understand and pursue a fact-based, sound information policy. On our Group website we provide the latest information to those interested. We also provide our customers with information online on the SAR levels of their mobile devices. Additional details are also available in the shops and through our free environmental hotline.

Participation

We rely on close collaboration and constructive dialog with all those involved, including municipalities, when it comes to network expansion. Our goal is to find amicable solutions and negotiate acceptable compromises, which can only be achieved by responding fairly to critical arguments and being ready to learn from mistakes.

Promoting science & partnerships

Our guidelines call for promoting targeted research, scientific excellence, transparency, objectivity, and intelligibility.

We conduct ongoing reviews of compliance with our EMF Policy. Our international working group, the „EMF Core Team“, uses the findings to improve individual aspects a to jointly develop solutions.

Mobile communications and health (EMF)

Electromagnetic fields (EMFs) are a prevalent part of our connected world, even if we are not able to perceive them directly. Their effects on our health remain a topic of discussion. Deutsche Telekom, like all providers, must ensure that the statutory threshold values are observed in mobile communications. In Germany, the threshold values are set by the Federal Government and are based on the recommendations of the International Commission on Non-Ionizing Radiation Protection (ICNIRP).

The effects of EMFs have been thoroughly researched over the past decades in numerous scientific studies. The World Health Organization (WHO) analyzes the findings of scientific research and most recently made a statement regarding the results in 2014. In its statement, it concludes that the current threshold values for EMFs ensure that mobile communications technology can be used safely and further development should be accompanied by research. In 2020, after evaluating current scientific research, the ICNIRP once again confirmed the protection concept for EMFs, as they occur in mobile communications. According to ICNIRP, the threshold values ensure comprehensive protection for people and the environment. This also applies to frequency ranges used by 5G, because, like earlier network types, 5G requires high security standards. Safe operation of mobile communications technology in Germany is therefore ensured.

In 2021, the online portal Informationszentrum Mobilfunk (center for information about mobile communications), working in cooperation with three municipal umbrella associations, expanded its offerings for municipalities and published a new brochure (only available in German), entitled “Mobile communications and health” (“Mobilfunk und Gesundheit”), for municipal decision-makers. In addition, working in cooperation with various media, the portal carried out informational events, and an experts’ conference for representatives of Bavarian municipalities, on the expansion of 5G network service. At the end of 2021, Informationszentrum Mobilfunk (only available in German) published a video on socially relevant 5G applications.

In cooperation with the three other 5G licensees in Germany, Telefónica Germany, Vodafone, and 1&1 Mobilfunk, we support Informationszentrum Mobilfunk. The portal provides objective, scientifically reliable information about basic issues relating to mobile communications, including controversial issues, in the areas of health and safety, technology and network expansions, the environment and sustainability, and politics and legal questions.

Further information on this subject can be found under “CR facts”.

Data protection and data security

Our approach to data protection

The highest standards of data privacy and data security are part of our brand identity. Our active data protection and compliance culture, which has been built up over the past decade, sets national and international standards.

The company's Human Resources and Legal Affairs Board department, headed by Board of Management member Birgit Bohle, has responsibility for the area of data privacy. The Technology and Innovation Board department, headed by Board of Management member Claudia Nemat, is responsible for the area of data security.

Since 2009, the Group Board of Management has been advised by an independent Data Privacy Advisory Board comprising reputable experts from politics, science, business, and independent organizations. At the beginning of 2020, the Advisory Board took on a bigger role through the addition of new members from the Board of Management and the Supervisory Board of Deutsche Telekom AG.

Deutsche Telekom Security GmbH combines the security activities from various Group areas, thereby reinforcing our portfolio of cybersecurity solutions.

Underlying regulations

Data protection and data security at Deutsche Telekom are subject to the following regulations:

- The Binding Corporate Rules on Privacy govern the handling of personal data.
- The Group Security Policy includes significant security-related principles followed within the Group.

Both guidelines set forth binding standards that are oriented to the international standards ISO 27001 and ISO 27701. These policies allow us to guarantee an adequately high and consistent level of security and data privacy throughout the Group.

Ensuring effective data privacy

- **Consistent transparency vis-a-vis the public**
At www.telekom.com/data-protection, we provide comprehensive information about our data protection activities, such as our implementation of the GDPR. We have also published an annual transparency report since 2014. Moreover, in the Consumer protection section of this CR report we explain how we make our products and services safe for users.

- **Regular employee training courses**

Telecommunications companies are obliged to provide new employees, at the beginning of their employment relationships, with information on data privacy regulations. We go above and beyond these legal requirements. Every two years, we train all Group employees and place them under an obligation to uphold data privacy and telecommunications secrecy. We have also introduced specific training in the customer and human resources departments. This training includes online courses for independent learning, presentations on data privacy and face-to-face courses on specific topics such as data protection at call centers. This helps us ensure that all employees have in-depth understanding of the relevant data privacy policies.

- **Regular review and adaptation of measures**

We carry out a Group data privacy audit every two years, to measure and improve the general data privacy standards throughout the Group. As part of the audit, we ask a randomly selected group, accounting for a 15 percent share of the Group's employees, to participate in an online survey. The Group data privacy audit is supplemented by internal and external on-site checks. Group Privacy assesses the results and checks whether action needs to be taken in the respective units. Where necessary, the Global Data Privacy Officer calls for improvement measures and, to this end, holds personal meetings with the responsible directors, managers, and data privacy officers at the different departments. Group Privacy offers advice on the implementation of the measures and determines whether they are effective. We take unusual audit results into consideration when planning the follow-up audit.

- **Certifications**

We have our processes, management systems, products, and services certified by external, independent organizations such as TÜV, DEKRA, and auditing firms. The IT systems at Telekom Deutschland were most recently certified as secure in 2020 by the testing institute TÜV Informationstechnik (TÜViT) of the TÜV Nord Group. This certification has a validity of two years.

How we handle “big data” and “artificial intelligence”

When we process very large volumes of data, we need to take special measures to protect data subjects' privacy. In keeping with this requirement, we have had eight relevant, mandatory principles for handling big data in place since 2013. In addition, in 2015 we adopted a “Ten-point program for better online security,” which includes specific measures to protect data and the network infrastructure. In this framework, we have developed a number of special protection products – including the “Protect Mobile App,” which looks for any risks in the mobile network one's smartphone

is currently connected to. Furthermore, we have published a guideline for designing artificial intelligence (AI) in compliance with data privacy requirements.

Review of our products

Data privacy and security begin playing an important role in connection with our products and services right from the start of the products' and services' development. Our Privacy and Security Assessment (PSA) procedure allows us to review the security of our systems in each step of the development process. This procedure applies to newly developed systems as well as existing systems that undergo changes in technology or in the way data is processed. We use a standardized procedure to document the data privacy and data security status of our products throughout their entire life cycle.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-220a.1 (Data Privacy)
- Code TC-TL-230a.2 (Data Security)

Transparency report

As a telecommunications company, we are legally obliged to assist security agencies. This includes, for example, monitoring and recording telecommunications connections of certain criminal suspects or providing information about subscribers.

International legal framework conditions differ considerably. In some countries it is illegal to disclose security measures, while in others surveillance is directly conducted by the authorities without the involvement of telecommunications companies. You can find details of the different situations in the relevant countries on our website.

Since 2014, we have published an annual transparency report for Germany; since 2016, we have also published an international transparency report. Here, we reveal the nature and extent of information we had to disclose to security authorities to the extent legally permitted. We consider it the responsibility of the authorities to ensure transparency regarding security measures, Until state authorities meet our demands in this regard, we will strive to provide the necessary transparency ourselves to the extent legally possible.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-220a.4 (Data Privacy)

Cybersecurity

Deutsche Telekom Security GmbH is our security specialist. It has years of experience in safeguarding the Group's internal security. In addition, it offers our customers suitable security products and services throughout the entire value chain – from product development and applications to secure, high-performance networks and high-security data centers.

Increasing connectivity and digitalization can also harbor risks, which is why we develop targeted measures for combating potential new security risks and preventing some threats from even arising in the first place.

We want to enhance collaboration in the area of digital defense and therefore regularly host the Cyber Security Summit together with the Munich Security Conference.

In addition, we collaborate with research institutes, industry partners, initiatives, standardization committees, public institutions, and other internet service providers on a global scale. Together, we want to fight cybercrime and improve online security. We collaborate, for example, with the German Federal Office for Information Security (BSI) throughout Germany and with the European Union Agency for Network and Information Security (ENISA) at a European level.

We also provide up-to-date information about all of our security and data protection activities on our Group website.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-230a.2 (Data Security)

Our cybersecurity infrastructure

Cyber Emergency Response Team

We are always working to develop new ways to defend against attacks. We launched a Cyber Emergency Response Team (CERT) in the mid-1990s, which is responsible internationally for managing security incidents for our information and network technologies. Since then, we have continued to expand our activities in relation to cyberdefense, and promote more information and information sharing. Since 2020, our CERT has been officially certified according to the SIM3 standard (Security Incident Management Maturity Model). It is now one of only three German CSIRT (Computer Security Incident Response Team) / CERT organizations that comply with this standard.

Cyber Defense Center

At our Cyber Defense and Security Operations Centers (SOCs), we monitor the security situation 24/7, 365 days of the year, for ourselves and our customers. With the aid of artificial intelligence (AI), the SOC's analyze about a billion security-relevant data items, from some 3 000 data sources, every day. Our security specialists detect attacks in real time, and immediately initiate the steps necessary to neutralize them or even ward them off completely. In 2021, we registered peaks of up to 90 million attacks per day against Deutsche Telekom's "honeypot" systems – systems intentionally designed to lure attackers. In addition, we actively combat botnets (interconnected computers infected with malware) in the Deutsche Telekom AG network. We are the only internet provider in Europe that safeguards its network in this way. This is how we protect our infrastructure, and hence also our customers' data.

Threat Intelligence Team

When we register an attack, our Threat Intelligence team studies it to determine precisely how it has been perpetrated. To such ends, our Threat Intelligence team consults with, and shares findings with, researchers throughout the world. In this way, our team always stays abreast of the latest scientific findings – and well informed about the threats and perpetrators it faces. Even if we cannot always stay a step ahead of cybercriminals, we always try to ensure they are well aware of our presence.

In the same way, we also provide other companies with our measures to fight cyberattacks: More than 30 German DAX companies and SMEs employ our services for their own protection.

Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-230a.2 (Data Security)

Protection of personal data

Protecting our customers' data is one of our top priorities. On our Group website, under "Data protection and data security," we provide regular – daily, in some cases – information about our commitment in this area.

Although we take a wide range of preventive measures, we cannot completely prevent data breaches. In 2021, we recorded a total of 257 data breaches in Germany. We investigated 151 of these breaches as a result of customer complaints, and six as a result of complaints of supervisory authorities. All in all, some 334 customers were affected by the data breaches. In none of the cases did the breach amount to a critical violation.

We participate in various projects aimed at continually improving data privacy and data security. The following are just a few examples of our recent activities during the reporting period.

In 2020, we joined with the software company SAP to develop our contact tracing app, the Corona-Warn-App. It informs users in Germany and several other countries about possible contact with people infected with the coronavirus. Even before development of the app began, the underlying data protection and security concept for it was discussed intensively. To ensure maximum protection of personal data, the German Federal Government opted for a decentralized approach; the data remains on the user's own phone and is not stored centrally. This concept has paid off: In Germany alone, the app has been installed as often – more than 39.5 million times through December 2021 – as all other similar apps, combined, have been installed in other European countries.

International cooperation for cybersecurity

In 2021, we once again promoted data security at the international level. Since 2014, we have been a member of the "Cyber Security Sharing & Analytics" (CSSA) association. The association provides a technical and organizational framework for secure sharing of sensitive information, to enable the members' experts to interact with and support each other. Also, in 2018 we underscored our commitment to security in the digital world by signing the Paris Call for Trust and Security in Cyberspace. We thereby pledge to intensify collaboration in support of integrity and security in the digital world.

Knocking out botnets

An international comparison shows that Deutsche Telekom AG is a leader, among network operators in Europe, in the area of detection and suppression of botnets (as of December 2021). Botnets are illicit networks of hijacked devices, created for various criminal purposes. The bigger a botnet is, the greater its cyberattack impacts can be. To keep hackers from controlling hijacked devices within a botnet, Deutsche Telekom Security GmbH experts analyze the botnet's structures and suppress communications with its controlling servers. Botnets have frequently hijacked devices of our customers. In over 420 000 instances in 2021, we informed customers of botnet problems and helped them remove bots from their devices.

Uncovering stolen identities

Our "fraud scouts" (experts from the Deutsche Telekom security team) use a special application to search the world wide web and the dark web for stolen identities. If they find anything, we then warn and help our customers. In 2021, we provided such assistance, for example, in a total of 30 000 cases of "smishing" – sending of fraudulent SMS text messages – in Germany alone. Overall, in these cases, the relevant customers' malware-infected devices were responsible for 100 million unintentionally sent text messages.

Smart can also be safe and transparent

We not only want to comply with legal guidelines, we want to actively ensure that our customers' data is protected. To do so, we continue to enhance technical standards, and promote maximum transparency.

For example, with our "VoicelD" ("SprachID") service, we do not save a customer's voice file. Instead, we save a mathematical pattern that is calculated from characteristics in the voice. The original voice – and the customer behind it – cannot be identified via such a pattern.

Commendation for handling of customer data

For the fourth time, in 2020 we were commended by the independent testing authority TÜV Informationstechnik (TÜViT) for our handling of customer data. The relevant seal of quality is valid through mid-2022. TÜViT certified that our processing of data – as it relates to billing, for example – is careful and secure.

Strengthening trust in the cloud

Since September 2021, T-Systems has been a member of the "EU Cloud Code of Conduct General Assembly" of SCOPE Europe, an association for the development of a common regulatory framework for the digital economy. With this membership, we express our commitment to the "EU Cloud Code of Conduct," the first cloud-services standard to be accepted by European data protection authorities. T-Systems now structures all of its cloud services accordingly.

Also, we are participating, along with additional experts, in the AUDITOR project of the Federal Ministry for Economic Affairs and Climate Action, which is aimed at developing a standard for cloud-services certification pursuant to the General Data Protection Regulation (GDPR) ("GDPR Compliant Cloud" – GCC).

The new standard is to be applied in GAIA X, a European cloud project – of which we are a founding member – for high-performance and secure data infrastructure. Also, we are reviewing options for certifying our Open Telekom Cloud and vCloud services in accordance with the standard, subject to the standard's approval by supervisory authorities. To date, the competent supervisory authorities have not yet approved a common data protection certification of cloud services. Deutsche Telekom views such approved certification as essential for a protected data infrastructure in Germany and Europe.

Simple data privacy statements for everyone

For non-specialists, data privacy notices can be incomprehensible. We offer customers our “one-pager”: an easy-to-read, brief overview of our key data processing activities. It does not replace our formal data privacy statement, which complies with legal requirements and to which we also link in the document. With this one-pager, we have followed an initiative launched by the National IT Summit, with the support of the Federal Ministry of Justice and Consumer Protection. For information about other projects, please refer to our CR facts.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 418–1 (Customer Privacy)

Sustainability Accounting Standards Board (SASB)

- TC-TL-550a.2 (Managing Systemic Risks from Technology Disruptions)

IT security & data protection

A random sample of 50 000 Telekom employees are surveyed on the topics of data protection and IT security every two years. The findings of the survey are used, for example, to determine the Security Awareness Index (SAI) and the Data Protection Award indicator. The indicators help us to review the effectiveness of our measures in the areas of IT security and data protection. The data protection award indicator was last measured in 2020 and stood at 86 percent (without T-Mobile US). In the last survey in 2021, security awareness reached 80.9 (without T-Mobile US) of maximum 100 points (which is higher than for all other companies in the benchmark).

The Security Awareness Index measures our employees' perception of IT security at Deutsche Telekom. The assessment is based on Deutsche Telekom employee answers on management awareness of the topic, the security culture, the influence of security requirements on their own work, and their personal responsibility for and attitudes towards IT security. The index includes a scale from 0 to 100 – the higher the value, the higher IT security is rated at Deutsche Telekom.

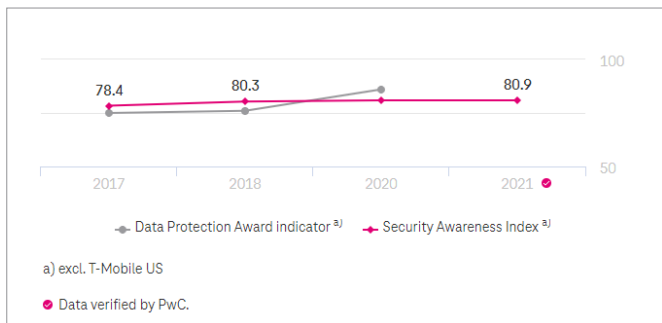
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 418–1 (Customer Privacy)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)



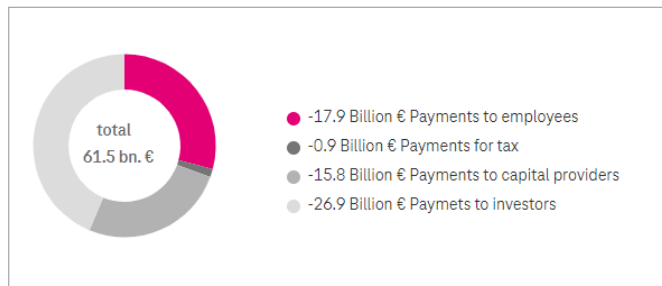
The Data Protection Award indicator measures the level of data protection within the units on a scale of 0 to 12. It is calculated based on what the employees said they thought, did and knew about data protection.

Financial performance indicators

Net value added

The increase in net value added from 35.5 billion euros to 61.5 billion euros is mainly due to significantly higher investments in intangible assets (especially spectrum licenses) and our high investments in network roll-out in 2021. In addition, significantly higher repayments to providers of capital had an impact in 2020 compared with the prior year. Payments to employees increased, among other things, due to the completion of the merger of T-Mobile US and Sprint as of April 1, 2020. This was offset by a reduction in the number of employees in Germany.

In contrast to the statement of income, the net value added only takes account of real payment flows. That means that deferred tax expenses and the accrual of provisions do not impact the net value added of the reporting period. Although these costs are deducted from net profit in the statement of income, they are not linked to any current payments to stakeholder groups, as is the case with net value added. Outpayments in this respect are scheduled for the future and will only be accounted for in net value added in future years.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-1 (Economic Performance)

Net revenue, EBITDA and net profit

A detailed clarification of our financial KPIs is available at www.telekom.com/investorrelations.

in bn. €	2018	2019	2020	2021	
Net revenue	75.7	80.5	101.0	108.8	
EBITDA AL (adjusted for special factors) ^{a, b, c)}	23.1	24.7	35.0	37.3	
EBITDA AL margin (adjusted for special factors) ^{c)}	in %	30.5	30.5	34.7	34.3
Net profit (loss)	2.2	3.9	4.2	4.2	

^{a)} Deutsche Telekom defines EBITDA as profit/loss from operations before depreciation, amortization and impairment losses.
^{b)} EBITDA AL adjusted for special factors, net debt, and free cash flow are non-GAAP figures not governed by the International Financial Reporting Standards (IFRS). These measures should be considered in addition to, but not as a substitute for, the information prepared in accordance with IFRS. Alternative performance measures are not subject to IFRS or any other generally accepted accounting principles. Other companies may define these terms in different ways. For further information relevant to alternative performance measures, please refer to the Annual Report section Management of the Group, page 38 et seq., or to Deutsche Telekom's Investor Relations website.
^{c)} Our operational performance is now measured on the basis of "EBITDA after leases" (EBITDA AL) and not on the basis of EBITDA. EBITDA AL is calculated by adjusting EBITDA for depreciation of the right-of-use assets and for interest expenses on recognized lease liabilities.

Revenue development

In 2021 Deutsche Telekom generated Group revenue of 108.8 billion euros. With growth of 7.8 billion euros, it rose by around 7.7 percent compared with the previous year's level. The international share of Group revenue increased by 1.3 percentage points to 76.3 percent.

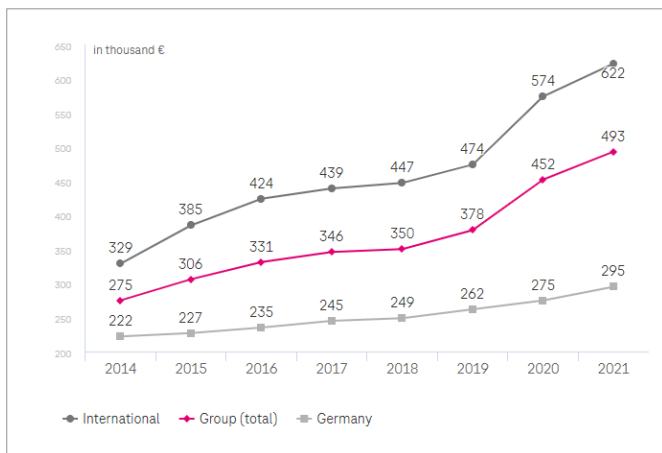
in bn. €	2019	2020	2021	Change on 2020 (in bn/pp)
Net revenue Germany ^{a)}	25.2	25.2	25.8	2.2%
Net revenue international ^{a)}	55.4	75.8	83.0	9.5%
Net revenue Group (total)	80.5	101.0	108.8	7.7%
International revenue as a percentage of Group revenue	69.0%	75.0%	76.3%	1.3 pp

^{a)} Since revenue allocation to determine ratios is from an HR perspective, it reflects the location of employees (FTE); see annual report section 'Workforce statistics'. In the annual report revenue is allocated to the country where it is generated.

Financial personnel indicators

Revenue per employee

In the year 2021, revenues per employee increased to EUR 493 000 groupwide – this represents an increase of about 9 percent. In Germany, the revenues per employee has increased by 7 percent. Outside Germany, revenues per employee increased by about 8 percent.



Personnel costs and personnel cost ratio

in bn. €	2014	2015	2016	2017	2018	2019	2020	2021
Personnel costs in the Group	14.7	15.8	16.5	15.5	16.4	16.7	18.9	18.5
of which: Germany	9.1	9.4	9.8	8.5	9.2	8.7	8.8	8.5
Special factors	0.9	1.2	1.5	0.6	1.2	1.0	1.8	0.9
Personnel costs in the Group adjusted for special factors	13.8	14.6	14.8	14.9	15.2	15.7	17.0	17.6
Net revenue ^{a)}	62.7	69.2	73.1	74.9	75.7	80.5	101.0	108.8
of which: Germany	25.7	25.7	25.3	25.2	25.0	25.2	25.2	25.8
Adjusted personnel cost ratio Group (total, in %)	22.0	21.2	20.3	19.9	20.1	19.5	16.8	16.1
Adjusted personnel cost ratio Germany (in %)	32.9	33.0	32.9	32.1	33.0	31.6	30.7	29.9

^{a)} As revenue allocation is separated into Germany/international from an HR perspective, this reflects employee location, unlike the financial report, which allocates revenue to the country where it was generated.

By personnel costs we mean basic personnel costs (salaries) and incidental personnel expenses. The indicator is adjusted for special factors in conjunction with personnel restructuring measures (individual downsizing instruments). The personnel cost ratio represents personnel costs as a proportion of revenue. The development of this rate serves as a benchmark for company business. In the Group as a whole, the personnel expenses ratio in 2021 fell slightly compared with 2020. One driver for the 0.7 percentage point improvement in the adjusted personnel expenses ratio in the Group is the significant increase in Group revenues.

The disadvantage of the personnel cost ratio is that it ignores external personnel costs. Therefore the total workforce costs ratio is more meaningful for the management of personnel costs at Deutsche Telekom.

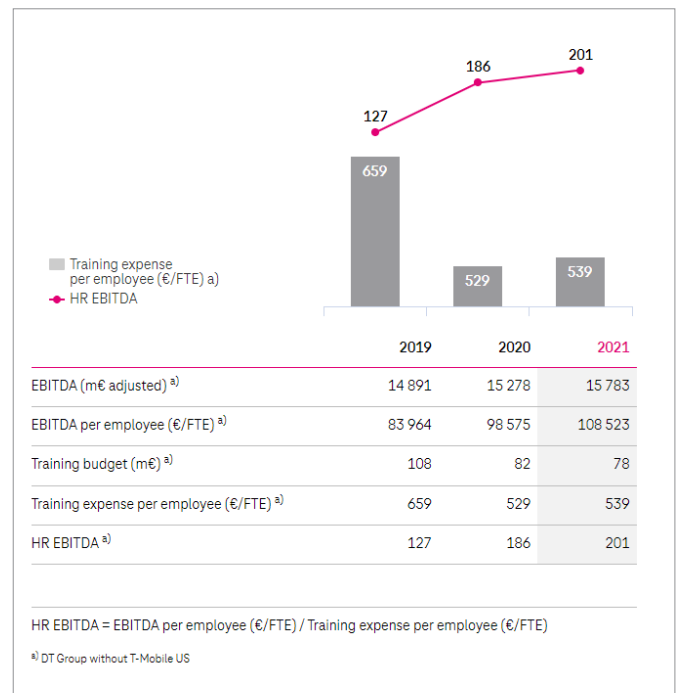
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-1 (Economic Performance)

HR EBITDA (Ratio)

The so-called „HR EBITDA“ of Deutsche Telekom Group (without T-Mobile US) puts into ratio the calculated earnings per employee with the investments in training per employee.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 404-1 (Training and Education)
- GRI 404-2 (Training and Education)

Deutscher Nachhaltigkeitskodex

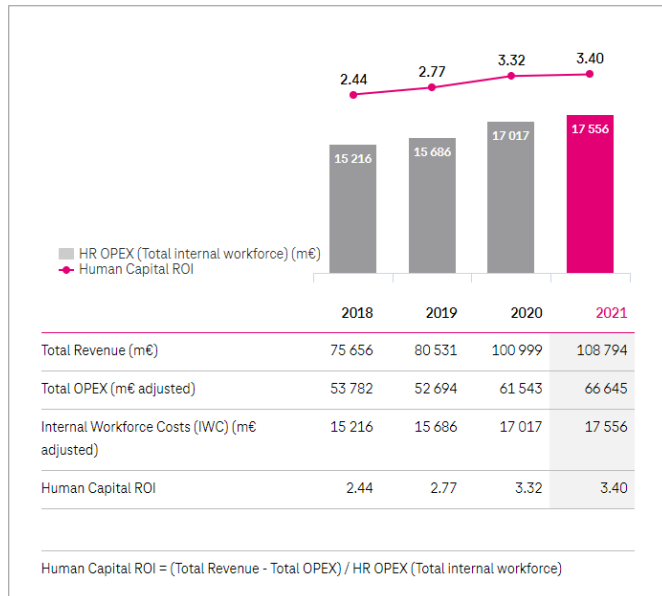
- Criterion 16 (Qualifications)

European Federation of Financial Analysts Societies (EFFAS)

- S02-02 (Average expenses on training per FTE p.a)

Human Capital ROI

The so-called "Human Capital Return on Invest (ROI)" illustrates the company's return on investment in human capital by building a ratio between revenue, OPEX and the costs of our internal workforce (IWC).



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 404-1 (Training and Education)
- GRI 404-2 (Training and Education)

Deutscher Nachhaltigkeitskodex

- Kriterium 16 (Qualifications)

European Federation of Financial Analysts Societies (EFFAS)

- S02-02 (Average expenses on training per FTE p.a)

Total Workforce Costs

In bn. €	2016	2017	2018	2019 ¹⁾	2020	2021
TWC^{a)}	16.8	16.9	17.1	17.5	19.1	19.6
of which: Germany	9.1	8.9	9.0	8.7	8.3	8.3
IWC ^{b)} (PC ^{c)} adjusted	8.3	8.1	8.1	7.9	7.7	7.7
EWC ^{d)} Leased and temporary workers	0.03	0.04	0.05	0.04	0.03	0.02
EWC ^{d)} Freelancers and consultants	0.7	0.8	0.8	0.75	0.5	0.6
of which: international	7.8	7.9	8.0	8.8	10.7	11.3
IWC ^{b)} (PC ^{c)} adjusted	6.5	6.8	7.1	7.7	9.3	9.9
EWC ^{d)} Leased and temporary workers	0.5	0.2	0.2	0.2	0.2	0.2
EWC ^{d)} Freelancers and consultants	0.8	0.8	0.8	0.9	1.2	1.3

^{a)} Total workforce cost: external workforce cost + personnel cost adjusted for special factors
^{b)} Internal workforce cost
^{c)} Personnel cost
^{d)} External workforce cost: cost of leased and temporary workers + cost of freelancers and consultants
¹⁾ The value for 2019 has been corrected compared to the previous year's published value.

Total Workforce Ratio

Total workforce management allows HR to be managed in a holistic manner, enabling qualitative and quantitative personnel planning over the long term. The total workforce ratio describes the relationship between all personnel expenditure and revenue. This means: if the ratio has fallen in comparison with the previous year, either revenue has remained constant while total workforce costs have gone down, or revenue has increased with stable Total Workforce Cost.

Deutsche Telekom's total workforce quota improved again in 2021. The adjusted ratio for the Group as a whole dropped by 0.7 percentage points in 2021 compared with the previous year. While total revenue was up 7.7 percent (7.8 billion euros) in 2021, total workforce costs only increased by around 2.6 percent year-on-year.

In bn. €	PA ^{a)} adjusted 2021	EWC ^{b)} 2021	TWC ^{c)} 2021	Revenue ^{d)} 2021	TWQ ^{e)} adjusted 2018	TWQ ^{e)} adjusted 2019	TWQ ^{e)} adjusted 2020	TWQ ^{e)} adjusted 2021
Germany	7.7	0.7	8.3	25.8	36.1%	34.8%	33.1%	32.2%
International	9.9	1.5	11.3	83.0	15.9%	15.8%	14.2%	13.7%
Group (total)	17.6	2.1	19.6	108.8	22.6%	21.7%	18.9%	18.1%

^{a)} Personnel cost
^{b)} External workforce cost: cost of leased and temporary staff + cost of freelancers and consultants
^{c)} Total workforce cost: external workforce cost + personnel cost adjusted for special factors
^{d)} As revenue allocation is separated into Germany/international from an HR perspective, this reflects employee location, unlike the financial report, which allocates revenue to the country where it was generated.
^{e)} Total workforce quote = TWC/revenue

Circular economy & climate strategy

#GreenMagenta Program

During the year under review, we brought many of our CR topics together under the headings #GreenMagenta and #GoodMagenta, with the aim of positioning our commitment to sustainability more strongly in our communication with stakeholder groups such as employees, partners, and customers. As part of this move, we renamed our “we care for our planet” Group program in 2021. The program is now called the “#GreenMagenta Program.” It comprises measures, along our entire value chain, and carried out in cooperation with the relevant specialized staff, for improving resource efficiency and making effective contributions toward the achievement of our climate goals. As part of a handover of specific responsibilities to pertinent departments, the program’s work areas, and the activities they comprise, have been grouped into four focus areas, “Green Customer Experience,” “Zero Waste,” “Green Operations” and “Green Governance.” By grouping our efforts into these four focus areas, we are ensuring that #GreenMagenta activities are efficiently moved forward and controlled, and that they are enshrined in our company’s everyday operations.



The Group Corporate Responsibility department (GCR) had responsibility for coordinating the #GreenMagenta Program for Germany in 2021. Activities of the national companies were coordinated by the Board member for Deutsche Telekom’s Europe segment, with the support of GCR. Within the program framework, Deutsche Telekom’s departments in Germany and in the national companies carried out numerous measures under their own responsibility. In 2020, intensive international collaboration within the #GreenMagenta Program framework began, and this continued in the year under review. The aim of such collaboration is to synchronize the program activities in the various countries as effectively as possible and to establish regular exchanges between the departments responsible for the program’s implementation. Our “sustainability ambassadors” are involved in all of the #GreenMagenta Program’s focus areas. In Germany, these ambassadors are known as “Green Pioneers.”

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305–5 (Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

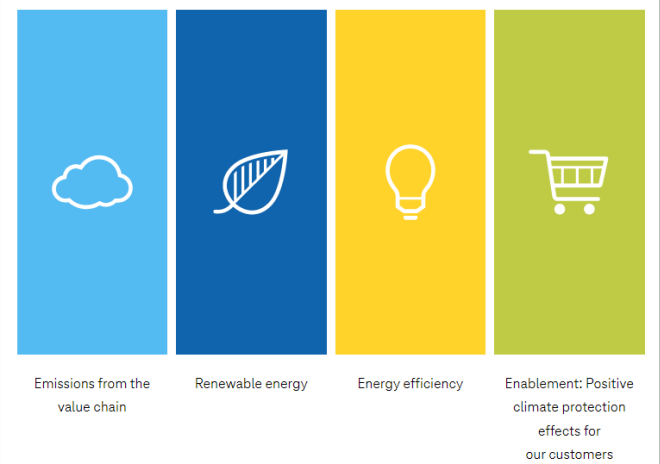
Climate strategy

We see ourselves as a responsible company and have made that a core element of our Group strategy. Our Corporate Responsibility Strategy is derived from this. It covers three action areas: “Climate protection & resource efficiency,” “Digital responsibility,” and “Digital participation.” The climate strategy translates the action area “Climate protection & resource efficiency” into concrete measures. This is how we ensure that climate protection measures are closely connected with our core business.

To support the climate strategy and achieve the ambitious Group targets, the national companies have developed and implemented their own climate protection strategies, concepts and measures. These can be viewed in the relevant profiles.

Our integrated climate strategy is based on four pillars: Emissions from the value chain; renewable energy; energy efficiency; and enablement: positive climate protection effects for our customers.

The four pillars of our integrated climate strategy



Emissions from the value chain

We record all direct and indirect emissions using the globally recognized Greenhouse Gas (GHG) Protocol. As of 2021, all of the electricity we use comes from renewable energy. This has enabled us to reduce the pertinent emissions to zero (see “Renewable energy”). Nonetheless, we are continuing to improve efficiency in areas with particularly high energy consumption – such as, especially, our networks and data centers (see “Energy efficiency”). We are also taking measures to reduce emissions tied to use of gas or oil. For example, we are transitioning to low-emissions and zero-emissions vehicles and are carrying out facility-space consolidations. With such efforts, we have achieved considerable emissions reductions over the past few years – even though data traffic continues to grow rapidly, necessitating network expansions.

Indirect emissions from the upstream and downstream value chain (Scope 3 emissions) make up the largest share of our total emissions. We consult closely with our suppliers in order to reduce the emissions generated during production, and to have products manufactured that are energy-efficient in their utilization phases.

Renewable energy

In 2021, we drew all of our electricity from renewable sources, having converted the entire Deutsche Telekom network, throughout the spectrum from mobile communications to high-speed DSL, to use of renewables-only power. Now, we are aiming to expand our own production of emissions-free power and to conclude suitable green power purchase agreements (PPAs). In Germany, PPAs already account for over 10 percent of the power we use. As of the end of 2021, 23.1 percent of the power used throughout the Group was obtained via PPAs. In 2020, we published a guide for the Deutsche Telekom Group, the purpose of which is to support the national companies in choosing the ideal solution for their individual needs by providing information on the various options they have available for the purchase of green electricity.

Energy efficiency

As a logical consequence of our network infrastructure's considerable energy requirements, we are seeking to reduce our energy consumption by investing in energy-efficient technology. For instance, we have migrated our entire network infrastructure to IP technology, which is not only more powerful, but also consumes less electricity than existing technologies. In addition, we are working to concentrate data traffic on a small number of data centers that are especially efficient. One indicator we use to keep track of efficiency improvements at our data centers is power usage effectiveness, or PUE. We determine PUE values in keeping with the method specified by the data-center standard EN50600. In order to measure our progress, we use also the key performance indicators (KPIs) “Energy Intensity” and “Carbon Intensity.”

Enablement: Positive climate protection effects for our customers

Many of our products and services provide sustainability advantages. They can help reduce energy consumption and CO₂ emissions, improve healthcare and make logistics more efficient. In

addition to our own carbon footprint, we also calculate the positive CO₂ effects facilitated for our customers through using our products and solutions. We correlate the two factors via the ESG KPI “Enablement Factor”. This helps us evaluate our overall performance in relation to climate protection. We aim to further improve our enablement factor by increasing sales of sustainable products and solutions and reducing our own emissions.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305-5 (Emissions)

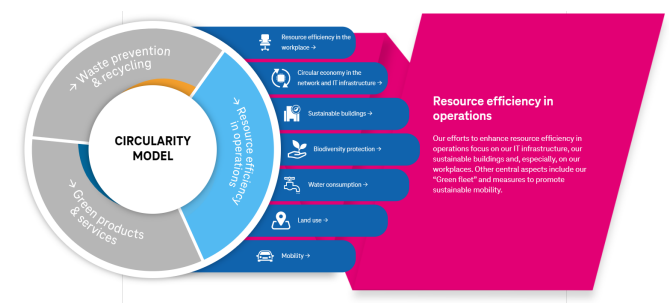
Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Our approach for a circular economy

As a service provider, we use considerably fewer resources than manufacturing companies. We do use some resources, however – day in and day out, at the workstations in our office facilities, in our Telekom Shops and in our data centers. Office supplies and materials for marketing are one area of resources use, for example. On the other hand, the resource consumption for the manufacturing and use of our products and network infrastructure occurs in both upstream and downstream stages of the value chain – with our suppliers and customers. This is why we are committed to ensuring that resources are used responsibly throughout our entire value chain. In this connection, we are taking a holistic approach to achieving a circular economy. We aim to make products and materials as durable as possible and to ensure they are always recycled at the end of their lifetimes.

Our effort to bring about a circular economy, along with a focus on “climate,” is the second main emphasis of the #GreenMagenta Program. Our approach in this area is holistic, covering the areas “Resource efficiency in operations,” “Green products & services” and “Waste prevention & recycling” (see graphic).



The basis: a certified management system

With our health, safety, and environmental management system (HSE), we have made a commitment to continually improving our performance in these areas. In the year under review, it was successfully recertified, for three more years, in accordance with the international standards ISO 45001 on occupational health and safety, ISO 14001 on environmental management, and ISO 9001

on quality management. Our environmental guideline summarizes all of the current voluntary ecological commitments in effect throughout the Group.

European targets

In the year under review, our European national companies (with the exception of our unit in Germany) set targets in the framework of our EU strategy for resource efficiency. Through 2024, the national companies plan to collect one million used mobile devices and keep them in the circular economy by refurbishing or recycling them. In addition, they are striving to ensure that no electronic waste produced by Deutsche Telekom's national companies, and no returned devices, such as smartphones, routers or laptops, wind up in landfills – and that such waste and devices (where not refurbishable) is properly disposed or recycled as it would be in Germany (target: “Zero Waste for ICT to Landfill”). Furthermore, as of mid-2022 packaging for all Deutsche-Telekom-branded products launched on the market is to be sustainable, in keeping with our “Sustainability Packaging Guideline.” Also, by the end of 2022, packaging for over 90 percent of the smartphones sold by third-party providers is to be sustainable product packaging.

Measurement of progress

We are continually working to improve our performance indicators, with a view to enhancing review of our Group-wide progress. In the year under review, and in the framework of the #GreenMagenta Program, we developed a comprehensive new set of performance indicators. This has enabled us to set clear-cut goals and to report transparently on progress. Since 2021, for example, and in addition to using the ESG KPI “Take Back Mobile Devices,” we have been keeping records of the numbers of CPE (Customer Premises Equipment) we have collected. We measure progress in copper cable recycling with the KPI “Recovered copper cables.”

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 306–2 (Waste)

Ecological sustainability program at T-Systems

As part of the Deutsche Telekom Group, T-Systems has also committed itself to the Group's Group-wide climate targets and integrated sustainability into its strategy. T-Systems has set up its own program to these ends. Its fundamental areas and goals are:

Enablement of our customers

To support customers in making purchase decisions, T-Systems determines the ecological impacts of its products and services and provides this information transparently. For example, to determine the carbon footprints of products, T-Systems uses an impact measurement approach in accordance with the Group-wide Impact Measurement Blueprint, that also includes social and economic factors. It looks at the entire value chain. An important factor in impact measurement consists of the positive carbon-footprint impacts our customers realize through the use of T-Systems' ICT products. To provide orientation for our product developers, T-Systems is currently creating a “Low Product Carbon Footprint Guideline.” The Guideline's purpose is to assist developers in mini-

mizing the carbon footprints of new and existing products. Such efforts have been paying off: In 2021, a market analysis of the Information Services Group (ISG) found T-Systems to be a “leader” in sustainability and decarbonization services in Germany and the Nordic countries.

In the year under review, T-Systems brought new offerings to the market that have a specific focus on sustainability on the customer side.

- With “Syrah Sustainability” software, for example, companies can monitor the development of their sustainability indicators. The software, which has dashboard functionality, and is oriented to the UN's Sustainable Development Goals (SDGs), assists companies in collecting and evaluating relevant data.
- The “Energy Dashboard”, which T-Systems is developing, is a tool for transparent emissions calculation. It shows customers the carbon footprint, in real time, of the IT infrastructure they are currently using.
- Also, T-Systems now offers “EcoShift”, an app for calculation of the carbon footprints related to employee commutes.
- In addition, in the year under review, Detecon International, a T-Systems subsidiary, further expanded its consulting area “Sustainability Consulting.” It supports companies comprehensively in sustainability-oriented activities, starting from the very early stages of their sustainability development and from the development of an environmental strategy.

Reducing our own ecological footprint

With a view to reducing its CO₂ emissions in an effective way, T-Systems has determined a baseline figure for the base year 2019 and identified its largest emissions sources. In addition, it has initiated a range of further analyses, including impact assessments taking account of product-related emissions during products' service lives, and including emissions generated on the customer side. These will identify areas that present particular potential for reducing the ecological footprint. In 2021, T-Systems intensified its interactions with hardware suppliers, with a view to reducing the carbon footprints of supplied components and to contributing to achievement of the Group's climate goals.

CO₂-emissions reductions in operations The Group-wide conversion of all of the Group's own buildings to renewable energy by the end of 2021 also extends to T-Systems' data centers. The centers use electricity from renewable energies, and one data center in Spain is fitted with its own photovoltaic system. We are also gradually making the data centers more energy-efficient, with the aid of innovative technologies and artificial intelligence. For example, the well-water cooling system at the data center in Munich has been optimized with the help of an AI system. In 2021, T-Systems joined the Climate Neutral Data Centre Pact. With this move, it has committed to making all of its own data centers, and the externally operated data centers within its sphere, climate neutral by 2030. Also, in the year under review, it launched a research initiative in

cooperation with the Fraunhofer Institute for Factory Operation and Automation IFF, with the aim of developing measures to make its data-center operations more sustainable. This effort also extends to the overall aim of enabling data centers to become energy self-sufficient, via intelligent interaction between renewable energy generation, power storage and flexible management of current loads.

Raising employee awareness

Employees also play an important role in reducing our carbon footprint at T-Systems. To this end, T-Systems is reducing business travel and relying on videoconferencing for meetings. In addition, the company's employees, at all of its production sites, and in all countries in which it is located, are being made more aware of the need to think and act with an orientation to sustainability (the company is doing this, for example, by promoting alternative mobility solutions, participating in "action days" focused on sustainability, participating in sustainability-oriented workshops, and providing information about ways to reduce power and resources consumption). These efforts are being supported by employee initiatives focused on sustainability, such as the "Green Team" in Brazil and a sustainability program in Hungary that has over 80 "green volunteers."

Green fleet

T-Systems is aiming to make its fleet of vehicles more sustainable – with the help, in particular, of greater reliance on e-mobility. In February 2022, it published a revised "e-car-only car policy" that defines additional steps toward greener mobility.

Further information on the topic of green IT at Deutsche Telekom is available here and in the report at explanations on the EU taxonomy.

Climate targets & risks

Our climate targets

We are helping to mitigate climate change and contributing to compliance with the Paris Climate Agreement. In 2013, we adopted a Group-wide climate protection target for the first time: By 2020, we planned to reduce our own CO₂e emissions by 20 percent compared to the base year 2008 (excluding T-Mobile US). As it happened, we greatly exceeded our target by achieving a reduction of about 60 percent. Our current climate targets for the period after 2020 were approved by our Board of Management in 2019, and then made even more ambitious in March 2021:

- By the end of 2021, we aimed to source 100 percent of the electricity used by the Group from renewables (Scope 2). We have achieved this target.
- Now, we aim to reach climate neutrality throughout the company by the end of 2025 (Scope 1 and 2). To that end, we plan to reduce CO₂ emissions by up to 95 percent, with respect to their level in 2017, and offset any remaining emissions via suitable offsetting measures. In this context, we focus on offsetting measures for the long-term capture of CO₂ from the atmosphere, for example through reforestation. In addition to switching to renewably sourced electricity, our measures toward climate neutrality will especially include implementing energy efficiency measures. In the year under review, this target was further underlined by its integration into Executive Board compensation as one of two ESG targets.
- By consistently reducing our Scope 1 and Scope 2 emissions, over 98 percent of our carbon footprint is not generated directly by us, but in the production and use of our products. We plan to achieve a 25 percent reduction per customer in these emissions by 2030 (with respect to 2017) (Scope 3, categories: goods and services acquired, capital goods, use of sold products, rented or leased equipment). We consult closely with our suppliers in order to reduce the emissions generated during production, and to have products manufactured that are energy-efficient in their utilization phases.
- We want to reach “net zero,” with no carbon footprint left in any of the three scopes, by the end of 2040 at the latest.

Our climate targets from 2019 were developed with the method from the “Science Based Targets initiative (SBTi).” The SBTi officially confirmed in May 2019 that we are the third DAX-listed company to contribute toward implementing the Paris Climate Agreement through our climate protection targets. We have thus followed our national companies in the United States and Hungary, whose targets were already endorsed by SBTi in 2018 and at the start of 2019, respectively.

Our approach to measuring our climate-protection progress

We calculate our emissions for our climate targets along the entire value chain according to the market-based method of the internationally recognized Greenhouse Gas (GHG) Protocol. All of our CO₂e emissions are broken down in detail here.

The emissions data enter into various KPIs that we use to measure our contribution to climate protection and make our progress transparent. The “Carbon Intensity” and “Energy Intensity” KPIs are used to analyze the relationship between our CO₂e emissions or energy use and relevant transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks. The KPIs “Enablement Factor”, “PUE” and “Renewable Energy” also improve management and transparency with regard to climate protection issues.

Indirect emissions along our value chain, or Scope 3 emissions, make up the majority of our total emissions. By recording them, we lay the foundation for reducing emissions in our value chains through targeted measures together with our suppliers and customers.

The Board of Management is informed each year in detail, by Group Corporate Responsibility (GCR) about the status of the programs we have implemented to achieve our climate targets.

Climate target achievement

At the end of the year, our progress toward our targets was as had been forecast. The calculation of the base-year emissions took the T-Mobile US and Sprint merger into account. For that reason, they are higher than the level given in the 2019 CR Report for 2017.

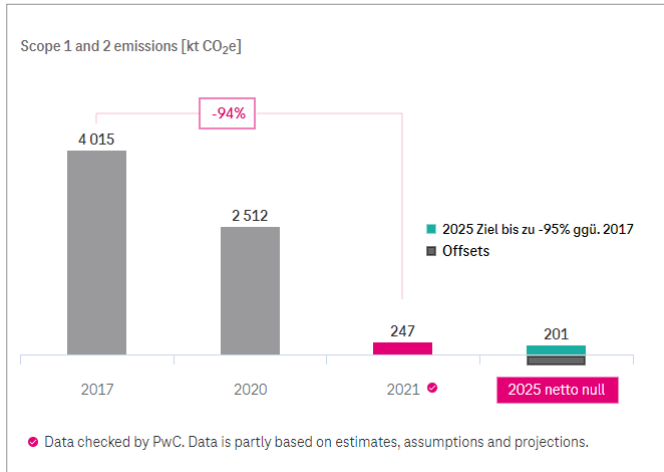
Electricity from 100 percent renewable energies

For 2021, we aimed to have 100 percent of the electricity we use, Group-wide, be sourced from renewable energies (Scope 2). We achieved this target, and we plan to continue using only renewably generated electricity.

Climate neutrality by 2025 (Scope 1 and 2)

Our targets call for us to reduce our Scope 1 and Scope 2 emissions by up to 95 percent, with respect to their 2017 levels, by 2025, and to offset all remaining emissions, via suitable measures, in order to achieve climate neutrality in our operations.

In the year under review, we reduced our Scope 1 and Scope 2 emissions by 94 percent with respect to their 2017 levels.

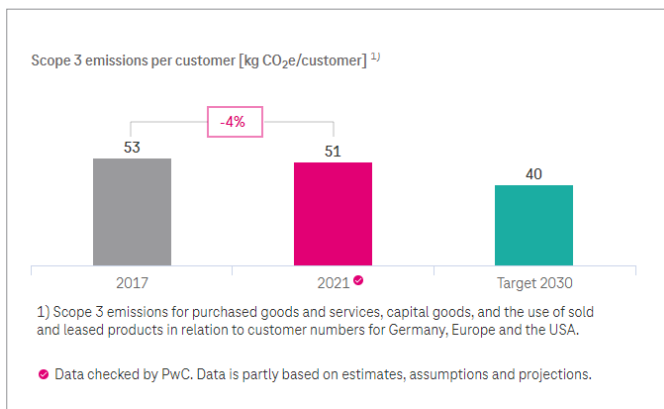


25-percent reduction of per-customer Scope-3 emissions by 2030

Over 95 percent of our carbon footprint arises from the production and use of our products. We plan to achieve a 25 percent reduction per customer in these emissions by 2030 (versus 2017) (Scope 3; categories: goods and services purchased, capital goods, use of sold products, rented or leased equipment).

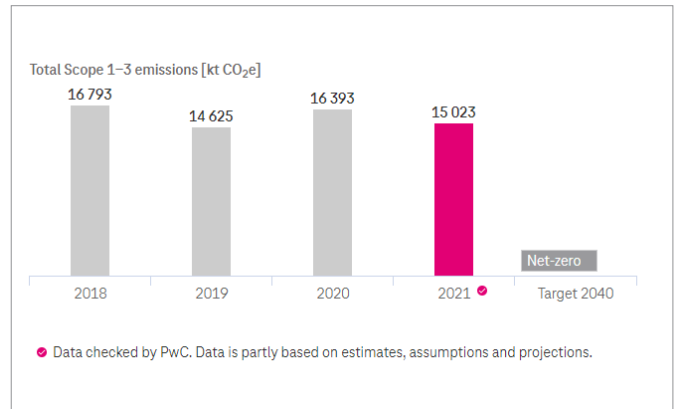
The figure for the base year 2017 was corrected in comparison with the prior-year reporting due to a different basis of calculation. The reason for this is a subsequent correction of the number of customers in the U.S. segment following the acquisition of Sprint. The customer figures excluding wholesale customers are used for the calculation. The adjustment has changed the value for 2017 and the target value for 2030.

In the year under review, we reduced our per-customer Scope 3 emissions by 4 percent with respect to their 2017 level.



Climate neutrality by no later than 2040 (Scope 1, 2 and 3)

In addition, we plan to achieve net-zero emissions, throughout all three Scopes, by no later than 2040 – and, at that point, have no carbon footprint whatsoever. In this connection, we are aiming to address all of the emissions remaining in our value chain, and to stop them from entering the atmosphere. In the year under review, our total emissions amounted to 15 023 kt CO₂e.



Orientation to the TCFD's recommendations

The “Task Force on Climate-related Financial Disclosures (TCFD)” was established at the 2015 United Nations Climate Change Conference in Paris. Its aim is to develop voluntary, consistent climate-related financial risk disclosures. In 2017, the TCFD published specific recommendations for putting these disclosures into practice, recommendations that companies can use as a guideline to inform investors, lenders, insurers, and other stakeholders about the risks climate change presents for their business model.

We welcome the aims tied to the TCFD, and we are moving forward with TCFD-based reporting relative to those aims. As is already becoming increasingly clear, the physical risks posed by climate change include extreme weather events. In addition, transitional risks, such as the trend in CO₂ prices, are increasingly affecting political debate in this context. This directly influences our operations and our stakeholders. The risks applying to the continuation of our operations are analyzed, and those risks are operationally managed by our business units. In addition, we evaluate internally how reporting on climate-related financial risks and opportunities can be aligned with the TCFD’s recommendations. Ideally, such alignment would build on existing approaches for strategy, controlling, and risk management.



Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Governance

Disclosures	Input
<p>a) Describe the supervision of the Board of Management relative to climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> ■ Since sustainability and climate change are important issues for Deutsche Telekom, efforts to address these issues are managed at the top level of the company. Our CEO, along with the other members of the Deutsche Telekom Board of Management, has responsibility for addressing climate-relevant issues throughout the entire Group. This extends to our climate strategy, our climate targets, and our climate-related opportunities and risks. ■ The Deutsche Telekom Board of Management is informed annually, via the Climate Target Monitoring Board Report, concerning the current status of the company’s achievement of its climate targets and regarding other company-relevant climate issues. In addition, climate-protection indicators (ESG KPI img “Energy Intensity”, ESG KPI “Carbon Intensity”) are included in quarterly reporting to the Management Board member for Human Resources and Legal Affairs, who was the Board member responsible for managing our efforts in connection with CR and climate issues through the end of 2021. As of 2022, the CEO has this responsibility. <p>In addition, Deutsche Telekom’s risk management team reports, on a quarterly basis, to the Supervisory Board’s Audit img Committee regarding ESG risks and opportunities. When unforeseen risks occur outside of the regular-reporting framework, they are reported on an ad hoc basis, and reported to the company’s Board of Management and Supervisory Board. The key risks for the Deutsche Telekom Group are reported in our annual report.</p> <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Current CR-organization structure ■ Risk and opportunity management ■ Addressing climate risks ■ CDP questionnaire, C.2 Governance
<p>b) Describe the management’s role in assessing climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> ■ Responsibility for managing the company’s efforts in connection with CR- and climate-relevant issues lies with the Group Corporate Responsibility department (GCR). That responsibility extends to evaluation of climate-related opportunities and risks. To facilitate regular exchanges with the Management Board, GCR is advised by a CR Board. This board is made up of the heads of the main Group units. <p>An overview of Deutsche Telekom’s complete CR-organization structure is available in the CR report.</p> <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Risk and opportunity management ■ Addressing climate risks ■ CDP questionnaire, C.2 Governance

Strategy

Disclosures	Input
<p>a) Describe the climate-related opportunities and risks that the organization has identified for the short, medium and long terms.</p>	<ul style="list-style-type: none"> ■ The central climate-related risks include the possible failure of the network infrastructure, as a result of damage to the secondary infrastructure (such as through power failures) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-infrastructure damage resulting from climate events or changes in climate conditions. The primary transitional risks mentioned include CO₂ prices and regulation of products and services – for example, via increased energy-efficiency requirements. In addition, there is a risk of negative stakeholder feedback and reputational damage. For the most part, the time horizon for the identified risks is seen as medium-term to long-term. ■ With regard to opportunities, we have identified our increasing use of energy-efficient technologies, and growing demand for climate-friendly products and services, as significant climate-related opportunities. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Progress in implementation of the TCFD recommendations ■ CDP questionnaire, C.3 Risks and Opportunities
<p>b) Describe the impacts of climate-related opportunities and risks on the organization's business operations, strategy and financial planning.</p>	<ul style="list-style-type: none"> ■ Climate-related opportunities and risks have affected our business operations in many different ways. Energy efficiency, for example, is of great importance for Deutsche Telekom, since the network's energy consumption strongly affects operational costs. It is also important in light of the Group's strategic approach to climate protection and of the growing concerns and expectations of our stakeholders. Consequently, we are now aiming to limit our annual energy consumption – and have defined progress toward this aim as remuneration-relevant for our Board of Management. In addition, we are seeking to reduce our electricity costs. ■ For this reason, we have launched a number of programs for improving energy efficiency at our locations and our plants. In the framework of our environmental program, we have studied our value chain in order to identify potential for enhancing resource efficiency and reducing CO₂ emissions. In the process, a total of ten central action areas for future measures were identified that are expected to make our company's operations more sustainable overall. The measures include, for example, labelling of products that are especially sustainable. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Analysis of our products' sustainability benefits ■ Energy consumption & efficiency ■ Climate strategy ■ #GreenMagenta Program ■ CDP questionnaire, C.3.3 and 3.4 Business Strategy
<p>c) Describe the resilience of the organization's strategy, taking account of various climate-related scenarios, including a scenario with 2°C or less of warming.</p>	<ul style="list-style-type: none"> ■ In 2020, we analyzed – by way of example, to begin with – 500 of Deutsche Telekom AG's locations in Germany with regard to their physical climate risks. The risks for the various locations were considered in light of two climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5), with a global temperature increase of more two degrees, and a 4-degree scenario (RCP 8.5). Further details are provided here in the CR report. ■ We plan to extend our scenario analysis to additional international locations, in order to be able to comprehensively assess our organization's long-term resilience. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ CDP questionnaire, C3.2, Business Strategy – Scenario Analysis

Risiko Management

Disclosures	Input
<p>a) Describe the organization's processes for identifying and evaluating climate-related risks.</p>	<ul style="list-style-type: none"> ■ In 2020, in the framework of various workshops with experts from the areas of technology, procurement, and strategy & risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences for our business operations that could result from the physical impacts of progressing climate change. In addition, we analyzed the impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated. Further details are provided here in the CR report. ■ The process for identifying the opportunities and risks tied to climate change comprises the following: <ul style="list-style-type: none"> ■ Screening of media and NGO publications ■ Actively supporting the work of various industry associations that are studying the issue of climate change, such as GeSI, econsense, Foundation 2°, ICC, GSMA, and ETNO ■ Initiating and participating in stakeholder dialogs on the issue of climate change ■ Analyzing responses to the CDP img supply-chain program ■ Analyzing relevant enquiries of rating agencies, such as RobecoSAM img, CDP, Sustainalytics, etc. ■ The process for evaluating the opportunities and risks tied to climate change comprises the following: <ul style="list-style-type: none"> ■ Identifying and quantifying the important trends ■ Calculating the impacts on operations ■ Analyzing the impacts on the value chain ■ Currently, we are working to financially quantify all of the climate-related opportunities and risks involved. For some opportunities and risks, the quantification has already been completed and is being reported in the CDP questionnaire. The resulting financial impacts are then taken into account in the company's planning. Management instruments for taking account of climate protection in investment decisions are regularly reviewed for feasibility and benefit (instruments such as an internal CO2 price, for example).
<p>b) Describe the organization's processes for addressing the climate-related risks.</p>	<ul style="list-style-type: none"> ■ On an expert-knowledge basis, opportunities and risks are evaluated in terms of their potential financial impacts (on EBITDA-AL) and of the probability of their occurrence. Where opportunities and risks cannot be quantified, their potential impacts can be reported in qualitative terms. Once risks and opportunities have been identified, they are analyzed and evaluated, in detail, in terms of the probability of their occurrence and their potential financial impacts. This can be done with the help of a scenario analysis, for example. Then we decide what concrete measures need to be taken in order to reduce the risks or exploit the opportunities. As a next step, in each case the relevant risk owner implements the measures, and monitors and evaluates their effectiveness. As necessary, the above steps are repeated and adjusted in light of the latest pertinent developments and decisions. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Board of Management's assessment of the aggregate risk and opportunity situation ■ CDP questionnaire, C2.2 Risks and Opportunities – Description of processes
<p>c) Describe how the processes for identification, evaluation, and management of climate-related risks are integrated within the organization's risk management.</p>	<ul style="list-style-type: none"> ■ Our processes for identification and evaluation of climate-related risks are completely integrated within company-wide, multidisciplinary processes for risk identification, evaluation, and management. On a quarterly basis, risks and opportunities (with impacts of over 100 million euros on EBITDA) are identified via a Group-wide risk-management process (RMP) that has been developed, and is managed, by the Group Risk Governance department. The RMP provides methods and systems for identification and evaluation of risks and opportunities. The responsibility for reporting on Group risks and opportunities is divided among the relevant business units; consequently, GCR is responsible for climate risks. Further information on the risk process is available in our annual report. ■ In addition, managers from our risk area took part in our internal workshop for identification of key climate-related opportunities and risks. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Risk and opportunity management system ■ CDP questionnaire, C2.2 Risks and Opportunities – Description of processes

Metrics and Targets

Disclosures	Input
<p>a) Disclose the types of measurements that your organization uses, in accordance with its strategy and risk management process, to evaluate climate-related opportunities and risks.</p>	<ul style="list-style-type: none"> ■ The most important performance indicators for measurement and management of climate-related opportunities and risks are as follows: <ul style="list-style-type: none"> ■ Scope 1 to 3 emissions ■ Share of renewables ■ Energy consumption ■ ESG KPI “Energy Intensity” ■ ESG KPI “Carbon Intensity” ■ Enablement Factor ■ Waste production, including e-waste ■ Waste management & recycling ■ Water consumption ■ Land use ■ In addition, we calculate the share of our revenue that is sustainability-oriented, and we continually analyze the sustainability benefits of our products. ■ Historical performance indicators of Deutsche Telekom and its national companies are published in the interactive benchmarking tool of the CR report.
<p>b) Disclosure of greenhouse-gas (GHG) emissions (Scope 1, Scope 2 and, if applicable, Scope 3) and of the pertinent risks</p>	<ul style="list-style-type: none"> ■ Deutsche Telekom discloses its Scope 1–3 emissions annually, in its CR Report and Annual Report. ■ The Scope 1 and Scope 2 emissions are calculated in accordance with the GHG Protocol img. Calculation of Scope 3 emissions is oriented to the GHG Protocol. ■ Deutsche Telekom’s carbon intensity is published annually in the company’s CR Report and its Annual Report (ESG KPI “Carbon Intensity”). This KPI shows carbon emissions in relation to pertinent transported data volumes. <p>Further information is available at:</p> <ul style="list-style-type: none"> ■ Benchmarking tool ■ CDP questionnaire, C4 Metrics and targets
<p>c) Describe the goals the organization uses in the context of efforts to manage climate-related opportunities and risks, and performance, in relation to goals.</p>	<ul style="list-style-type: none"> ■ For selected important functions, achievement of individual targets, and of targets oriented to specific areas of responsibility, enters into calculation of performance-based remuneration. This also applies to goals based on the ESG KPI “Socially Responsible Investment (SRI)” and on the goal “Listing of T-Shares in sustainability indexes/ratings”, which reflect climate-change issues and the CR KPIs “Energy Intensity” and “Carbon Intensity,” which are directly related to those issues. ■ Deutsche Telekom AG’s climate targets are published in the CR Report. ■ Our targets with regard to energy efficiency are disclosed here. ■ Here, we also publish targets for sustainable procurement.

Progress in implementation of the TCFD recommendations

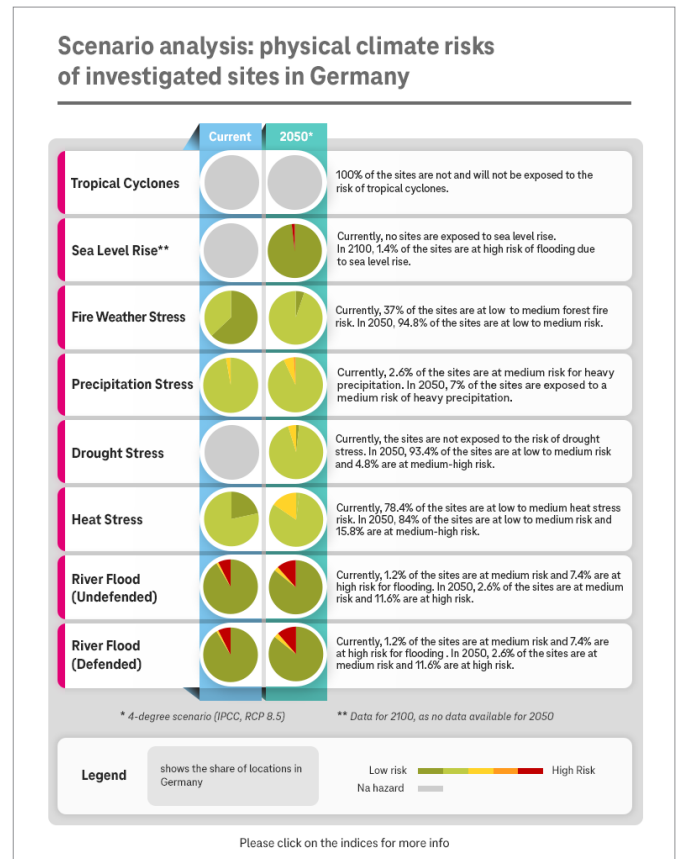
In 2020, we carried out a gap analysis to determine the extent to which our measures already conform to the TCFD recommendations (see here). In various workshops with experts from the areas of technology, procurement, strategy and risk management, we defined the main climate-related opportunities and risks and began weighting them. In the process, we considered the consequences, for our business operations, that could result from the physical impacts of progressing climate change. In addition, we analyzed the impacts resulting from political, technological, and social developments tied to the transition toward a low-carbon economy that has been initiated.

The important climate-related risks include possible network-infrastructure failures as a result of damage to secondary infrastructure (involving power failures, for example) or failures of cooling systems. Another risk consists of possible network damage or failure as a result of network-infrastructure damage due to climate events or changes in climate conditions.

The important climate-related opportunities we have identified include the increasing use of energy-efficient technologies (in network operations, for example), and growing demand for climate-friendly products and services.

In a next step, we analyzed – by way of example, to begin with – 500 of Deutsche Telekom’s locations in Germany with regard to their physical climate risks. This climate-risk analysis was carried out using the “Climate Change Edition” of the “Location Risk Intelligence” software of the reinsurance company Munich Re. The analysis covers eight indexes (see graphic). We considered the risks for the various locations in light of two climate scenarios of the Intergovernmental Panel on Climate Change (IPCC): a business-as-usual scenario (RCP 4.5), with a global temperature increase of more two degrees, and a 4-degree scenario (RCP 8.5). In addition to studying the climate scenarios, we looked at risks in various time frames: currently, for the year 2050 and for 2100.

The following graphic shows a simplified excerpt of the results: The results for the year 2050, in keeping with the 4-degree scenario:



The scenario analysis shows that only minor physical risks apply for the majority of the company’s locations in Germany. Nonetheless, we are prepared for the impacts of physical risks, such as changes in precipitation patterns and extreme weather variability. As shown by examples such as the storm “Friederike” in 2018, and the disastrous floods of July 2021, extreme weather events can already cause local damage to our telecommunications infrastructure. Consequently, our risk management is based on multiple pillars – we structure Deutsche Telekom’s telecommunications networks with built-in resiliency. For example, we use ring structures to ensure that failures of individual network components do not affect the services we provide for our customers. For most of our critical locations, we use uninterruptible power supply (UPS) systems incorporating batteries and mobile and stationary diesel generators. Such systems can normally provide emergency power for several hours in the event of power failures. Our crisis management also helps with rapid recovery in the event of disruptions. The risks of damage to buildings and to Deutsche Telekom’s network infrastructure are covered by insurance policies. Further information is available in the chapters “Addressing climate risks” and “Risk and opportunity management”.

In 2022, we plan to continue analyzing the most important opportunities and risks presented by the above-described climate scenarios. We also plan to extend our location analysis to additional countries – and we are in discussion with other national companies to that end.

The continuing refinement of our risk management, in keeping with the TCFD requirements, is also important from a regulatory perspective, especially in light of the new EU taxonomy guidelines. The criteria for the environmental goal “Climate change adaptation” require – as does the TCFD – companies to study physical climate risks and to be aware of the potential impacts on their business activities. With our TCFD process, therefore, we have provided a basis for defining taxonomy-compliant business activities. Currently, we are working on fulfilling the Taxonomy’s requirements for the 2022 financial year.

Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Addressing climate risks

In the context of our integrated climate strategy, we determine climate-related risks and opportunities both for us as a company and for our stakeholders. Our Board of Management is informed quarterly about current climate risks in a Group Risk Report. Further information on risk management is provided in the “Risk and opportunity management” section of our annual report.

Physical risks

Extreme weather conditions as a consequence of climate change will have a negative impact on our business processes and will inevitably lead to incidents or even network outages. Among the effects of such breakdowns is their massive impact on the management of rescue operations, for example, sometimes even rendering such emergency efforts entirely impossible. In order to be able to react appropriately in these cases, we have defined the necessary responsibilities, processes, and measures in our internal “Group Policy on Continuity and Situation Management.” The policy also outlines how to handle emergency and crisis situations like floods.

We also take possible consequences of climate change into account when planning our future business activities. For example, our network infrastructure is set up to be better protected from storm conditions, changes in temperature, and high winds and keep mobile supply infrastructure on hand for emergencies.

Financial risks

Climate change also carries financial risks – for example, from levies on CO₂ emissions or through increases in energy costs. Our contribution to the mitigation of these risks includes measuring our own energy efficiency and developing measures for improvement. To prevent infrastructure failure due to extreme weather events, additional investment in a more robust infrastructure might be necessary.

Prevention

We also help our customers reduce their own carbon footprint, and thereby help to mitigate climate change, by providing them with innovative solutions. Examples include projects in the area of sustainable urban development and mobility, and also a real-time solution for agriculture (“Precise Positioning”). It can be used, for instance, to correct GPS data that is often too inaccurate for agricultural purposes and transmit precise location data in real time – using 5G mobile technology. Our low-threshold, comparatively inexpensive solution helps farmers deploy their machinery with greater precision, to reduce emissions, dose fertilizer and seeds more accurately, and increase their yields. That way we can also make an indirect contribution to achieving the second sustainable development goal (SDG) of “zero hunger.”

We also help our customers deal with the adverse effects of climate change (adaptation). In the event of an imminent catastrophe, our infrastructure can be used, for example, to send alerts via early warning apps. “Climate Change Adaptation” is part of the EU Taxonomy Regulation, which we discuss here.

Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Resource efficiency in operations

Resource efficiency at the workplace

We also contribute to resource efficiency at the workplace: We try to use as many green office supplies as possible. In 2021, 50 percent of all of our catalogue-based office supplies in Germany were sustainable. We also took the following measures in Germany:

- Our “IT Remarketing” project: Used IT hardware is refurbished so that it can be reused.
- Our partner, the charitable organization “AfB gemeinnützige GmbH,” which offers jobs for people with limitations, receives some of our used IT hardware (e.g., laptops) for reconditioning and reselling.
- In our catalogue of office supplies, over 50 percent of products are classified as sustainable, meaning they have been awarded a label recommended by the German Environment Agency (UBA). The labels in question include the EU Ecolabel, the Fair-trade seal, the Organic Farming seal, the Blue Angel eco-label, and the FSC® and PEFC environmental labels. For the most part, deliveries of office supplies have carbon neutral certification.
- The goal of our “Paperless Office” project is to increase the number of e-books and e-papers used in our company to save even more paper.
- Since 2018, we have worked with a paper wholesaler to purchase only environmentally certified paper that has been awarded the “Blue Angel” or the “Nordic Swan” certificate.
- To reduce the amount of paper used throughout the Group, we ask our employees to opt out of having salary statements sent by post, and we provide them online instead.
- On our “You and Me UNITED” social network, we also offer our employees a platform where they can exchange used office supplies instead of ordering new supplies.
- To meet the requirements of the Minamata Convention and curb mercury emissions, we are working to modernize the media technology used in our company. We are now replacing devices that still contain mercury with new mercury-free devices. The old devices are professionally recycled or disposed of.
- Where possible, we are opting for projectors with state-of-the-art lasers or laser-LED hybrids that work without any conventional lamps and have low power consumption.

Less food waste in cafeterias

Since 2020, we have been offering our employees discounted items in the cafeterias after 4 p.m., at two locations in Germany. Employees can purchase items that would otherwise have to be thrown away, such as baked goods, salads and muesli, at half price. In 2021, a large proportion of our employees worked from their home offices, which is why the offer was only taken up sporadically. For the spring of 2022, we expect our employees to use the offer of discounted items more frequently again.

In addition, our employees have had the option, since 2021, of getting their midday meal as a takeaway lunch in reusable-bowl containers (“REBOWL”) that have a 5 euro deposit. The containers can be returned to any REBOWL partner. Our employees have responded well to this offer: More than 8 000 of the reusable-bowl containers are in circulation.

In addition, in 2018 we joined forces with Sodexo, the company running our cafeterias in Germany, to pilot the RECUP returnable cup. Since 2019, the RECUP system has been introduced at many Deutsche Telekom sites. More than 41 100 RECUP returnable cups have been purchased since the pilot. As a sustainable alternative, one reusable RECUP can replace around 500 disposable cups and can then simply be recycled. In return for a deposit of 1 euro, our employees get their coffee or tea in a reusable RECUP. This can be returned to any participating partner, where the deposit is returned and the cup washed and reused.

Resource efficiency in the network and IT infrastructure

We are currently carrying out projects in this area in various Board of Management departments. The common goal: We want to achieve our climate protection targets, implement the circularity requirement, and introduce a holistic “total cost of ownership” (TCO) approach for our network and IT infrastructure.

- Projects to promote energy efficiency and energy saving measures in Germany and Europe
- Group-wide innovation project for developing new approaches for optimization of energy use and costs
- Modernizing our network infrastructure: 3G network shutdown in Germany

Promotion of resource efficiency in the national companies

Apart from the centrally controlled projects in this area, the national companies are implementing additional measures to promote circularity and resource efficiency in the network and IT infrastructure. In the United States, efficiency in data centers is being improved through cold aisle containment.

Hungary is promoting the use of renewable energies: For a donation, employees sponsor solar modules that supply electricity to a training building. In return, employees receive various benefits, such as an extra day of vacation. Other examples include PC recycling at Magenta Telekom in Austria and the refurbishment of mobile masts in Romania.

More-sustainable Deutsche Telekom buildings

We want to make our buildings in Germany as sustainable as possible. To that end, we are implementing various measures to reduce their CO₂ emissions, improve their energy balance, optimize waste separation, and facilitate longer use of their furniture.

Reducing vacancy is one of the most effective ways to increase sustainability, since lower vacancy levels can lead to significant CO₂ and energy savings. We are currently examining our future office-space requirements, and developing plans that will enable us to use our office space in the best possible way. In the process, we are testing new, more-flexible space/office concepts. The overall aim is to optimize space utilization in our buildings. Also, we are reducing our unused office space – for example, by subletting it. Such efforts are enabling us to prevent vacancies and save energy.

Energy efficiency

In order to minimize the energy requirements of our buildings in Germany, we are carrying out a range of measures, including the following:

- To identify anomalies in energy consumption, we use specific indicators such as “kilowatt hours per square meter” to compare similar facilities. In addition, we analyze the course of energy consumption (load profile) of individual buildings. On the basis of the findings from such analysis, we initiate measures to prevent peak loads and optimize energy use, with the aim of reducing total energy requirements.
- We use communication measures to raise awareness of energy consumption among our employees and motivate them to be energy-conscious at the workplace.
- We pay attention to energy efficiency during construction and renovation work on a building’s exterior.

The Deutsche Telekom subsidiary Power & Air Solutions (PASM) procures energy for the Deutsche Telekom Group companies in Germany. Its energy management system is certified as per the ISO 50001 international standard. In addition, our office buildings undergo an energy audit pursuant to the DIN standard 16247 every four years.

Heating and hot water

We regularly assess the need for repairs at our properties in Germany and conduct cost-effectiveness analyses to further reduce our energy consumption for heating and hot water, concentrating on necessary and economically viable measures, such as:

- Energy optimization of heating systems (e.g., by replacing old burner technologies)
- Updating heat generators and related hydraulic components (such as pumps and valves)
- Using waste heat (e.g., by using heat recovery systems)
- Using combined heat and power (e.g., from cogeneration plants)
- Reducing supply losses when heating water (e.g., by switching to local hot water supply)

Electricity

Building services account for the biggest share of electricity consumption in office buildings (e.g., pumps, ventilation and cooling systems, building automation systems, elevators, and lighting). To reduce electricity consumption, we are focusing on the following measures in Germany:

- Using LED lighting and motion sensors
- Turning off light sources (advertising pylons) at night
- Controlling the room temperature of our network infrastructure more accurately
- Using efficient building services (e.g., high-efficiency pumps, frequency-controlled motors for ventilation systems)
- Optimizing pre-programmed usage profiles (such as through absence profiles)
- Using efficient building automation systems
- Also, in our parking areas we are adding additional charging stations for electric cars, in order to promote electromobility.

Internet of Things (IoT) and innovations

In Germany, we are optimizing our facility management with the help of sensor technologies. This includes the following measures:

- Using sensor technology to actively control indoor temperatures in buildings in real time
- Using predictive maintenance in elevator maintenance and repair

- Using predictive weather-dependent building technology controls
- Using thermal and fluidic building simulation to increase the efficiency of buildings and their building services

Sustainable Deutsche Telekom buildings outside Germany

Internationally, we are also implementing measures to reduce energy consumption, such as optimizing the energy efficiency of major sites, and switching off advertising pylons at night. In the future, we also want to carry out simulation tests to identify energy-saving potential in technical buildings. We also carry out campaigns to raise awareness among our employees for the need to save energy. For Earth Hour during the year under review, for example, the national company in Croatia shut off the power in its buildings for one hour.

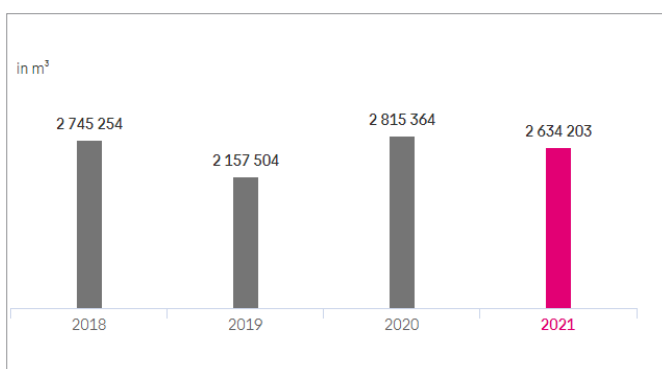
In Greece, three buildings of the OTE Group received LEED Gold (Leadership in Energy and Environmental Design) certification: the Kerameikos office building; the Cosmote TV Services building; and the Group’s office building in central Athens, which was renovated in 2020. All three were certified to the Gold level under the U.S. Green Building Council’s (USGBC) international LEED certification scheme for green and sustainable buildings. The Mill Park building of IT Services Hungary in Budapest also received LEED certification. Group-wide, over 290 000 square meters of our building space was certified to LEED or a comparable standard in 2021. In addition, a further approx. 130 000 square meters meet the criteria of a standard for sustainable buildings but are not certified.

Water consumption

As a service provider, we almost exclusively use water within the scope of our office activities. Water consumption also plays but a minor role along our supply chain. For that reason, water is not a main focal area in our CR management activities. Nevertheless, our environmental guideline does call for reducing our water consumption. We measure our annual consumption by means of our water consumption indicators.

In the year under review, Group-wide water consumption decreased by 6 percent.

We provide detailed information on the figures for each individual company in our interactive benchmarking tool.



Protecting biodiversity

One major cause of species extinction is the fact that more and more space is being taken up by industry, agriculture, and transportation. As a telecommunications company, we take up significantly less space compared to companies in many other industries. However, our business activities can also impact biodiversity in other areas of our value chain – particularly our suppliers. This is why our suppliers must also comply with our environmental regulations. We verify this regularly during our on-site social audits.

ICT solutions can help preserve biodiversity. In our “Bee and Me” project, intelligent sensors are being used to collect data from beehives and transmit them to beekeepers. The beekeeper simply needs to look at their smartphone or tablet app to find out whether their bees are healthy. They can then take action if they notice any anomalies. To date, we have now established a total of 42 beehives in Europe – including 23 “conventional” hives and 19 “digital” ones that are equipped with sensors. The bee hives are home to a total of around 1.7 million bees. In spring 2022, we plan to expand the project and set up beehives in India, for example.

We also cooperate with environmental and nature conservation organizations. Proceeds from our various cell phone collection campaigns (only available in German) in Germany have so far benefited the following organizations, among others: Landesbund für Vogelschutz Bayern e.V.; Pro Wildlife e.V.; Frankfurt Zoological Society (projects for the protection of gorillas); and Hellabrunn Zoo, Munich (species protection projects).

The safety of the electromagnetic fields used in mobile communications is a publicly discussed issue. In 2021, the possible impacts of such fields on animals and plants continued to be discussed. The Federal Office for Radiation Protection has determined that there is no scientific evidence (only available in German) that high-frequency fields below the legal limits endanger plant and animal life.

In the fight against climate change, we support international reforestation projects. Trees store CO₂, produce oxygen, regulate the water balance, provide a habitat for countless species, and thereby promote biodiversity. In 2020, we officially terminated our active partnership with the Plant-for-the-Planet foundation, after the foundation's work was widely and publicly criticized. Many of our employees remain active within the foundation's “Trillion Tree Campaign” initiative, however, with efforts such as organizing tree-sponsorship donations or tree-planting campaigns. For this reason, the number of planted seedlings shown in our interactive tree counter (only available in German) continues to grow. In our “Magenta Forest” campaign, we have now grouped the various projects underway throughout the Group in this context, thereby highlighting the fact that many small efforts can add up to make a big difference. One and all are welcome to participate in this campaign – by having trees planted, via an online site; making donations; or joining with others to plant trees in their local areas and have them registered, along with their geodata. If they wish, donors can also have their names displayed within the “Magenta Forest.” In addition, we have asked our employees to use the Eco-

sia search engine for their internet searches wherever possible. Use of Ecosia contributes to global afforestation, and to our “Magenta Forest”: with the income it generates from search engine advertising, Ecosia plants trees in over 30 countries, in cooperation with local organizations. In 2021, our Ecosia searches financed over 26 950 tree plantings. Together with our self-planted as well as donated trees, our “Magenta Forest” grew by over 29 400 trees in the reporting year.

Reporting against standards

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 9 (Encourage the development and diffusion of environmentally friendly technologies)

Land use

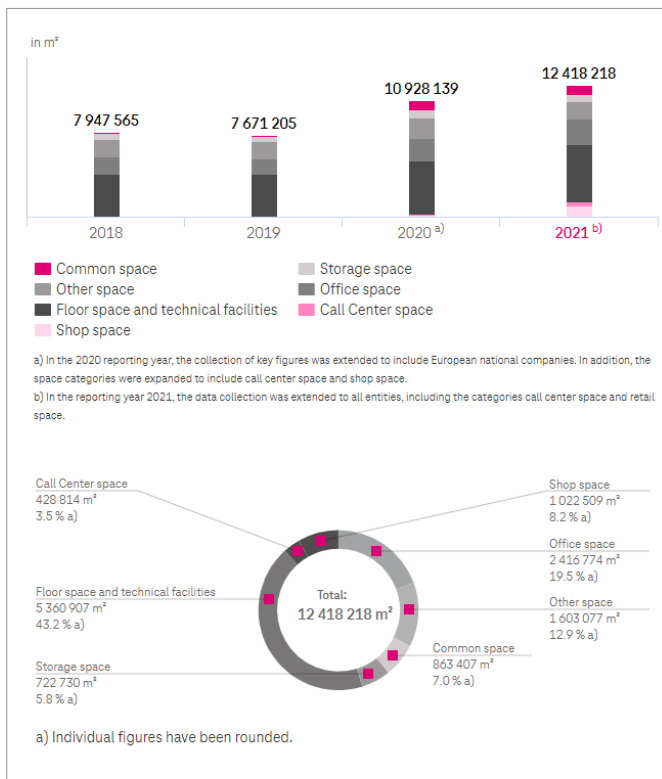
The property used by Deutsche Telekom Group covers most of our demands for technology, office, common, call center, shop and storage space as well as providing space for other needs. Total take-up decreased year-on-year with a total of 12 418 218 square meters of space being used due to an expansion of the data collection.

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)



Reporting against standards

Environmentally friendly products & services

Ecological design

How can we make our products more sustainable and minimize their adverse environmental impacts throughout their entire life cycles? For each product, we begin answering this question very early on in the product's development. Our "Sustainability by Design Guidelines" give product developers specific information on how to proceed. The guidelines cover such aspects as "sustainable packaging," "hazardous substances" and "sustainability-oriented device development."

This approach is in line with our aim of continually improving and expanding our range of sustainable products. It also answers to the growing consumer demand for more-sustainable products for mobile and fixed-network communications.

Introduction of Eco Rating

In 2021, working in cooperation with the telecommunications companies Orange, Telefónica, Telia Company and Vodafone, we launched the Eco Rating initiative, a new sustainability-rating system for cell phones. By the end of 2021, over 150 different cell phones had been evaluated in keeping with the Eco Rating method. The purpose of the rating system is to provide consumers with consistent, precise information about cell phones environmental impacts throughout their entire life cycles, i.e. throughout their production, use, transport, and disposal. In the system, cell phones are evaluated on the basis of information provided by the manufacturers. The aspects taken into account include durability, reparability and recyclability, climate compatibility, and resource efficiency. With the system, we are improving transparency in the cell-phone industry and thereby helping to reduce its entire ecological footprint. In addition, the Eco Rating system is expected to motivate device manufacturers to develop products that are even more sustainable. In the year under review, the Eco Rating label had been introduced in a total of 24 European countries. Now, it is being successively introduced in non-European countries – including South Africa, Brazil, Argentina, Chile, Colombia, Ecuador, Mexico, Peru, and Uruguay.

Also, since 2021 we have been cooperating with Samsung in the development of a sustainable 5G smartphone, for the mass market, that will be easy to repair and come with a removable battery. The new phone is expected to reach the market by the end of 2022.

Ecological responsibility in procurement

We work closely with our suppliers in order to be able to offer environmentally friendly products. In a sustainable procurement strategy that is valid throughout the Group, we have defined guidelines for our procurement processes.

Our principles in this area are also enshrined in various sets of rules and standards, such as our Supplier Code of Conduct and our procurement guide (Leitfaden für den Einkauf). Our Global Procurement Policy sets forth the sustainability criteria that apply to our Procurement unit. These criteria are taken into account throughout the entire procurement process. In a comprehensive pilot project carried out in 2021, we revised our specific sustainability criteria for selecting suppliers of IT/network hardware products. As of 2022, these new criteria will be applied in selected invitations to tender involving large procurement volumes. The sustainability criteria enter into supplier selections with a weighting of 20 percent. In cases in which a supplier does not satisfactorily fulfill the sustainability requirements set forth in our Supplier Code of Conduct, we initiate an escalation process. We use various control instruments, such as risk analyses and audits, to review compliance with our standards. In addition, our ESG KPIs serve as an important control element in our procurement.

Green shop

In an effort entitled "Green Point of Sale," we have brought together sustainability-oriented measures focused on our shops in Europe.

To make the sustainability aspects of the products in our stores visible to our customers, we use our #GreenMagenta sustainability label and demonstrate our sustainability strategy through various communication campaigns. Also, we carry out sustainability training events for our shop employees, to enable them to provide more-specific sustainability-oriented advising to customers. More than 4 000 employees have participated in such training to date.

Under the "Green Point of Sale" scheme, 100 percent of the electricity used by our shops comes from renewable energies. Also, sustainability criteria figure in the shops' decor and lighting. Since 2019, all new or renovated major shops in Europe use recyclable LED lamps. In the shops, we also use sustainable, ecologically certified, organically sourced flooring that has earned our #GreenMagenta label. Around 45 stores in Europe are equipped with "green walls" covered with living plants – and over 20 more are planned for 2022. Our green walls are also marked with the #GreenMagenta label. In addition, we have introduced energy-saving screens, and have banned all single-use plastic from stores across Europe since 2020. For example, we have replaced all of the plastic cups for our coffee machines with more-sustainable alternatives.

In Austria alone, this policy is saving around 6 000 plastic cups per month. In Germany, shops have introduced bags made of recycled PET plastic. Five recycled PET bottles go into the making of each bag. Plus, we are reducing our paper consumption, and have already introduced paperless stores in Slovakia and the Netherlands. Digital invoices and online payment methods are offered across the board at all national companies. In some shops in Europe, we offer “repair bars,” where we repair or replace displays, rechargeable batteries and back covers of Apple, Samsung and Huawei devices. In 2022, we plan to introduce more-sustainable corporate clothing for the staff in our shops in Germany. To that end, we are aiming to include large shares of ecological and/or recycled materials in the clothing.

Overall, we are aiming to apply sustainability criteria in the design and decor of our shops throughout Europe. At the beginning of 2021, we established a Europe-wide “Green Point of Sale” community to drive sustainability issues forward in regular virtual meetings. The topics included local green initiatives in the national companies, the visibility of our sustainability activities in the stores, paper reduction, and our sustainable cell phone recycling scheme. In 2022, we aim to make the furniture inventory and design of our stores even more sustainable.

Ecologically sustainable products

We are offering our customers more and more products and services that are sustainability oriented. The basis for them is Deutsche Telekom’s “green network,” which is powered 100 percent by renewable energies. We use the #GoodMagenta and #GreenMagenta labels to highlight relevant key aspects of our products and services. Also, in 2021, and in cooperation with other network operators, we introduced the Eco Rating system. With these labelling systems, we transparently show which cell phones make positive contributions to environmental protection. We further expanded our range of sustainable products and services in 2021. In addition to sustainable devices, such as routers, media receivers, and the Fairphone, we also offer sustainable accessories. And our ecologically sustainable portfolio also includes rental models and services for refurbishment and recycling of smartphones and fixed-network devices.

First sustainable 5G smartphone

In the year under review, we introduced the first sustainable 5G smartphone to markets in Germany, Austria, and the Netherlands: The Fairphone 4 is currently the world’s only smartphone to have been awarded the German “Blue Angel” (“Blauer Engel”) label, a certification for environmentally friendly products. The phone has a modular design that conserves resources and reduces emissions, and it is the first cell phone to be electronic-waste neutral.

Sustainable smartphone circularity

In the year under review, we added the “Trade MyMobile,” “ReUse MyMobile” and “Insure MyMobile” services to our portfolio of sustainable products and services. Under the “Trade MyMobile scheme,” we buy used smartphones – including smartphones from both Deutsche Telekom and other providers. We provide guaranteed, certified erasure of all data. We refurbish many of the devices

we buy through this service. In doing so, we refrain from replacing components wherever possible, and instead use innovative procedures that minimize resources consumption. A new, innovative deep polish sustainably renews the phone display. Thus, it does not have to be replaced, but can be reused in a resource-saving way. Prior to being sold, each such device undergoes a total of 65 tests, covering the same functional standards that are applied to new devices. Then the devices are sustainably and securely packaged – and returned into circulation.

For this purpose, we offer the devices, along with a 24-month guarantee, for sale via our “ReUse MyMobile” service – and thereby extend the devices life cycle and help save resources. Our newly designed packaging is biodegradable – including the environmentally friendly stickers and printing. The inner packaging is sealed and secure, but customers can view the display through a window without a foil while they are still in the shop.

The new “Insure MyMobile” cell-phone insurance including Apple Car Service can be added not only for new devices, but also for refurbished smartphones. This also helps to extend devices average lifetimes, since devices are repaired free of charge if they are damaged. By buying a “ReUse MyMobile” smartphone, customers can save up to 200 euros in comparison to the purchase of a new phone. These products receive our #GreenMagenta label.

Similar efforts at our national companies

Our national companies also offer ecologically sustainable products and services. For example, in 2021 Magenta Telekom in Austria added the #GreenMagenta-labelled category “Magenta Refurbished” to its portfolio and now uses it to offer refurbished cell phones. At our national companies in Romania and the Czech Republic, customers can rent routers and modems. Such rental devices can easily be reused when they are replaced. In Hungary, our customers may choose the “ExtraNet Green 1 GB” data-expansion option. In its own solar power plants, Magyar Telekom generates enough power to meet the power requirements for data transmission under the option. The power plant generates enough green power to transport about 450 000 gigabytes of data per year.

Offers for business customers

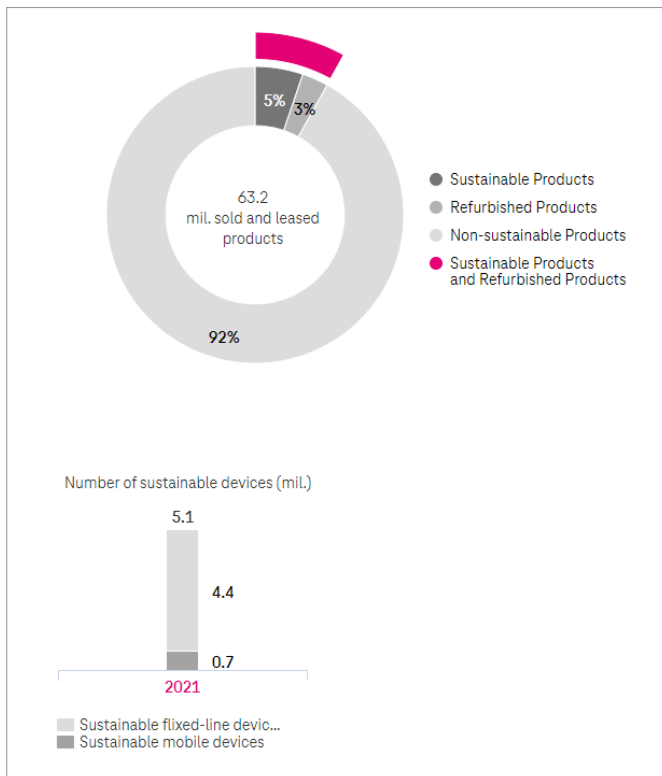
We also want to help our business customers meet their sustainability goals and implement relevant regulatory requirements – such as the EU Green Deal. A total of seven customer solutions of T-Systems International have already received our #GreenMagenta label. Four of them were added in the year under review, including, for example, “M.A.R.S.,” a solution for management of legacy data systems. The data is stored on cloud servers that are operated with 100 percent renewable electricity. In 2021, four products of Telekom Deutschland also received the #GreenMagenta label. Among these is our cell-phone purchase portal for business customers, through which we offer companies a fully circulating system for cell phones. Together with the provider “everphone,” we also offer our business customers the “Device as a Service” model. We manage the entire device lifecycle – including actively retrieving devices from employees, replacing and profes-

sionally repairing defective devices, and certified disposal and subsequent recycling. Numerous other Deutsche Telekom offers, and numerous products of other manufacturers, help our customers reduce their carbon footprints. This is the case, for example, with the many home-office solutions we offer – and especially with our web-conferencing systems. In the period under review, we conducted communication campaigns such as “Sustainable with the IoT,” which highlighted Internet-of-Things solutions and their contributions to ecological sustainability, to inform our business customers about sustainability issues.

Measuring progress with performance indicators

We use various performance indicators to measure our progress in expanding our range of sustainable products. For example, we track the numbers of sustainable and refurbished devices in our mobile and fixed-line segments. We also specify the ratio of sales of sustainable products to total sales of all devices. By 2021, more than 40 percent of our fixed-line devices sold and leased group-wide were already sustainable.

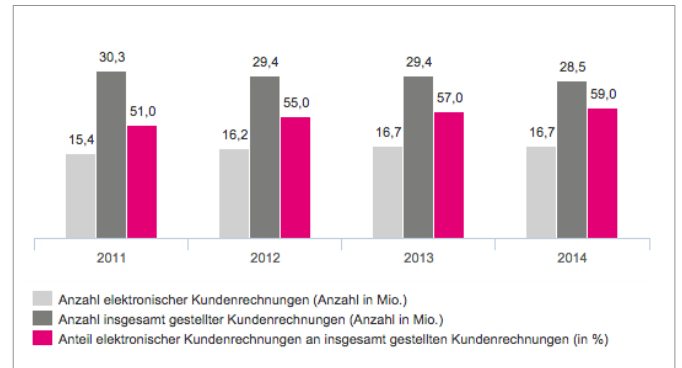
Sustainable products Deutsche Telekom Group



In addition, we collect KPIs on the collection of devices for recycling purposes, on products with sustainable packaging, and on offsetting of CO₂ emissions through shipping with DHL GoGreen and through tree-planting campaigns.

Online billing for mobile and fixed-line customers in Germany

About 237 million online bills were sent out in 2021. This is the equivalent of around 84 percent of all bills and credit notes for mobile and fixed-line customers in Germany. Since 2017, the data has been collected using a more precise calculation method.



Reporting against standards

Deutscher Nachhaltigkeitskodex

- Criterion 2 (Materiality)
- Criterion 10 (Innovation and Product Management)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

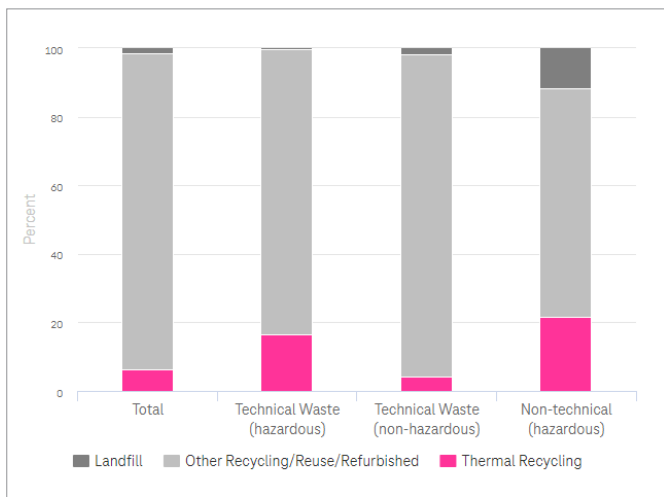
- V04-13 (Percentage of products or services for increasing eco-efficiency of own products or services)

Waste prevention & recycling

Waste management and recycling

We are careful with resources – and likewise with waste. Our waste management throughout the Group is organized consistently in keeping with our “International Waste Management Framework.” On the basis of this framework, our national companies define measurable targets, under their own responsibility, and monitor progress toward those targets. This enables them to flexibly comply with general conditions specific to each country and company.

We strive to recycle as much of our waste as possible. In the year under review, our European national companies defined the following common aim: to ensure, by 2024, that no electronic waste they produce, and no returned devices, such as smartphones, routers or laptops, wind up in landfills – and that such waste and devices are properly disposed or recycled as they would be in Germany. In 2021, we refined our Group-wide set of performance indicators for waste management. In addition to monitoring quantities of waste produced, we now also collect data on recycling of technology and hazardous waste.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 306-1 (Waste)
- GRI 306-2 (Waste)
- GRI 306-4 (Waste)
- GRI 306-5 (Waste)

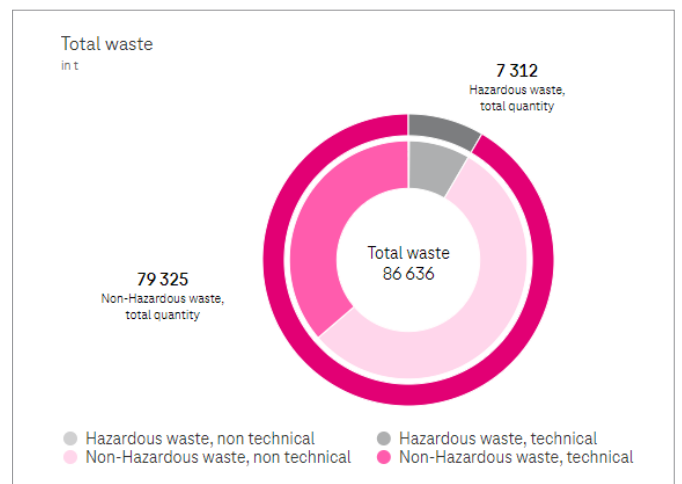
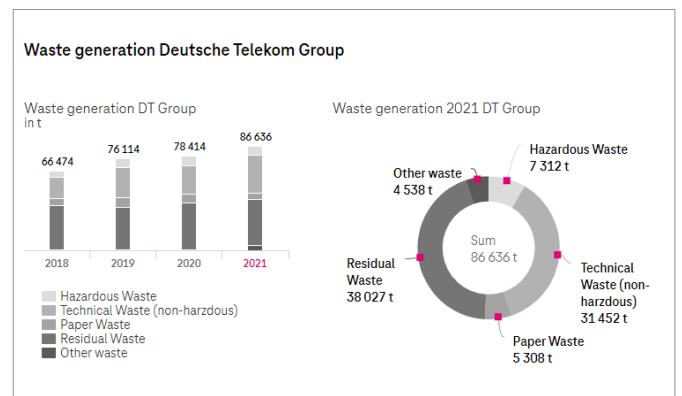
Sustainability Accounting Standards Board (SASB)

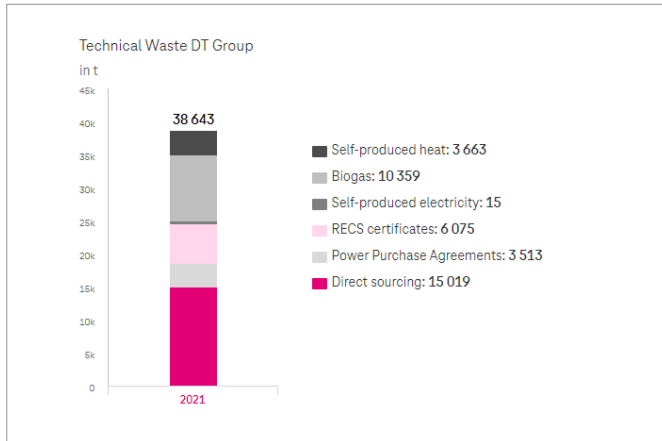
- Code TC-TL-440a.1 (Product End-of-life Management)

Waste production (including e-waste)

As part of our waste management, we transparently track our waste production. In the year under review, we added a performance indicator for technology waste to our set of KPIs. As a result, we are now able, for the first time, to differentiate between electronic waste (e-waste), cable waste, and other technology waste. We have not defined Group-wide targets for the reduction of hazardous and non-hazardous waste. Instead, the national companies are guided by our “International Waste Management Framework,” which was adopted in 2013; they use it as a basis for developing or revising their own waste management strategies. They are also setting their own targets, giving top priority to reducing hazardous waste such as lead batteries.

Group-wide waste increased by 10 percent compared to 2020. The increase is due to a change in the calculation methodology at T-Mobile US. The waste volume excluding T-Mobile US decreased by around 28 percent. We provide detailed information on the figures for each individual company in our interactive benchmarking tool.

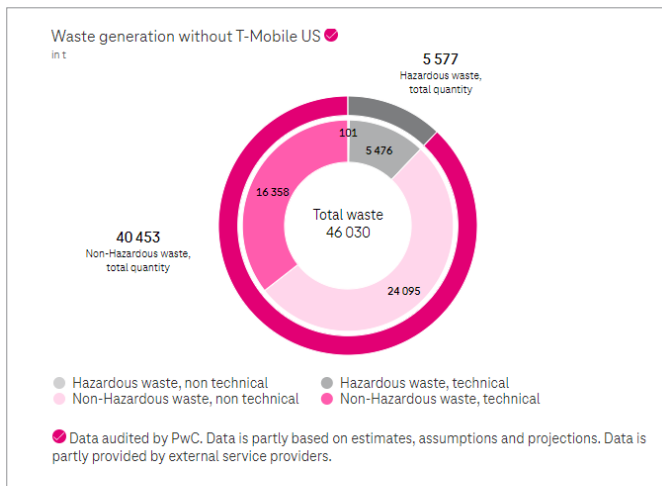
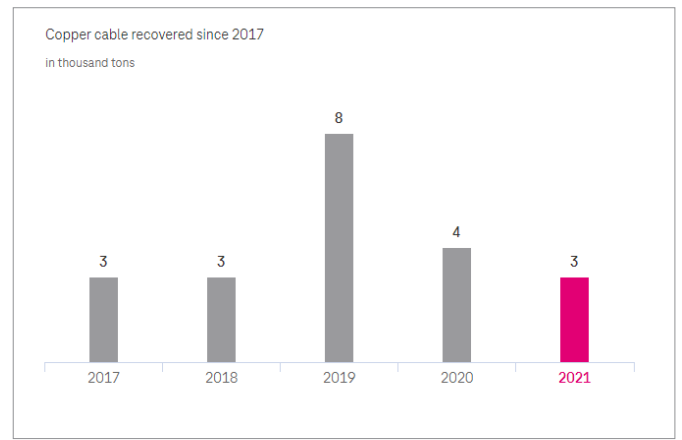
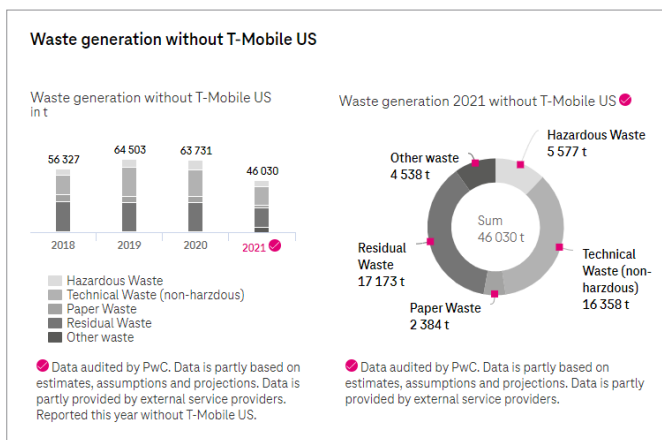




Recovered copper cables

Copper cables were the main component of telephone lines for decades. Our fiber-optic roll-out means that this type of cable is now gradually being replaced. In 2016, we therefore introduced a relevant Group-wide, mandatory policy. It provides a guideline to our national companies when it comes to the recycling and disposal of legacy cables and also contains requirements for copper cable recycling.

In 2021, Deutsche Telekom removed around 3 171 metric tons of copper cable from cable ducts in Germany alone. Certified waste disposal facilities process the cables in accordance with environmental standards, and up to 90 percent of the material is then recycled.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 306-1 (Waste)
- GRI 306-3 (Waste)

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-440a.1 (Product End-of-life Management)

Global Compact

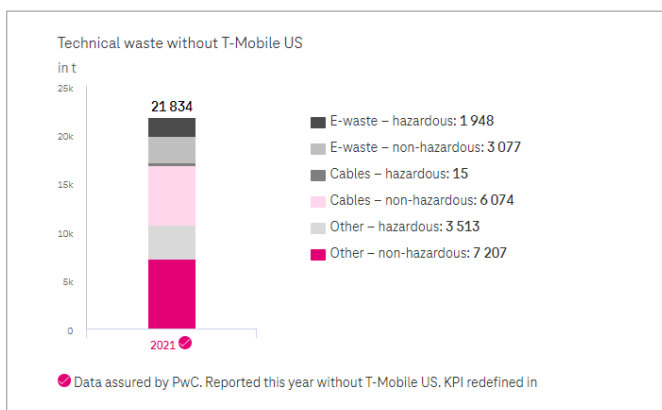
- Principle 7 (Support a precautionary approach to environmental challenges)

Paper-free and low-paper work

Running a large company like Deutsche Telekom involves high paper consumption. For several years now, we have gradually been reducing our paper consumption. With our Paperless Office project, we aim to completely as possible eliminate paper use by 2025.

Given the immense paper consumption – around 3 200 metric tons – at our German locations alone, and the large number of processes that require paper, achieve a mostly paperless Deutsche Telekom is a very ambitious goal.

Print on demand has many advantages. For example, quick reference guides can be printed as needed depending on orders and don't need to be preprinted, transported, and stored. Changes to information sheets for our customers can be made on short notice, eliminating large quantities of outdated documents that need to



be destroyed. In the year under review, we expanded this project, and print on demand is now available for printing of quick reference guides for all the rate plans we offer in Germany (MagentaZuhause, MagentaTV, business-customer and hybrid plans). In addition, we reviewed whether other materials are also suitable for print on demand – such as those containing a brochure, or a SIM card. The process is not suitable for all of the materials we work with. This applies to the SIM cards for our hybrid plans, for example. Since March 2021, print-on-demand instructions have been marked with our #GreenMagenta label.

In 2021, we implemented various measures in Germany with a view to minimizing our consumption still further – and thus saved around 275 tons of paper:

- Correspondence with our millions of customers is one of the biggest levers for saving paper. Thanks to online billing and increasing use of digital communication, we sent out around six million fewer items in 2021 than in 2020 – a quantity that corresponds to 100 metric tons of paper.
- A portion of each delivery note is now provided in digital form. As a result of this conversion, our paper delivery notes now comprise only one page instead of two – a change that saves seven metric tons of paper per year.
- Due to the pandemic, more employees are now working from home, with the result that fewer documents were printed out in the company's offices. Also, awareness campaigns and digitalization procedures have led to further reductions on printing – amounting to total savings of 46 metric tons of paper in 2021. Flipcharts, notebooks and the like are also increasingly being replaced with digital alternatives.
- A successful pilot project for reducing printing at Deutsche Telekom Headquarters in Bonn is now to be followed by a similar project at another location. As we look to the future, we plan to reduce Deutsche Telekom's printer fleet considerably, at all locations.
- Our EmployeeApp (“Mitarbeiter-App”) is used to handle HR and accounting processes – such as travel expense reports – digitally and paperlessly.
- We have also been able to save large quantities of paper in connection with our shops. The quantity of paper used for our “Mehr Magenta Magazin” (“More Magenta Magazine”) has been decreased by about 32 metric tons in comparison to the previous year. By phasing out paper bags, we saved an additional five metric tons of paper.
- We also reduced the quantities of paper used for the flyers we send out to households throughout Germany – by about 90 metric tons.

- Until we reach our goal of going paperless, we will continue to use certified paper from sustainable sources. Furthermore, over 50 percent of the articles in our range of office products are currently sustainably certified. By 2025, we plan to use certified alternatives for all products for which such alternatives are available.

The next step is to network more closely with our national companies. Our national companies can also already boast a number of successes:

- Slovak Telekom: Through greater reliance on online billing, the company is saving about 10 metric tons of paper per month. In addition, our Slovakian national company uses no paper flyers in its shops, and its customers are able to conclude their agreements completely online.
- Croatia: Since 2021 Hrvatski Telekom's business customers have also been receiving online bills; this has reduced paper use still further.
- Magenta Telekom in Austria: Here as well, customers can receive their monthly bills online, on request. In 2021, this option saved a total of 91 million pages of paper. In addition, for each switch to online billing, Magenta donates three euros to the city of Vienna's afforestation projects.
- T-Systems in Brazil: 90 percent of customers receive their bills online; supplier contracts are also processed paperlessly using digital signatures.
- T-Mobile Polska: For every two pages of paper saved via business customers switching to online bills, T-Mobile Polska plants one tree.
- T-Mobile US: In the U.S., use of digital alternatives for printed bills and flyers is also increasing. Also, the company has reduced the numbers of printers in its office buildings, in order to conserve resources.
- Greece/OTE: With the “MyNet.Go” app, employees can do such things as submit vacation requests online.
- DT IT Solutions Russia: To promote the transition to a “paperless office”, the company has digitalized HR processes and documents and introduced digital signatures.
- DTSE: The “Let's go paperless” project reduces paper consumption and digitizes as many processes as possible. A digitization community offers tips and suggestions as well as workshops and digital tools to save paper and reduce the number of printers.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 306–2 (Waste)

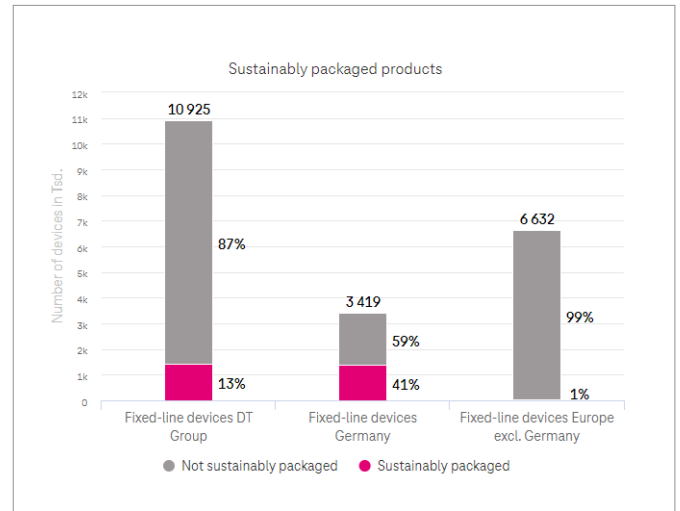
Sustainable product packaging

We have set ourselves the goal of reducing packaging materials and are converting our product packaging to sustainable alternatives: As of mid-2022, all new Deutsche-Telekom-branded products introduced to the German and European market are to be sustainably packaged. For this conversion, we have developed appropriate sustainability criteria, and enshrined them in a packaging guideline. Among other things, we want to use recyclable and biodegradable materials, recycled paper wherever possible, and only non-toxic labels and imprints (e.g. made from soy ink). The packaging guideline is part of our “Standard Design Specifications,” which apply throughout the Group (with the exception of T-Mobile US), and which also include sustainability requirements for product components and design. All product manufacturers must meet these criteria when developing Deutsche Telekom devices. In 2021, about 1.4 million new Telekom-branded products sold or leased in Germany were already sustainably packaged in line with our criteria.

For our products we use PaperFoam (among other materials), a biobased and biodegradable alternative to conventional packaging materials. PaperFoam is non-toxic, and recyclable in paper recycling streams, and it reduces the carbon footprint by up to 85 percent compared to other materials. As of 2021, the packaging of the Speedport Smart 4 router sold in Germany is made of this material. In addition, 95 percent of the router's housing consists of recycled plastic.

We also use sustainable product packaging with non-Deutsche-Telekom-branded devices that we source from third-party providers. By the end of 2022, we plan for all third-party smartphones that we sell in Europe to have sustainable packaging. We are currently examining the sustainability of existing packaging as part of our quality audits. If our sustainability standards are not met, we will discuss this with the manufacturers. Some manufacturers do not yet fully meet our requirements, but have introduced promising plans for sustainable packaging. In 2021, about two-thirds of all smartphones sold by Deutsche Telekom in the EU were sold in sustainable packaging.

This year, for the first time, we are reporting Group-wide figures on sustainably packaged devices, differentiating between our own sustainably packaged fixed-line devices and sustainably packaged mobile devices (e.g., mobile routers, smartphones, and tablets). In 2021, the proportion of sustainably packaged mobile devices throughout the Group was 0.01 percent. The proportion of the Group's own sustainably packaged fixed-network devices was 13 percent.



We also want to make logistics more sustainable. To that end, we plan to optimize parcel packaging, for example. In particular, we plan to discontinue use of plastic in such packaging. A comprehensive analysis has found that in 2021 we saved more than 60 000 square meters of plastic film in Germany. That is equivalent to the area of eight football fields. By producing packaging based on demand, we have already been able to reduce paper consumption by 80 percent. In 2020, we began using a cardboard shredder. This has enabled us to reduce our use of paper as fill material – by 50 metric tons of paper. To make even greater use of optimization potential in this area, we are in discussion with our national companies outside of Germany and are working with them to develop relevant innovative concepts.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 301-3 (Materials)
- GRI 306-2 (Waste)

Used mobile device collection

The European national companies (with the exception of Germany) are aiming, by 2024, to collect one million used mobile devices and refurbish or recycle them to return them into circulation. In Germany, we are also doing more than the law requires in our efforts to collect used cell phones. Since 2003, we have collected over 3.3 million used phones.

Under our sustainable smartphone recycling scheme, users can sell used phones to Deutsche Telekom via the “Trade MyMobile” (only available in German) service. Used phones that lend themselves to refurbishment and reuse are refurbished – and the results are certified. Via the “ReUse MyMobile” service, they are resold and returned into the smartphone ecosystem. By being reused, their ecological footprint is considerably improved. With our “Insure MyMobile” service, we also offer cell-phone insurance for new and refurbished smartphones.

Business customers can use the cell phone collection center (only available in German) to return smartphones and tablets. In this way, we also offer a complete cell phone cycle for companies.

In Germany, used mobile devices can be sent to us by mail – without batteries, please! – or deposited in a Deutsche Telekom collection box. Overall in 2021, Deutsche Telekom took back or purchased a total of around 203 000 used cell phones in Germany. We offer an online portal (only available in German) via which anyone can get involved in cell phone collection and order a free collection box. Phones returned via this channel are also checked to see if they can be reused. Phones that are no longer suited for refurbishment are recycled in Germany, by specialized companies, properly and environmentally safely. The metal resources thus recovered are also returned to the cell phone ecosystem and reused.

In the year under review, we conducted a wide-scale cell phone collection campaign (only available in German) in cooperation with the radio station WDR 2. During the campaign period in October 2021, the station boosted its reporting on sustainability, cell phone collection, and urban mining. All in all, we collected around 20 000 devices from WDR listeners. The proceeds from the campaign benefit humanitarian projects in countries in which gold, copper or silver are mined for cell phone production. We transport all collected devices in a controlled and safe manner to the Telekom Recycling Center. Each cell phone is then electronically recorded and registered in a database. Around 10 to 15 percent of them can be reused. All of the previous users data from these cell phones and smartphones is carefully deleted. Defective cell phones or devices, for which certified data deletion would be too costly, are properly recycled at the Telekom Recycling Center in Germany. Up to 100 percent of the materials are reused – as recycled metals or for energy generation.

We work with collection specialist Teqcycle for our device collection processes. Together, we are committed to secure, state-of-the-art solutions for the collection and transport of used equipment and data deletion. Deutsche Telekom maintains high security standards for data privacy; data privacy throughout the entire collection process has been certified by the testing and certification company DEKRA. In addition, the joint collection system of Deutsche Telekom in Germany and Teqcycle, operating via the cell phone collection center, has been awarded the official Blue Angel eco-label.

We use the proceeds from marketing and recycling to support nature conservation and environmental protection projects (only available in German), as well as social projects organized by the partners of the cell phone collection center.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 301–3 (Materials)
- GRI 306–1 (Waste)
- GRI 306–2 (Waste)

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-440a.1 (Product End-of-life Management)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)

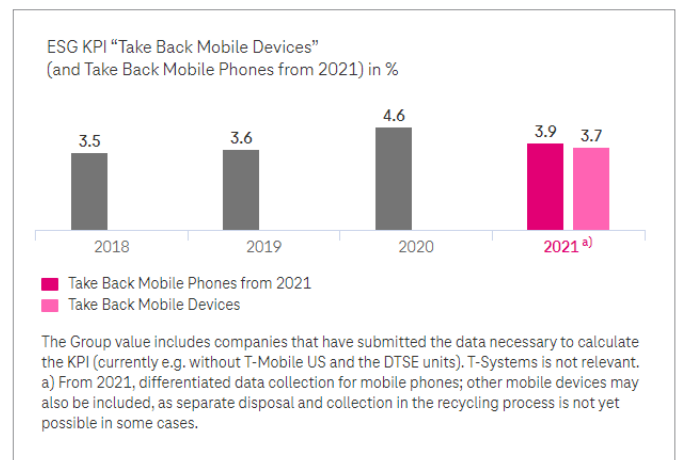
ESG KPI “Take Back Mobile Devices” (including mobile phones)

We report the ESG KPI “Take Back Mobile Devices” based on the reference value “number of devices sold.” This makes it possible to show the ratio of collected devices to the number of devices sold. When devices are used for longer periods of time, the environment benefits from this decision and, as a result, this has a positive impact on the KPI.

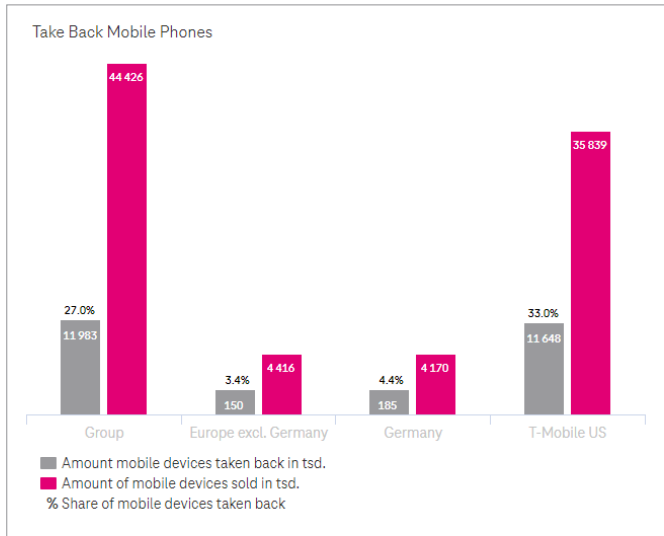
In 2021, the value of the ESG KPI “Take Back Mobile Devices” is 3.7 for the Group (not including T-Mobile US and DTSE units).

This means, for every 100 devices put into circulation each year, we take back around 3.7 via collection campaigns. In 2021, we expanded our data collection and, in addition to the return of mobile devices, also report the return of mobile phones. The KPI for mobile phone take-back was 3.9 percent in 2021.

Our ambition in this connection: Increase the KPI



In 2021, over 12 million mobile devices were collected throughout the Group – 11.6 million mobile phones were collected by T-Mobile US alone. The corresponding KPI for T-Mobile US is 33 percent, and the Group-wide value, including T-Mobile US, is 27 percent. The aim of the scheme for collection of used mobile devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain. With these efforts, over 3.3 million used mobile devices have been reused or recycled in Germany since 2003. This has conserved resources, and it has helped to improve the life cycle assessments for mobile devices overall.



The quantities of collected devices are reported in kilograms or in numbers of items. When using kilograms, we apply a Group-wide conversion factor of 7.25 items per kilogram, except where a different conversion factor is typically used in the country concerned. The mobile devices in circulation include smartphones, simple phones, tablets and cordless phones. In the interest of data quality, numbers of items are reported by Procurement.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 301-3 (Materials)
- GRI 306-1 (Waste)

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-440a.1 (Product End-of-life Management)

German Sustainability Code

- Criterion 7 (Support a precautionary approach to environmental challenges)
- Criterion 10 (Work against corruption in all its forms of, including extortion and bribery)
- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)

European Federation of Financial Analysts Societies (EFFAS)

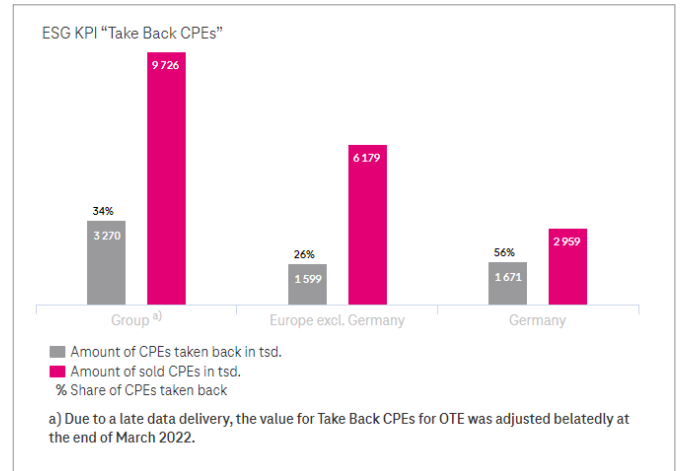
- E14-01 (Recycling Quota)

ESG KPI “Take Back CPEs” (including fixed-line)

In keeping with our circularity strategy, we also promote refurbishment and proper recycling of Customer Premises Equipment (CPE). The CPE category includes modems, routers, repeaters, and TV receivers. The aim of the scheme for collection of such devices is to give the devices a second life and, where that is not feasible, to properly recycle them, in order to recover the valuable raw materials they contain.

In 2021, we reported the ESG KPI “Take Back CPE” and the numbers of refurbished CPE items involved. In 2021, more than 3 million CPE items were collected, and 18 percent of that quantity were refurbished.

We are aiming to further improve the collection and refurbishment processes, and to achieve 100 percent sustainable management of collected CPE items. This would mean that all CPE items collected by European national companies would either be refurbished, stored for future refurbishment, or recycled. We plan to begin implementing relevant measures in this connection in 2022.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 301-3 (Materials)
- GRI 306-1 (Waste)

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-440a.1 (Product End-of-life Management)

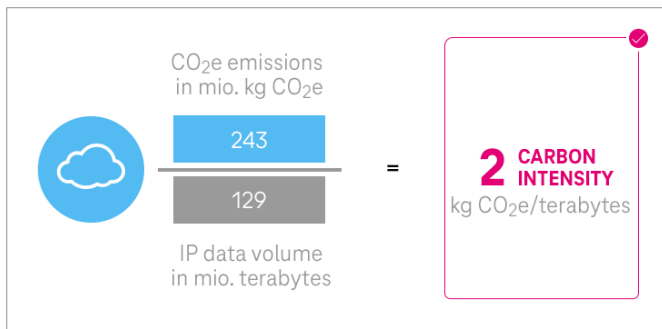
a) Due to a late data delivery, the value for Take Back CPEs for OTE was adjusted belatedly at the end of March 2022.

CO₂e emissions

ESG KPI “Carbon Intensity” DT Group

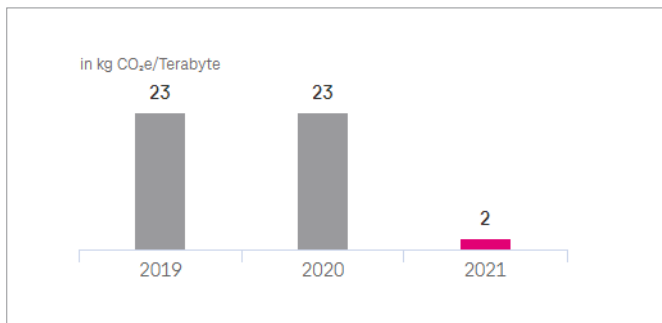
Since 2016, we have reported on the ESG KPI “Carbon Intensity.” In contrast to the ESG KPI “CO₂ emissions” used in previous years, this ESG KPI shows the CO₂e emissions in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.

Our ambition: decrease KPI



✔ Data assured by PwC. Data is partly based on estimates, assumptions and projections.

The ESG KPI figure also takes into account total CO₂ emissions for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 13 (Climate-Relevant Emissions)

Global Compact

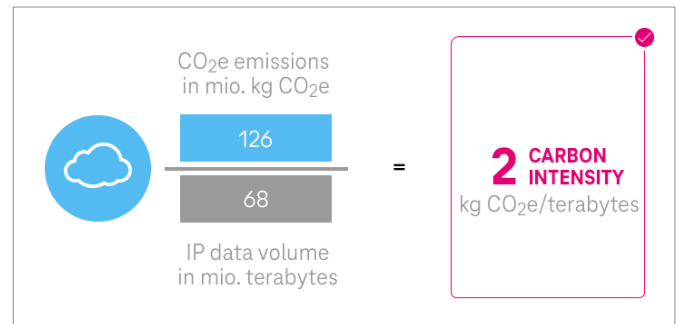
- Principle 7 (Support a precautionary approach to environmental challenges)

European Federation of Financial Analysts Societies (EFFAS)

- E14-01 (Recycling Quota)

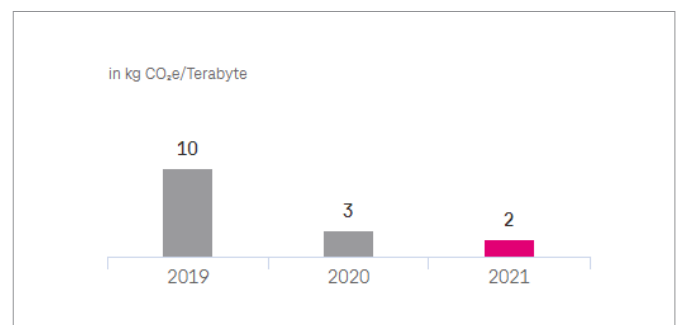
ESG KPI “Carbon Intensity” DT Group in Germany

Since 2016, we have reported on the ESG KPI “Carbon Intensity.” In contrast to the ESG KPI “CO₂ emissions” used in previous years, this ESG KPI shows the CO₂e emissions in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.



✔ Data assured by PwC. Data is partly based on estimates, assumptions and extrapolations.

The ESG KPI figure also takes into account total CO₂ emissions for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305-4 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 13 (Climate-Relevant Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

- E02-01 (GHG Emissions)

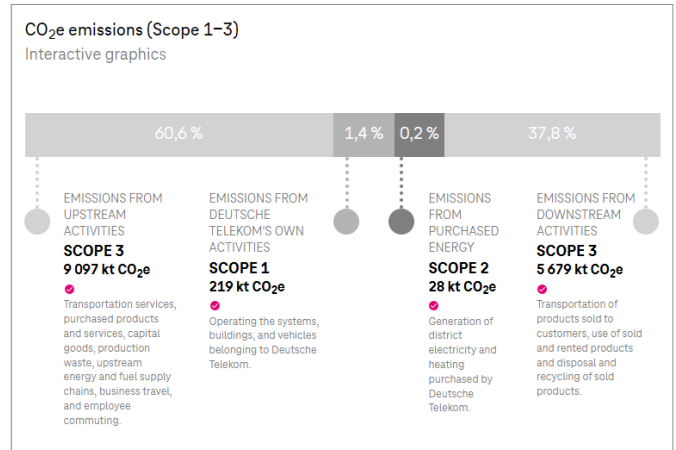
Total CO₂e emissions (Scopes 1 to 3) DT Group

We present our Scope 1 to 3 greenhouse gas emissions uniformly so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO₂ equivalents (CO₂e). We break down the emissions that occur along our value chain; this gives us an overview of where in the value chain the majority of them occur.

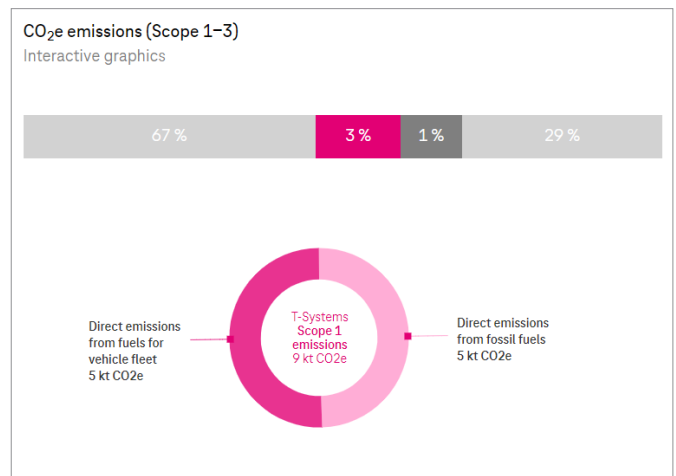
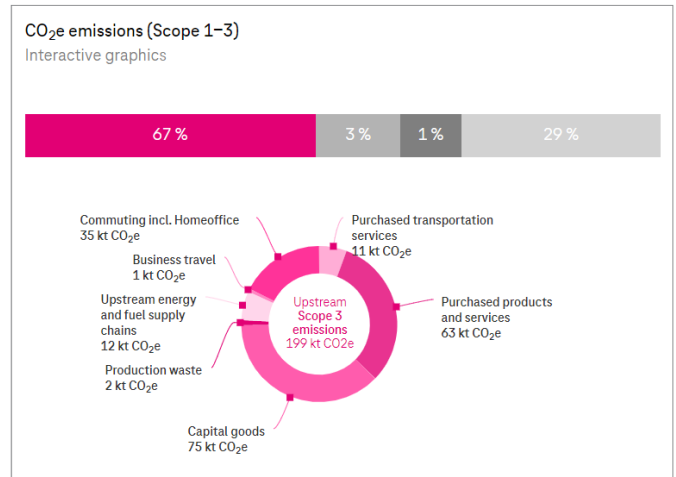
By making a complete transition to electricity from renewable energies, we were able to considerably reduce our Scope 2 emissions in the year under review. In 2021, market-based Scope 1 and 2 emissions throughout the Group amounted to around 247 000 metric tons of CO₂e, or about 90 percent lower than in the previous year.

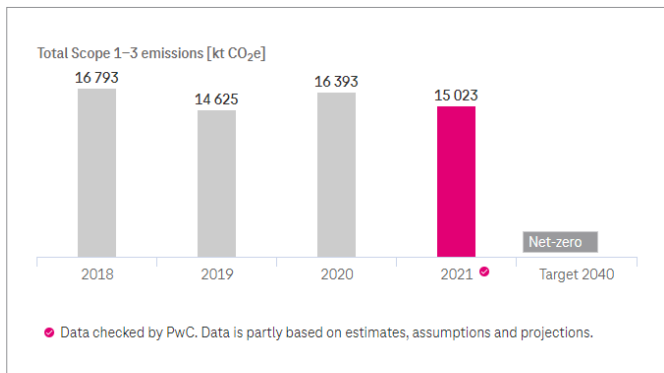
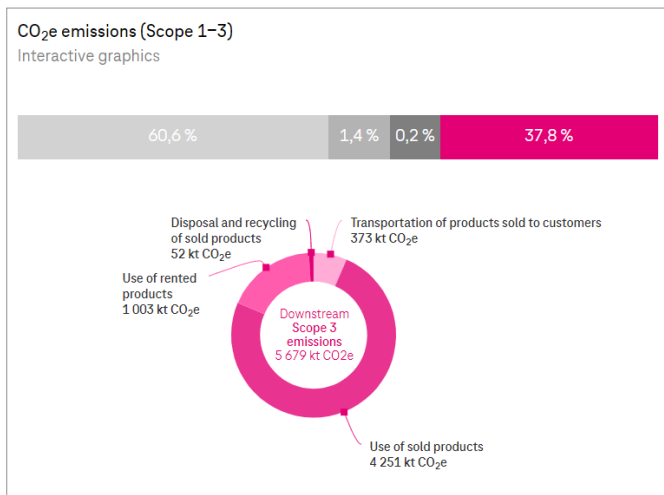
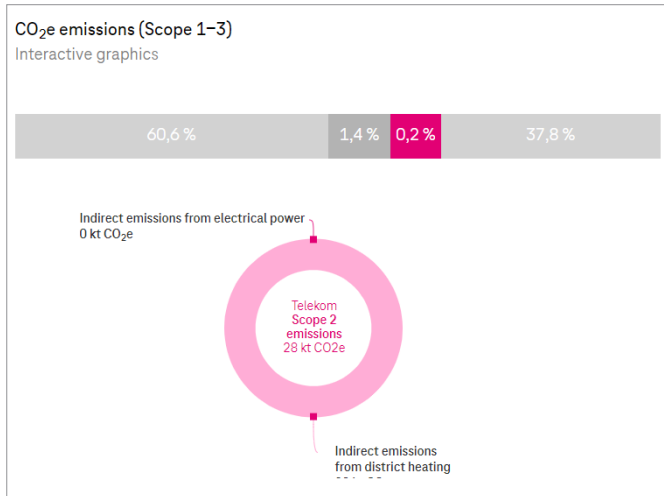
In 2021, Scope 3 emissions increased in comparison to the previous year – by 13.9 million metric tons, to around 14.8 million metric tons of CO₂e. Most of these emissions resulted from the manufacture of products and components (in particular devices and network technology), and from the use of our products and services (for example, sold or rented fixed-line and mobile phones, routers, and media receivers) by our customers. We also include emissions resulting from the use of our services by our customers' own devices, such as laptops or televisions. Emissions from the manufacture and transportation of technology required for establishing our networks are also taken into account.

Currently, we are studying various factors that will influence the quantities of our future emissions. Complete-coverage introduction of the Internet Protocol (All-IP), and our suppliers climate-protection efforts, are having a positive impact. In addition, lower power mix factors, and improved energy efficiency in the devices used in connection with our products and services, can be expected to lower emissions. On the other hand, it is possible that the numbers of (new) devices used in connection with our products and services will increase. The switch to the new mobile communications standard 5G, wider network coverage, and higher-quality fixed lines are also expected to result in emissions increases.



✔ Data assured by PwC. For detailed assurance comments see „DT Group in Germany“ and „T-Mobile US“. Includes offsets from purchased certificates.





Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305–3 (Emissions)

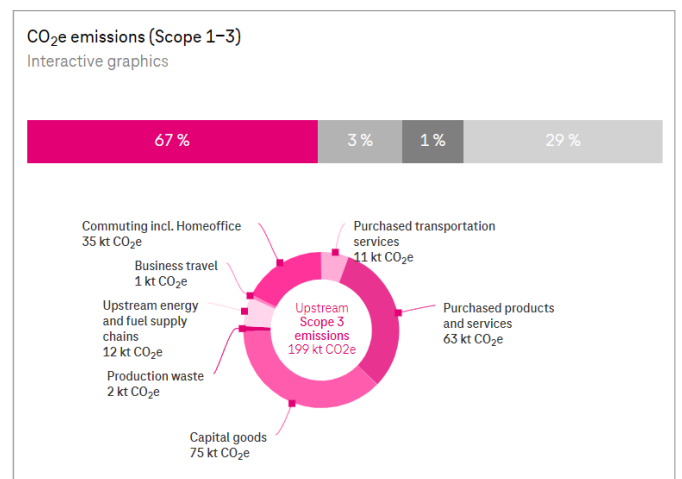
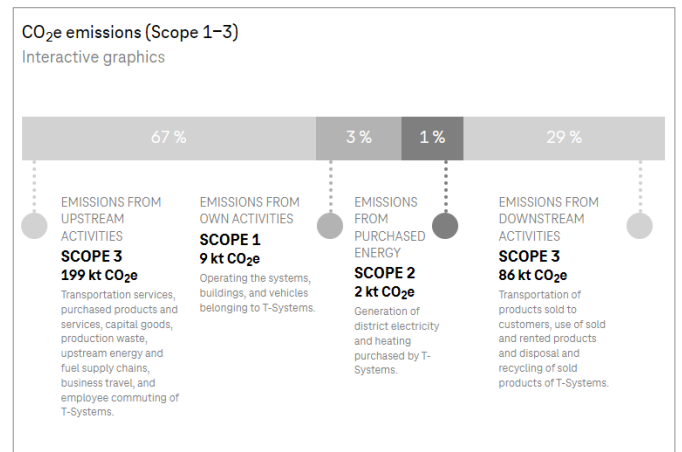
Task Force on Climate-related Financial Disclosures (TCFD)

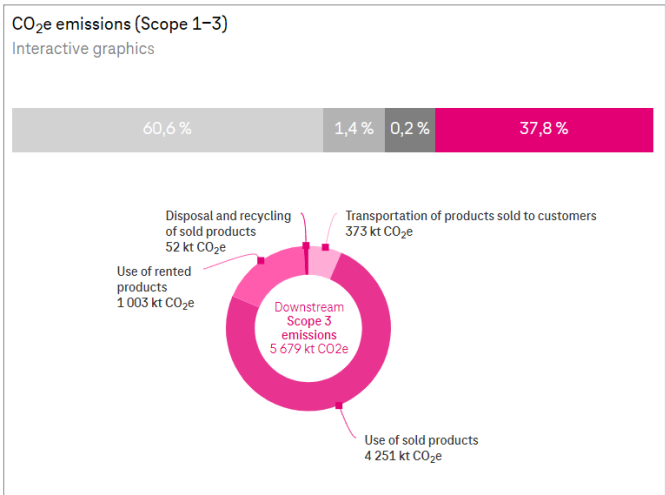
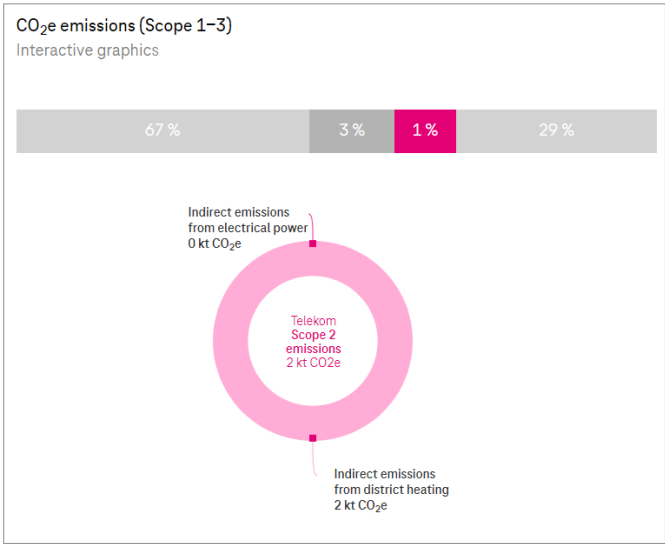
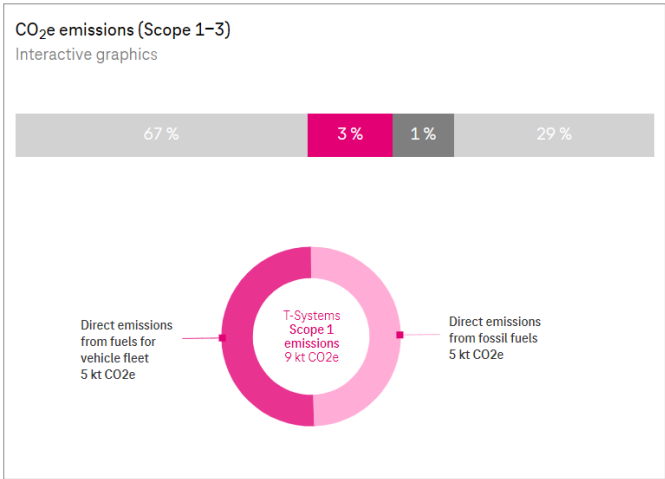
- The most important key figures for measuring and managing climate-related opportunities and risks

Total CO₂e emissions (Scopes 1 to 3) T-Systems International

In addition to discussing the emissions of the Group as a whole, we provide separate information on Scope 1–3 emissions for T-Systems International. We present our Scope 1–3 greenhouse-gas emissions in a consistent manner, so that they can be compared with each other. To that end, emissions are converted into metric kilotons of CO₂ equivalents (CO₂e). We also break down emissions along our value chain. This gives us an overview of where most of the emissions are produced in our value chain.

In 2021, market-based Scope 1 and 2 emissions for T-Systems amounted to around 11 000 metric tons of CO₂e. In the same year, the Scope 3 emissions were 285 000 metric tons of CO₂e, thereby accounting for the largest emissions share. Most of these emissions occurred in the upstream value chain, as well in our customers’ use of our products and services. In those emissions, we also include emissions resulting from the use of our services by our customers’ own devices, such as laptops or tablet computers.





Total CO₂e emissions (Scope 1 & 2 emissions)

Our CO₂ emissions are largely driven by our electricity consumption. That's why the table below contains very detailed information about the Group numbers for the Scope 2 emissions resulting from our electricity consumption. We differentiate between the market-based and location-based methods, thereby adhering to the GHG Protocol Scope 2 Guidance. Market- and location-based emissions are reported in CO₂ equivalents (CO₂e). This change was made in order to allow a transparent comparison between Scope 1 to 3 emissions and to be consistent with the requirements of the Science-Based Targets Initiative, to which the new target is also geared.

The leading reporting method is the market-based approach. This method is used to calculate emissions with a specific emissions factor (provider factor) per DT company. This factor depends on a company's actual energy procurement (electricity mix); procuring renewable energy (direct purchase, certificates) reduces emissions.a)

In contrast to the market-based method, with the location-based method the emissions factors for the respective country are used (the country mix factor of the International Energy Agency (IEA)). A company's actual energy procurement (electricity mix) is hence not taken into account, i.e., not even the procurement of renewable energy over and above the country mix.

Change compared to the previous year: The Scope 2 emissions calculated according to the market-based method are about 90 percent lower than in the previous year. The significant change compared to the previous year results from the Group-wide use of green electricity, PPAs and certificates. Since 2021, we have covered 100 percent of our electricity consumption throughout the Group from renewable sources, thus achieving one of our climate targets.

CO₂e emissions (Scope 1 & 2) in t

Year	Scope 1 emissions	Scope 2 emissions „market-based“ a,b)
2019	1.8 mil.	-
2020	2.5 mil.	-
2021	-	0.2 mil.

Scope 1 and Scope 2 („market-based“) a,b)			
Total in million	2019	2020	2021
t CO ₂ e emissions Scope 1	253 940 c)	235 261	218 731
t CO ₂ e emissions Scope 2 („market-based“) a,b)	1 543 311 c)	2 276 607	27 850
t CO ₂ e emission reduction through additional purchase of electricity from renewable energies (PPA, GOO, RECS)	1 506 541	1 705 363	4 607 367

Scope 2 („location-based“)			
t CO ₂ e emissions (Scope 2, „location-based“)	2019	2020	2021
	3 438 913 c)	4 815 423	4 635 217

^{a)} If no provider factors are available for the market-based method, the country-related residual factor is used (based on the RE-DISS project of the European Commission, which assessed the national share of renewables). If there is no residual factor available either, the IEA factor is used (same as with the location-based method). As a rule, the value of the emission factor in the residual mix is higher than the IEA's country mix factor. Renewable energy certificates are included in all cases.

^{b)} For the national company T-Mobile US, the market-based Scope 2 emissions were calculated using the eGRID emissions factors until 2020, which are reported by the American Environmental Protection Agency according to different grid regions in the USA. In addition, the quantities of electricity from renewable energy sources obtained under Power Purchase Agreements (PPAs) were taken into account in reducing emissions.

^{c)} The values were corrected compared to the information published in the previous year's report.

● Data verified by PwC. Data is partly based on estimates, assumptions and projections. Includes offsets from purchased certificates.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305-1 (Emissions)
- GRI 305-2 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)
- Criterion 13 (Climate-Relevant Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

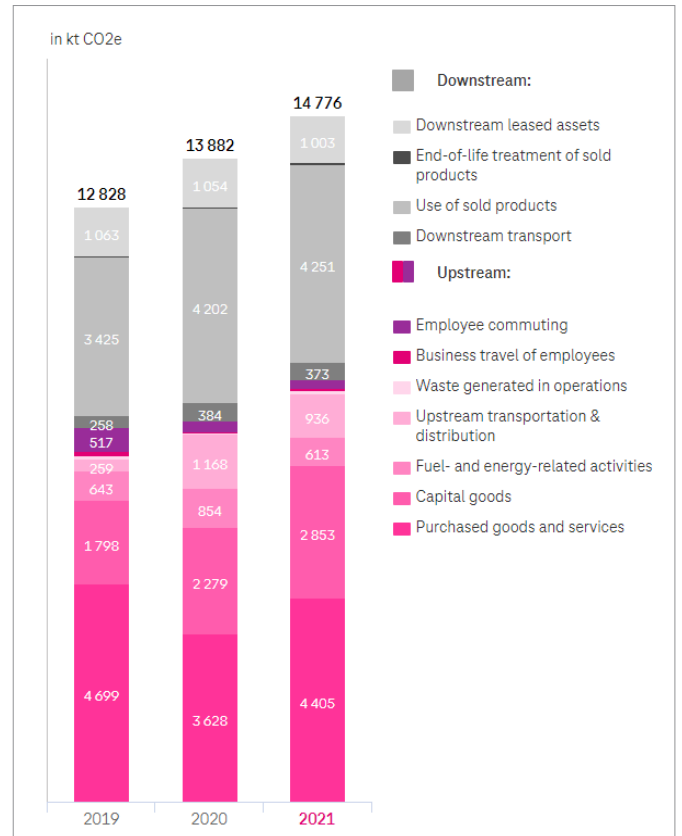
- E02-01 (GHG Emissions)

Total CO₂e emissions (Scope 3) DT Group

The majority of our total emissions can be classified as Scope 3 emissions. Scope 3 emissions are all emissions from upstream or downstream value chains that are produced in supply chains, through business travel, through employee commuting (upstream) or through customers' use of products and services (downstream). They are determined in accordance with the globally accepted Greenhouse Gas (GHG) protocol.

In order to reduce our Scope 3 emissions, we are placing increasing priority on climate-protection criteria in our supply chains. This commitment is reflected in our CDP Supplier Engagement Rating, which once again has given us a top grade of "A." Our ESG KPI "CDP Supply Chain Program" indicates the degree to which our procurement volume from carbon-intensive suppliers is covered by the CDP Supply Chain Program.

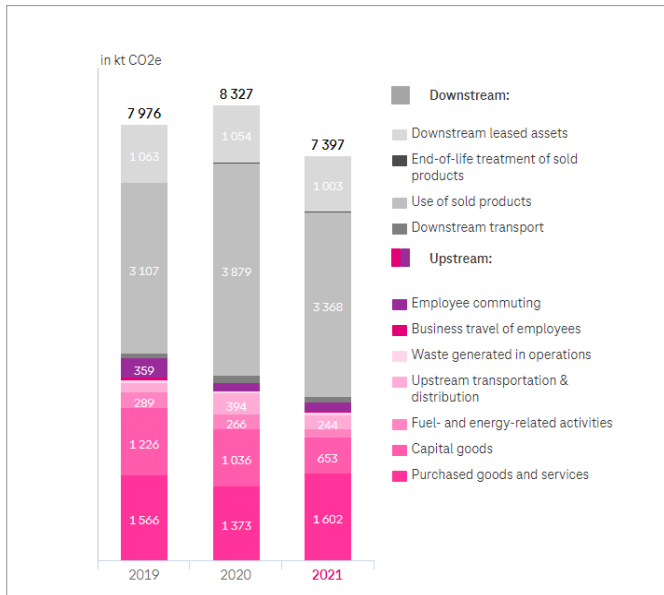
The graphic presents our Scope 3 emissions from 2019–2021, broken down by emission source. In 2021, upstream emissions accounted for about 62 percent of our Scope 3 emissions, while downstream emissions accounted for about 38 percent. The basic data used to calculate Scope 3 emissions are reported in the performance-indicator tool. More information about determination of Scope 3 emissions throughout the value chain is available here.



Total CO₂e emissions (Scope 3) Deutsche Telekom EU*

The majority of our total emissions can be classified as Scope 3 emissions. Scope 3 emissions are all emissions from the upstream and downstream value chain, which are generated in the supply chain, by business travel, commuter traffic ("upstream") or at the customer's premises by the use of products and services ("downstream"). Their recording is based on the globally recognized "Greenhouse Gas (GHG)" protocol.

The graph shows Scope 3 emissions from 2019–2021, classified by emission sources. Upstream emissions accounted for around 39 percent of Scope 3 emissions in 2021, while downstream emissions accounted for around 61 percent. The basic data used to calculate Scope 3 emissions are reported in the key figure tool. You will find more information on recording Scope 3 emissions along the value chain here.



* DT Group in Germany + European fixed-line/mobile communications companies

Reporting against standards

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)
- Criterion 12 (Resource Management)
- Criterion 13 (Climate-Relevant Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

- E02-01 (GHG Emissions)

CO₂ offsets

Our efforts to prevent greenhouse gases include relying on renewable energies, and reducing our energy consumption through more energy-efficient technologies. So far, however, this has not allowed us to prevent all CO₂ emissions, which is why we compensate for those emissions by investing in certified climate protection projects.

Our Event Policy specifies the ways in which we offset emissions generated by events. In 2021, we offset over 18 000 metric tons of CO₂ through various measures. Around 17 000 metric tons of CO₂ were compensated for through renewable energy projects. We offset a further 1 300 metric tons of CO₂ through carbon removal projects.

In t CO ₂	2021
Carbon offsets total	18 494
Carbon removal projects	1 329
Renewable energy projects	17 165

We are aiming to reach climate neutrality by the end of 2025. We plan to achieve this goal by investing in measures for long-term capture of CO₂ emissions, and we are currently developing a strategy to this end. We are aiming to reach climate neutrality by the end of 2025. We plan to achieve this goal by investing in measures for long-term capture of CO₂ emissions, and we are currently developing a strategy to this end.

Enablement factor

Enablement factor: Customers saving on CO₂ emissions

We enable our customers to reduce their emissions through our products and solutions. The enablement factor gives us the ratio between this savings potential for our customers and our own carbon footprint, allowing us to assess our overall performance – both positive and negative – when it comes to climate protection. Since 2014, we have been studying the potential savings that various products can achieve on the user side; we carried out 17 such assessments in 2021. Also, we again tracked emissions reductions resulting from installation of efficient wall-mounted charging stations for electric cars (“wall boxes”). The largest potential in Germany lies in the area of “connected cars” with 6.8 million tons of CO₂, followed by video conferencing with 4.5 million tons of CO₂. The greatest savings potential lies with cloud computing, which enables our customers to reduce their CO₂ emissions by using our cloud services and outsourcing their existing infrastructure to our efficient data centers. Better servers, more energy-efficient data centers, and higher infrastructure capacity utilization can thus cut energy consumption and the associated emissions by up to 80 percent.

Reporting against standards

Global Reporting Initiative (GRI)

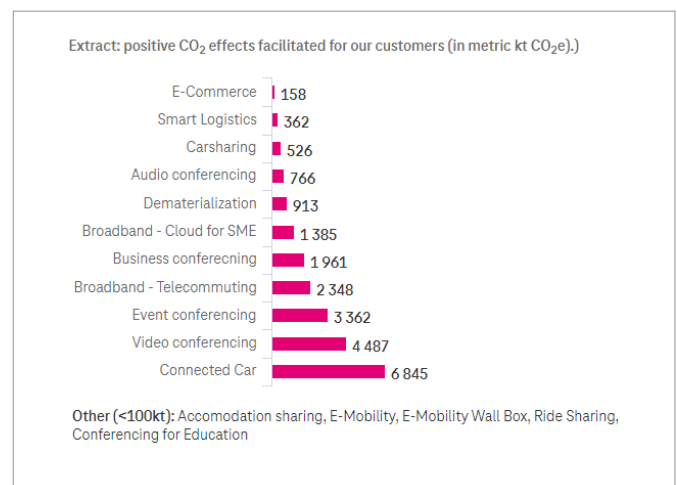
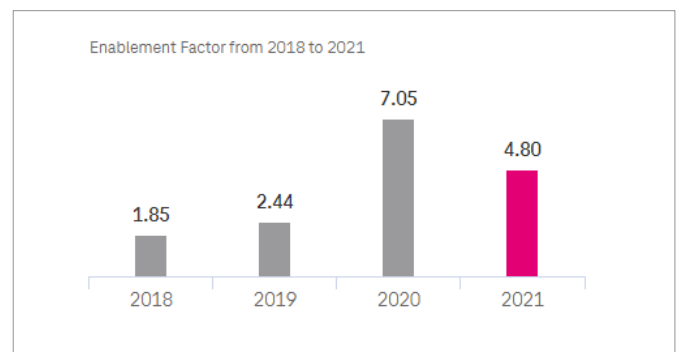
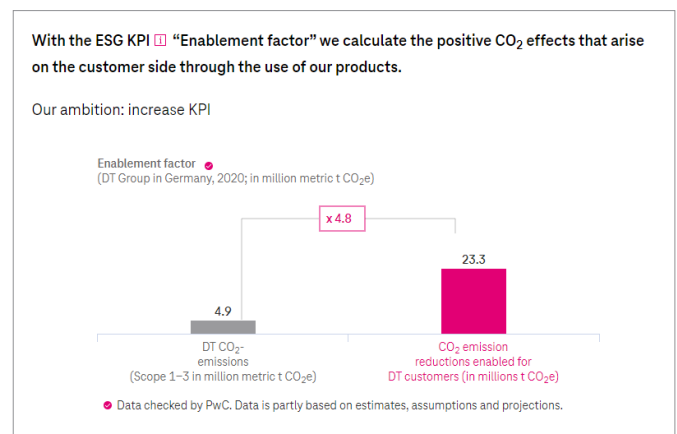
- GRI 305–3 (Emissions)

ESG KPI “Enablement Factor” DT Group in Germany

We use the “Enablement Factor” to measure our overall performance in climate protection. According to this, in 2021 in Germany the positive CO₂ effects enabled by our customers were 380 percent higher than our own CO₂ emissions (enablement factor of 4.8 to 1). The decrease compared to the previous year (enablement factor of 7.1 to 1) results from a still differentiated survey methodology as well as a lower number of users of our conference solutions.

With the ESG KPI “Enablement factor” we calculate the positive CO₂ effects that arise on the customer side through the use of our products.

Our ambition: increase KPI



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305–5 (Emissions)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 13 (Climate-Relevant Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

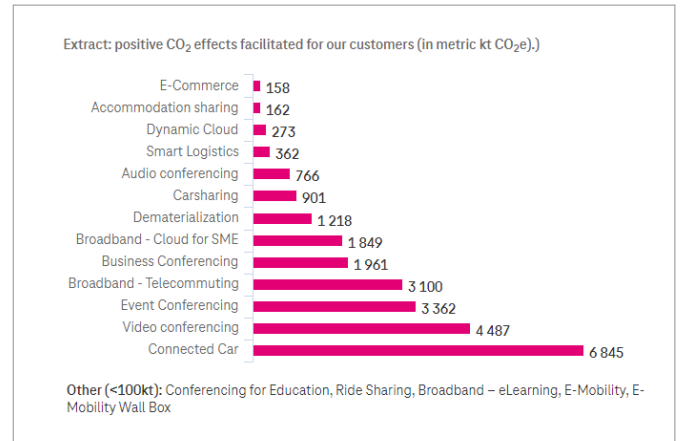
- S13–01 (Intermodality)

ESG KPI “Enablement Factor” DT Group Europe

In 2021, the positive CO₂ effects enabled by our customers across Europe were 237 percent higher than our own CO₂ emissions (enablement factor of 3.37 to 1).

The positive CO₂ effects made possible on the customer side by using our products and solutions amounted to almost 26 million tonnes in the reporting year.

With the ESG KPI “Enablement Factor” we calculate the positive CO₂ effects that arise on the customer side through the use of our products.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 305–5 (Emissionen)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

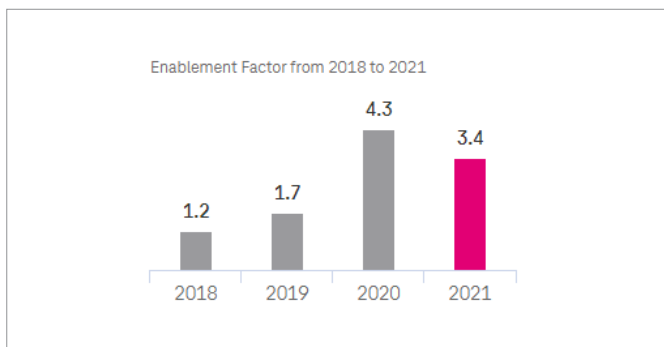
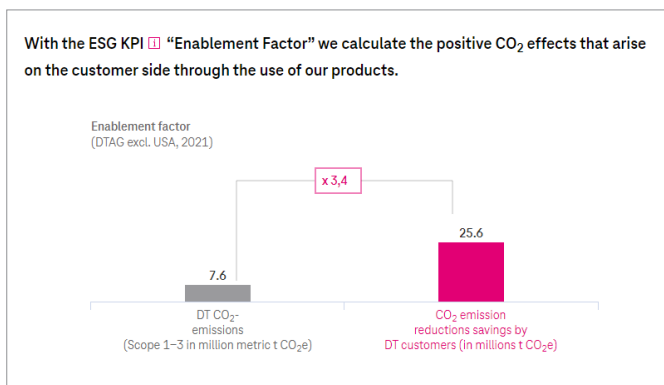
- Criterion 13 (Climate-Relevant Emissions)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

- S13–01 (Intermodality)



Energy consumption & efficiency

Our approach to energy-efficient networks

We operate our own fixed-line and mobile networks in Europe and the United States. The majority of our energy requirements come from operating this network infrastructure. To handle growing amounts of data and improve the speed and quality of data transmission, we continuously increase the capacity and performance of our networks. To ensure that our energy consumption grows much less than the amounts of data transmitted, we are pursuing various approaches:

- We are updating our network infrastructure, e.g., by migrating the fixed network to IP technology and removing equipment we no longer need, such as 3G antennas. The 3G network was switched off in Germany on June 30, 2021.
- We have established specifications and requirements that firmly anchor energy efficiency in the architecture and design phase when selecting new technologies.
- We use energy-efficient technology for our networks. This also applies to the lighting, monitoring and, above all, cooling of our plants.
- The energy management practices of our internal energy service provider Power & Air Solutions have been ISO 50001 certified since 2013.
- We are optimizing energy efficiency throughout the entire supply chain for all locations of Telekom Technik, thereby reducing our carbon footprint.
- We are expanding our use of photovoltaic systems at Deutsche Telekom locations. In the process, we are emphasizing use of power storage systems and intelligent load management. Power & Air Solutions is testing innovative technologies such as fuel cells; energy generation from waste heat, via gas turbines; and ice-storage systems for support of mechanical cooling systems.
- Also, in the framework of our energy management in Germany, we work to reduce the energy requirements of our buildings. We continuously monitor consumption values and use this data to identify potential for improving efficiency.
- In 2020, we published an energy guideline applicable throughout the Group. It helps our national companies implement our Climate Strategy. The guideline compiles selected measures and proposed solutions for better energy efficiency, including operational energy-saving functions, optimized energy man-

agement, decommissioning of legacy systems, and/or the use of more energy-efficient technologies. In the year under review, we reviewed how the energy guideline is being implemented in practice, by studying use cases involving individual projects. We found that marked positive effects are already being achieved.

We are also aiming to stabilize our energy consumption by 2024. To achieve this goal, in spite of growing data traffic and our ongoing network expansion, we plan to double our energy efficiency, or the ratio of our network data traffic to the electricity required to move it. In a Group-wide technology-innovation project, we are studying and developing new ways of making our network operations even more energy-efficient and sustainable. In the process, we are looking especially carefully at the areas of energy transport, energy availability, and energy efficiency. For example, we plan to reduce the energy consumed in our mobile-network operations, and to develop solutions for energy-autonomous cellular base stations. The results of these efforts will help us promote energy-efficiency and energy-saving measures in Germany and Europe. In the same vein, some of our European national companies have already been able to reduce their energy consumption via network modernizations.

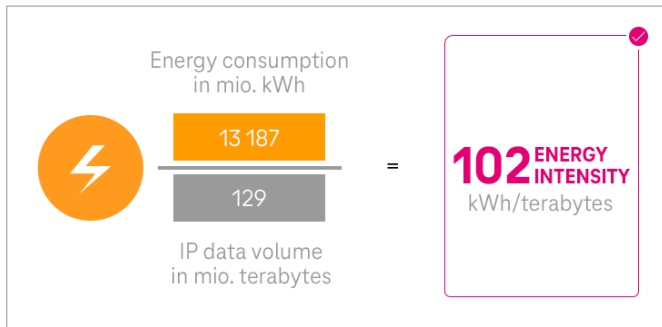
Solutions from our Group-wide innovation projects also enter into our “PLASMA” (only available in German) project, which was launched in 2018. Its aim is to reduce our electricity consumption – and thereby lower our electricity costs – in a lasting way, throughout Germany. We have been carrying out various optimization measures to this end. For example, we have been gradually replacing the aging rectifier systems at our central offices with systems that are more energy efficient. In 2021, we achieved our project goal in this area, and thereby lowered Telekom Deutschland's energy consumption by 274 GWh per year. That figure is equivalent to the annual consumption of about 68 000 four-person households.

Since 2020, we have been a member of the Solar Impulse Foundation (SIF) 1000+ Solutions Alliance. The aim of the SIF is to identify more than 1 000 solutions that tackle environmental problems – especially as a result of climate change. For Deutsche Telekom, the focus is on developing technologies for the ICT industry that have a positive impact on reducing CO₂ emissions, on energy management and energy efficiency, and on collecting and recycling digital devices. In addition, SIF not only supports the development of solutions like these; it also certifies them. In 2020, it recognized a solution used by Deutsche Telekom in Germany, and its partner Cloud&Heat, to cool servers using an innovative water cooling system.

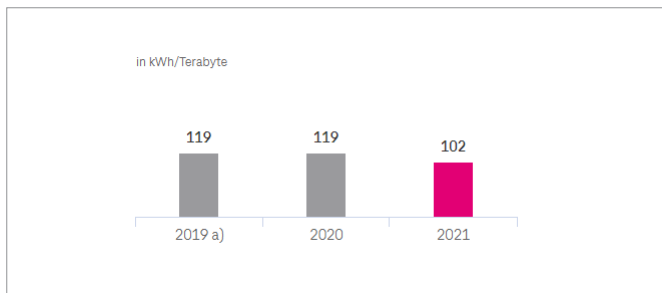
ESG KPI “Energy Intensity” DT Group

Since 2016, we have reported on the ESG KPI “Energy Intensity.” In contrast to the existing “Energy Consumption”, the new ESG KPI shows energy consumption in proportion to the transmitted data volumes. Using data volume as a reference parameter makes it possible to create a direct link to the performance of our networks.

Our ambition: decrease KPI



✔ Data assured by PwC. Data is partly based on estimates, assumptions and projections.



The ESG KPI also takes into account total energy consumption for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transmitted IP data volumes (including Voice over IP, Internet, IP-TV).

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 302–3 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 12 (Resource Management)

Global Compact

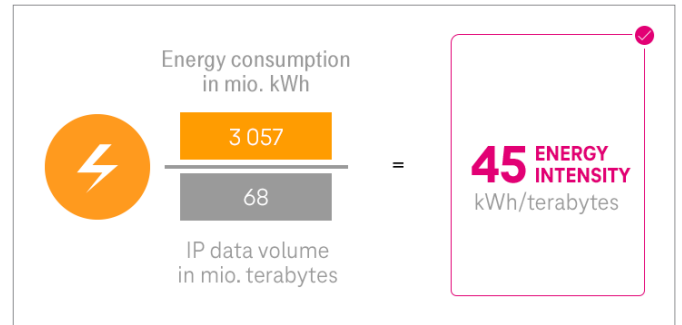
- Principle 7 (Support a precautionary approach to environmental challenges)

European Federation of Financial Analysts Societies (EFFAS)

- E01–01 (Energy consumption)

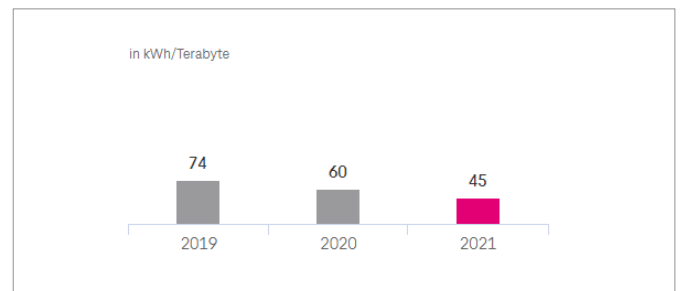
ESG KPI “Energy Intensity” DT Group in Germany

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✔ Data assured by PwC. Data is partly based on estimates, assumptions and extrapolations.

The ESG KPI also takes into account total energy consumption for all energy sources – fuel, gas, district heating and electricity. The data volume is composed of the transported IP data volumes (including IP telephone, internet, IP-TV).



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 302–3 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

German Sustainability Code

- Criterion 12 (Resource Management)

Global Compact

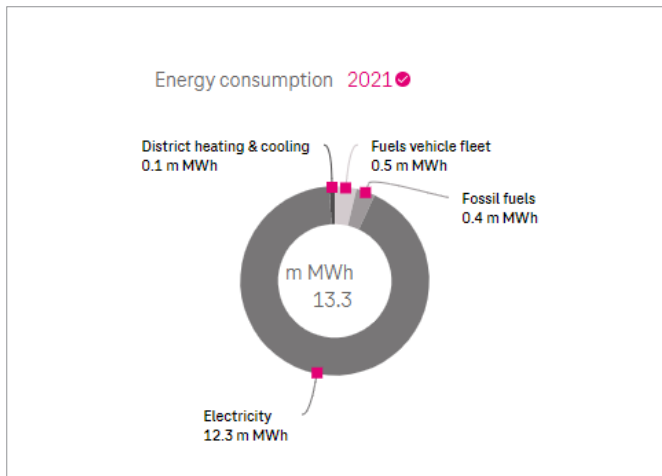
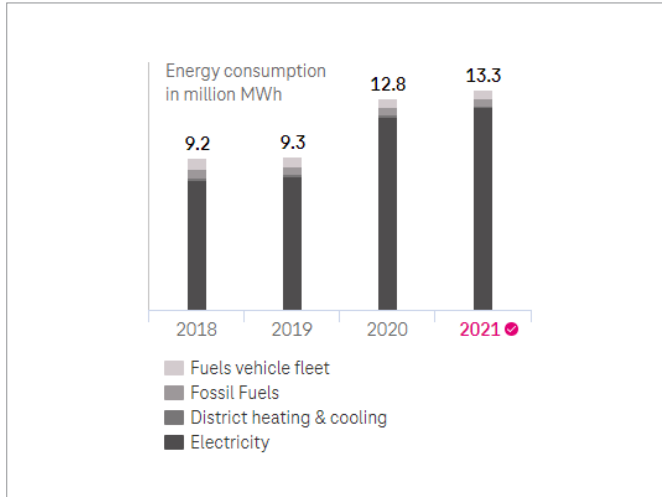
- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

- E01–01 (Energy consumption)

Total energy consumption

Total energy consumption increased by 4 percent year over year. The slight increase resulted from higher electricity consumption due to network expansion and growing data volumes.



✔ Data verified by PwC. Data is partly based on estimates, assumptions and projections. Some of the data originates from external service providers.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 302-1 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-130a.1 (Environmental Footprint of Operations)

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

European Federation of Financial Analysts Societies (EFFAS)

- E01-01 (Energy consumption)

ESG KPI “PUE” – lower CO₂ consumption in data centers

We are reducing the CO₂ emissions of our data centers by optimizing energy consumption and improving processes at the individual data center sites. The Power Usage Effectiveness (PUE) metric serves as one indicator for energy-efficiency enhancements in our data centers. We determine this metric using the method recommended by the standard EN50600 for data centers, which has to take the total energy consumed by data centers into account – and not only that used to operate the servers. The PUE factor is calculated using the ratio between the total electrical energy consumed by the data center and the amount of electrical energy consumed by IT.

In 2021, the global PUE score for our T-Systems data centers was 1.58. For our data centers in Germany, we reduced the PUE from 1.85 in 2008 to 1.49 in 2021; this value is significantly below the average for all data centers in Germany, which is around 1.8. Our most-efficient highly available data center has a PUE of 1.3. This will allow us to compensate, in part, for increases in IT systems energy requirements as a result of growing volumes of data and of new features.

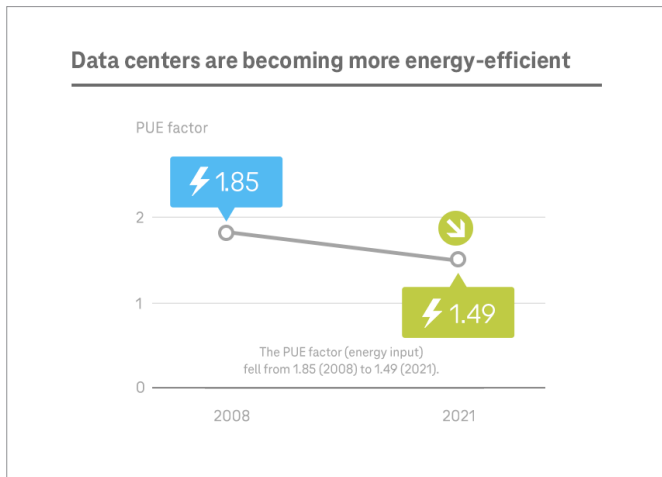


Data centers are becoming more energy-efficient

As part of the DC11@2018 program, we worked until the end of 2018 to combine data center capacity worldwide in FMO (Future Mode of Operation) data centers with the latest IT technology and hence improved energy efficiency. Physical data center consolidation (reducing data center space and sites) was combined with logical consolidation (virtualizing IT infrastructure). Within the scope of the physical consolidation, we decommissioned several old data centers in Germany.

The follow-up program “Data Center Next” was launched in 2019. Our aim is to further homogenize and virtualize the IT landscape, and to optimize utilization of the data center infrastructure according to IT requirements. The Data Center Next program is making use of efficiency-enhancing options, such as selective cooling of individual areas, and temperature increases within allowed ranges – always in conformance with defined thresholds. With such efforts, we plan to achieve efficiency improvements across the board.

A majority of our high-availability, modern internal FMO twin-core data centers were included in the “EU Code of Conduct on Data Centre Energy Efficiency” (EU CoC) at the end of 2020. We therefore already meet, to a large extent, what is likely to be a future criterion of the new European regulation for sustainable business (EU Taxonomy). At the same time, we are working to further optimize energy efficiency in all data centers.



Reporting against standards

Sustainability Accounting Standards Board (SASB)

- Code TC-TL-130a.1 (Environmental Footprint of Operations)

Compliance with the EU Code of Conduct on Data Centre Energy Efficiency

The European Union (EU) introduced the “EU Code of Conduct on Data Centre Energy Efficiency” in 2008. Its goal is to motivate operators and owners of data centers to reduce energy consumption and hence its negative impact on the environment, the economy, and energy supply security. Companies can join this voluntary initiative, which T-Systems did in 2014. The related EU Commission page provides transparent, detailed information about the participation of individual data centers.

We currently operate a total of 16 FMO twin-core data centers in Europe at eight FMO twin-core sites – eight internally and six externally – in addition to four local customer-specific data centers. In 2021, six of our eight internal European FMO twin-core data centers, and one external FMO twin-core data center, were included in the “EU Code of Conduct” list. By taking part in the “EU Code of Conduct,” T-Systems meets what is expected to be an important criterion for achievement of Taxonomy-conformity under the new regulatory initiative for sustainable business activities (EU Taxonomy). More information about our commitment in the framework of the EU Taxonomy is available here.

Renewable energy

Our approach to more renewable energy

We had set ourselves the following goal for the end of 2021: for the Group as a whole to meet all of its electricity requirements, and more than 80 percent of its total energy requirements, with renewable energy sources. And we have achieved this goal. We have joined the global RE100 initiative to underscore this commitment, which aims to advance the purchase of electricity from renewable sources.

In this context, we are sourcing more green electricity directly, acquiring corresponding guarantees of origin, or concluding special power purchase agreements (PPAs), as is the case in the United States. As of the end of 2021, 23.1 percent of the power used throughout the Group was obtained via PPAs. Whenever possible and practicable, we invest in our own power plants, such as cogeneration plants or photovoltaic systems.

As of the end of 2021, we operated over 300 photovoltaic systems, for our own electricity requirements, with a total generating capacity of about 4 100 kilowatts peak (kWp). We also operated an additional group of five systems, with a total generating capacity of about 200 kWp, that feed power into the public grid (systems regulated under the German Renewable Energy Sources Act (EEG)). In 2022, we will further expand our own generation and commission 20 photovoltaic systems, with more already in planning.

We use the ESG KPI “Renewable Energy” to measure our progress. In addition, we have also introduced parameters throughout the Group that are used to assess electricity procurement at all of our national companies in terms of sustainability.

Since 2019, we have been testing a climate-neutral power supply for cellular base stations (only available in German) in which we use fuel cells instead of diesel generators. Fuel cells are economical, silent, low-maintenance and, thanks to the use of bio-methanol, they are one thing in particular: carbon neutral. In the year under review, we also launched pilot projects for off-grid power provision to cellular base stations.

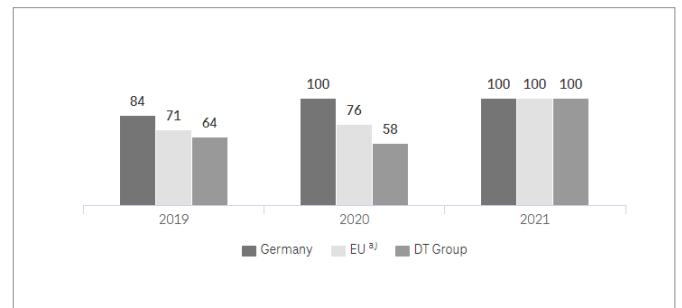
ESG KPI “Renewable Energy”

The ESG KPI “Renewable Energy” is calculated as renewable energy’s share in meeting the Group’s total electricity requirements. Since 2021, we have been sourcing 100 percent of the electricity we use, throughout the Group, from renewable energy sources. By reaching this milestone, we have achieved one of our climate targets.

We are working to reduce our energy consumption overall, by improving our energy efficiency and implementing energy-saving measures. The electricity requirements that remain are met with renewable energy. Also, we are aiming to increase our own electricity generation, and to have Power Purchase Agreements (PPAs) meet larger and larger shares of our power use. As of the end of 2021, 23.1 percent of the power we used throughout the Group was obtained via PPAs. Although we meet our power requirements wherever possible via PPAs, our own power generation and direct purchases, capacity limitations require us to also depend on sources for which guarantees of origin (GOs) come into play. GOs are an important element in our efforts to meet 100 percent of our electricity requirements via renewable energy sources and thereby achieve our climate target in this area.

In 2021, renewable energy sources accounted for an average share of 25 percent of the country mix in all countries in which Deutsche Telekom operates. At present, “residual mix” data is of relevance, in this context, only for Deutsche Telekom in Germany. In Germany, the EEG surcharge paid is taken into account when calculating the share of renewable energy.

Share of renewable energy in the total electricity consumption (in percent)



	2019			2020			2021		
	D	EU ^{a)}	Group	D	EU ^{a)}	Group	D	EU ^{a)}	Group
Electricity from renewable energy (in GWh)	2 242	1 336	5 196	2 719	1 450	6 837	2 510	1 845	12 270
Total electricity consumption (in GWh)	2 656	1 880	8 102	2 718	1 895	11 716	2 506	1 845	12 270
Renewable Energy (ESG KPI)	84 %	71 %	64 %	100 %	76 %	58 %	100 % ●	100 %	100 % ●
Ren. energy mix	52 %	30 %	31 %	63 %	24 %	30 %	59 %	26 %	25 %
Certificates	32 %	48 %	22 %	37 %	53 %	18 %	36 %	82 %	53 %
Power Purchase Agreements	-	-	-	-	-	-	5 %	0 %	23 %
Direct purchase	0.0 %	12.9 %	17.7 %	0.0 %	15.2 %	2.6 %	59 %	18 %	24 %
Self-generation	0.12 %	0.04 %	0.05 %	0.12 %	0.03 %	0.03 %	0.1 %	0 %	0.04 %

^{a)} EU = National companies in Europe excluding Germany and T-Systems
^{b)} Since 2021, we have reported the volume of Power Purchase Agreements separately. Previously, these were included under direct purchase.
^{c)} After the transition to 100% electricity from renewables, no remaining country mix is shown, as a complete transition to electricity from renewables has taken place. For 2021, this position now also includes the quantities taken into account from the EEG levy paid in Germany. The prior-year positions have not been adjusted. Historical data on this can be found in the key figure tool.
● Data assured by PwC. For detailed audit comments, please refer to 'DT Group in Germany' and 'T-Mobile USA'.

Renewable energy in the national companies

In the year under review, the share of renewable energy at our national companies was an average of nearly 75 percentage points above the respective country mix^{a)}. In determining the amount, the national companies can also include certificates (guarantees of origin) and power purchase agreements (PPAs) for electricity obtained from renewable energy.

Deutsche Telekom in Germany purchases its electricity as part of a green tariff. 59 percent comes directly from renewable energies. The rest is covered by guarantees of origin, power purchase agreements (PPAs), and a small proportion by in-house generation.

T-Mobile US intends to reach our Group target primarily with wind power, but with solar energy as well. To that end, the American national company has concluded long-term contracts (12–15 years) with wind and solar farm operators, which gives the power producers security of investment. Thanks to PPAs, two new wind parks in the United States were put into operation in 2021. We are also aiming to conclude such long-term electricity purchase agreements in other countries. By the end of 2021, 23.1 percent of our electricity was obtained via PPAs.

We use the ESG KPI “Renewable Energy” to measure our progress. It is calculated based on the share of renewable energy in total electricity consumption, and is compared here, for all national companies, to the share of renewable energy in the national energy mix (country mix)^{a)}.

Reporting against standards

Global Reporting Initiative (GRI)

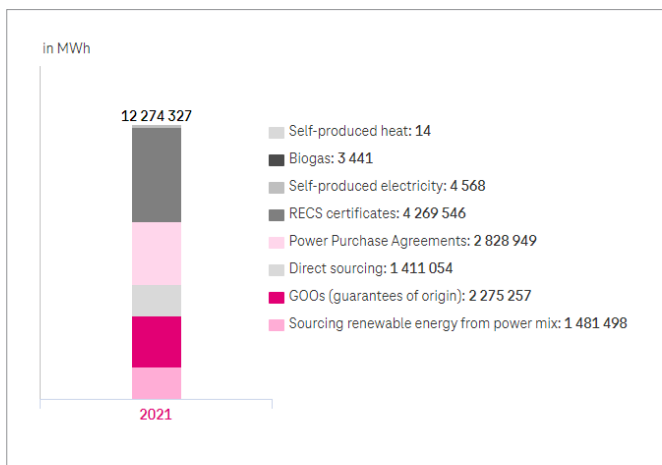
- GRI 302–1 (Energy)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for measuring and managing climate-related opportunities and risks

Renewable energy in the Group

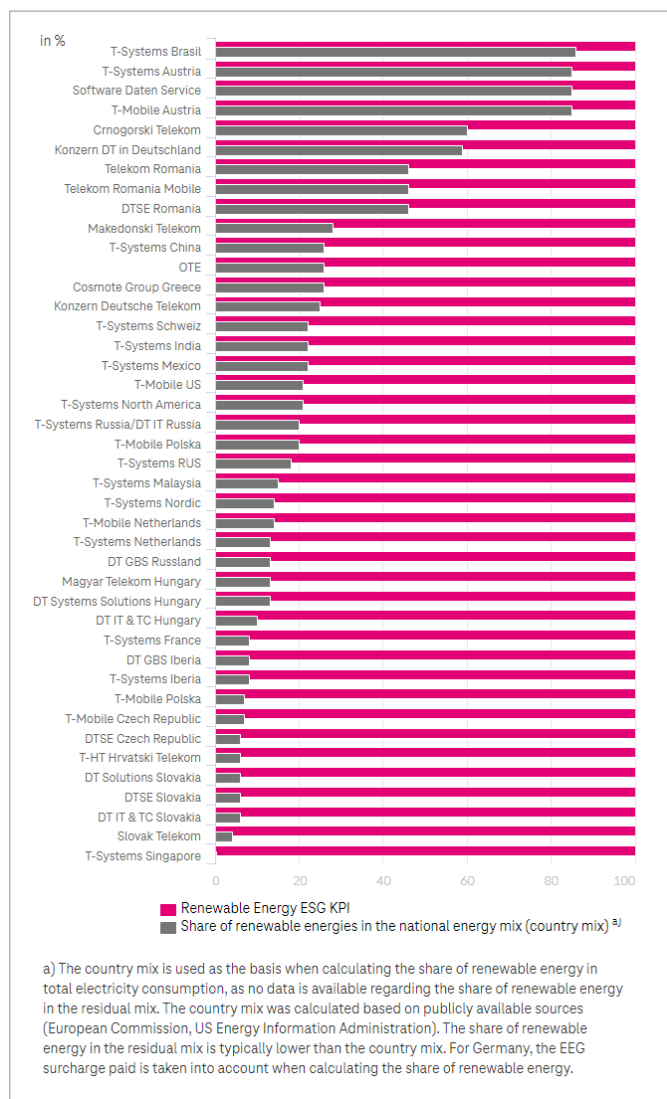
Group-wide, we cover 100 percent of our electricity consumption from renewable energies. To this end all European national companies can also purchase renewable energy certificates if needed.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 302–1 (Energy)



Mobility

Our strategy for climate-friendly mobility in Germany

In every reporting year since 2008, we were able to significantly reduce the CO₂ emissions caused by our vehicle fleet – by using CO₂-optimized vehicles, for instance. Savings were again higher in 2021, since we used our fleet much less due to the coronavirus pandemic. Our fleet-related CO₂ emissions decreased by more than 13 percent with respect to the previous year, as more employees worked out of their homes and less business travel took place in our company-car segment. In addition, we were able to reduce our fleet in Germany by more than 2 300 vehicles, to about 18 600 vehicles.

Along with use of environmentally friendly drive systems (electric or natural-gas-powered), the transition to climate-friendly mobility calls for expansion and support of the charging-station infrastructure and intelligent linking of new and existing forms of mobility. In parallel with the efforts we are making in connection with our vehicle fleet, we are encouraging our employees to travel and commute in more-sustainable ways. All of these efforts are based on the three pillars of our DT mobility strategy:

- Diversified portfolio: Building a more efficient, increasingly sustainable fleet with diversified drive systems and integrating micro-mobility (e.g., bicycles, e-scooters)
- Digital services: Pooling and sharing solutions; digital mobility services, such as an e-logbook and a mobility app (E2E digitalization of lifecycle services for company cars and service vehicles)
- We understand “connected mobility” to mean linkage between existing and new forms of mobility and mobility services – such as services provided with the help of a digital platform for road users.

Interconnecting transport services

Interconnection between different types of modes of transport is becoming increasingly important. For this reason, we plan to offer a mobility platform that connects existing mobility services with new ones: “Mobility as a Service” (MaaS), which will interconnect various different modes of transport, including public transportation, privately shared vehicles and Deutsche Telekom vehicles (including services such as “Shuttle on Demand” and car-sharing). MaaS will give our employees added convenience and flexibility in their commuting options. The MaaS platform and app were developed by Telekom MobilitySolutions and Hacon, a Siemens subsidiary. For the launch of the service, we have entered into a cooperation agreement with a public-transportation operator (and thereby

become the first non-transport company to do so) – SWB Bus und Bahn. The resulting service will become available (initially) to Deutsche Telekom employees, and their friends and families, in the Cologne/Bonn region, beginning in spring 2022. Following this test phase, we plan to make the service available nationwide. We are already in discussions to that end with additional transport companies and mobility-services providers.

Carbon offsets

In the transition phase to zero-emission mobility, we are using CO₂ offsets to reach our climate protection targets. In 2021, we offset 100 percent of the CO₂ emissions from business operations of Deutsche Telekom's vehicle fleet in Germany. In this context, oil companies make an annual contribution to the fuel purchased. This CO₂ offset aids projects that are certified according to recognized standards and ensures that the vehicle fleet is largely climate-neutral while we transition to zero-emission mobility. These quantities are not included in emissions accounting according to the Greenhouse Gas (GHG) Protocol, since the emissions are not avoided but offset by climate protection projects.

As part of our mobility strategy, we are working together with our employees on intelligent solutions for a new, more sustainable mobility. Such solutions are needed, in light of the impact of both work-related and private mobility on climate change. We also communicate directly with our customers and use their feedback to continuously improve our products and services. Our goal is to make it a matter of fact that alternative forms of mobility are used at the Group; any decision about a particular means of transportation should be scrutinized. More information about our activities to promote sustainable mobility is available here.

Reporting against standards

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)

Promoting green mobility at Deutsche Telekom “Green Fleet”

As part of our Green Car Policy, we have been using a CO₂-based selection process for procuring new vehicles for 11 years. These also include company cars provided to employees on account of their position or function that can also be used privately. The Green Car Policy contains a bonus/penalty system as an incentive to encourage our employees to select fuel-efficient models. Employees who choose a more low-consumption model (with emissions of less than 130 g/km) receive a bonus based on the fuel cost savings. In contrast, drivers of high-consumption vehicles

must make a financial contribution for the increased mobility costs and greater environmental impact. Currently, we are again reviewing our Policy, and a revised version is expected to enter into force at the beginning of 2023.

In the reporting year, we increased the share of vehicles with alternative drives. We started regular operation of both electric and natural gas vehicles. With regard to company cars, employees entitled to a company car can choose from the regular e-vehicle portfolio we have maintained since February 2020, after completion of initial pilot projects in 2019. Around 30 percent of all new orders for company cars have since been for electric cars. At the end of 2021, we had 804 electric company cars in our inventory or on order. Due to extensive delivery delays, resulting from chip shortages in the automobile industry, delivery of many of our electric cars on order has been postponed until 2022.

In many cases, high acquisition costs are still making electric vehicles the more-expensive option, even though the non-cash benefit is taxed at a lower rate and buyers have a net saving compared to their costs for a comparable diesel vehicle. In addition, the range of available models is much smaller for electric vehicles than for conventional vehicles.

The range of more climate-friendly vehicles that are suitable for our Service segment is still quite limited. For this reason, only about 5 percent of our Service-fleet vehicles are electric or natural-gas-powered vehicles. In the year under review, their number increased from 362 to 539. For this reason, we are currently also testing new forms of mobility. Through October 2021, our field services in Berlin, Frankfurt am Main and Münster tested various e-scooter models, for example. In the test, service technicians and engineers sought to determine whether e-scooters are suitable for short and medium-distance travel in everyday work situations – such as in service calls for setup of internet accesses in major cities in which it is difficult to find parking. The tests were successful, and now the scooters are to be introduced nationwide in spring 2022.

We are participating in a nationwide funding project from the German Federal Ministry for the Environment (BMU) and the German Federal Ministry for Economic Affairs (BMWi) until the end of 2023. This will enable us to create further opportunities for using electromobility. The prerequisite for this is a suitable charging infrastructure. Various units in the Group are collaborating on this, including Comfort Charge (only available in German), which operates a public charging infrastructure, and Telekom Service, which serves as the partner for installation and support.

Salary sacrificing scheme: bicycles or e-bikes

Since 2015, our salary sacrificing scheme has enabled our employees to sacrifice some of their salary for the purchase of resource-conserving and health-promoting bicycles or e-bikes, which they can lease from their employer for three years. The monthly payments are deducted from the employee's gross salary. In 2020, so many employees wanted to use the salary sacrifice scheme that all bikes had been allotted after just eight weeks. For the start of the 2021 season, we completely revamped the scheme.

Since then, orders may be placed year-round, via an external leasing partner. In addition to ordering from that partner's own portfolio, employees have the option of ordering from a bicycle dealer of their own choosing. Deliveries and local service are available for all of Deutsche Telekom's locations in Germany. Currently, some 8 000 bicycles are being leased via this scheme.

#movegreen – getting there sustainably

Our Green Pioneers organize various campaigns and measures to raise awareness and motivate our employees to use "greener" forms of mobility. In 2021, during the Bonn "mobility weeks" organized by the JOBWÄRTS mobility platform, our employees had the opportunity to borrow bicycles, free of charge, for a full week of use. Also, the "cycle to work" ("Mit dem Rad zur Arbeit") campaign, which was launched in 2020 by German health insurer AOK, was continued. In it, we encourage our employees to leave their cars at home, and to count up the number of kilometers they cover with their bicycles. Since fall 2021, they have the option of participating in the campaign via the company's EmployeeApp, which has functionality that simplifies the task of "collecting" kilometers on a group basis. To date, employees have saved about 29 980 kilograms of CO₂ in comparison to the emissions they would have generated by using cars for the relevant trips.

Since September 2021, bicycle service stations have been in place at six different Deutsche Telekom locations in Germany. The stations offer a bicycle pump and tools for minor repairs – including a digital repair guide that users can access via QR code.

The national companies in other countries are also moving forward with alternative forms of mobility. Hrvatski Telekom, for example, has become the first telecommunications company in Croatia to be awarded the European "Cycle-Friendly Employer" certificate. To inspire its employees to commute to work by bicycle – and thereby do something good for both the environment and their own health – the company has provided 100 covered bicycle stands, along with showers, changing rooms, and a repair station.

Expansion of the e-mobility charging infrastructure

To drive e-mobility forward, it is crucial to provide the appropriate infrastructure. We are therefore upgrading parts of our existing telecommunications infrastructure to charging stations, primarily using our large technical facilities such as main distribution frames. Using the existing infrastructure eliminates the need for additional constructions in the cityscape. The electricity used for charging comes from renewable energy sources.

Telekom Mobility Solutions (TMS), in cooperation with Group Supply Services (GSUS), is responsible for expansion of the charging infrastructure at our Deutsche Telekom locations. Deutsche Telekom's subsidiary Comfort Charge provides and operates the (rapid) charging stations and wall boxes at Deutsche Telekom locations.

Around 500 rapid charging stations are planned over the next three years. They are not part of the existing telecommunications infrastructure and will be set up at Deutsche Telekom locations with medium-voltage installations, which give users up to 150 kW

of power. This enables charging for an approximately 100-kilometer range in just ten minutes. Also, installation and maintenance services for wall boxes (44 kW) are available for business customers.

In cooperation with an external service provider and Telekom Service as the nationwide installation partner, we also offer our employees, and users of electric company cars, a home charging solution that employees can finance privately. The solution provides a complete package, including a wall box, installation fee, and automatic reimbursement of incurred costs for charging at home. Until the end of 2021, KfW (Kreditanstalt für Wiederaufbau) bank provided 900 euro subsidies for purchases of home wall boxes.

Comfort Charge GmbH is also helping to build a nationwide electric charging network with rapid charging points with up to 150 kW capacity. Comfort Charge is part of the Deutsche Telekom Group and is funded and supported by the Telekom Innovation Pool (TIP). The responsible sponsor for the effort is Deutsche Funkturm GmbH (DFMG). Comfort Charge operates charging stations for electric vehicles throughout Germany and offers services related to electromobility. The company is thus creating the necessary infrastructure for the breakthrough of e-mobility in Germany. Since 2020, it has concentrated its expansion operations more strongly on the business-customer and the public sector. Comfort Charge is supporting the City of Hamburg, for example, in putting the necessary framework in place for a transition to electromobility in its taxi market.

Deutsche Telekom Außendienst (DTA), working in cooperation with the company's Individual Solutions & Products (ISP) unit, is responsible for installing and servicing charging stations and wall boxes at Deutsche Telekom locations and at employees homes. The service unit of Deutsche Telekom, DTA/ISP, continues to offer infrastructure services for the charging stations of major external customers. With over 9 600 orders, Deutsche Telekom is one of the largest service providers (installation, maintenance, repair) in the charging station infrastructure sector.

The activities of our business customer unit, Deutsche Telekom Business Solutions, also need to be mentioned. On a nationwide basis, its Smart City Unit installs, operates and maintains a charging infrastructure, in conformance with calibration regulations, on behalf of customers. The stations provided include normal charging stations (AC), fast-charging stations (DC) and, on request, hypercharger stations (HPC) with charging at up to 350 kW.

With its "MeineLadesäule" ("my charging station") service, Deutsche Telekom offers comprehensive solutions for customers who wish to set up and operate a charging infrastructure. The modular meineLadesäule portfolio comprises all necessary steps for such efforts; for example, customers can have Deutsche Telekom assume responsibility for consultation, planning, charging-station procurement, and project management for the necessary civil engineering. In addition, it provides relevant software and energy-/load- management services.

E-mobility is also being promoted at our national companies: in Croatia, for example, a digital charging service for electric vehicles via app has been offered since 2020. Via the app "espoTs," end users can search for and use charging stations. No subscription or contract is required. Charging stations have been installed in front of T-Systems Nederland's building in Utrecht, and T-Mobile US is also investing in charging stations for electric cars at its locations. The national company in Hungary launched a pilot project in 2021 to determine availabilities in the area of electric cars and charging stations, with a view to adding more electric cars to its vehicle fleet in the future.

We measure our activities to promote greener mobility at Deutsche Telekom using various KPIs, and have been collecting data for them since 2020.

Number	2020	2021
eMobility charging stations sold	2 111	627
Standard charging stations (≤ 22 kW)	1 542	426
Wall-mounted standard eCharging stations	1 407	233
Detached mounted standard eCharging stations (outdoor)	135	193
HighPower charging stations (> 22 kW)	569	201
Detached mounted high power eCharging stations (outdoor)	569	201

In the year under review, and on a Group-wide basis, we provided a total of 201 fast-charging stations (2020: 569) and 426 normal-charging stations (2020: 1 542).

Since 2020, we have installed a total of 161 fast-charging stations in Germany. In 2021, we also provided 137 normal charging stations (including wall boxes). Operating rapid charging stations has allowed us to save more than 548 metric tons of CO₂. That is the equivalent of the CO₂ emissions produced by a passenger car on a journey of around 3 million kilometers.

Number of vehicles

The total number of vehicles at our company decreased slightly with respect to the previous year. While the majority of our vehicles still have diesel engines, their share of our overall fleet decreased in the year under review. To accelerate our transition to greener mobility, we have intensified the expansion of our charging-station infrastructure. Also, we continue to focus on green alternatives to gasoline/diesel-powered engines, and on fuel-efficient engines – subject to cost-effectiveness criteria – when purchasing new company cars and service vehicles. This has enabled us to increase the total number of our fleet vehicles with green alternatives to gasoline/diesel-powered engines by 42 percent, with respect to the corresponding figure in 2020.

	2019	2020	2021
Total number	39 548 ^{a)}	39 503	32 210
Number of vehicles with diesel engines	33 550 ^{a)}	30 416	25 020
Number of vehicles with gas engines	5 370	7 984	5 619
Number of alternative fuel vehicles	628	1 103	1 571
Number of company cars	11 246 ^{a)}	12 721	9 984
Number of service vehicles	28 302	26 782	22 226

^{a)} The values were corrected compared to the information published in the previous year's report.

For detailed comments on the performance indicators for each individual company, please refer to the interactive performance-indicator tool in our company comparison. More information about our Green Car Policy, alternative engines and our goals for climate-friendly mobility is available here.

Reporting against standards

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

Fuel consumption

Overall fuel consumption fell by approximately 11 percent, and by 6 and 22 percent respectively for company cars and service vehicles. For detailed comments on the figures for each individual company, please refer to the interactive benchmarking tool.

in liter	2019	2020	2021 ●
Fuel consumption (total)	61 201 141 ^{a)}	55 252 535	49 167 373
Fuel consumption by diesel-powered vehicles	44 773 730 ^{a)}	35 819 699	31 612 742
Fuel consumption by gasoline-powered vehicles	16 218 581 ^{a)}	19 038 604	17 025 709
Fuel consumption by vehicles with alternative drives	208 830	394 232	528 923
Fuel consumption by company cars	19 814 221 ^{a)}	17 552 364	13 760 425
Fuel consumption by service vehicles	41 386 920	37 700 172	35 406 948

● Data audited by PwC. Data is partly based on estimates, assumptions and projections. Some of the data originates from external service providers.

^{a)} The values were corrected compared to the information published in the previous year's report.

You will find more information on Deutsche Telekom's climate friendly fleet management policies here.

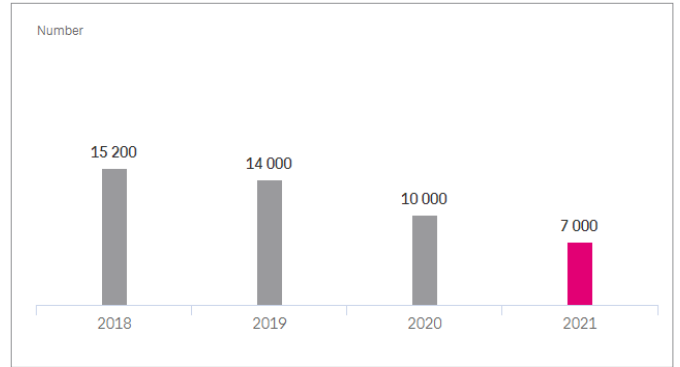
Reporting against standards

German Sustainability Code

- Criterion 11 (Usage of Natural Resources)

Job ticket

In 2021, 7 000 employees of the Deutsche Telekom Group in Germany used a discount season ticket provided by their employer to commute by public transport. This reduction is mainly due to COVID-19 related constraints.



We offer regional discount season tickets (monthly or annually) to our employees at many of our German Deutsche Telekom sites, especially in high-density population areas. The offer encourages our employees to use climate-friendly public transportation and helps them keep their commuting costs down.

Reporting against standards

German Sustainability Code

- Criterion 2 (Materiality)
- Criterion 10 (Innovation and Product Management)

Global Compact

- Principle 7 (Support a precautionary approach to environmental challenges)
- Principle 8 (Undertake initiatives to promote greater environmental responsibility)

European Federation of Financial Analysts Societies (EFFAS)

- V04-13 (Percentage of products or services for offsetting climate change)

Employee initiatives

Green Pioneers in Germany

Internal sustainability ambassadors around the world are dedicated to promoting a sustainable corporate culture. With their efforts, they support implementation of our #GreenMagenta Program – and, in the process, implementation of our CR strategy.

The internal “Green Pioneers” ambassador program was launched in Germany in 2018. Its aim is to further promote and expand responsible management and conduct among the workforce. Group Corporate Responsibility (GCR) creates suitable conditions for the Green Pioneers work. Community Management, which is part of GCR, organizes regular meetings – primarily virtual ones, during the COVID-19 pandemic – for sharing of information and exchanges of experience. It also sponsors presentations by internal and external experts, and helps design activities. In addition, it also provides up-to-date information about the initiative on the internal social network You and Me UNITED (YAM UNITED). As of the end of 2021, the Green Pioneers groups had about 1 400 members and subscribers in YAM UNITED. The initiative has gained increasing attention and followers among our employees.

There are now 320 Green Pioneers in Germany. Active at 53 locations and in 25 departments, they seek out improvement potential and initiate appropriate measures. Depending on their location, interests and know-how, the Green Pioneers come together to form subject-related or regional “hubs.” They act as internal multipliers for change by motivating employees to be involved in numerous resource conservation campaigns, such as an exchange for office supplies, clothing exchange campaigns, tree-planting and waste collection campaigns, and an internal company ride-sharing agency. In the framework of the #GreenMagenta Weeks event in May 2021, the Green Pioneers organized short presentations on the topics “Rethink & reshift – in the green fast lane” (“Umdenken & Umschalten – Auf der grünen Überholspur”) and “Forward to Net Zero – #TAKEPART & save CO₂.” For “World CleanUp Day” in September, the initiative organized a nationwide trash-pickup campaign. In the year under review, the group continued its “cycle to work” (“Mit dem Rad zur Arbeit”) campaign, which it had launched in 2020. In addition, a campaign feature was added to our employees app, to simplify joint accumulation of kilometers traveled by bicycle. Also, in September 2021, at the initiative of the Green Pioneers, bicycle service stations were set up at a first group of Deutsche Telekom locations. The stations offer a bicycle pump and tools for minor repairs – including a digital repair guide that users can access via QR code.

With a view to reinforcing our employees motivation and commitment, we seek to offer our employees additional latitude and options for structuring their working lives. The flexible work arrangements we make available to all employees, such as our “job visits,” are one example of this policy. In addition to their core activities, our employees can also gain cross-departmental experience and apply their knowledge and skills. For example, the Green Pioneers take advantage of these opportunities to work on sustainability activities.

Green employee networks at our national companies

Numerous employee initiatives aimed at sustainability and environmental protection are also active at the national companies of Deutsche Telekom AG:

T-Systems Iberia (Spain)

Founded by T-Systems ITC Iberia at the end of 2019, the T-TOGETHER community started its work at the beginning of 2020. T-TOGETHER is a group of volunteers dedicated to promoting sustainable initiatives. The center of this community consists of an Executive Committee. It is supported by an internal advisory committee made up of 15 experts for environmental issues, corporate responsibility, and communications. The aim of T-TOGETHER is to develop ideas for sustainability in line with the company’s ecological and social goals, and to raise awareness of environmental issues among all employees. The members develop initiatives and propose them to the company management. Once an initiative and budget have been approved, the board of management initiates the implementation. In the year under review, T-TOGETHER moved initiatives forward in the areas of both #GoodMagenta and #GreenMagenta. The initiatives included efforts to reduce commuting-related CO₂ emissions.

Deutsche Telekom IT Solutions Hungary

At DT IT Solutions Hungary, seven experts within a “Sustainability Core Team” are working to raise employee awareness about the need to reduce electricity, water and paper consumption; to promote more-efficient use of the company’s vehicle fleet; and to promote waste recycling. In addition, a 90-member strong “Green Activists Community” is working to make it easier for employees to contact colleagues with regard to environmental concerns – for example, via a dedicated site within our YAM UNITED internal social network. Also in the year under review, an awareness campaign on sustainability issues was launched, with the participation of over 700 colleagues. During each month of the campaign, a different topic was featured. The topics covered included nutrition, waste avoidance, sustainable fashion, and diversity.

Deutsche Telekom IT RUS and T-Systems RUS (Russia)

A “Think Green” community, with a core team of six employees, is working to reduce plastic, promote recycling, and build a “green corporate culture.” In May 2021, Deutsche Telekom IT RUS, with the support of its “Think Green” community, took part in the “#GreenMagenta weeks” event. At the event location, it held several workshops for its employees on the topics of sustainability and green lifestyles. In addition, it organized two trash-pickup campaigns, in the cities of Saint Petersburg and Voronezh, for employees and their families. In a concerted effort, the participants collected some 700 kilograms of trash and brought it to a recycling center.

Magyar Telekom (Hungary)

In 2019, Magyar Telekom became the first company in Hungary to launch a community solar project. As part of the project, 100 Magyar Telekom employees were able to rent a solar panel from the company for one year. As a reward for their contribution to Deutsche Telekom’s climate protection activities, the donors received benefits such as an additional day off. The solar modules were installed on Magyar Telekom’s training facility; the energy generated is used on site. The panels cover a quarter of the building’s energy consumption. The project was continued in 2021.

Other national companies committed to a more sustainable corporate culture include:

- T-Mobile US (USA): Employees of this U.S. company have formed an online community focused on sustainability. In it, around 70 employees regularly discuss and keep up-to-date on T-Mobile’s environmental initiatives.
- Magenta Telekom: About 25 employees of this company in Austria take part in #GreenMagenta and #GoodMagenta working groups.
- T-Systems Limited (UK): An interdepartmental team of eight employees reviews, discusses and promotes sustainability issues within the company.
- OTE Group (Greece): The “Green Ambassadors,” founded in 2019, are working to create a green culture, inspire OTE Group employees, collect ideas and provide information about projects such as #ZEROPLASTIC and recycling programs.
- T-Systems do Brasil Ltda.: The “T-Green Team” consisting of 22 employees is committed to recycling and donation campaigns as well as to communicating ways to save energy and avoid waste both inside and outside the company.
- Employee communities are also active, or in the process of being established, at other national companies such as T-Mobile Czech Republic, Hrvatski Telekom (Croatia), T-Systems Mexico and DT IT Solutions Slovakia.

To find out more about corporate responsibility at our national companies and the involvement of their employees, please visit the relevant company profiles.

Social commitment

Our approach to social responsibility

In focus: Building digital inclusion

As the digital society takes shape, we at Deutsche Telekom are working hard to ensure that all can #TAKEPART. That's why, as part of our social commitment, we are working on enabling digital inclusion.

The internet offers a wealth of opportunities for education, work, networking, and cultural life. In an equitable society, everyone – regardless of their age, disability, education, income, or place of residence – has access to the technology necessary for accessing the internet, and to the digital opportunities available online. When people do not take part in the online world, that should happen solely as the result of free choice – and not of a lack of financial means or requisite know-how.

In our perspective, three crucial factors decide whether people can participate in the digital society on an equal-opportunity basis: access to fast networks (“access”), affordable rates and devices that enable all people to participate, regardless of their financial situation (“affordability”), and the ability and motivation to use digital media competently (“ability”).

- **Access:** We are continuously expanding our network with a view to enabling access. In the process, we cooperate with various partners – especially in more-remote areas. Also, we are pressing ahead with the development of equipment and products for various demographics. The “nora Notruf-App” (nora emergency-call app), for example, which offers one-tap emergency calling – and is intended especially for people with hearing and speech impairments – is based on a patent of Deutsche Telekom.
- **Affordability:** Our range of rate plans includes plans for just about any budget. We also offer a subsidized rate (only available in German), and reduced basic charges – for schools, for example. With this approach, we strive to make digital accesses affordable for everyone.
- **Ability / Competent use of digital media:** We support people in using media in a competent, responsible, and critical manner, and in living together in society in keeping with basic democratic values. Our campaign “#TAKEPART – No hate speech,” which has been underway since 2020, serves as a good example in this regard.

In the spirit of our #TAKEPART promise, we not only stand for access to the internet, but are also committed to diversity, tolerance, and joy in interpersonal interaction. This is because, from our perspective, a person's digital inclusion depends both on their ability to use digital media competently and on their willingness to behave responsibly online. This orientation highlights the ways our social commitment and our core business are closely interrelated. And it allows us to put our expertise as a telecommunications provider to the best possible use for the benefit of society. Our commitment to fair and equitable digital inclusion also plays an important role in our position as an attractive employer.

Our commitment to sustainable economic activity is explicitly enshrined in our Group strategy, in our exhortation “Act responsibly.” This commitment includes facilitating digital inclusion, promoting a willingness to change in positive ways, and complying with our climate targets.

Voluntary commitment, financial support and international connectedness

As part of our social commitment, we carry out projects and initiatives of our own. In addition, we promote voluntary commitment on the part of our employees. For example, we provide financial support for associations in which our employees are active. We also give them time off for volunteer work, such as the work many of them contributed in summer 2021, in the German areas hit by disastrous floods.

In addition, we provide financial support – for example, via donations to, and collaborative efforts with, non-profit organizations that work to promote more-harmonious coexistence and combat exclusion.

Also, we collaborate closely in this regard, and across national borders, with the national companies, and share experience and best practices in the process. In many cases, we invite our national companies to regionally implement, under their own responsibility, initiatives that we launch centrally.

Close cooperation with social players such as NGOs, associations, and initiatives also plays an important role. The reasons why we place priority on such interaction, across organizational and national boundaries, include the opportunities that it provides for mutual impetus and for the development of new ideas.

Measuring our success

We measure the impact of our social commitment on a Group-wide basis, with a set of ESG KPIs. Until 2020, these KPIs were focused especially on media literacy, which is one aspect of digital inclusion. In 2021, then, we enshrined all aspects of digital inclusion – which is a central aim of our CR and company strategy – in our KPIs:

- The ESG KPI “Community Contribution” reflects our social commitment in terms of financial, human, and material resources.
- The ESG KPI “Beneficiaries – Focus topics” shows the number of people who have benefited from our commitment to digital inclusion and to a society that protects the climate and conserves resources.
- The ESGI KPI “Reach” ESG KPI shows the number of people and media contacts that we reach with our communication about digital inclusion and about a society that protects the climate and conserves resources.

Our measures are also based on the Sustainable Development Goals (SDGs) of the United Nations. In an overview, we list the activities with which we are working on behalf of the SDGs.

Promoting media literacy and democratic competence

The COVID-19 pandemic has shown us just how important the internet has become in our everyday lives. For many people, in fact, the network has served as the sole means of communicating with family and friends during lockdowns. The internet has also provided a way to work, take classes and go to school, and shop – from home. But online communication has its down sides. In uncertain times, fake news and conspiracy theories spread even more widely and rapidly, and more and more people find themselves facing hate speech and marginalization.

For us, media literacy is the key to safe and competent use of digital media. But media literacy alone cannot ensure that people interact harmoniously, and treat each other with respect, in the digital world. For this reason, we believe that media literacy has to go hand-in-hand with democratic competence. We therefore work, through a wide range of projects and initiatives, to promote trust and informed formation of opinion, and to combat marginalization and hate speech, in cyberspace.

Teachtoday

Our Teachtoday initiative supports children, young people, parents and grandparents, and educational staff by providing hands-on tips and materials about safe, proficient media usage. The materials are available at www.teachtoday.de in seven languages (German, English, Croatian, Montenegrin, Polish, Romanian, and Hungarian). In the year under review, the topic “Gaming – where the fun stops” was a focus of our campaign #TAKEPART – No hate speech. In keeping with that emphasis, we are also highlighting the issue of gaming in outreaches to our Teachtoday target audience.

Digital learning plays a particularly important role now that digital schooling and remote learning have become an even bigger part of students day-to-day lives. Teachtoday offers a digital tool box that we published in 2020 and have continually expanded since then. In 2021, in the framework of our “Gaming – where the fun stops” initiative, we added topic-specific workshops and other offerings to the tool box. The tool box, which now comprises over 120 different formats, including product ideas, video tutorials, and fascinating quizzes, is designed for adults who have contact – either in schools, in learning groups or in their own private lives – with children and young people between the ages of 9 and 16.

Teachtoday also has its own YouTube channel, on which it presents short, catchy videos about safe, proficient internet use, along with complete workshops on subjects such as how to use the tool box.

SCROLLER

“SCROLLER”, an online magazine for children aged nine to twelve, teaches media literacy using age-appropriate language. With its new, interactive web format, the magazine has a completely up-to-date look and feel, and it is suitable, as a learning and reading tool, both for solitary use and for group exercises. Via the additional SCROLLER EDU+ area, which links directly with the magazine's features, teachers can access background information and learning resources for classroom and online instruction. In keeping with our focus topic “Gaming – where the fun stops”, our messaging to our “SCROLLER” audience in the year under review also concentrated on the subject of gaming. The content, aimed at children from the ages of nine to twelve, was presented under the heading, “Here's how to keep the fun in gaming” (“So bleibt es beim Spiel Spaß”).

In 2020, the children's media magazine SCROLLER, which has already received the “Stiftung Lesen Siegel” (seal of the Stiftung Lesen reading-promotion foundation) and the “German Design Award,” and Teachtoday were awarded the “Comenius Medal,” the most important European award for digital educational media.

#TAKEPART stories

Our #TAKEPART stories initiative highlights socially relevant aspects of digitalization, from a practical perspective, and transforms them into modules that multipliers can use in workshops. The stories/modules are aimed at adults of all ages, from young adult to senior. The initiative highlights ways to use the internet responsibly, and it encourages critical discussion about this subject.

A special feature of the initiative is that the multipliers who use it do not have to be experts on the subjects concerned; we provide presentation resources for all workshops, along with moderators guides and background information. As a result, the workshops are easy to carry out. Consequently, the initiative supports our aim of ensuring that everyone can #TAKEPART and participate in the opportunities that digitalization provides. The content is developed in didactic formats, implemented in innovative modules. The modules are available in German, English, and simplified language, and are tailored to various workshop durations.

The #TAKEPART stories include various modules on the focus topics gaming and civil courage, along with modules on other digital-world topics, such as digital friendships, life in the city of the future, and data protection and privacy.

Promoting digital competence

As part of EU Code Week (only available in German), and in cooperation with Apple, we invite teenagers and teachers to immerse themselves in the world of app development. In workshops and interactive events, participants learn how to develop and implement app ideas. Code Week, which is supported by the European Commission, took place from Oct. 9 to Oct. 24, 2021, for the ninth time overall.

We cooperate with various universities, with a view to supporting current research and promoting digital skills. For example, via Telekom Laboratories (T-Labs), we finance several endowed chairs, at TU Berlin, oriented to teaching of digital topics. Also, at the CODE University of Applied Sciences in Berlin, we have established a professorship for software engineering (with a focus on blockchain technology).

"Startupnight" is one of the largest annual events in Europe at which startups can network and present their ideas and business models to companies, investors, and potential customers. The event, an initiative of Deutsche Telekom, is promoted primarily by hubraum, Deutsche Telekom's technology incubator. hubraum also offers its "on air" live-streamed online discussions. Each month in "on air," we converse with industry experts, startups and investors about an innovative, technology-oriented topic. In the framework of our TechBoost program, we support startups (especially in connection with financing issues), offer expert know-how and provide access to our technical resources and customers.

DIGITAL@School

In our Group-wide "DIGITAL@School" initiative, we support children engaged in active, self-reliant efforts to help shape the digital age. Some 500 "DIGITAL@School" volunteers are giving their time to schools, and other educational institutions, in a range of in-person and online assistance formats. With age-appropriate approaches, they are helping to inspire children to take an interest in STEM (science, technology, engineering, mathematics) subjects and in programming languages. In addition, they are teaching skills that children need in order to use digital media responsibly. At the end of 2021, the initiative received the #GoodMagenta label for its work. The initiative was launched in 2017 as "IT@School." It then grew throughout the Group, and was renamed "DIGITAL@School" at the end of 2021.

Seniors with good online skills

As part of our efforts to ensure that everyone can #TAKEPART, regardless of their age, we offer special equipment and products for seniors. The resources available for facilitating seniors use of digital technologies include big keyboards, uncluttered displays, with large fonts and icons, and emergency-call buttons. In addition, we are working, in cooperation with the German National Association of Senior Citizens Organisations (BAGSO), to promote

seniors media literacy. In 2021, we again sponsored, as a partner, the Goldener Internetpreis (Golden Internet Prize; only available in German). The prize is awarded to committed individuals, initiatives, and municipalities that are working to inspire seniors to go online – and to assist them in doing so. Also in the year under review, we sponsored a special prize, in the framework of the Golden Internet Prize, entitled "With respect – working for fairness online!" ("Respektvoll – aktiv für einen fairen Umgang im Netz!"; only available in German). The prizewinners were honored at the German Senior Citizens Day event, which took place online because of the pandemic.

In another effort in this context, we are serving on the advisory board of Digital-Kompass (only available in German), a joint project of BAGSO and the association DsIN (Deutschland sicher im Netz e.V. – "Germany secure online"). Digital-Kompass provides resources and digital "round table" meeting formats for "internet pilots" who help seniors navigate the online world.

In cooperation with the German Senior Citizens League (DSL), we have produced a guide entitled "Digital inclusion – age is not an issue" ("Digital dabei sein – Keine Frage des Alters"; only available in German). In clear, straightforward language, the brochure covers a range of relevant topics, such as "How to set up a fast, secure internet / Wi-Fi access," "What rates are available?" and "How can I ensure that my data is safe?" The guide also explains where one can find support – including learning resources, and pertinent services – and it provides tips on how to use digital media.

Working against online hate speech

In 2021, we continued our campaign #TAKEPART – No hate speech, which we launched in summer 2020. Our goal with the campaign is to send a signal and promote an internet in which everyone can enjoy the vast opportunities of the digital world without having to fear marginalization or hate speech. In addition, we support initiatives that work to combat marginalization. At present, we are cooperating with a total of 44 initiatives and NGOs that are working in support of our aim of strengthening democracy, peaceful coexistence, and diversity. Also, with our own measures aimed at online civil courage, we call on society to support us in this commitment.

In 2020, we founded an internal network with the aim of making our aspiration "we have no room for marginalization and racism" come alive within our company. In it, representatives of various areas, such as "internal communications," "threat management," "compliance," and "human rights," are working together to ensure that preventive measures are implemented, and that potential incidents in the company are taken seriously and transparently scrutinized. In addition, we ensure that persons affected by marginalization are quickly and beneficially assisted.

We also carried out various workshops for our employees on the subject of "online hate speech" – including workshops for apprentices and dual students. In keeping with pandemic-related restrictions, the latter workshops were carried out online. School students taking part in the digital internships that we introduced in

2021, as the only company to do so, were also invited to take part in our workshops. These addressed the topics of digital democracy, civil courage, and racism.

No hate speech in gaming

In the year under review, our campaign #TAKEPART – No hate speech focused on the topic “Gaming – where the fun stops”. In the process, we sought to answer the following questions:

- What is already being done to promote democratic, fair, and collaboratively oriented rules in gaming – and what can we all individually do in this regard?
- How do civil courage and constructive dialog work on the internet and on gaming platforms?
- How can diversity be promoted in gaming, without prejudice and discrimination?

Also, we worked in cooperation with the esports player foundation to prepare relevant didactic resources for various age groups. With our specially targeted resources and messaging, we encourage parents, educational staff, and gamers to take a stand on this issue.

Together with the esports organization SK Gaming and the esports player foundation, we have launched the initiative #equalesports to promote greater diversity in esports and gaming. The goal is to support women who are participating in professional and popular sports. The three-day Equal eSports Festival, which took place in the fall of 2021 at our representative office in Berlin, addressed the topics of diversity, esports, and gaming. For the festival, we organized various events, including workshops for parents and panel discussions.

In addition, we emphasized the need for communication about, and promoted the introduction of, counter speech elements in gaming – for example, elements such as critical and humorous images and videos, in formats such as memes and GIFs. In cooperation with the esports player foundation, we have developed a selection of suitable memes and GIFs with which gamers can quickly and easily take a stand, in chats and social networks, against hate speech in gaming. In another campaign, top esports athletes have spoken out, in videos on social media, against digital discrimination and toxic behavior in gaming.

Digital crime – When words become weapons

In 2021, in an effort to reach relevant new target audiences, we published the six-part podcast series “Digital crime – When words become weapons” (Digital Crime – Wenn Worte zur Waffe werden“) on all leading podcast channels. In each episode, we hear from a person who has experienced hate speech online and describes what that was like. Also, experts put the cases in proper perspective, and – as is customary in true crime podcasts – discuss the legal issues the cases raise. In the first episode, we hear from Jay (who also stars in our spot for the campaign #TAKEPART – No hate speech) about sexual self-determination and hate speech. Other episodes focus on topics such as hate speech in

local politics, hate speech in gaming and hate speech against women. And the episode “When customers become haters” (“Wenn Kunden zum Hater werden“) discusses this issue in the context of our own customer service.

Since the beginning of the campaign #TAKEPART – No hate speech, in the second quarter of 2020, we have generated 720 million media contacts, and reached about 3.85 million people – either directly or via multipliers (for example, in workshops).

Digitalization in schools

For the past 20 years we have been offering free 16 Mbps broadband lines to all general and vocational schools in Germany as part of the “Telekom@School” initiative. As of fall 2021, more than 19 000 schools were making use of our offer. Also, more than 9 000 additional schools opted for a service, subsidized by us, that is subject to charges and provides higher bandwidth. In addition, we contacted around 17 000 schools in 2020 to improve their access to modern IT technologies. They can now easily increase their internet speed to up to 250 Mbit/s by ordering an upgrade from ADSL to VDSL – which will be free of charge until August 2021. Around 16 percent of the contacted schools have accepted our offer for an upgrade. In the year under review, we further intensified our commitment to improving schools internet access. As part of our efforts, we offered 100 schools a full year of our Digital School Service (DSS), free of charge, to free them from having to manage their own technical support and related services.

Since 2020, school authorities may opt for a flat rate for education (only available in German), which provides pupils with an unlimited data allowance for educational content, for a low monthly fee. In addition, the plan, with funding from the German governments DigitalPakt initiative, facilitates provision of tablet computers and laptops to disadvantaged students. This gives children and young people the opportunity, irrespective of their family background, to learn how to use digital media. Our Group Representative for Education has central responsibility for our commitment to schools.

Since the beginning of 2021, and in cooperation with Microsoft, we have been using a digital education package (only available in German) to support schools in Germany in the area of IT-based and online education. The package includes laptops or tablet computers and special educational licenses for “Microsoft MS365” software. A team of Deutsche Telekom experts – specially certified by Microsoft – provides the requisite service and helps set up the devices. Schools can test the package free of charge and without obligation.

In the U.S., T-Mobile is also committed to connecting schools and students. The Covid-19 pandemic has forced more than 50 million American students to switch to online schooling. For this reason, the company's "Project 10Million" initiative, which was launched in 2020, was continued in the year under review. Hundreds of U.S. school districts were able to get students connected with their schools for free thanks to the initiative. In 2021, T-Mobile US worked with school districts, extracurricular programs, and local authorities to offer affordable internet access to more than 1.2 million students nationwide.

In the year under review, other national companies, such as those in the Netherlands and in Slovakia, continued their efforts on behalf of school students digital inclusion. To help support online instruction, they donated IT equipment to schools, for example. Further information about Deutsche Telekom's international commitment in this area is available in the Profiles of the national companies.

Deutsche Telekom Stiftung's commitment

The educational foundation Deutsche Telekom Stiftung is working, via numerous programs and projects, to help improve education in STEM subjects (science, technology, engineering, and mathematics). It supports children and adolescents, between the ages of 10 and 16, in self-managed learning, both in school and elsewhere, that helps them acquire key educational and life skills. Along with STEM-related skills, the skills in question include critical thinking, good judgement and discernment, creativity, and communication and teamworking skills. The foundation provides such support out of the conviction that a modern education system must give young people the best possible preparation for meeting global challenges such as digital transformation, climate change, electromobility, and biodiversity.

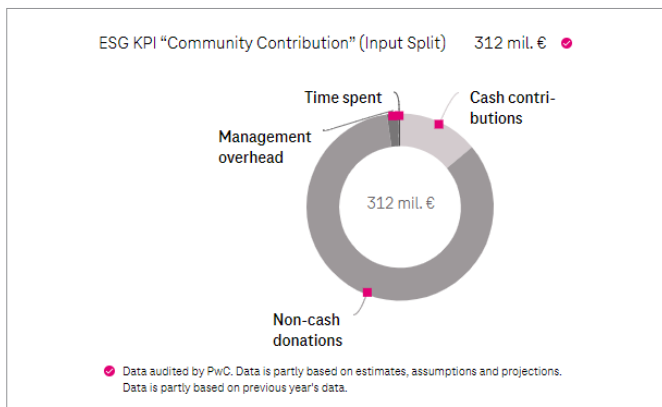
ESG KPIs "Community Contribution," "Beneficiaries – Focus topics" and "Reach"

As part of our assessment of the impacts of our social commitment, we report a set of three ESG KPIs: "Community Contribution," "Beneficiaries – Focus topics" and "Reach." In using these KPIs, we rely on methods employed by the organization Business for Societal Impact (B4SI), which incorporate the aspects "input," "output" and "impact." In 2020, Deutsche Telekom's KPIs were oriented especially to the topic of media literacy. In 2021, we then turned their main focus to digital inclusion – because that is a central aim of our CR and corporate strategy.

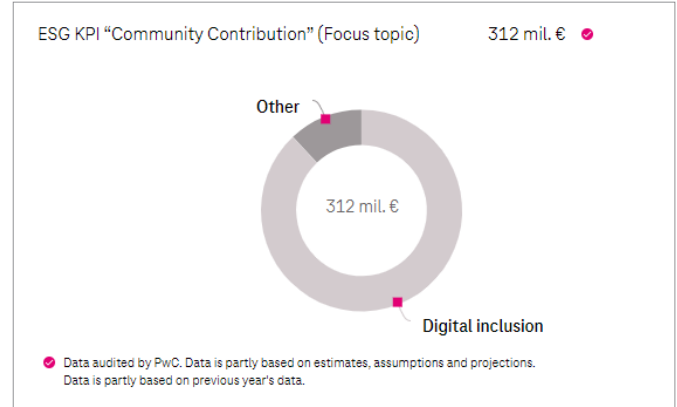
Community Contribution

The ESG KPI "Community Contribution" reflects activities in which Deutsche Telekom was involved in the community either financially, through its employees, or through donation of materials. The "input" (effort/commitment) was communicated from 2017 to 2020 under the name "Community Investment." In 2021, the KPI was adjusted and the focus was sharpened.

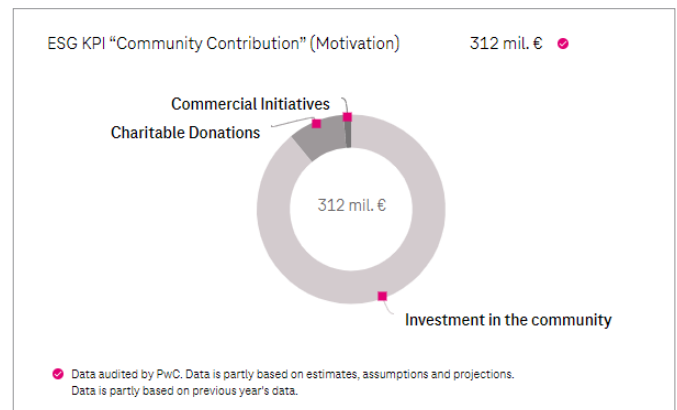
Our ambition in this connection: Increase the KPI



In 2021, 88 percent of our engagement focused on "Digital Inclusion." 12 percent paid in on other topics, such as "Low Carbon and Circular Society" or "Disaster Relief."



In addition to the longer-term commitment to our focus topics "Digital Inclusion" and "Low Carbon and Circular Society" (social investments), we also contribute through charitable donations and social sponsorship (e.g., of cultural events).



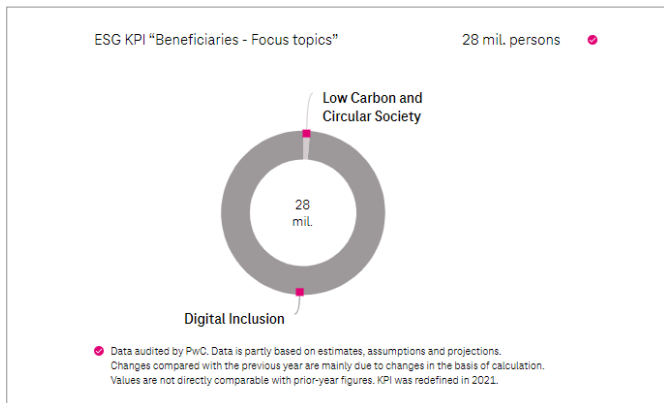
To determine the overall commitment of our employees, we look at the number of hours our employees have put in under our Corporate Volunteering program. In 2021, we adjusted the calculation basis and, in addition to volunteer hours performed during working hours, also collect volunteer hours otherwise supported by the company (e.g., through premises, insurance, or donations). In 2021, we contributed 137 746 volunteer hours.

Also, efforts we make in the context of the Community Contribution ESG KPI contribute significantly toward achievement of the Sustainable Development Goals. In 2021, about 274 million euros of our Community Contributions contributed to digital inclusion and thus to the achievement of SDG 4 (Ensure inclusive and equitable quality education).

Beneficiaries – Focus topics

The ESG KPI “Beneficiaries – Focus topics” shows the number of people who have benefited from our commitment to digital inclusion and to a society that protects the climate and conserves resources (this includes efforts such as providing media-literacy training, providing broadband accesses for schools, and supporting counseling hotlines). In 2021, our media literacy measures reached 28 million people. In contrast to the years 2017 to 2020, in the year under review only beneficiaries in the focus topics “Digital Inclusion” and “Low Carbon and Circular Society” were included. Besides direct beneficiaries, indirect beneficiaries are also taken into account according to a fixed key if, for example, a multiplier concept is involved or a discounted connection is used by several people.

Our ambition in this connection: Increase the KPI

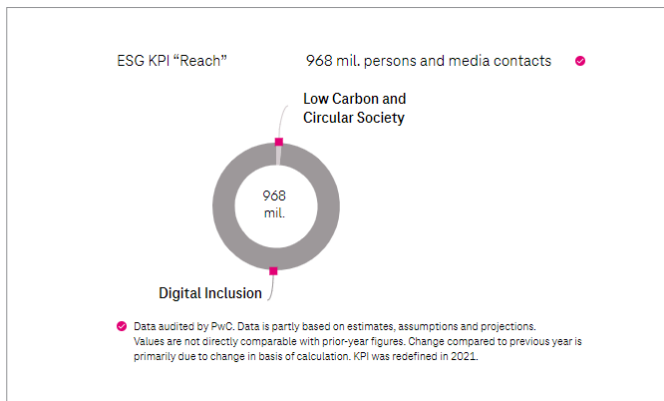


The ESG KPI “Media Literacy” has no longer been collected since 2021 due to the restructuring of our KPI set for measuring the impact of social engagement.

Reach

The ESG KPI “Reach” shows the number of persons and media contacts that we have reached via our messaging on digital inclusion, and on societal efforts to protect the climate and conserve resources – and that thereby have become more aware of the issues involved and of our pertinent activities. As of the end of 2021, this KPI reached a value of 968 million people and media contacts.

Our ambition in this connection: Increase the KPI



An overview of our most important digital inclusion initiatives at the project level can be found here.

Our investments in network expansion are making an important contribution to facilitating broadband access for large sections of the public. On a Group-wide basis, our investments in our network infrastructure overall amounted to 18 billion euros in 2021 (of which about 4.1 billion euros were made in Germany). Also, we are already providing LTE service to 98 percent of the total population of the countries in which our national companies are active. What’s more, we operate the largest fiber-optic network in Germany, with more than 650 000 kilometers of cables, and are driving the expansion of a large-scale NB-IoT infrastructure for the cities of the future.

engagement@telekom

Our range of corporate volunteering opportunities supports our employees social commitment. Through their commitment, our employees play a major role in strengthening social cohesion, broadening their own horizons, and boosting their social skills. This in turn has a positive impact on teamwork at the company.

Our “engagement@telekom” corporate citizenship program pursues three aims – to support our employees’ current commitment, to provide impetus for new commitment, and to provide space for networking. To that end, we give our employees opportunities to volunteer. For example, numerous Social Days provide an opportunity to get involved on behalf of society. In 2021, our employees contributed over 137 000 volunteer hours.

Projects that promote media literacy are one focus of “engagement@telekom.” With such projects, our employees help people better understand digital phenomena, thus laying the groundwork for participation in the digital world. One example is the Group-wide initiative “DIGITAL@School” (known as “IT@School” until the end of 2021). Using age-appropriate strategies and language, the committed employees in that initiative help children in schools and other educational institutions become acquainted with STEM (science, technology, engineering, mathematics) subjects, and they carry out workshops on programming. In addition, they teach skills that children need in order to use digital media responsibly.

Environmental issues also play an important role in the framework of “engagement@telekom.” As part of our commitment in this area, employees active in our Green Pioneers Initiative have initiated efforts to help reduce our carbon footprint. These efforts contribute to our Group efforts in the area of sustainability. In addition, Deutsche Telekom employees again volunteered their time for the annual fundraiser “Ein Herz für Kinder” (“A heart for children”) and for the SAT.1 TV channels hotline for collecting donations for victims of the July floods in Germany.

Joint commitment with partners

We have taken on the task of driving forward the social discussion on digital responsibility. To do this, we participate in various alliances and partnerships, such as the “Corporate Digital Responsibility” initiative¹ run by the Federal Ministry of Justice and Consumer Protection. In April 2021, we signed the code of conduct of the initiative, thereby committing ourselves to upholding specific principles. Also, in 2022 we will publish our own “Corporate Digital Responsibility” framework.

We signed the Charter of digital networking (Charta der digitalen Vernetzung¹) back in 2014. With our involvement in its sponsoring association, we are also underscoring our commitment to responsibility in shaping the digital society.

We have longstanding partnerships with many organizations, associations, and initiatives with whom we work as part of our social commitment. In the year under review, we again collaborated closely with many people and organizations, and launched joint activities with them, as part of our efforts to provide support during the coronavirus pandemic. In this connection, “Our space for your aid” initiative turned out to be the campaign with the widest reach. In it, we donated our own advertising slots on radio and TV to five partner organizations, including “W.a.d.E. – Wege aus der Einsamkeit¹”, “Nummer gegen Kummer¹” (youth counseling line) and “Labdoo¹”. Also, in joint spots with them, we highlighted the organizations pandemic-oriented charitable activities. With this campaign, we achieved about 200 million media contacts.

In cooperation with our longstanding partner, “Germany’s Relief Coalition”, we supported a fundraiser for the victims of the disastrous floods of 2021. In addition to donating 1 million euros ourselves, we also provided the technical infrastructure the fundraiser needed in order to receive pledges, and 2 000 of our employees volunteered their time to staff the fundraisers hotlines.

Other partnerships in which we are involved include the following:

- The esports player foundation, which promotes democratic game rules and diversity in gaming,
- Digitale Helden¹ (Digital heroes), which promotes media literacy,
- #ichbinhier¹ (#Iamhere) and Diskutier Mit Mir¹ (Discuss with me), which carry out workshops on constructive communication on digital platforms,
- The TelefonSeelsorge¹ crisis line,
- “Deutschland sicher im Netz e.V. (DsiN)” (Germany secure online), which supports efforts aimed at IT security and data privacy (among other things, we support the “Digital Neighborhood” project, which provides tips and advice on digital opportunities and data security in connection with volunteering),

- The “German National Association of Senior Citizens’ Organizations (BAGSO),” which promotes media literacy among older people,
- The German Senior Citizens League (DSL), which promotes senior-appropriate provision of information, especially information about fixed-network accesses for private citizens, and
- The National Network for Civil Society, as a participant in the “Volunteers’ Week” (Woche des bürgerschaftlichen Engagements¹).

In addition to urging society to push back against online hate speech, our campaign #TAKEPART – No hate speech focuses strongly on providing support for those victimized by hate speech. We have entered into additional partnerships to this end. In our spot for the campaign “Words must not become a weapon” – which has been seen by many millions of people – we present several of these partner organizations. And we present additional partners in our Topic special.

We promote various initiatives and programs aimed at protecting children and adolescents in cyberspace. For example, we are a member of the association fragFINN, which provides a safe online surfing environment for children between the ages of six and twelve. The search engine on fragFINN.de¹ and its pertinent browser app turn up only websites that are suitable for children and have been reviewed by media educators. Also, we support JusProg e.V.¹, a non-profit association that works to improve protection for children and adolescents online. Its youth-protection program JusProg, which is available for download and use free of charge, filters out age-inappropriate online content.

¹ Only available in German.

Financial commitment and sponsorships

In Germany, we are involved in the fields of sport, culture, and social issues. Our national companies are also engaged in these areas. In addition to providing funding, we help artists, athletes, event organizers, and associations with their communication and marketing activities. Our Sponsorship Policy provides the framework for sponsoring activities. Being involved in the regions where we are based is another important aspect. Examples of our involvement include:

- Music sponsorship
- Competitive sport sponsorship with partners such as the DFB (German Football Association), FC Bayern Munich, Telekom Baskets Bonn, and Deutsche Sporthilfe, DFB’s Sepp Herberger Foundation, and the German National Paralympic Committee
- Recreational sport sponsorship
- Sponsorship of social activities associated with partnerships

Corporate giving

Through our corporate giving program, we support the work of aid organizations worldwide – preferably in the form of long-standing partnerships – and provide rapid assistance in disaster situations. Our Group Donation Policy lays out the guidelines for these activities.

Our contribution to containing the coronavirus pandemic

The COVID-19 pandemic has shown just how important digitalization is in meeting social challenges. Digitalization has made it possible for many people to switch to working from home; online shopping, and contactless payments, have been reducing the risk of infection; physicians have been offering online consultations; contact tracing apps have been helping contain the pandemic; digital proofs of vaccination have been opening doors – and people throughout the world have been communicating via video chat.

Containing the COVID-19 pandemic continued to be a priority for us. Even in times of crisis, we remain committed to keeping everyone connected. Our multi-billion investments in network infrastructure have paid off during the pandemic: Our networks are stable, and in 2021 we once again experienced no major outages. We also helped contain the pandemic with numerous other activities. Detailed information about our measures in Germany is also available in our COVID-19 Special.

Breaking chains of infection, with the Corona-Warn-App

Under commission to the German government, and in cooperation with SAP, we developed our contact tracing app, the Corona-Warn-App and, in 2021, upgraded it with additional service features. Since the previous year, the app has made it possible, throughout Europe, to trace chains of infection and break them more quickly than was previously possible. The contact tracing app is a useful digital complement to the COVID-19 behavioral guidelines. We continue to improve the app, on an ongoing basis. In the year under review, for example, functionality for the EU digital Covid certification of vaccination or recovery, and for a check-in feature – for visits to cafés, for example – was added. Comprehensive information features, such as features reporting on incidence rates, have also been included. As of the end of 2021, the app had been downloaded more than 39.5 million times.

The Enterprise Protection System (EPS), developed by T-Systems, is a smart means of preventing Covid lockdowns. It is suitable for production and logistics operations and for events. The system's innovative technology facilitates early contact tracing, thereby helping to break chains of infection. EPS makes use of smart wearables, such as armbands, that help wearers comply with social distancing requirements, in order to prevent infections. With visual and acoustic signals, the wearables warn their wearers (such as employees) whenever safety distances are not being complied with. Via data-privacy-conformal tracing of risky encounters, the system makes it possible to quickly identify contacts of infected persons, with a view to breaking the relevant chains of infection.

Improving vaccination and verification processes with the help of digital solutions

With the help of smart systems, such as access-management systems and vaccination-capacity monitors, and suitable IT infrastructure, we have supported the establishment of vaccination centers in Germany and helped simplify vaccination processes – and thereby helped implement the country's national vaccination strategy.

Under Covid guidelines, for example, persons wishing to enter business facilities, hotels, events, etc. have to show proof of vaccination, recovery and/or testing. Since the end of 2021, T-Systems has offered a “Validation Service” that enables proprietors of restaurants etc. to check the various digital Covid certificates in use, quickly and with little overhead (staffing, logistics, etc.). We integrate the solution within our customers IT systems, thereby making access processes user-friendly, secure and anonymized (GDPR compliant).

Making it easier for people to work from home

Millions of people in Germany continued to work from home in 2021. We offer our business customers secure solutions that enable their employees to work from home efficiently, and stay connected despite the distance. Our home office configurator helps small and medium-sized businesses, for example, to develop customized solutions for staff working from home. Likewise, our Digital Schutzpaket Business (digital business protection package) keeps sensitive customer data safe.

Working from home offers opportunities, and it presents special challenges. The Deutsche Telekom guide for homeworkers (Homeoffice Ratgeber der Telekom; only available in German) helps companies and their employees deal with the challenges. In short videos, our experts provide helpful tips and explain such things as how to manage and structure home working arrangements in effective, healthy ways.

Protecting employees

At Deutsche Telekom, we have introduced comprehensive regulations for working from home, detailed hygiene concepts, and other support measures, such as free rapid tests, to fulfill our responsibility as an employer. We have taken special precautions for our Telekom-Shop and field employees, who cannot work from home. In addition, in 2021 we offered many courses in our extensive health program online. And we continued “My Health Journey” – a mental health program launched in 2020. Since June 2020, the company's medical service (B.A.D.) has offered coronavirus vaccinations for employees and their family members. This campaign has taken place nationwide, at a total of 87 locations – of which 18 are solely Deutsche Telekom locations. A full 24 200 Deutsche Telekom employees made use of the company's internal vaccination service and received their COVID-19 shots from the company's in-house medical professionals. In December, 2 700 employees received their third vaccination, i.e. a booster shot. We continued to offer this vaccination service in the first quarter of 2022.

Promoting digitalization in schools, and facilitating remote learning

We are also working to promote digitalization in Germany's schools – via installation of fiber optic connections, and via a diverse portfolio of services. Our extensive range of media literacy offerings such as Teachtoday and SCROLLER provides informative content for students and parents.

Smooth operation of online instruction depends on more than just the availability of the right equipment. The equipment also has to be set up and operated properly. Since February 2021, in keeping with this insight, we have been providing 100 schools with a year's worth of free support service, under our "Digital School Service" campaign. The service includes immediate assistance, and user support in connection with apps, tools, and platforms for online instruction and home-schooling.

In addition, and in cooperation with Microsoft, since early 2021 we have been offering schools an extensive package that includes laptops, tablets, and licenses for "Microsoft MS365" software. It also includes service that facilitates trouble-free use of the packages in everyday online school instruction. Schools are invited to test the package, which is modularly structured, at no charge or obligation.

Free entertainment

To make the time people spend cooped up at home pass more quickly, we have expanded our range of free entertainment and cultural programs. On our MagentaMusik 360 streaming platform, for example, we presented numerous concerts and brought their music directly into people's homes. Most of the concerts we offer on the platform become available for streaming within just a few days after the relevant live event, and they stay available for up to twelve months.

Reliable partner during the crisis

We have also helped ease the impact of the COVID-19 crisis on society with a range of further activities. The measures in question have included providing additional data volume free of charge, and establishing a hotline to support nebenan.de, a neighborhood help portal, during lockdowns. In addition, we have donated one million euros to aid organizations that have provided a wide range of community assistance during the pandemic.

In the year under review, we used Digital X, a two-day trade fair on digitalization, as a means of supporting restaurants and hotels in Cologne that have been especially hard hit by the COVID-19 pandemic. To that end, the trade fair, which operated in conformance with coronavirus guidelines, invited its guests not only into large event halls, but also into Cologne's restaurants, bars, and cafés. The event drew over 20 000 participants. At Digital X, 300 global companies presented their solutions for digital transformation and economic and social sustainability, with exhibits ranging from an autonomously driving city shuttle to a 3D scanner for the creation of avatars. Digital X received several international awards, including the Grand Prix and two gold awards, in the prestigious Best Event Awards World (BEA World) competition.

Starting at the end of April 2021, we carried out a campaign, entitled "Our space for your aid", in which we made our advertising slots and spaces available, for one full week, to non-profit charitable organizations such as the "Nunmer gegen Kummer" youth counseling line, Germany's Relief Coalition, and "Labdoo," in light of the fact that they provide aid and assistance that especially large numbers of people need during the pandemic. On and in a total of 1 000 advertising slots and spaces on TV and radio, online media, newspapers, and outdoor advertising, the organizations called attention to the charitable work they are performing during the pandemic. Our campaign was successful: Some 200 million media contacts were generated. What's more, this has had a direct impact on the organizations' work. The organization "Nunmer gegen Kummer," for example, experienced 15-percent growth in the volume of counseling provided via its hotlines, in comparison to the period prior to the start of the campaign. With a total of 550 IT-donation pledges, "Labdoo" can now provide digital education for up to 8 250 children. The effects were also noticeable for "Crew Nation": In the days following the campaign, the number of funding applications it received from event-industry staff more than tripled. Also through the campaign, many seniors became aware of the educational programs of the association "Wege aus der Einsamkeit" ("Pathways for getting away from loneliness") and now plan to take advantage of them. For Germany's Relief Coalition, the campaign provided key support for the coalition's pandemic-related emergency-response measures.

Examples of international commitment

At T-Mobile US, the "Project 10Million" was especially important – since the COVID-19 pandemic forced more than 50 million American schoolchildren to switch to online learning. Hundreds of US school districts were able to get students connected with their schools for free thanks to the initiative. In 2021, T-Mobile worked with school districts, extracurricular programs, and local authorities to offer affordable internet access to 1.2 million students nationwide. In the Oakland Unified School District (OUSD), the percentage of students with internet access was increased from 12 to 98 percent.

In 2021, T-Mobile in the Czech Republic continued its support for people disadvantaged as a result of the pandemic. A total of 500 families were given laptops, routers and free internet accesses. In addition, some 200 tablet computers were loaned to facilities for seniors. T-Mobile Czech Republic also supported the mentoring program "DoToho!," which assists small and medium-sized companies affected by the pandemic. Along with the financial support, the national company in the Czech Republic also provided professional expertise, with T-Mobile employees serving as mentors and trainers at 124 companies, free of charge.

Hrvatski Telekom also continued its commitment in this area in 2021. It provided tablet computers and free internet access to an additional 16 nursing homes in Croatia. In the framework of the "Generation Together" program, seniors were familiarized with digital media, so that they could stay in contact with their families and friends during the pandemic. Also, Hrvatski Telekom in Croatia launched a joint project with Smart Sense, a technology developer.

As a result, special monitors are now measuring indoor air quality, in real time, in three elementary schools and five kindergartens of the City of Dubrovnik. The devices measure CO₂ concentrations, temperature, and humidity, and they are connected via NB-IoT technology. When the air quality drops below certain thresholds, teachers promptly receive acoustic and light signals and can quickly air their rooms, to ensure that the learning environment for their pupils remains safe and healthy.

Slovak Telekom supported healthcare workers, teachers, and students by providing mobile data, technical equipment, and financial aid. Slovakia was hit hard by the pandemic especially in the first quarter of the year under review, and the impacts were felt especially in the country's hospitals. Slovak Telekom responded by providing six months worth of unlimited data allowances for health-care-sector employees, who suffered especially high levels of stress in their "front-line" work during the pandemic. At the same time, the company carried out a campaign to call attention to the vitally important work and sacrifice provided by the health-care workers.

Many national companies continued to allow their employees to work from home, and continued to keep business travel at reduced levels, in order to keep their employees safe. Additional measures aimed at containing the COVID-19 pandemic are described in the profiles of the national companies.

Emergency response during disasters

Extreme heat waves, torrential rainfall and droughts – the sixth report of the Intergovernmental Panel on Climate Change (IPCC) predicts that climate change is going to make events such as these more and more frequent. In 2021, in the countries in which we are represented, we supported regions affected by natural disasters.

Europe: Disastrous floods

In July 2021, heavy rainfall led to a severe natural disaster that especially affected Germany, Belgium, France, the Netherlands, and Luxembourg. Some 220 people throughout Europe died as a result. Areas in the German Länder (states) of Rhineland-Palatinate and North Rhine-Westphalia were especially hard hit. Cities and villages suffered heavy damage, and many residents lost their homes. The telecommunications infrastructure was also heavily damaged. A total of 300 base stations in Deutsche Telekom's mobile network went offline as a result of the storm. In such emergency situations, communications are especially important, however – for organizing assistance, networking with others, and informing family and friends. Here are some examples of measures we carried out in order to help alleviate the situation in the areas hit by the disaster:

- **Restoring communications**

Our technicians worked day and night in order to repair damaged and destroyed mobile and fixed networks and to get emergency replacements up and running. The mobile network was 100 percent restored within one week, and the fixed net-

work was restored to a degree of 90 percent within two months. In particularly hard-hit regions, we are not repairing damaged copper-cable accesses, and are instead installing new fiber-optic networks with fiber-to-the-home (FTTH) accesses. For customers affected by the disaster, we provide LTE or hybrid routers free of charge, for a twelve-month period. With both types of routers, telephony and internet access with unlimited data allowance are included. Customers are not billed for their fixed-network accesses while they are not yet operational. Furthermore, customers receive a simplified special right of termination in cases in which their property cannot be used or lived in for a prolonged period.

- **Rapid assistance on location**

In order to help affected people as quickly and unbureaucratically as possible, our response teams and volunteers distributed some 13 000 power banks, emergency cell phones with SIM cards, internet quick-start kits, routers, and other equipment among the people in the regions hit by the floods. For our mobile customers, we provided 60 days worth of free, unlimited data allowance. To our helpers on location, we also distributed data vouchers. In the interest of providing direct, fast assistance on location, we set up "Telekom Shop" containers and mobile service stations in various regions.

- **Donations for victims**

On July 24, 2021, the German TV channel SAT.1 and the Germany's Relief Coalition conducted a nationwide fundraiser for the victims of the terrible floods. Some 2,000 of our employees volunteered to staff the hotlines for the fundraiser and receive TV viewers' pledges. In total, over 31 million euros were raised. In addition to staffing the donation hotlines, we made a donation of one million euros to Germany's Relief Coalition, in support of its work. Prize money won in connection with the Telekom Team Award – with which achievements of Deutsche Telekom teams are honored – was also donated. The employees in two prize-winning teams donated all of their 40 000 euros of prize money to victims of the flooding.

- **Support for our employees**

Assistance was also provided to employees who were affected by the extreme floods. The assistance included financial support provided by the Postbank Telekom Welfare Service and Deutsche Telekom's social fund. In addition, they, along with volunteer helpers, became eligible for up to five days of paid special vacation. Also, affected employees were invited to make use of the counseling service provided by psychosocial support experts at "SPRECHZEIT" – a hotline that is part of our range of health services.

USA: Hurricane Ida

At the end of August 2021, hurricane Ida caused heavy damage in Louisiana, in the southeastern U.S. Teams of our national company T-Mobile US responded on location, by distributing chargers and phones. Affected persons also received packages with unlimited free calling, texting, and data allowances.

In preparing for disasters, T-Mobile US applies a comprehensive approach. It works closely with the countrys meteorologists, and it watches carefully for any signs of climate-related emergencies. Its network response teams stand ready 24/7, 365 days of the year, to respond quickly in emergencies.

Czech Republic: A tornado

At the end of June 2021, a tornado in the southeastern part of the Czech Republic killed and injured people, and damaged buildings and infrastructure. T-Mobile Czech Republic provided therapists and humanitarian responders with free services and phones for their work. Those affected by the storm were also given free phone service, including calling, texting and data transmission. Also, to help people in the affected area, our national company and its employees donated more than 250 000 euros to ADRA, a charitable organization, and to the VIA Foundation.

North Macedonia: Forest fires

In 2021, North Macedonia experienced severe forest fires. Makedonski Telekom responded with emergency measures that enabled residents in the area to stay connected. In cooperation with the local Red Cross, the national company also made donations to people affected by the fires.

Corporate culture & the workplace

Our corporate culture

A company's culture is its "DNA." As such, a company's culture influences not only its ways of working, but also its very success. A company's success depends primarily on the people who work for the company. We at Deutsche Telekom promote a culture of trust that makes people satisfied and the company successful. We encourage this in several ways – for example, by providing a suitable environment in which our employees feel comfortable and can work effectively. Our culture is shaped by mutual trust and respect, entrepreneurial thinking, and collaborative working. We give our employees room to grow personally and professionally and to make a positive contribution to our company and society through their work. Our corporate culture provides the "guardrails" for this. It is based on our corporate values, which we have formulated in six Guiding Principles. The Guiding Principles are the basis for our cooperation with each other – and with our customers, shareholders, and the general public. Our Code of Conduct, which is founded on the Guiding Principles, makes our Guiding Principles come alive in tangible ways. It defines the rules for our daily work, including both internal and external work.

In September of each year, we celebrate our "Living Culture Day." The Living Culture Day provides an opportunity to reflect on our corporate culture and to make it perceptible for all of our employees. In the year under review, our celebration was dubbed "Passion for the future" ("Lust auf Zukunft"). The topics it highlighted included "good leadership" and "inspiring customers." Also, each year we bestow our Team Award, to honor outstanding teams that uphold our Guiding Principles in their work in exemplary ways. In addition, we invite all employees to take part in an ongoing cultural dialog, in order to help us all integrate our Guiding Principles within our daily work even more effectively. Again and again, this dialog leads to specific measures that make our culture come alive.

A new world of work

The workplace is changing rapidly, and the rate of the change is constantly increasing. Chatbots support customer-service processes, videoconferences take the place of business travel, and artificial intelligence helps out in data analysis. Not surprisingly, employees' job profiles are changing as well. The half-life of knowledge keeps shortening, and core competencies for employees now include a readiness to change, and to learn.

At the same time, employees' expectations with regard to their employers are also changing, in corresponding ways. Employees are expecting employers to offer them more personal freedom, greater flexibility, and less limitation to specific workplace locations.

From such changes, a new balance between trust and responsibility is emerging. Strict controls, and rigid office-time schedules, will become things of the past. Today's competent, committed and entrepreneurially oriented employees are assuming greater responsibility for their work than past employees did. They are also assuming greater responsibility for themselves overall.

As we become the "Leading Digital Telco," the ways in which we collaborate are changing. At Deutsche Telekom, we call the results of this development "New Work." This is about more than simply whether employees work in the office or from their homes. It's also about the essence of our work – about whether it is meaningful, and of use to society, and about how it helps take us, as a company, toward our common success.

Our journey toward a new, more flexible, more intelligent, more individual workplace began at least a decade ago. Rather than focusing on structures, this journey emphasizes attitudes and relationships – including relationships among ourselves and with our customers – and is directed at a changed understanding of what leadership should be. Such topics are also a central focus of our corporate culture, which we are developing jointly, as a Living Culture.

This culture supports a transformation process that calls on employees to be willing to change and acquire new skills. This, in turn, presents challenges – challenges that we are addressing with comprehensive skills management and precisely tailored training options.

Currently, and also as a result of the pandemic's impacts, the framework for our collaboration is defined by five pillars. We invite and expect our employees, in the context of their teams, to help flesh out the specific details of how this framework is applied. With this approach, we can combine the best of both worlds – the physical and the virtual worlds, or the analog and digital worlds.

To this end, and working in cooperation with the Group Works Council, we have produced the "New Work" manifesto. It serves as the basis for interaction characterized by trust and respect.

Our "Digital@Work" program facilitates our employees' collaboration – with suitable tools and technologies. Also, in the year under review, we began making the new world of work visible at many of our German locations by redesigning our office spaces. We want our offices to invite and inspire employees to collaborate, interact, and carry out hybrid meetings and workshops.

Throughout our locations in Germany and abroad, we are setting up spaces for digital collaboration and creativity in which employees can work together, and interdepartmentally, on projects.

Digital collaboration

For effective collaboration in the new world of work, simple, fast and virtual communication is a fundamental requirement. In the pandemic year 2020, the volume of online conferences more than doubled. In 2021, this trend has continued with an increase to over 2.1 billion conference minutes. The number of accounts of telephony and messaging services have not been reported since 2021.

For global exchange, we also use our internal social network "You and Me UNITED" (YAM UNITED) - under the name "You and Me" until 2020. In the reporting year, 138 071 users were registered here.

	2017	2018	2019	2020	2021
Conference minutes (in mio.)	763.73	835.10	883.88	1 787.15	2 153.52
You-and-Me UNITED (Number of created user profiles)	121 876	125 670	133 306	130 788	138 071

Corporate culture and the new workplace at T-Systems

The #peoplemakeithappen cultural transformation

In 2021, a great many of the goings-on at T-Systems had to do with "cultural change." In the framework of a "culture month" at the beginning of the year, the companys top management invited all employees to take part in an open dialog about "respect," "leadership," "behavior patterns" and "culture." The findings, wishes, and expectations of employees that emerged from this process then entered into the design of a new, six-month program for managers. The program was aimed especially at mid-level managers, with training to prepare them for their role as models for the cultural transformation.

Also, the first digital "T-Systems Summer Games" were held, in June 2021. Their purpose was to reinforce the companys sense of community, worldwide – and to take the place, in this regard, of the team meetings that were no longer possible due to the pandemic. For the Games, employees from throughout the world competed in teams, in fun events calling for them to solve strategy problems and test their intercultural knowledge. Those employees who showed a particularly strong commitment to T-Systems transformation were then honored in a "People Week" that took place in September 2021.

T-Systems launched its "#peoplemakeithappen" cultural initiative in 2018. #peoplemakeithappen is aimed at the thought and behavior patterns of the companys employees and managers. It is about delegating responsibility, and engaging in collaboration and self-reflection, on the basis of a common mindset.

The coronavirus pandemic has changed the T-Systems workplace, by giving it a stronger focus on virtual working and communicating. The crisis has shown just how important – and strong – our corporate culture is. During it, management has remained in con-

tact with the companys workforce via virtual employee events. The subjects these have covered have included T-Systems strategy and raison d'être, its culture, and the topics of physical and mental health.

"We.Work.New."

With its "We.Work.New." program, T-Systems has made use of the COVID-19 crisis as an opportunity for change. Also, its new hybrid work concept, "activity-based work," combines the best of two worlds – the home office and the regular office. The basic principle for the concept is "What you do determines where and how you do it." Teams should have the freedom to decide what activities should take place, and where. The companys offices have also been changed in keeping with the new modes of working. In September 2021, the company opened ten "Meet & Connect Hubs" in Germany, and it reduced its number of standard-desk work areas used via a desk-sharing arrangement. Individual offices have been done away with completely – even for the companys top management. Employees in all company areas sit in a "booking zone" – meaning that instead of having permanently assigned offices, employees book desks flexibly, as needed. This arrangement provides the ideal basis for smooth, interdepartmental collaboration. State-of-the-art hardware and software, and new tools for international collaboration, are rounding out the transformation.

Agile transformation

In 2021, the move toward agile work at T-Systems progressed further, with the company making the necessary preparations for becoming agile throughout. Currently, flexible work accounts for about 90 percent of the organizations work. Due to the COVID-19 pandemic, much of this flexible work is being carried out in employees home offices. Many customer projects are already being carried out via agile-work arrangements. Also, in the year under review, T-Systems introduced the method "Objectives by Key Results" (OKR) – a method for management on the basis of common goals. This development is being coordinated by Agile:Hub, whose staff includes experts for agile work. Among other things, they design training formats and support knowledge-sharing among the teams. A next step, slated for 2022, will take the development to the "Enterprise Agility" level.

Flexible working models for a wide range of needs at Deutsche Telekom in Germany

In order to help our employees achieve a good work-life balance, and avoid burn-out, we explicitly promote flexible work models. We have set out this orientation in our Group policy "Diversity, Equity and Inclusion". The options we offer our employees in Germany range from flexitime and part time to lifetime work accounts. This has paid off especially during the COVID-19 pandemic, in that our employees have been able to structure their working hours flexibly and adapt to the new challenges posed by the pandemic.

Promoting part-time work

We support the establishment of part-time jobs and guarantee employees in Germany the possibility to return to their original weekly working hours. The following policy applies for our employees: Employees are permitted to reduce their working hours as they wish, subject to operational requirements, and they may terminate their part-time work at any time, even earlier than originally

planned. About 14 percent of employees covered by collective agreements, and 18.2 percent of civil servants, are making use of part-time arrangements (as of Dec. 31, 2021). In addition, a total of 29 executives are working part-time (as of Dec. 31, 2021).

Job sharing

In job sharing, two employees share one full-time position. They can flexibly divide up their total working hours, tasks, and areas of responsibility. The arrangement is also available for management positions. In such cases, the managers collaborate closely and share responsibility for their team and its success.

Mobile working

Thanks to modern communications technology, in many different fields we can work when and where we wish. Mobile working arrangements are an established part of the Deutsche Telekom workplace, and such options are enshrined in the collective agreement on mobile working that we concluded with the union ver.di in 2016. Employees are free to choose their work locations; they do not have to confine their work to a designated room in their apartment or house, as is the case with teleworking. Needless to say, they do not have to be available to the company at all times, meaning they do not have to stay reachable after working hours, during vacation or on weekends. Mobile working is also possible in many national companies.

Part-time training

Under certain circumstances, apprentices at Deutsche Telekom can take their training on a part-time basis. Also, dual students, including students who are single parents, have the option of completing their study program on a part-time basis.

Remaining in contact during parental leave

Via our "Stay in contact" parental-leave process, we give employees the option to stay in contact with the company and their colleagues. By doing so, they stay abreast of what's happening at Deutsche Telekom, and they continue to feel connected to their team. Also, their re-entry into the workplace becomes easier to plan. Via the "Stay in contact" online network, they can discuss and learn about topics such as work-life balance and re-entry into the workplace.

Lifetime work accounts and leave of absence

The majority of employees in Germany can set up a long-term work-time account, called lifetime work account, in order to implement an individual life plan. Such accounts can be used to accumulate work-time credit by means of gross deferred compensation or by conversion of up to 80 overtime hours per year. In total, 14 276 employees, and 671 civil servants, are making use of this option (as of Dec. 31, 2021). The credit can be used for a sabbatical, earlier retirement, or a higher part-time salary. Employees also have the option of taking unpaid leave – for example, in order to care for their children, or to accept paid work with a different employer.

Leave of absence for personal reasons

Employees have the option of requesting leave of absence at short notice for special reasons, after consulting with, and obtaining the

approval of, their manager. This option is available, for example, for employees who need to serve as caregivers for family members or to take care of sick children. In such cases, during the individually agreed period, employees are exempt from performing their work and their salary is suspended within five days at the latest. All other aspects of the employment relationship remain unaffected.

Time off for education

Time off for education is based on the current offer of unpaid leave and makes it possible for employees in Germany to take up to four years off for a degree course or a doctorate. The employment contract is put on hold during this time and the employee does not receive any pay. Civil servants employed at the company can also take advantage of this offer in the form of a "leave of absence without pay for reasons of private interest." This time does not apply to their pension and no remuneration is paid.

The 80/20 model

Since 2017, we have been using the 80/20 model to give our employees the opportunity to spend part of their working time on projects outside of their usual remit. This allows them to work with teams from other departments. Use of the model is voluntary and is tied to a specific Group project.

Phased retirement

We offer phased retirement for employees who are 55 or older. This offer does not apply only in Germany; it is available to our employees throughout the Group. Separate regulations apply to employees and to civil servants. There are two options for phased retirement: the block model or the part-time model. During the year under review, a total of 1 985 phased retirement contracts were concluded with employees, including employees covered by collective agreements and employees not so covered. Among civil servants there were 580 such contracts (as of Dec. 31, 2021).

Underlying regulations

These working time models are based on the laws and regulations applicable in the individual countries. Working hours at Deutsche Telekom in Germany are governed by collective agreements and works agreements. We document the daily working hours of our employees covered by collective agreements by means of electronic time recording in MyPortal or via the EmployeeApp ("MitarbeiterApp"). This guarantees compliance with legal and company regulations; for example, it ensures that the weekly working hours for a specific flexitime balancing period are complied with. At a large corporation like Deutsche Telekom, regulations are diverse and cannot be fully specified for all the Group companies.

FreiRaum – More free time, thanks to more-flexible work-time arrangements

In the last round of collective bargaining (2021), the ver.di union and T-Systems reached agreement on a new, optional working-time model, which we now offer to all employees working for T-Systems International GmbH. Via the model, entitled "FreiRaum," employees who work a five-day week can receive an additional 12 days off per calendar year. For employees who use this option, the employees salary is reduced proportionately, and T-Systems provides a partial compensatory wage compensation. FreiRaum,

which complements existing flexible working-time models, thus gives employees more time to invest in their quality of life. The new model is scheduled to run until the end of 2022. Some 300 employees made use of the model in the year under review.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 404 (Training and Education)

Achieving a good work-life balance at Deutsche Telekom

We offer our employees attractive options and services to help them achieve a better work-life balance. Our efforts in this area include providing flexible family-friendly options, carrying out effective health promotion and establishing work-life balance as a permanent part of our corporate culture. In Germany, the range of options and services includes the following:

- Childcare services: At a number of locations with large numbers of employees, we provide childcare facilities, holiday childcare programs, and parent-and-child offices.
- Free advisory and referral services: Through our cooperating partner “awo lifebalance GmbH” and an online service, we support our employees in the areas of childcare (including emergency care), caregiving for family members, and household services.
- Employee networks: Through various networks, such as the “Fathers Network” and “Stay in contactT,” we provide tips on balancing work and family life, as well as contacts and discussion forums.
- Family fund: We support employee projects that help employees improve their work-life balance.
- Social fund: We provide fast financial aid to employees who find themselves in financial difficulties through no fault of their own. We also offer subsidies for recreational activities for severely disabled children.
- Welfare service: Through this foundation, we support employees in emergency situations, such as deaths in the family, serious illness, social crises, and natural disasters. For example, we offer special courses for women suffering from cancer. We also provide assistance for employees children who are studying at a university.
- Recreation Service: Working through this service, we offer our employees access to reasonably priced vacations at attractive destinations in Germany and Europe – for example, at one of our 18 company-owned resorts.

Our complete range of options and services for helping employees achieve a better work-life balance at Deutsche Telekom in Germany can be found at www.telekom.com/work-life.

Work-life balance is also promoted at our national companies. In addition to general options such as mobile-working and flexitime arrangements, individualized arrangements and measures are offered, such as the “SmartWork” model available at our national company in Croatia. It enables all employees to individually structure their working environment and working conditions. In Hungary, we are also committed to maintaining a healthy work-life balance by reducing overtime or promoting flexible working hours. Employees can also receive support upon re-entry into working life following parental leave. In the year under review, employees with children under the age of 14 received temporary leave, due to the COVID-19 pandemic, in cases in which they were unable to organize after-school childcare. In Austria, there are company childcare facilities and holiday childcare programs for the employees’ children. The OTE Group in Greece offers summer camps during the holidays, with sports, entertainment, and creative activities for children.

In 2019, T-Mobile US established the “TechX Returnship” program, which assists employees in returning to the workplace following leaves of absence. Initially, it was aimed solely at women in tech-centric fields who had taken leaves of absence in order to provide care to family members or stay at home with their children. In 2020, the program was opened to veterans, in recognition of the difficulties that veterans often encounter in entering (returning to) the civilian workplace following their military service. From November 2020 to May 2021, a total of 23 women and three men have completed the full-time, paid, return-to-work program. The program can be considered a success in that about 92 percent of that group found subsequent employment with T-Mobile US. In 2022, the program is being further expanded, with a focus on people who, during the pandemic, have been forced to leave the workplace due to factors such as a lack of childcare for their children. A total of 37 positions, in the areas of technology, consumer markets, human resources, and finance, need to be filled.

Employee relations

Our approach to shaping employee relations

We pursue dialog-oriented employee relations throughout the Group and engage in trust-based, constructive collaboration with employee representatives and unions. Our works councils, general works councils, and Group Works Council represent the interests of our employees at our Group in Germany.

Our partner representing the employees' interests on a European level is the European Works Council (EWC). We also have executive staff representation committees and disabled employee representatives at the unit, company, and Group levels.

As the underlying laws and contracts vary from country to country, codetermination matters are managed locally together with trade unions and employee representatives. Group management is involved in all major issues as a matter of principle.

We have set Group-wide standards for managing employee relations. The standards have been formalized in our Guiding Principles and in our Group's Employee Relations Policy (Employee Relations Policy). Comprehensive information about compliance with human rights at our Group is provided in the section human rights and on a separate page under "#TAKEPART sustainably."

Dialog and cooperation with employee representatives

During the year under review, and in Germany, the company concluded 115 collective agreements with the union ver.di. By bringing collective bargaining rounds to a successful conclusion, we gave employees covered by collective agreements security in the COVID-19 crisis and sent a clear positive signal in economic terms. As part of harmonizing remuneration systems at the Group, we also agreed collective bargaining provisions for a global, uniform job architecture.

Responsible collective bargaining plays an important role and has a long tradition at our company. The percentage of employees covered by collective agreements is published in the non-financial statement in our annual report.

Constructive dialog

In 2021, we continued our constructive dialog with our works councils. As the underlying laws and contracts vary from country to country, codetermination matters are managed locally with trade unions and employees' representatives. Group management is involved in all major issues as a matter of principle. Relevant information is available in the annual report.

Reporting against standards

Global Compact

- Principle 3 (Uphold freedom of association and the right to collective bargaining)

Employee Relations Policy

The Group-wide "Employee Relations Policy (ERP)" sets out twelve core elements describing what Deutsche Telekom stands for worldwide as an employer. It outlines our commitment to trust-based collaboration with employee representatives, and it covers topics such as employee health, fair pay, and a ban on discrimination. The ERP is a framework that employees throughout the Group can refer to. Its aim is to enable them to contribute individually to the company's goals and enhance shareholder value. The framework refers to our "Code of Human Rights & Social Principles" and explains which tools we use to ensure compliance.

In 2020, we revised and updated the ERP and had it approved by the Board of Management in December. The basic character and core content remained unchanged. In a move designed to address changes in the workplace and in our processes, we have added topics such as digitalization, freedom of speech and virtual working, however. The new version of the policy addresses the following topics:

- Values
- Recruitment and development
- Responsible management of organizational change
- Healthcare, safety, and sustainability
- Remuneration and recognition
- Work-life balance
- Virtual working
- Leadership
- Diversity
- Ban on discrimination
- Commitment and communication
- Collaboration with employee representatives

We monitor compliance with the ERP as part of a regular review process. If a review indicates that our voluntary commitments are not adequately implemented, we follow up on these indications and initiate corrective measures. We publish reviews of the reports of our national companies on our Group portal, under "Responsible Employer".

Reviewed: Employee relations at our national companies

What progress have the national companies been making in implementing our Employee Relations Policy? We examine this issue by means of special reviews. Two to three national companies are subject to such a review each year. They use the results of the review to further improve their relations with employees. The reviews also help us conduct a Group-wide assessment of employer/employee relations and any human rights risks involved in our business activities. Due to the COVID-19 pandemic, in 2021 we were again able to review only one company. In this case, the company was the OTE Group in Greece. The results of the review are available on our website.

If necessary, we formulate additional measures, including a “Human Rights Impact Assessment and Engagement,” a process for estimating the actual and potential effects of business activities on human rights. The process also assesses the ability of the national company to prevent, mitigate, or eliminate these negative effects altogether. In 2021, due to COVID-19 pandemic we concentrated on our entrepreneurial due diligence obligations in our supply chain, and we carried out a “Human Rights Due Diligence” review on all processes and results to date. We are analyzing the relevant findings internally, and we will use them to develop additional, preparatory measures designed to ensure compliance with the provisions of the Supply Chain Act (Lieferkettengesetz) that will apply as of 2023. We will publish the results in detail on our website. Since 2019, we have also been holding local workshops at our national companies to provide training and raise awareness about human rights issues.

Fair pay and benefits

We offer our employees competitive, performance-based pay oriented to the relevant national labor market. Our remuneration policies are structured to guarantee equal pay for all employees; they do not discriminate.

With our “Global Compensation Guideline” for executives, our collective agreements and other collective bargaining regulations, we ensure a transparent and gender-neutral payment structure and remuneration for our employees at the Group. Under this guideline, pay is based on the degree of difficulty and complexity of the specific task, and not on the individual person. We thereby ensure that remuneration at the Deutsche Telekom Group is based on the type and scope of the work performed and the requirements of the relevant position, irrespective of diversity aspects such as gender, age, and nationality. In addition, we offer our employees additional compensation, such as contributions to the company pension scheme, and subsidized share purchasing in the framework of our “Shares2you” program.

As part of our Group-wide employee survey, we regularly ascertain how satisfied our employees are with their pay. We also conduct other surveys on specific topics and in specific units.

In 2018, we compiled a report on equal pay and equality for the first time in order to comply with the new legal requirements of the Act to Promote Transparency of Pay Structures. It is published every five years. The latest report is available as an annex to the 2017 management report.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405–2 (Diversity and Equal Opportunity)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)

Salary development at Deutsche Telekom in Germany

In the 2020 collective bargaining round, a salary increase in two steps was agreed for roughly 60 000 employees covered by collective agreements at Telekom Deutschland, Group Headquarters, and Deutsche Telekom IT. The first increase took effect on July 1, 2020. The second followed on July 1, 2021. The increase covers a total of 5 percent in pay groups 1 to 5, 4.8 percent in pay group 6, and 4.6 percent in pay groups 7 to 10. The collective wage agreements have a term of 24 months. They may be terminated for the first time on March 31, 2022.

Two salary increases of 40 euros on July 1, 2020 and July 1, 2021 respectively were agreed for apprentices and dual students. Subsistence allowance for apprentices not living with their parents increased by 20 euros to 270 euros.

Salary development and remuneration systems at T-Systems in Germany

In 2019, we began to gradually harmonize regulations for variable remuneration at T-Systems. As a result of the 2018 collective bargaining round, variable remuneration in non-sales was eliminated effective January 1, 2021. A switch was made to fixed remuneration. In addition, negotiations on general pay increases were due to take place at the beginning of 2021, after the termination of the collective wage agreements on December 31, 2020.

The 2021 collective-bargaining negotiations occurred during an important phase of T-Systems’ transformation, a phase in which we are establishing ourselves as a provider solely of IT services, including as a European provider of digital and multi-cloud services. In light of the fact that the COVID-19 pandemic severely disrupted T-Systems’ further development during the 2020 financial year, the negotiating parties agreed to undertake further wage negotiations in the fourth quarter of 2021.

For the 2021 financial year, the negotiating partners agreed to address the impacts of the COVID-19 pandemic by providing a one-time special payment of 1 000 euros to T-Systems’ employees subject to collective agreements. In addition, individual annual salaries at the companies Deutsche Telekom Security GmbH and T-Systems Multimedia Solutions GmbH will be increased by 2.0 percent with effect as of July 1, 2022. Also, T-Systems has agreed to continue refraining from imposing any compulsory redundancies until December 31, 2022. With this move, the social compatibility of the company’s transformation is assured for an additional year. At the same time, in 2022 T-Systems is increasing the number of junior staff offered permanent employment to a total of 200.

Employee satisfaction

Our employee survey

Every two years we ask our employees across the Group (not including T-Mobile US) how satisfied they are with their work at Deutsche Telekom. This helps us to identify weaknesses and eliminate them. We use the responses to calculate the commitment score, a gauge for employee satisfaction.

In the framework of the 2021 employee survey, the questionnaire and the pertinent measurement model were revised, and updated on the basis of feedback and the latest scientific findings. The changes included changing the scale length for the commitment score (formerly, “commitment index”) from “1 through 5” to “0 through 100.” In addition, the procedure for calculating the commitment score has been revised in the area of responses to questions in the categories of, “employer attractiveness,” “brand identity,” and “inspiration.”

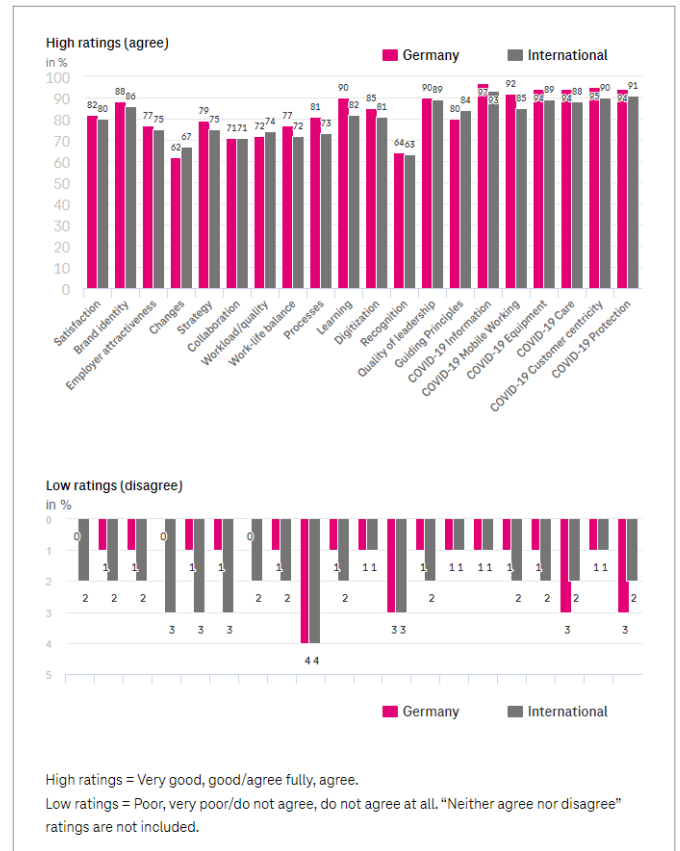
A total of 80 percent of all employees throughout the Group took part in the 2021 employee survey. This participation percentage was a record, corresponding to more than 117 000 employees throughout the Group. It demonstrates clearly that our employees truly care about our organization – and that they are passionate about contributing to our success. The commitment score amounted to 77 points.

The topics on which our employees were surveyed included sustainability issues, and the results in this area were gratifying: 84 percent of those surveyed stated that they identified with Deutsche Telekom’s environmental and social commitment. A total of 83 percent believe that Deutsche Telekom acts responsibly towards the environment and society. Both figures represent an increase of seven percentage points on the 2019 survey. With the employee survey, we also determine the Group-wide health index. Further information about this is available here.

Twice a year: The pulse survey

In addition to our employee survey, we also carry out a semiannual pulse survey to gauge employee satisfaction. The last pulse survey, carried out in May 2021, saw a 77 percent response rate among employees.

In our Group-wide pulse survey of May 2021, we included – as in the two surveys carried out in 2020 – a special survey on the COVID-19 pandemic. An improvement was seen over the already good results of the initial surveys in this area. Once again, we learned that our employees felt very well informed by the company and had access to the necessary equipment and tools to be able to work properly. They were also very satisfied with Deutsche Telekom’s dealings with its employees and customers.



Explanations of questions asked:

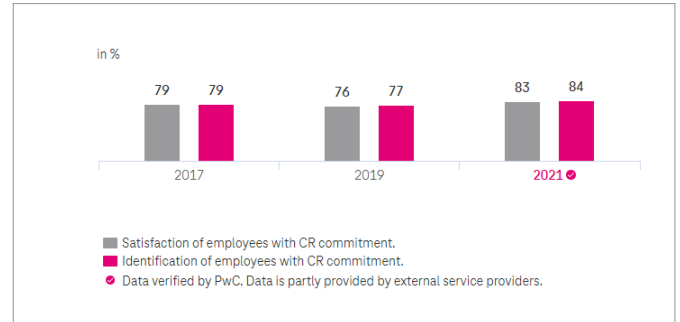
- Satisfaction = How do you feel in the company?
- Employer attractiveness = I would recommend our company as a great place to work.
- Changes = I can understand the changes in our company.
- Strategy = I can clearly explain to others the strategy of Deutsche Telekom.
- Collaboration = In my experience, we all work together as partners at Deutsche Telekom in the interests of the Group’s success.
- Workload/quality = In my team, the workload and quality requirements are consistent with one another.
- Work-life balance = The current working hours allow a good balance between private (family/leisure act.) and job-related interests.

- Processes = Processes and procedures allow me to effectively meet my (internal and/ or external) customers needs.
- Recognition = Considering all my efforts and achievements, I feel that I have received the appropriate amount of recognition at work.
- Guiding Principles = I feel that the Guiding Principles are reflected in my day-to-day work.
- Learning = Our company supports innovative learning formats and offerings.
- Digitalization = I feel that digital platforms/tools support dialog, networking, knowledge sharing, and collaboration at our company.
- Quality of leadership = My supervisor acts with integrity and walks the talk.
- COVID-19 Information = I feel well informed about the impact of the coronavirus (COVID-19) pandemic on our company and the relevant safety measures.
- COVID-19 Mobile working = I can do my work, also remotely (if applicable), in an effective manner.
- COVID-19 Equipment = I have access to the necessary equipment and the tools needed to work.
- COVID-19 Care = My company cares about employee concerns throughout the coronavirus (COVID-19) pandemic.
- COVID-19 Customer centricity = I am satisfied with the way our company reacted during coronavirus (COVID-19) pandemic towards our customers.
- COVID-19 Protection = I have the necessary protective equipment and access to disinfectants to carry out my work

Employee identification with ESG KPI “CR commitment”

We use the Employee Identification with ESG KPI “CR commitment” to determine the degree to which our staff identify with, or how satisfied they are, with our CR commitment. This is based on the Group employee survey (excluding T-Mobile US), which we conduct every two to three years. The last survey has been conducted in 2021. The vast majority of our employees believe that Deutsche Telekom acts responsibly towards the environment and society, and 84 percent identify with our commitment.

Our ambition: increase KPI



Reporting against standards

German Sustainability Code

- Criterion 7 (Control)
- Criterion 14 (Employee Rights)

Global Compact

- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)

Satisfaction and commitment score

As measures of employee satisfaction, we collect the satisfaction rate and the engagement score. We base this on the employee survey carried out every two years and monitor how effective these measures are through the half-yearly pulse survey. This allows us to continuously analyze and optimize our processes. It gives us the opportunity to continually improve employee satisfaction. The Group-wide satisfaction rate of our employees rose to 90 percent in the year under review. The engagement score of the 2021 employee survey shows a value of 77 on a scale of 0 to 100 at Group level. In the 2019 survey, the score (formerly “engagement index”) was displayed as an average value on a scale of 1 to 5 and achieved a value of 4.0, which corresponds to 80 points after conversion to the new scale. The engagement score thus fell by three points in the reporting year compared with the last survey.

Satisfaction rate	2018	2019	2020	2021
Germany	81 %	85 %	90 %	91 %
International	82 %	82 %	87 %	89 %
Group (total)	82 %	83 %	89 %	90 %

Commitment-Score, scale of 1 to 100 ^{a)}	2018 ^{a)}	2019	2020 ^{a)}	2021
All employees	4.1	4.0	4.0	77 ●
All managers	4.5	4.4	4.4	86
Employees excl. managers	4.0	4.0	4.0	76

The calculated values are taken from the pulse and employee survey results current at the time. The most recent pulse survey was conducted in May 2021, the most recent employee survey were conducted in November 2021.

^{a)} From prior year's employee survey.
^{b)} Commitment score determined on the basis of the employee surveys carried out in 2021, 2019, and 2017. In 2021, we changed from a scale of 1 to 5 for the commitment score (previously the “commitment index”) to a scale of 0 to 100.

● Data assured by PwC.

Diversity

Our approach to diversity and equal opportunity

Diversity makes us strong

More than 200 000 people work at Deutsche Telekom – and no two of those people are alike. Every one of those people is unique, in their own way. This diversity is our strength.

For us, diversity means offering our employees numerous opportunities to grow professionally and to develop individually – regardless of their age, ethnic background and nationality, gender and gender identity, mental and physical abilities, religion and world view, sexual orientation or social origin. We are clearly committed to diversity and have a Group-wide approach for upholding that commitment. It is based on our “Diversity, Equity and Inclusion” Group Policy (formerly, “Diversity Policy”), our six Guiding Principles, our Employee Relations Policy and our policy statement “Code of Human Rights & Social Principles.” We are also a founding member of the corporate initiative “Diversity Charter,” and we aim to promote and capitalize on diversity both within and outside of the company.

In 2021, we proclaimed March our “Diversity Month.” Throughout that entire month, and on a worldwide basis, we raised managers’ and employees’ awareness about various diversity issues, and invited their participation in our efforts. With one voice, the Board of Management of Deutsche Telekom AG called on employees to take the time to learn from one another and to create a more inclusive environment. Employees were invited to attend a range of presentations, on subjects such as antiracism, visibility of transgender people, and analysis of the gender-specific pay gap. The presenters included employees from Germany, Hungary, and the United States, along with speakers from outside the company – such as a queer refugee now in Germany. In addition, employees were invited to take an active role in events as “#AIHack4Mobility” and the “Female STEM Award.” Campaigns such as the #JerusalemDanceChallenge, with more than 100 participants, from a total of more than 20 international Deutsche Telekom locations, reached more than 43 000 people via social media.

We have been experiencing many changes since 2020 in particular, via the global pandemic and digitalization – and including changes in both the workplace and in society. As a result, in 2021 we revised our existing Diversity Policy, and adopted the “Diversity, Equity and Inclusion” Group Policy. The purposes of this change are a) to highlight the ambitions that we as a company have in promoting Diversity, Equity and Inclusion (DE&I) and b) to expand our gender-diversity focus into other dimensions – such as health conditions and sexual orientation. We are working hard to ensure that all people receive the same opportunities, regardless

of their personal circumstances. In December 2021, we launched the internal campaign “Connected As One,” as an introductory measure. We want to encourage all employees to enter into dialog with their colleagues, and we invite all employees to become involved in relevant activities and networks. At the end of 2020, we established an international diversity network, in cooperation with more than 30 other companies, in order to promote exchange of best practices. With this cooperative effort, we aim to highlight diversity and equal opportunity issues even more strongly, including at the global level. Our goal is inclusion for everyone without any type of discrimination. The Group Policy is also available in a “simplified German-language” version, and in a special version for the sight-impaired.

Violations of our Guiding Principles and corporate values can be reported at any time to our anonymous whistleblower portal “Tell me!”, to our threat-management unit, and to our Contact Point for Human Rights.

Right during the process for hiring new colleagues, we emphasize diversity and consider options other than just traditional educational and life paths. Good examples of such options include our entry-level training scheme (only available in German) for disadvantaged young people and our part-time training program. Also, students, including students who are single parents, have the option of completing a dual study program on a part-time basis. To ensure that all employees can make the best-possible use of their abilities, we support employees’ work-life balance with an extensive Work-Life Portfolio – with options such as family caregiver leave, lifetime work accounts, time off for education, job-sharing, mobile working, and working from home.

Diversity in figures

People from some 150 countries work successfully together at Deutsche Telekom. The average age of our employees, throughout the Group, is 41.8 years. At the end of 2021, 14 percent of employees covered by collective agreements and 18.2 percent of Deutsche Telekom civil servants throughout Germany were working part-time.

All in all in the year under review, 35.7 percent of our total workforce were women. We have a particularly strong commitment to gender equality, and we have made it a priority for more than two decades. One of our central goals is to increase the share of women in expert and managerial positions; by 2025, we want to have women in at least 30 percent of our leadership positions worldwide. With regard to our legal entities in Germany, we have already achieved this goal in our Supervisory Board (as of Dec. 31,

2021: 42.2 percent) and in the Board of Management of Deutsche Telekom AG (as of Dec. 31, 2021: 37.5 percent). Our mid-level and upper-level management positions in Germany are now occupied by women to a degree of 24.5 percent and 18.8 percent, respectively (as of Dec. 31, 2021). Worldwide, the womens share of our management positions is 27.3 percent (as of Dec. 31, 2021). We have enacted various measures in order to achieve our defined goal of 30 percent.

7.7 percent (as of Dec. 31, 2021) of our employees in Germany are disabled, putting us well over the statutory quota of five percent. More than one percent of our apprentices and dual students in Germany are young people with disabilities – that figure, in comparison to the total share of young people with disabilities in our society, shows that we train above-average numbers of young people in this segment as well.

In 2021, we presented the internal company Inclusion Award from the Group Representatives for the Disabled for the fifth time. This award honors internal company projects that were carried out last year with the aim of supporting employees with disabilities, and helping to retain them in the company.

Recognition for our achievements

In 2021, we received the “equal-pay check” (“eg-check”) certificate of the German Federal Anti-Discrimination Agency for a second time. The certificate process analyzes and highlights mens and womens salaries for work that is comparable or of equal value. Salaries at the company are based solely on the type of work being performed. Aspects such as gender, ethnic background, and sexual orientation do not factor in at all. Also in 2021, we again earned first place, among DAX-listed companies, in the BCG Gender Diversity Index. The criteria for the honor included the share of women, and the relevant remuneration ratio, on our Board of Management and our Supervisory Board. In addition, we were included in the Bloomberg Gender Equality Index (GEI), with top marks. The Index tracks the performance of listed companies that have committed themselves to transparency in use of gender-specific indicators. The GEI measures and evaluates gender-equality performance in a total of five areas: Female leadership and talent pipeline; equal pay and gender pay parity; inclusive culture; anti-sexual harassment policies; and pro-women brand. In addition, we were again honored as one of the best companies for women: In an employer study carried out by the magazine “Brigitte,” looking at aspects such as work-life balance, career advancement, transparency, and gender equality, we were named one of the best employers for women – and received five stars, the highest ranking. Other awards (including both internal and external awards) for commitment in the area of diversity, in the year under review, went to T-Mobile Polska (Telekom Team-Award, “Diversity IN Check” certificate), T-Systems Mexico (Mexican Standard on Labor Equality and Non-Discrimination) and T-Mobile US (Comparably award for “Best Global Company Culture,” and the Forbes award “Americas Best Employers for Diversity 2021”).

Diversity Charter

The Diversity Charter is an independent economic initiative that is supported by around 4 500 companies and institutions in Germany. Its aim is to create a work environment in which diversity among employees, and their many different abilities and talents, is valued. Such an environment opens up opportunities for innovative and creative solutions. Deutsche Telekom is a founding member of the Diversity Charter association. In addition, a number of our national companies are also members of this initiative – including T-Systems ITC Iberia, and Magyar Telekom in Hungary.

Currently, in an effort in cooperation with the Diversity Charter and representatives of other companies, we are working to refine the Diversity Audit “Shaping diversity” (“Vielfalt gestalten”; only available in German), which has been established in the higher education sector since 2013. The aim of the effort is to adapt the audit to the specific requirements and interests of companies. This will enable companies – including Deutsche Telekom – to use the audit in future to review and refine their own measures in the area of diversity.

Commitment to a larger share of women

We are aiming to increase the share of women on our Supervisory Board and our Board of Management, and among our mid-level and high-level managers. Specifically, we plan to increase the share of women in these areas, worldwide, to 30 percent by 2025. We are implementing numerous measures to this end:

- Our opportunities to achieve a good work-life balance through parental leave arrangements, flexible working hours, and child-care services
- The mentoring program “Child and Career,” for managers, junior managers and expert staff at Deutsche Telekom
- Specifically addressing female talent through cooperative activities and at events
- Filling more leadership positions with female talents
- Promoting the generation shift between male executives due to leave the company in the near future and female junior staff (mentoring)
- Maintaining or increasing the diversity score, also in transformation processes, especially when filling management positions
- Additional support and networking services, such as training courses on unconscious bias; exchanges with Employee Resource Groups; and the “Connected As One” communication campaign for the launch of our revised “Diversity, Equity and Inclusion” Group Policy.

Together with the heads of our segments, we reach agreement on implementation plans for increasing our womens quota. Our diverse range of measures has allowed us to continuously

increase the share of women in management positions – world-wide, from 12.5 percent in 2010 to 27.3 percent on December 31, 2021.

At 45 percent, we have already exceeded our 30 percent target for the Group Supervisory Board. We have also been successful with regard to the gender quota for Supervisory Board committees that has been legally mandated in Germany since January 1, 2016; in this area, at 42.2 percent, we are within the overall average for all legal entities in Germany. With a share of women of 37.5 percent (as of December 31, 2021), the Deutsche Telekom Board of Management also exceeds our own requirements and the legally mandated requirements. However, further efforts are needed to meet the above target for the remaining management positions on the two levels beneath the Board of Management level – the management of the national companies, and the internal supervisory boards in Germany.

We are also working to increase the number of women participating in dual study programs in technical fields. While in 2010 the share of women in these study programs was only 11 percent in Germany, it has meanwhile risen to around 15 percent (as of December 31, 2021).

Networking for success

Our women’s network Women@Telekom helps women reach management positions by providing support and counseling, and facilitating interaction with other women. In 2018, 2019 and 2021, the network organized an AI Hackathon (AI = artificial intelligence), with a view to bringing women together, in diverse teams, for creative, successful tackling of programming challenges. A third AI Hackathon, which was originally planned for October 2020, had to be postponed until March 2021 due to the COVID-19 pandemic. Entitled “#AIHack4Mobility,” it was carried out virtually, with participants from a total of 15 countries. Also in the year under review, volunteers representing the network launched a new talk-show series entitled “Diversi-T Career Talks.” In a total of seven events with Board of Management members and executive staff, they encouraged employees to take on leadership tasks, regardless of their background.

Promoting female STEM specialists

With carefully targeted messaging, we are seeking to attract talented women to our company. As part of this effort, we promote women in STEM subjects and professions (STEM = science, technology, engineering, mathematics). In 2021, for example, we invited female students from around the world to apply for our eighth Womens STEM Award. In addition, we conducted an innovation workshop in the framework of our partnership with Femtec. Femtec, a cooperative effort being undertaken by major companies, the Fraunhofer-Gesellschaft, leading German technical universities, and ETH Zürich, is aimed at finding young female talent for STEM professions and developing it. At the innovation workshop, a group of nearly 30 scholarship holders developed, over a five-month period, a technically innovative, green solution for smart, energy-autonomous cellular base stations. In addition, we are committed to “Global Digital Women,” an international network of women working to increase the percentage of women in digital professions.

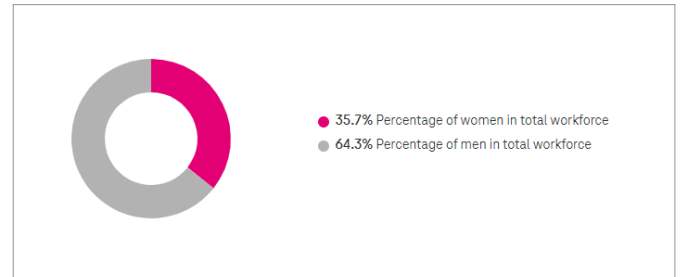
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405–1 (Diversity and Equal Opportunity)

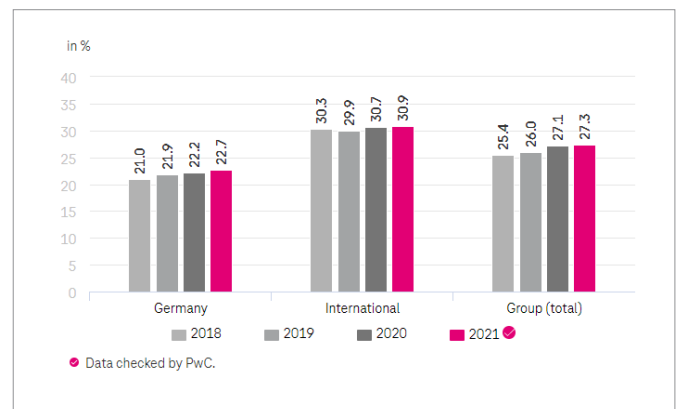
Percentage of women in total workforce

In recent years, we have succeeded in maintaining the proportion of women in the total workforce at over a third and expect a slight upward trend in the future.



Percentage of women in middle and upper management

In 2021, as well, we continued pursuing the goal of achieving 30 percent women in management positions. In Germany, the percentage of women in middle and upper management rose from 22.2 percent to 22.7 percent in 2021. Likewise, the figure for the entire Group increased and now stands at 27.3 percent.



You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405–1 (Diversity and Equal Opportunity)

German Sustainability Code

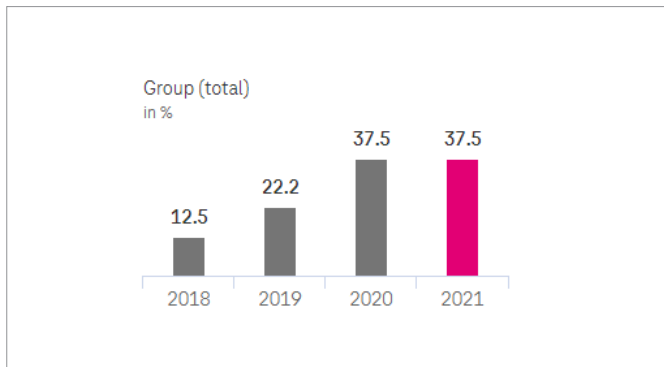
- Criterion 15 (Equal Opportunity)

European Federation of Financial Analysts Societies (EFFAS)

- S10–01 (Percentage of female employees in relation to total employees)
- S10–02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

Percentage of women on the management board

In 2020 we achieved the goal of 30 percent women in management positions. Since November 2020, a third woman has been appointed to the Board of Management. We continue to be at the top of all DAX Groups with a female share of 37.5 percent. Deutsche Telekom is one of the few DAX Groups where women have been part of the Board of Management for several years now. In addition, more and more women are working in international management teams below the Board of Management level.



You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

German Sustainability Code

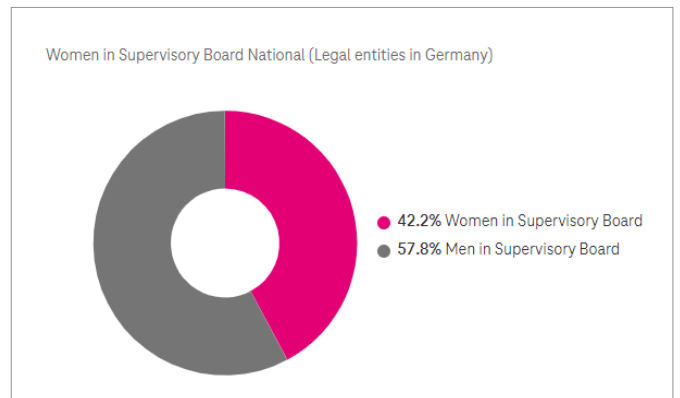
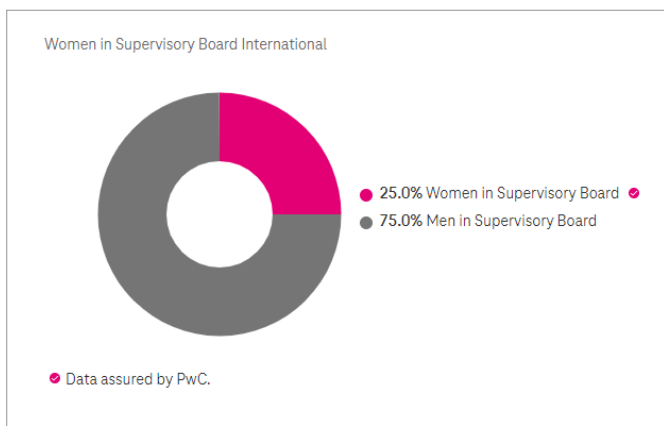
- Criterion 15 (Equal Opportunity)

European Federation of Financial Analysts Societies (EFFAS)

- S10-01 (Percentage of female employees in relation to total employees)
- S10-02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

Percentage of women on the Supervisory Boards

In the supervisory boards of our fully-consolidated European subsidiaries, the percentage of women totals 25 percent (in Germany: 42.2 percent).



You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

German Sustainability Code

- Criterion 15 (Equal Opportunity)

European Federation of Financial Analysts Societies (EFFAS)

- S10-01 (Percentage of female employees in relation to total employees)
- S10-02 (Percentage of female FTEs in senior positions in relation to total FTEs in senior positions)

Employees with disabilities

Deutsche Telekom has already exceeded the prescribed minimum rate of 5 percent of disabled employees for a good many years, so that it heads the list of DAX 30 companies on this count. In 2021, the proportion of severely disabled people at Deutsche Telekom increased to 7.7 percent.

in %	2014	2015	2016 ^{a)}	2017 ^{b)}	2018 ^{b)}	2019 ^{c)}	2020 ^{c)}	2021 ^{c)}
Group (total) in Germany	7,0	7,2	7,5	7,5	7,6	7,6	7,5	7,7

^{a)} excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Cronon AG, Strato AG, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG

^{b)} excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG, HÄVG GmbH

^{c)} excl. Deutsche Telekom Capital Partners Management GmbH, Detecon International GmbH, Deutsche Telekom Clinical Solutions GmbH, Orbit GmbH, operational services GmbH & Co. KG, HÄVG, goingsoft Deutschland, Toli4Europe GmbH

You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

German Sustainability Code

- Criterion 15 (Equal Opportunity)

Global Compact

- Principle 6 (Elimination of discrimination in respect of employment and occupation)

Promoting the diversity of our young talent in Germany

We make targeted efforts to promote diversity among our junior staff. That is why we encourage and support young people from different backgrounds and nationalities. In addition to offering a part-time training program and a part-time dual study program, we also support disadvantaged young people – with an entry-level training internship. Also, school students who have not yet received an apprenticeship position can take part in an internship sponsored by the Federal Employment Agency, and thereby receive the opportunity to become acquainted with an occupation and prepare for regular training in it. The internships run for twelve months, and can in some cases be credited toward a follow-on training program. We also offer young refugees opportunities to take part in entry-level training, regular vocational training or a dual study program. All applicants receive the same opportunities to begin a career with Deutsche Telekom. As of December 31, 2021, 6.52 percent of the apprentices and dual students we employed were of non-German nationality; in total, 49 nations were represented.

More diversity and inclusion for T-Mobile US

In the fall of 2020, the Board of Directors of our national company in the United States adopted a new declaration of intent for more diversity and inclusion. The declaration of intent was also signed by six major American civil rights organizations with whom T-Mobile US plans more intensive collaboration. To that end, T-Mobile US has established a Diversity and Inclusion Council where each of the signing civil rights organizations has a seat. Other organizations are also involved with the council; a complete list is published on the T-Mobile US website. The Council, which has a total of twelve members, advises T-Mobile US with regard to diversity, equity and inclusion issues. In addition, it assists the company in defining relevant priorities and goals, and it provides support for implementation of the companys strategic diversity plan. The Council convened for the first time in 2020. As of 2021, its meetings take place on a quarterly to semiannual basis.

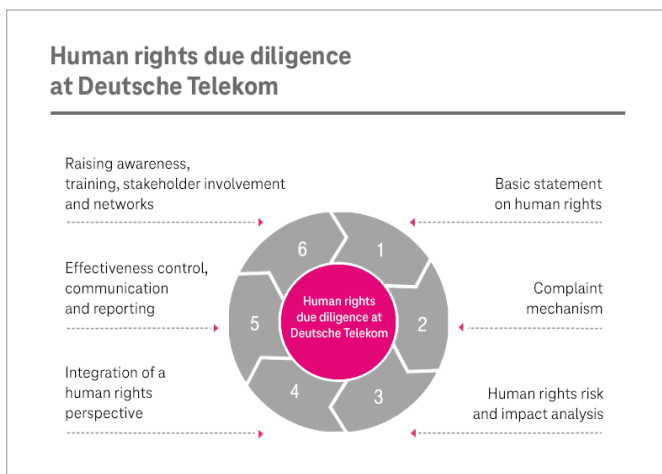
In addition to the new council, T-Mobile US also has an internal Diversity and Inclusion (D&I) network. Participants meet to address current issues, question prejudices, and learn from each other. Tens of thousands of employees – in total, some 36 percent of the companys workforce in the United States – participate in the D&I network. The network includes a group for people with disabilities (Accessibility Community), a multicultural group (Multicultural Alliance), an intergenerational network (Multigenerational Network), an LGBTQI* community (Pride), a network for veterans and active military personnel (Veterans & Allies Network), and a womens network (Women & Allies Network).

T-Mobile US has received a number of awards for its efforts in these areas. In 2021, for example, it received Comparablys “Best Global Company Culture” award and the prestigious Forbes honor “Americas Best Employers for Diversity 2021.”

Human rights

Our approach to protecting human rights

Deutsche Telekom has made an explicit commitment to the UN Guiding Principles on Business and Human Rights published by the United Nations Human Rights Council in 2011. These guiding principles require that we systematically identify the impact our operations have on human rights; prevent and mitigate adverse impacts; and make restitution as necessary. In order to meet these requirements, we have developed an extensive program for the entire Group: We implement the UN Guiding Principles in an ongoing process that includes several interconnected measures and tools (see diagram).



Mission statement on human rights

In several basic policies, Deutsche Telekom commits itself to respecting human rights, individual rights, and freedom of opinion – and to safeguarding the right to conclude collective agreements and to guaranteeing diversity and equal opportunity:

- Guiding Principles
- Code of Human Rights & Social Principles
- Employee Relations Policy
- Diversity Policy

Addressing complaints about possible human-rights violations

We receive complaints about possible human-rights violations via the anonymous whistleblower portal “Tell me!” and our Contact Point for Human Rights, which has been in place since 2013. The Contact Point can be reached via the public email address human-rights@telekom.de. A complete overview of contact options can also be found on the “Tell me!” portal. We look into all tip-offs and reports received and introduce countermeasures as soon as the information is identified as plausible. Here we report on how we handled the reports we received in 2021. In addition, since 2013

we have also taken account of human rights aspects in due diligence activities conducted in the context of mergers and acquisitions.

Human-rights risk and impact analysis

To review the potential impact of our business activities on human rights, we prepare a central Human Rights & Social Performance Report every year. In 2021, all 111 of the national companies surveyed declared in this report that they comply with the principles of the “Code of Human Rights & Social Principles.” We additionally included five joint ventures in the survey for 2021. The report indicated no violations for 2021.

Human rights and employee relations at our national companies

As necessary, we carry out special auditing processes to assess employer-employee relations at our national companies. This is how we monitor implementation of the Group’s Employee Relations Policy. In this context, we also take into account the results provided by our Human Rights & Employee Relations Cockpit. We use the Cockpit to measure progress at our national companies on the basis of five indicators pertaining to human rights:

- Employee satisfaction (source: semi-annual pulse survey)
- Willingness to recommend Deutsche Telekom as an employer (source: semi-annual pulse survey)
- Health rate (source: Health, Safety, Environment (HSE) cockpit)
- Number of employees giving notice (source: HSE cockpit)
- Country-specific human rights risks (according to the “Human Rights Risk Index” of Maplecroft)

Based on each indicator, we classify the respective national company according to a traffic light system. The results are then discussed with the regional managers of the respective national company; if necessary, measures are agreed – such as “Human Rights Impact Assessments” (procedures that assess the actual and potential impact of corporate actions on human rights) or “Employee Relations Policy Reviews” (reviews of compliance with the Group Policy on employer-employee relations).

Controlling the effectiveness of efforts to ensure compliance with human rights in the supply chain

In order to ensure that human rights are also protected within our sphere of influence outside of our Group, we expressly require our suppliers to assume responsibility in this context. To this end, we supplemented our sustainable procurement strategy with supplier management, to improve sustainability performance in our supply chain and ensure respect for human rights. This has included the carrying out of audits of our suppliers. Detailed results of our Group-wide auditing program are available here.

Raising awareness, training, stakeholder engagement, and networks

To ensure that human rights are safeguarded in accordance with our Guiding Principles and our Code of Human Rights, we offer all employees, worldwide, suitable online training courses. These courses cover topics such as sexual harassment, freedom of speech, and “Corporate Digital Responsibility.” We also use internal communication campaigns to provide information on important aspects of human rights, such as the aspect of anti-discrimination.

We are also involved in numerous networks such as the Global Compact and econsense. Together with other companies, policy-makers, and civil society, we can draw attention to existing grievances and press ahead with solutions.

In 2021, we intensified our public communication about our activities.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 412–1 (Human Rights Assessment)

Code of Human Rights & Social Principles

At Deutsche Telekom, protection for human rights is firmly and formally established. In 2017, we revised our Social Charter, and developed it into the foundational declaration “Code of Human Rights & Social Principles”. The Code was adopted by our Board of Management in the same year. This update underscores our commitment to the aims set forth in the Federal Governments 2016 National Action Plan on Business and Human Rights.

With the Code, we also underscore our commitment to

- the International Labour Organization’s (ILO’s) Tripartite declaration of principles concerning multinational enterprises and social policy (MNE Declaration),
- the Convention on the Organisation for Economic Co-operation and Development (OECD),
- the UN Universal Declaration of Human Rights,
- the UN Guiding Principles on Business and Human Rights and the United Nations Global Compact, and
- the UN Code of Conduct against LGBTQI+ discrimination, for companies.

In our Business Principles, our Supplier Code of Conduct, our Guidelines for Artificial Intelligence and our “New Work” manifesto, we also express these commitments, within the framework of our Code of Human Rights & Social Principles. We also welcome Germany’s new Supply Chain Due Diligence Act (Lieferkettensorgfaltspflichtengesetz).

Reporting against standards

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)

Reports and inquiries regarding human rights

Between January 1 and December 31, 2021, we received a total of seven reports related to human rights, through our Contact Point for Human Rights and our “Tell me!” whistleblower portal.

- The inquiries and tip-offs related to topics such as sexual harassment, bullying, and leadership conduct.
- We also received several inquiries related to fundraising and support, which we forwarded to the appropriate departments.
- Of course, all reports were treated as confidential.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 406–1 (Non-discrimination)

Human Rights and Social Performance Report

Deutsche Telekom has made an express commitment to the UN Guiding Principles on Business and Human Rights published by the United Nations Human Rights Council in 2011 and has anchored these principles in its Code of Human Rights & Social Principles.

Social Performance Report

To review possible impacts on human rights, we have operated a central Contact Point for Human Rights since 2013, and we prepare a Social Performance Report each year. In 2021 all 111 fully consolidated companies of Deutsche Telekom state whether they comply with the principles of the Code of Human Rights & Social Principles. We additionally included five joint ventures in the survey for 2021. The report again shows no violations of our Social Charter for January to December 2021.

Whistleblower Portal

Whistleblower portal “Tell me!”: 7 tip-offs relating to human rights issues in 2021.

Assessments & Review

- A “Human Rights Impact Assessment” in 2020 (Identification of further Group-wide challenges in the area of human rights, which necessitate adjustments to individual policies and communication measures. For example, in 2021 we set up a human rights working group and carried out a more in-depth review of the procurement process.): DT Group
- An “Employee Relations Policy” review in 2021: OTE in Greece

The Human Rights & Employee Relations Policy Cockpit is also used to measure impacts on human rights. To this end, the national companies collect data related to five human rights indicators and evaluate them according to a traffic light system.

✔ Data assured by PwC.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 406-1 (Non-discrimination)
- GRI 412-1 (Human Rights Assessment)

German Sustainability Code

- Criterion 17 (Human Rights)

Global Compact

- Principle 1 (Support and respect for internationally proclaimed human rights)
- Principle 2 (No complicity in human rights abuses)

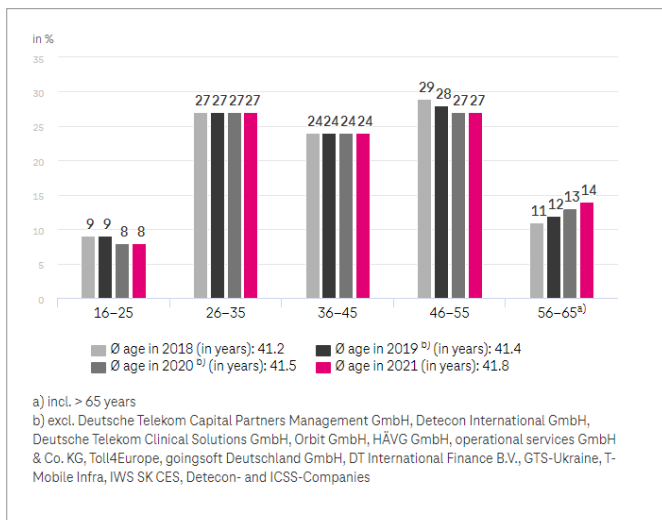
European Federation of Financial Analysts Societies (EFFAS)

- S07-02 (Percentage of total facilities certificated according to SA 8000 standard)

Demography and company pension scheme

Age structure at the Deutsche Telekom Group

The average age in the Group is 41.8 years. Compared with previous years, it is only a slight increase. This is mainly due to the continuous increase in Germany. The international average age (without Germany) has risen slightly by 0.3 to 38.6 years.



You can find further information here and in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

German Sustainability Code

- Criterion 15 (Equal Opportunity)

Global Compact

- Principle 6 (Elimination of discrimination in respect of employment and occupation)

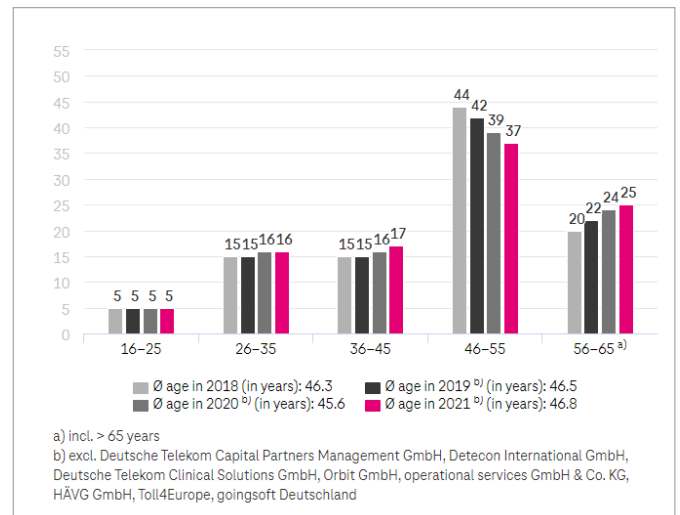
European Federation of Financial Analysts Societies (EFFAS)

- S03-01 (Age structure)

Age structure in the Deutsche Telekom Group in Germany

Demographic shifts and low natural attrition explain why the proportion of employees over the age of 55 has risen from 16 to 25.3 percent in the past five years.

Despite a 1.7 percent increase in the number of employees over 55, the average age of employees in Germany rose by only 0.2 to 46.8.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 405-1 (Diversity and Equal Opportunity)

German Sustainability Code

- Criterion 15 (Equal Opportunity)

Global Compact

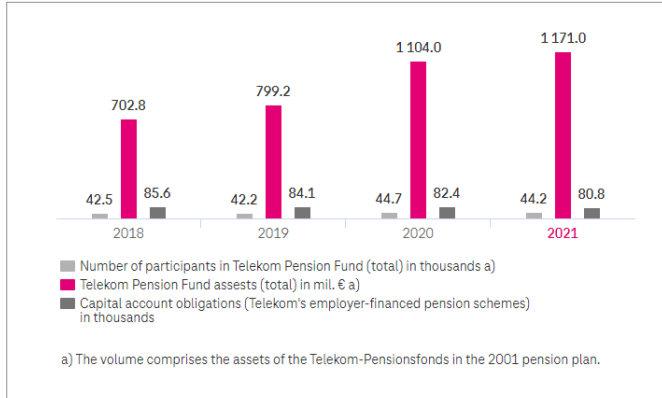
- Principle 6 (Elimination of discrimination in respect of employment and occupation)

European Federation of Financial Analysts Societies (EFFAS)

- S03-01 (Age structure)

Company pension schemes

The increase in fund assets can be attributed to the payments of the increasing number of plan participants (as was the case in previous years). Because the majority of participants in the 2001 pension plan are still active, i.e., still paying into their retirement plans, this increase will remain steady over the next few years.



Investments in the capital market made by Deutsche Telekom for company pension schemes and similar obligations in Germany are based on our sustainability principles. These principles were integrated into our socially responsible investment strategy for Deutsche Telekom pension providers, which we introduced in 2013, in the form of exclusion criteria. They prohibit investments in companies that produce NBC weapons, anti-personnel mines or cluster bombs or that trade in these or have repeatedly violated the UN Global Compact principles. Deutsche Telekom pension funds are also prohibited from purchasing government securities from governments that are subject to sanctions in accordance with public international law. Our pension providers agreed to our socially responsible investment strategy in 2013. This strategy was reviewed in 2017 and now incorporates Best-in-Class strategies and engagement approaches.

We are convinced that putting this strategy into practice will help improve our financial risk indicators. This strategy will also promote perception of Telekom as a socially responsible company. It will help us avoid high-risk, controversial investments and, instead, invest in long-term, stable values that are in line with our principles of sustainability.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 201-3 (Indirect Economic Impacts)

Training and development

Our approach to training and development

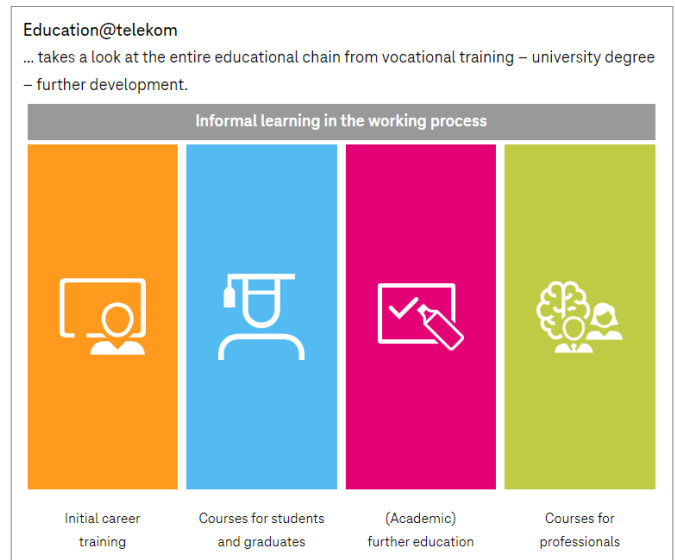
We offer our employees a wide range of individual training and development programs. Important principles for this are defined in our Employee Relations Policy and in our Guiding Principles. For many units of Deutsche Telekom, specific agreements were also reached with the employee representatives on the subject of training. The training we offer our employees pays off. In 2021, for example, we were able to fill 50.75 percent of our open positions with internal candidates.

Training the experts of tomorrow

We offer many young people an opportunity to enter the workplace. For example, we have an extensive range of technical and commercial programs for training our experts of tomorrow. In 2021, we provided 2 150 apprenticeship positions in Germany, of which 1 450 were for vocational training, 675 were study places for dual Bachelors-degree programs, and up to 25 were for dual Master's-degree programs. These results make us one of the nations largest training companies. We train considerably more people than we need for our own workforce. During our training programs, we lay the foundations of digital competence, and thereby enable our apprentices to make a seamless transition into the digital workplace.

Promoting lifelong learning

We promote lifelong learning and support our employees on their individual learning paths. We start by reviewing the skills our employees have now and those they will need in the future. On this basis, we offer our employees tailored training and development programs. These can also include stays abroad or studies parallel to their jobs. For example, "Bologna@Telekom" gives employees access to part-time bachelors and masters degree programs. Since its introduction more than ten years ago, over 2 000 employees in Germany have taken advantage of this opportunity.



Training: Self-managed, digital learning

Since 2019, we have been carrying out the "youlearn" initiative, which is aimed at turning Deutsche Telekom into a learning organization. We offer our employees worldwide (with the exception of T-Mobile US) the ability to largely manage their own training by means of digital offerings and to make learning an integral part of everyday working life. For example, "youlearn" invites employees to take part in voluntary, informal learning challenges. The second Group-wide "youlearn day" was held in October 2021. It took the success achieved with this digital learning event in 2020 to an even higher level. A total of 5 000 participants – 300 more than in the previous year – from a total of 30 countries took part in some 40 digital learning sessions. In the sessions, participants learned about important technology topics such as data analytics, cyber security and software development, and had the opportunity to interact with experts.

Also, we continued to expand our online education and training programs at the global level (with the exception of T-Mobile US) – most notably, via the Percipio learning platform, which we introduced in 2019. In addition to a desktop solution, the Percipio app lets users access content anytime and anywhere. It offers a wide range of courses, videos, books, and audio books on topics such as leadership, technology and development, and digital transformation, and it conveys the learning content in an entertaining way. Content is offered in 18 languages – with the help of dubbing and subtitling. In 2021, some 180 000 Deutsche Telekom employees were registered on this platform. Via Percipio, our employees can access training materials offered by Coursera, the world's largest

provider of online courses at the university level. The courses, on issues such as big data, cybersecurity, cloud computing, and artificial intelligence, are provided by a network of around 200 universities. In the year under review, we also expanded the online learning areas of our training programs in Germany, by adding formats of the online-course provider “Bildungsinnovator.”

The employee initiative “Learning from Experts” (LEX), which was launched in 2018 and is now successfully established at Deutsche Telekom, provides another example of opportunities for self-managed, self-guided learning. In LEX, experts from the Group share knowledge with their colleagues via a range of different channels. With 20 500 active members (as of Dec. 31, 2021), LEX is our fastest-growing employee community. Its LEX sessions, lasting 30 to 60 minutes, are especially popular. As of the end of 2021, over 5 000 such content items were available. Since LEX’s launch in 2018, some 260 000 employees have participated in LEX Sessions.

Our employees around the globe spent some 4 million hours on training and skills development in 2021. Overall, LEX users completed a total of 3.5 million hours of online learning in 2021 – and the comparable figure for 2019 was only 1.8 million. In 2021, 83 percent of the training courses were available online. During the COVID-19 pandemic, when large numbers of employees have been working from home, and no classroom courses have been available, this extensive range of online courses has been very helpful in keeping training available to employees.

Boosting leadership skills in the digital age

We are also increasing the use of virtual solutions in our management development programs. The aim of such programs is to strengthen virtual leadership skills. In 2021, at Deutsche Telekom in Germany, and at the Local Business Units (LBUs) of T-Systems, we introduced “WeGrow,” a new approach to performance development. WeGrow has supplanted “Lead to Win,” our previous performance and development process. This new process will help us increase the commitment of each employee through regular feedback, create clarity about tasks and expected results, and strengthen trust-based relationships between managers and employees. In addition, the new approach will enable closer integration with other HR processes such as skills management, talent management, and succession planning, and it will help us meet our business targets. Also, we use “Compass” career development meetings for employees covered by collective agreements and for civil servants, on a Germany-wide basis. Compass serves as a means of providing feedback about performance and skills and of identifying talents.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 404–1 (Training and Education)
- GRI 404–2 (Training and Education)

New learning concepts at T-Systems

In the year under review, the Group-wide “youlearn” initiative, which was launched in 2020, was also continued at T-Systems, with a special focus on the “Digitize!” company-wide qualification campaign. The company’s management is giving the initiative top strategic priority for the next few years. “Digitize!” comprises several skills development programs that teach employees highly relevant technology skills that they need in order to implement digital transformation for their customers. The programs include digital training on topics such as artificial intelligence (AI) and big data, as well as the part-time programs “Digital Engineer,” “Data Scientist,” “Digital Consultant,” and “Digital Expert of Tomorrow,” which are offered in cooperation with RWTH Aachen University. The programs are aimed at entry-level participants (“Explorer Level”), experienced participants with solid technology skills (“From Good to Great”) and at thought leaders for digitalization (“Thought Leadership”). Wherever possible, the courses are offered internationally, include large virtual sections and consist of a mixture of self-guided learning and in-person training on location. While all of these measures for retraining, and for development of employees existing skills, are centrally controlled, they are carried out in close cooperation with the relevant business units (departments, teams of experts). A key aim of these efforts is for T-Systems to increasingly become a self-learning organization. For this reason, self-organized initiatives of the various units, within the “Learning & Development” area, are welcomed and supported by the company.

Training program for cybersecurity professionals

IT security experts are still in short supply on the German labor market, which is why we developed our part-time training program for cybersecurity professionals (certified by the Chamber of Commerce and Industry) in 2014. The program is integrated into regular work processes and supplemented by topic-based and general modules in a variety of formats (classroom courses, e-learning, blended learning). After successfully passing the examination at the relevant Chamber of Industry and Commerce (IHK), participants receive an IHK certificate as a cybersecurity professional. They can obtain credits in their Bachelors or Masters program for the skills they have acquired as part of the training.

We are continuously developing our training programs, taking into account current and future IT security requirements. In the year under review, for example, we updated our “network security” module. In 2020, we developed and deployed new technical modules in cryptography and web and application security. In addition, in the previous year, we added a “mental health” unit to the program at the request of participants and specialist companies.

Despite the continuing COVID-19 pandemic, we were again able to carry out the full program in 2021. The contact restrictions simply meant that individual classroom events had to be carried out virtually.

In 2018, in response to considerable demand, we opened up our training to employees from other organizations, including employees of other companies and of government agencies. In 2021, the

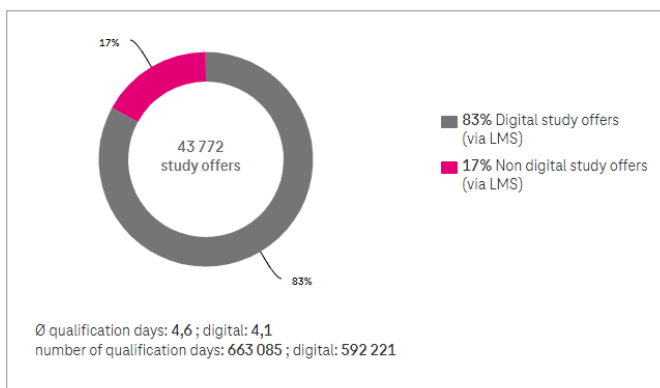
training, in its eighth year, was carried out online due to the pandemic. It included 18 participants, one of whom came from an external organization. In addition, 11 participants came from Deutsche Telekom Security GmbH, five from Deutsche Telekom IT GmbH and one from T-Systems International GmbH.

After eight program sessions to date, we can assess the program very positively. A total of five classes completed the training in full by June 2021 and were certified accordingly – and this included, in the year under review, a first group of employees from external companies. The average age of the graduates was approximately 25. At 1.8 percent, the dropout rate among participants was very low. We now have a total of 115 program participants from eight course years. All 50 internal graduates from the 2014 to 2018 intake were kept on by Deutsche Telekom. Only two graduates decided to leave the company, and one of those returned after one year.

Skills development at Telekom Training

Deutsche Telekom offers its employees a range of advanced training measures, which enable them to develop and brush up their skills.

In 2021, we provided 43 772 learning opportunities via our global Learning Management System (LMS). – 83 percent of the Group learning portfolio was available digitally. Our employees in Germany and the European national companies invested an average of 4.6 working days in their continuing education, 4.1 days of which were spent digitally. The digital learning rate increased to 89 percent in the year under review (2020: 69 percent).



You can find further information here and in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 404–1 (Training and Education)
- GRI 404–2 (Training and Education)

German Sustainability Code

- Criterion 16 (Qualifications)

European Federation of Financial Analysts Societies (EFFAS)

- S02–02 (Average expenses on training per FTE p.a)

International development and leadership programs

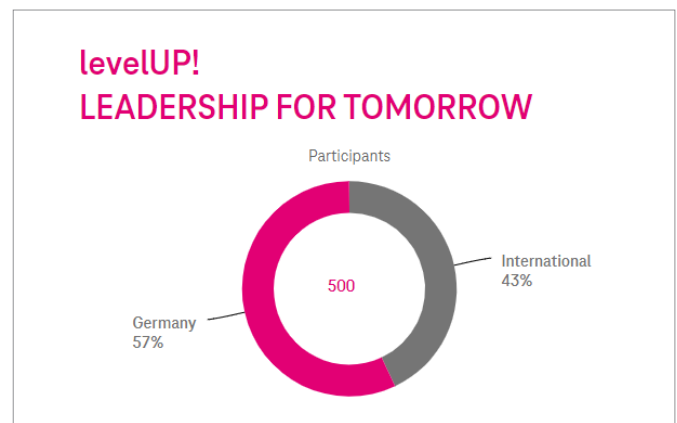
The object of our international development and leadership programs is for high potentials and high achievers to gain a foothold in the Group, to keep them loyal to the company and to position them in suitable jobs. These programs focus on development of the upcoming leader generation and on support in coping with the challenges they face now and in the future. At the same time, the programs aim to enhance their sense of belonging, increase knowledge exchange and promote personal responsibility.

The Global Talent Pool was closed to new entrants in June 2020. A revised global approach “Talent Hub” has been developed and was launched in 2021.

		2018	2019	2020	2021
Participants Trainee-Programm Start up! ^{a)}	total	44	71	44	39
Participants Trainee-Programm Start up! ^{a)}	of which women	59 %	44 %	59 %	49 %
Participants Global Talent Hub ^{b)}	total	976	952	-	365
Participants Global Talent Hub ^{b)}	of which women	26 %	26 %	-	30 %

^{a)} The program lasts 15–18 months. The numbers listed are annual new hires.
^{b)} Group-wide program for top talents. Replaces the former „Global Talent Pool“ program.

In 2021 the levelUP! platform changed the approach and became a leadership hub. In 2022, LevelUP! will be accessible to all leaders, also non-executives across Deutsche Telekom group, at any-time, from anywhere and from any device. Content-wise it focuses on following learning journeys: Leading in transformation, Leading hybrid teams, Leading digital telco. Joining any of the learning paths helps to gain a new arsenal of powerful tools and skills, insights, reflections and improves personal leadership style while upskilling for digital literacy.

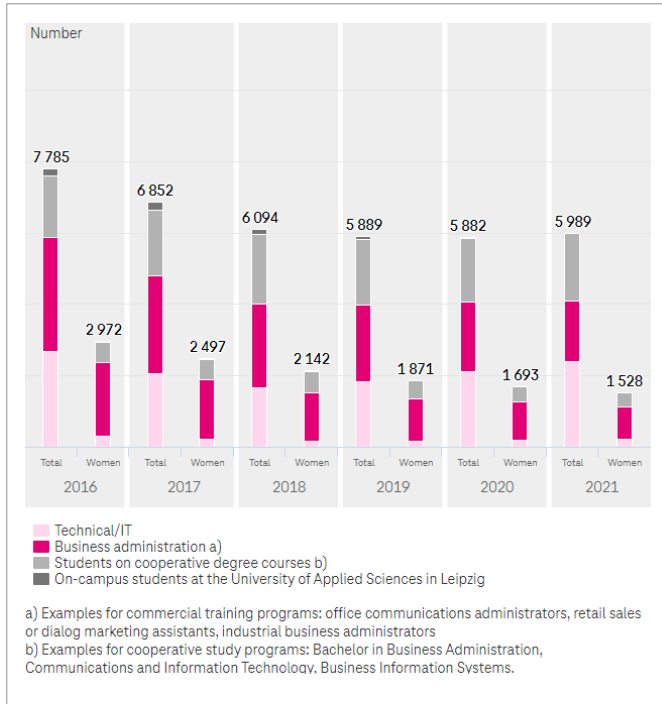


Already in 2020, we had to conduct levelUP!NextGeneration purely digitally due to COVID-19. In 2021, we again offered the programme in a purely digital format for the safety of all participants. Worldwide, 500 employees from 18 countries went through this 4-month development programme, which is aimed at motivated employees and is characterised by the teaching of innovative, inspiring and tangible leadership topics and skills.

You can find further information in the HR Factbook.

Apprentices and training programs Deutsche Telekom Group in Germany

In 2021, a total of around 6 000 junior employees were employed for training or a cooperative degree program. 26 percent of them were women.



You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

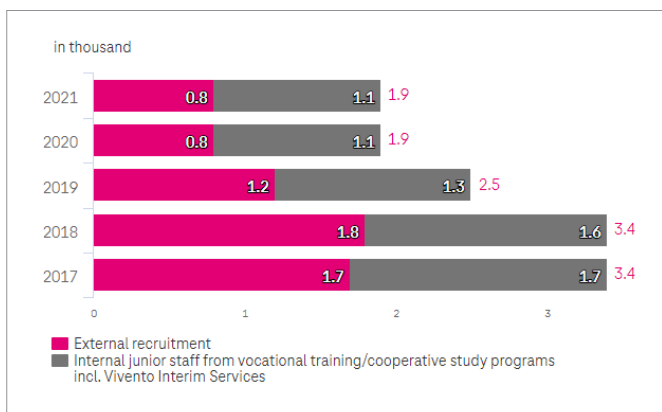
- GRI 404-1 (Training and Education)

German Sustainability Code

- Criterion 15 (Equal Opportunity)

Employee recruitment Deutsche Telekom Group in Germany

In 2021, Deutsche Telekom hired almost 800 new employees from the external labor market in Germany. In addition, again we gave around 1 100 internal junior staff permanent jobs on completion of their vocational training or cooperative study courses.



You can find further information in the HR Factbook.

Occupational health and safety

Our approach to health and occupational safety

We take our obligation to ensure the health and safety of our employees very seriously. The Board of Management assumes overall responsibility for occupational health and safety, as well as for environmental protection. We combine and control our occupational health and safety programs at Group level; health and safety managers (H&S managers) are responsible for implementing these programs locally. The general responsibilities, duties and programs for health and safety management are outlined in the Management System Manual for Quality, Health, Safety and Environmental Protection. The handbook serves to harmonize and align our management systems with common targets across the Group.

Occupational health and safety is firmly anchored in our structures through certified management systems and through suitable policies and guidelines. We conform to the ISO 45001 standard in this connection. In 2018, we were one of the first DAX-listed companies to have our H&S management system certified according to the standard. Before that, we had been certified to OHSAS 18001 since 2011. In 2021, we successfully completed the audits for recertification pursuant to ISO 45001, ISO 14001, and ISO 9001. With this success, Deutsche Telekom AG's umbrella certificates for quality, occupational health and safety and environmental protection are valid for the next three years, and they cover both national and international Deutsche Telekom locations (ISO 9001: 18 locations; ISO 14001: 91 locations; ISO 45001: 83 locations). The certificates certify that we have systematic procedures and processes in place that provide, and continually improve, assured occupational health and safety, and environmental protection.

We support our employees in maintaining and promoting their health, with target-audience-specific measures and extensive programs. At the same time, safety in the workplace is our highest priority. We view legally mandated occupational health and safety standards as minimum requirements. Awareness-raising, prevention, and personal responsibility are of particular importance to us. Our international portfolio of occupational health and safety measures also includes many voluntary measures to promote health within the company. These include, for example:

- An annual, comprehensive health check by company doctors
- Vaccinations and hygiene measures
- Bowel cancer screening
- Exercise/fitness activities
- Programs for recovery and resilience, mindfulness, health-oriented leadership, and increasingly
- digital training exercises.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403-1 (Occupational Health and Safety)
- GRI 403-6 (Occupational Health and Safety)

Effectiveness of our occupational health and safety measures

We systematically analyze and gauge the effectiveness of our measures. This includes reviewing the results of our employee survey, evaluating stress prevention measures under collective agreements, competitor analyses, and other indicators. We analyze this information on a yearly basis and use it to derive measures that promote the health and well-being of our employees.

Different indicators reflect the effectiveness of our corporate health management activities:

- At Deutsche Telekom in Germany, the health rate for 2021 (including long-term illnesses) was 95.3 percent (prior year: 95.0 percent). Excluding long-term illnesses, the health rate in 2021 stood at 96.7 percent (prior year: 96.5 percent). With these results, we have achieved our Group-wide goal, for 2021, of keeping our health rate at the high level seen in the previous year. The health rate is reported to the Board of Management at the end of each quarter.
- The total number of work-related accidents declined in the reporting year in comparison with the previous year. The accident rate in Germany for 2021 was 4.2 accidents (resulting in over three days of absence) per thousand employees, which is well below the industry average. This figure includes occupational accidents associated with the COVID-19 pandemic. Without these COVID-19 cases, the accident rate in Germany was 3.7 and therefore once again down from the previous year (prior year: 3.8).
- The Group-wide health index – last calculated in 30 countries as part of the employee survey in 2021 – stood at 69 (on a scale from 0 to 100). This represents a slight increase of 4 points with respect to the last survey. In the employee survey of 2019, the health index was shown on a scale ranging from 1.0 to 5.0. The resulting average, 3.6, is equivalent to a value of 65 on the scale used in 2021, which has values ranging from 1 to 100. The next health index is slated for 2023.

Measures during the COVID-19 pandemic

To protect our employees during the outbreak of the COVID-19 pandemic, we provided the opportunity to work from home whenever possible. Together with the Bonn Hygiene Institute, we also developed a comprehensive hygiene concept. It enabled employees to return to their offices – when the numbers of infections so permitted. Our Chief Human Resources Officer Birgit Bohle regularly informed employees about our extensive safety measures. Beginning in June 2021, the companys in-house medical service (B.A.D) administered COVID-19 vaccinations to Deutsche Telekom employees, and their families, at a total of 87 locations nationwide, of which 18 were locations solely of the company. At major German locations, suitable facilities were converted into temporary vaccination centers. In Germany, a full 24 200 Deutsche Telekom employees made use of the companys internal vaccination service and received their COVID-19 shots from the companys in-house medical professionals. In December, 2 700 employees received their third vaccination, i.e. a booster shot. We continued to offer this vaccination service in the first quarter of 2022.

Also, the company held its annual flu-vaccination campaign in fall 2021. That campaign was especially important in that a major wave of influenza would have only intensified the burdens and impacts of the fourth wave of the COVID-19 pandemic. As of the end of December, some 9 700 employees in Germany had received their flu shots within the campaign.

In Romania, employees were given a free day off, in 2021, for the purpose of receiving COVID-19 vaccinations. Employees in Russia were given both their annual opportunity to get flu shots and the option of receiving COVID-19 vaccinations in special clinics. In Slovakia and Germany, employees and their families were also given access to psychological counseling, to help them deal with the impacts of the COVID-19 pandemic. Crnogorski Telekom, in cooperation with the Clinical Center of Montenegro, organized a counseling hotline where people from all over Montenegro received free psychosocial support. In Greece, we set up a medical hotline to answer questions related to COVID-19, and we offered special mental and emotional counseling services.

In addition, in 2021 our pulse survey again looked at the issue of how our employees are perceiving and handling the long-running COVID-19 pandemic. As in the previous year, the survey found that they strongly and widely approve of our approach in dealing with the pandemic.

The “My Health Journey” health program

In the year under review, we continued our “My Health Journey” company health program for emotional and mental fortitude. In addition to a series of workshops on developing mental resilience, it provides science-based mindfulness training for managers and executives. Its aims include promoting self-reflection and self-organization. In 2021, we expanded the program to include support in the area of self-management and self-leadership, meaning the ability to develop and grow, personally and professionally, irrespective of external influences. For example, participants in a 21-day “Mindset matters” challenge considered the topic of self-leadership during challenging times. Also, our “Mindfulness Week

2021” event offered a diverse range of workshops and presentations on mental health. One included offering, for example, was a series, entitled “Media climate,” on self-care in a digital environment.

Further awards

In the year under review, a number of national companies applied for awards for in-company health management. One such award, for example, went to T-Mobile Czech Republic. It won the “Health Promoting Company Award” of the Czech Republics ministry of health. Makedonski Telekom won a second place in the 2021 National Awards for companies with the best safety and health practices in the workplace. The awards were given by the Council for occupational health and safety of the Ministry of Labor and Social Affairs.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403–6 (Occupational Health and Safety)
- GRI 403–9 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

Psychosocial counseling as part of change management

Deutsche Telekom AG attaches great importance to the psychosocial support that the Employee and Executive Advisory Service (MFB) provides for various transformation processes Group-wide. The goal is to help affected employees, managers, and teams deal with professional and private changes, and to prevent psychosocial crises. Also, an experienced team of crisis-intervention and emergency-assistance experts stands ready to respond to cases in which an acute crisis occurs nonetheless.

In Germany, we also offer free and anonymous individual counseling and consultation hours. After registering for the service, employees can receive personal counseling from professionals. Immediate telephone advice is available through the TALK TIME hotline from 8 a.m. to 8 p.m., Monday through Friday. If necessary, employees seeking help are referred directly to local experts or specialist agencies. The counselors have a duty to maintain confidentiality and are familiar with the specifics of the company. Due to the immense changes in 2020 caused by the COVID-19 pandemic, we have expanded the range of services: the TALK TIME team counsels on the impacts of reduced social contacts and of stress caused by the closure of care facilities and schools. In addition, a dedicated team of occupational physicians answers medical questions relating to the COVID-19 pandemic. In the year under review, we further added to our offerings in this context. Our psychosocial experts provided counseling to employees who had been affected by the flood disasters of July 2021.

Also, for many years now we have provided special additional support to managers, in the form of presentations and workshops on healthy leadership, conflict management, mindfulness and self-leadership, as well as on strategies for dealing with changes and mental stress.

Courses on virtual leadership are also part of these offerings. Working in hybrid or distributed teams has long been part of everyday life for some segments of Deutsche Telekom. Nevertheless, the shift of workplaces to home offices due to COVID-19 – combined with severely limited personal contact – poses an additional challenge: Executives have to be sensitive to changes in teams and individuals and provide enough time for personal exchange, for instance, by planning regular video conferences.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403–6 (Occupational Health and Safety)
- GRI 403–10 (Occupational Health and Safety)

Digitalization and health

In 2017, and in cooperation with one of our health partners, the BARMER health insurance company, we launched the “Digitalization and Health” model project, with the University of St. Gallen and IfOS in Cologne, among others, providing scientific support. In this effort, and in the context of digitalization, we have developed solutions that can improve employee health and enhance their motivation and performance. Also, we have introduced various measures in the cooperation project and tested them together with Deutsche Telekom staff. The model project is now being continued on a regular operational basis.

In 2019, the pilot project “Healthy and mindful leadership” was launched. This is a multimodal course designed to improve the digital health literacy of employees. The course was initially aimed at managers, who are important multipliers. In the course of the pilot project, we were able to scientifically demonstrate the positive training effects on health, stress perception, and mindfulness. For this reason, in 2020 we expanded the project to the national level, under the “My Health Journey” program. To date, the course has been proven to have additional positive effects that remain significant three months after the end of the training period. The effects for participants included improved performance, a better sense of well-being, and enhanced health competence. In light of these results, in 2021 we made the training course available to the managers of nearly all German entities.

Also, since 2020 our employees in Germany have access to the FITMIT5 training app (the “digital health coach for everyone”), which is also integrated within the annual “My Health Journey” program [LINK]. The training app includes an algorithm that puts together 5-minute workout/wellness/relaxation programs tailored to users preferences and needs. In addition, it offers a wealth of exercise, relaxation and meditation resources, as well as a nutrition planner with over 800 recipes. To date, more than 10 000 employees are already using the app. The app has been extremely well received, and thus company use of the app is being continued in 2022.

In 2021, in the Netherlands, T-Systems introduced the “Virtual Gym” digital platform for its employees. The platform offers numerous work aids, training courses and information, all designed to help employees achieve a healthy work-life balance.

The topics covered include (mental) health and well-being, working from home, (self-) leadership and good collaboration.

For our employees in Germany, we introduced a virtual 3D (“obstacle”) course in 2021 on the health topics “stress and digital balance,” “sleep,” and “nutrition.” Also, the T-Systems segment offered additional resources in this context, such as podcasts and workshops on the topic of “sleep” in connection with in-company health management. This took place within the “sleep campaign” #ausruhezeichen, which was launched in 2020, and was developed by the BARMER insurance company, Institut für Betriebliche Gesundheitsberatung (IFBG; Institute for in-company health counseling) and Deutsche Telekom. In addition, we invited our employees to take part in interactive presentations, on the topic of “power napping,” given by an IFBG sleep researcher. In the campaign framework, we are also developing a sleeping and resting room for our employees. A first prototype of this facility will be completed in 2022.

With support from BARMER, we also continued to address the topic of nutrition in 2021. In the previous year, we sponsored a pilot project that offered virtual presentations by nutritionists and top athletes; team workshops; and additional offers such as Weight Watchers Online. In 2021, we rolled out the project throughout the Group and moved it forward with additional campaigns and offers. Via various media formats, our employees were invited to access useful information about healthy eating. Currently, we are planning to continue, and refine, the project in 2022.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403–6 (Occupational Health and Safety)

Health rate

Nationally, the health rate for the Deutsche Telekom Group in 2021 showed a slight improvement of 0.3 percent year-on-year, and stood at an average of 95.3 percent (including the long-term sick). Musculoskeletal disorders, respiratory diseases, and mental health problems account for the bulk of illness-related absenteeism at Deutsche Telekom AG.

The health rate is reported to the Board of Management at the end of each quarter. The 2021 health rate excluding the long-term sick is 96.7 percent. We have thus achieved our Group-wide target for 2021 of maintaining the health rate at the high level of the previous year.

Targeted health protection programs were implemented in the individual companies. Across all segments, management training courses on the topic of “healthy leadership” were either introduced or continued. The aim is to raise managers’ awareness of this issue and train them accordingly. Additionally, a structured absence management system will be put in place to ensure that employees and managers regularly communicate about illness-related absences so that appropriate action can be taken early on.

	2014	2015	2016	2017	2018	2019	2020	2021
Group (national)	94,4	94,0	93,8	93,7	93,6	94,0	95,0	95,3

● Data assured by PwC.

You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403-9 (Occupational Health and Safety)
- GRI 403-10 (Occupational Health and Safety)

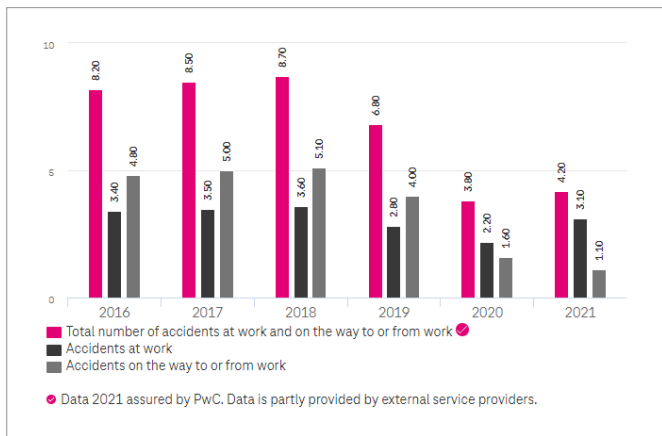
German Sustainability Code

- Criterion 15 (Equal Opportunity)

Work-related accidents in Germany

In 2021, the accident rate remains at a low level overall. The accident rate is well below the average at comparable companies. The accident rate in Germany for 2021 was 4.2 accidents (resulting in over three days of absence) per thousand employees, which is well below the industry average. This figure includes occupational accidents associated with the COVID-19 pandemic. Without these COVID-19 cases, the accident rate in Germany was 3.7 and therefore once again down from the previous year (prior year: 3.8).

Deutsche Telekom has a health and safety management system in place to reduce the number of work-related accidents. This certified system makes it possible to map the entire health and safety process and to develop sets of measures to further improve employee safety.



You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 403-9 (Occupational Health and Safety)
- GRI 403-10 (Occupational Health and Safety)

Headcount and part-time work

Workforce development worldwide

The Group's headcount fell by 4.3 percent compared with the end of the prior year. The number of employees in our Germany operating segment decreased by 9.3 percent against year-end 2020, mainly as a result of the reassignment of employees to the Group Headquarters & Group Services segment in connection with reorganization measures at Deutsche Telekom IT. Employees also continued to take up socially responsible instruments as part of staff restructuring activities, such as dedicated retirement and phased retirement.

The total number of employees in our United States operating segment remained stable compared with December 31, 2020. In our Europe operating segment, the headcount was down 14.4 percent compared with the end of the prior year, with staff levels decreasing in Romania in particular, mainly due to the sale of the fixed-network business. The headcount in our Systems Solutions operating segment was down 1.2 percent against year-end 2020. The effect on headcount of our global efficiency enhancement measures was offset by increased staff requirements in our growth areas. The decline in numbers was due to the sale of a business operation and the reassignment of parts of the business within the Group (-2.0 percent). The takeover of external service providers in Mexico had an offsetting effect (+0.9 percent). In the Group Development operating segment, the headcount remained at the 2020 year-end level. The number of employees in the Group Headquarters & Group Services segment was up 17.6 percent compared with the end of 2020, mainly due to the aforementioned reassignment of employees from the Germany operating segment.

Number	2014	2015	2016	2017 ^{a)}	2018 ^{b)}	2019 ^{b)}	2020 ^{b)}	2021
Germany	68 754	67 927	66 410	64 798	71 549	69 117	66 051	60 189
USA	39 683	44 229	44 820	45 888	46 871	47 312	71 303	71 094
Europe	53 499	48 920	46 808	47 421	47 964	44 410	41 272	35 319
Systems Solutions	46 244	37 850	37 472	37 924	28 945	29 800	28 395	27 754
Group Headquarters and Group Services	19 631	23 548	20 258	19 351	18 370	17 292	16 585	19 498
Group Development		2 768	2 572	1 967	1 976	2 603	2 684	2 674
Group (total)	227 811	225 243	218 341	217 349	215 675	210 533	226 291	216 528

^{a)} Since January 1st 2017 we report the Board division technology and innovation via the segment Group Development and the segments Group Headquarters & Group Services. Year on year data has been adjusted accordingly.
^{b)} Values for 2018–2020 restated.

You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

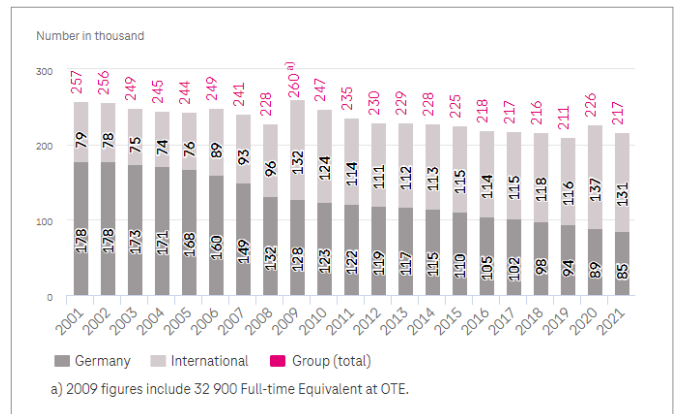
- GRI 401–1 (Employment)

European Federation of Financial Analysts Societies (EFFAS)

- S01–01 (Staff turnover)

Deutsche Telekom workforce 2001–2021

Our strategy to become the leading telecommunications provider in Europe is reflected in the trend in our international employee headcount. The domestic workforce has been steadily declining since 2003, and measured in terms of the total number of employees, amounted to around 39 percent at the end of 2021. Since this year we are also recording a decrease in international staff for the first time, the shares thus remain the same. The international share stays at 61 percent. The strategic sales in Romania, South Africa and Malaysia contributed to this.

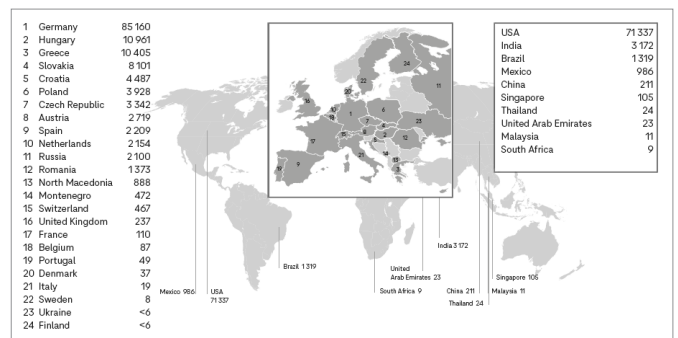


Reporting against standards

German Sustainability Code

- Criterion 15 (Equal Opportunity)

Number of employees by country

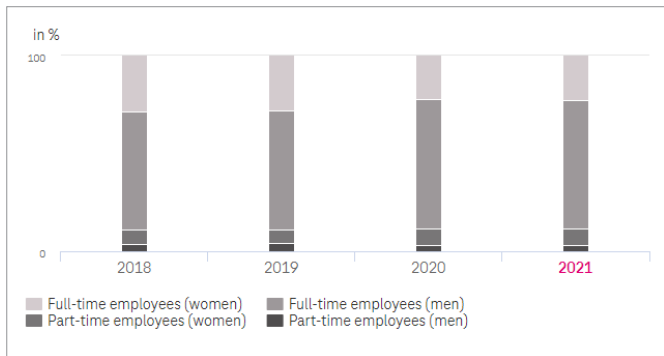


Part-time employees Deutsche Telekom Group

We believe it is important to offer our staff flexible working conditions that fit their needs at every stage of their lives. This includes the opportunity to work part-time, but also the guaranteed option of returning to work when the employee no longer wants to work part-time. We also offer this to young parents so that they can balance starting their career through training or a part-time cooperative study course with the demands of family life as a single parent. Part-time training is available in all of our training programs, and means apprentices spend 25 hours per week either in the company, in school, or in the training center. The highlight: like all apprentices, part-time apprentices can cut their training to two and a half years and therefore apply for a job earlier than would have otherwise been possible. A success model all round, since Deutsche Telekom also benefits from the young people’s commitment.

Global Compact

- Principle 3 (Uphold freedom of association and the right to collective bargaining)
- Principle 6 (Elimination of discrimination in respect of employment and occupation)



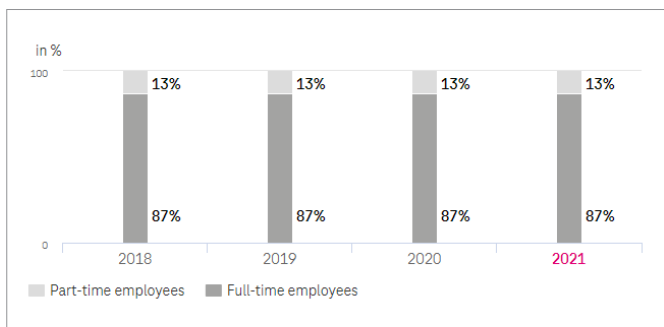
Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-8 (General Disclosures)

Part-time employees Deutsche Telekom Group in Germany

The percentage of part-time employees came to around 13 per cent in 2021, and thus remained stable compared to the previous year.



Reporting against standards

Global Reporting Initiative (GRI)

- GRI 102-8 (General Disclosures)

German Sustainability Code

- Criterion 14 (Employee Rights)
- Criterion 15 (Equal Opportunity)

Staff turnover & restructuring

Socially responsible staff restructuring

With a view to remaining strong and competitive in our dynamic and global market environment, in the long term, we support and assist our employees in growing with the evolving digitalized workplace.

These changes are also accompanied by unavoidable personnel restructuring. We are creating new jobs in growth fields and are training qualified personnel to fill these positions. In other areas, we are restructuring, and reducing our workforce in the process. We make sure that all staff restructuring measures are implemented in a socially responsible way for our employees.

The HR service provider Vivento has provided us with support for implementing staff restructuring in Germany for many years. Since 2013, Vivento has been primarily responsible for providing support and placement services for civil servants. 70 civil servants employed at Deutsche Telekom in Germany opted for a permanent transfer to federal, state, or local authorities in 2021. The focus was primarily on transfers of civil servants to the German Armed Forces, the Customs Office, and to other federal authorities. Also, employees were assisted in finding positions with administrative authorities. Since Vivento's founding, 18 years ago, it has helped more than 52 900 employees (full-time equivalents – FTEs; as of Dec. 31, 2021) find viable new options.

For some years now, various segments, including T-Systems, Group Headquarters and Telekom Deutschland, have offered surplus personnel assistance, including individual counseling for professional reorientation. Employees in the change process are given prompt and comprehensive support, with the goal of finding permanent new employment for them.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 401-1 (Employment)

Job Service & Placement (JSP): Staff restructuring at T-Systems

Deutsche Telekom's systems solutions business is currently undergoing a transformation. Job Service & Placement (JSP), our internal service provider, advises and supports employees, with a comprehensive program and various initiatives, in connection with the necessary change processes. The aim is to place employees within the Group or externally. In addition, T-Systems supports restructuring in a socially responsible manner – for example, by offering phased retirement, early retirement, and severance payments.

T-Systems also designs and supports processes for individual applications to external partners. In 2021, the company also launched new initiatives for placement of employees in available positions in the employment market. One such initiative was the program "ACM – Ausgewählte Chancen am Markt" ("Selected opportunities in the market"). In the framework of the initiative, cooperating companies and government agencies offer expert and management positions for potential new recruits. T-Systems presents the cooperating partners and organizes pertinent informational events for employees.

Holistic staff restructuring and transfer management at Telekom Deutschland GmbH

Telekom Deutschland GmbH has implemented a holistic staff restructuring and transfer management system since 2017. Its aim is to win employees over to the idea of a career change early on. In cases where tasks are being eliminated in the near or medium term, or different skills are required, the affected employees will be given advice proactively regarding opportunities for a professional reorientation. Managers are also actively involved in the change process. Together with them, internal and external employment alternatives are considered and personal labor market profiles developed. In addition, assistance is provided for individual application processes and – where necessary – training offered. Since 2018, around 1 200 employees nationwide, in the company's Germany segment, have received counseling via this system. Approximately two thirds of them were able to find new options through these measures.

Tools for socially responsible staff restructuring Deutsche Telekom Group in Germany

We continued our efforts to engage in socially acceptable staff restructuring. To this end, the Group continued to rely on the already proven tools of early retirement, severance pay and partial retirement in 2021.

Personnel cuts (FTEs)	2015	2016	2017	2018	2019	2020	2021
Early retirement (civil servants)	1 219	3 849	27	1 711	1 242	1 917	630
Early retirement (non-civil servants)	29	47	61	63	71	77	66
Severance payments	1 448	726	1 081	972	763	745	526
Partial retirement (start of passive phase)	1 345	1 393	1 687	1 890	1 692	1 899	2 444
Other socially responsible tools	11	<6	15	-	-	-	-
Transfers to public authorities (final ^{a)})	711	418	417	326	321	146	70

^{a)} Permanent transfers; civil servants are not entitled to return to the Deutsche Telekom Group – established as a cluster in 2015.

You can find further information in the HR Factbook.

Reporting against standards

German Sustainability Code

- Criterion 6 (Rules and Processes)
- Criterion 14 (Employee Rights)

Fluctuation rate

The fluctuation rate in Germany increased slightly compared to 2020 and was 2.1 percent. Internationally it has also risen compared with 2020. At Group level, it also increased slightly due to the increase in Germany and internationally and stood at 5.2 percent in 2021.

in %	2018	2019	2020	2021
Germany	1.94	2.28	1.98	2.10
International ^{a)}	9.78	9.55	6.61	9.30
Group (total) ^{a)}	5.12	5.32	3.94	5.20

^{a)} excluding USA

You can find further information in the HR Factbook.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 401-1 (Employment)

Proportion of civil servants in Group workforce

The proportion of civil servants employed in the company fell once again in 2021. The reason for this is that Deutsche Telekom has not recruited any new civil servant staff since the company was privatized. In addition to civil servants leaving the company when they reach retirement age, others also took advantage of early retirement or moved to other agencies. This led to a continuous drop in the number of civil servants in our workforce.

	2014	2015	2016	2017	2018	2019	2020	2021
Active civil servants	19 881	18 483	15 999	15 482	13 507	12 153	10 583	9 653
Civil servants on temporary leave from civil servant status ^{a)}	1 340	1 220	889	731	657	553	405	311
Civil servants at affiliated companies	13 260	12 292	10 827	10 486	9 785	8 720	7 423	6 773
Civil servants (total)	34 482	31 995	27 716	26 699	23 950	21 426	18 412	16 736
Number of non-civil servants in Germany	80 267	78 360	76 946	75 202	74 143	72 685	70 620	68 424
Total number of employees in Germany	114 749	110 354	104 662	101 901	98 092	94 111	89 032	85 159
Percentage of civil servants in Germany (in %)	30.05	28.99	26.48	26.20	24.42	22.77	20.68	19.7

^{a)} Civil servants whose status as such is currently suspended. They have temporarily switched to an employee relationship not covered by collective agreements.

Reporting against standards

Global Reporting Initiative (GRI)

- GRI 401-1 (Employment)

Ideas management

Heading for success – with our ideas management

Our employees come up with creative ideas for ways to improve our processes, products and services – and thereby strengthen Deutsche Telekom’s competitiveness. We promote a corporate culture in which we encourage our employees to take an active role. Our Ideas Management unit develops concepts and measures for making the most of our employees’ potential.

Also, in Germany, we maintain an “ideas portal,” and invite any and all of our employees to submit ideas through it – acting either alone or as part of a team. And to ensure that no ideas, no matter how nascent, are ever lost, our Idea Management unit offers all employees an “ideas garden,” a dedicated platform for their creativity. On this platform, employees have the opportunity to play with and refine their emerging ideas and bring them to full maturity. Submitted ideas are reviewed by our Idea Management unit, on the basis of various criteria. Ideas that are truly new are assessed by the relevant department and then, in some cases, implemented. The process, which is extensive overall, ensures that each and every idea can be individually and considered and promoted. Our employees are paid a consideration for each submitted idea that is implemented.

In 2021, ideas submitted by our employees in Germany led to the largest economic benefit we have gained through this channel to date, with a total of 4 420 submissions (2020: 4 574) leading to savings, or new commercial potential, worth about 169.3 million euros (2020: 69.2 million euros). This impressive success shows that the quality of our employees ideas continues to grow, all hybrid working arrangements and spatial distance in the workplace notwithstanding.

Also in 2021, Deutsche Telekom won first place at the German Idea Management Awards (Deutscher Ideenmanagementpreis), in the category “Best idea in occupational safety and health in the workplace” (“Beste Idee in Arbeitssicherheit und Gesundheit in der Arbeit”). The “access control traffic light”, a prize-winning idea of Jürgen Küderle and Marco Fiene, both with business customer sales, helps businesses comply with pandemic-related rules on social distancing and maximum group sizes, and it is suitable for all businesses with walk-in customers and changing groups of visitors. Their simple, cost-effective solution is an IoT system consisting of two pillars that are installed to the right and left of the main entryway. The pillars, which are easy to install, contain infrared sensors that track the numbers of people that enter and leave the business. The traffic light turns red when the maximum permitted number is reached. The access traffic light keeps track of numbers of visitors reliably and verifiably, and it records them digitally, in the Cloud of Things. The German Idea Management Awards are

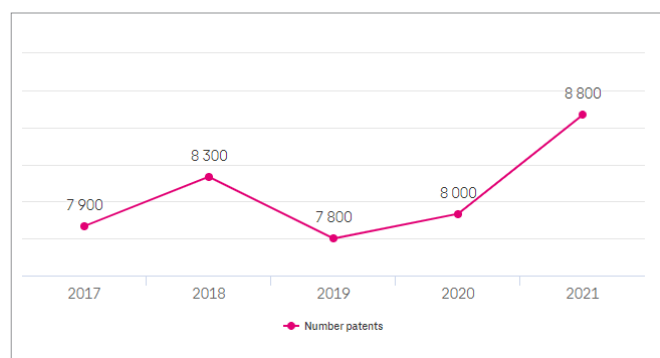
awarded annually, by the Deutsche Institut für Ideen- und Innovationsmanagement (German institute for idea and innovation management). All submissions are judged by an independent jury consisting of persons with relevant scientific and practical workplace expertise.

Better and better – thanks also to some ideas from outside the company

Via our Ideenschmiede (think tank; only available in German), which has been in place since 2018, we invite persons from outside the company, including both customers and non-customers, to actively help us design Deutsche Telekom’s products, services and processes. Over 17 800 users have registered for the site, in order to contribute ideas and impetus. Users also have the opportunity to take part in surveys, polls, and discussions, and to place suggestions in our digital suggestion box. Also, they can participate in online and in-person workshops for the purpose of interacting with the platform community and with Deutsche Telekom experts regarding new ideas. Examples of innovations that developed from Ideenschmiede feedback include our VoicelD (SprachID; only available in German) for secure caller authentication in calls to our service hotline, and the Mein Telekom Techniker (My Deutsche Telekom Service Technician) app.

Portfolio of Intellectual Property Rights

By the end of 2021, we owned around 8 800 intellectual property rights (IPRs). We take a targeted approach to managing these IPRs in consideration of cost-benefit aspects. We regularly take stock of our IPRs and eliminate those that are no longer relevant.



Patents are gaining more and more significance in the telecommunications industry. Market players and their areas of activity are changing, with a knock-on effect on our IPR (intellectual property rights) agenda. On the one hand, our Group’s scope for action must be maintained. On the other hand and alongside our own research and development activities, we want to pave the way to

open innovation through collaboration projects and partnerships. National and international IPRs are vital for these types of activity. We are strongly dedicated to generating our own property rights. Industrial property rights include inventions, patent applications, patents, utility models and design patents.

Thanks to our intense efforts to develop and structure our IPR portfolio, the rights we hold are highly valuable and firmly in line with our Group's strategic objectives. We have put in place a professional patent law management process to keep our IPR assets safe. Additionally, we are represented on various standardization bodies in our industry. We manage our IPRs on the basis of cost/benefit aspects, filing only selected applications and de-registering patents systematically.

Reporting against standards

European Federation of Financial Analysts Societies (EFFAS)

- V04-05 (Number of patents registered within last 12 month)
- V04-06 (Percentage of patents registered within last 12 month in relation to total number of patents)

About this report

Our stakeholders expect us to report transparently and solidly about our operations. We want to meet these expectations and, at the same time, also inspire the general public to take an interest in our sustainability focuses. With our 2021 Corporate Responsibility Report, we have also sought to make the best of available options in the areas of content, multimedia, and technology – and produce something that CR experts and non-experts will find fun and fascinating to read and explore.

Deutsche Telekom has been committed to CR reporting for more than 25 years. Now, every year we publish both an annual CR Report and, in our annual report, a pertinent non-financial statement. To identify the key reporting topics for our company and stakeholders, we regularly carry out a comprehensive materiality process. Our reporting is supplemented by updates in the Corporate Responsibility section of our website and by our “We Care” magazine.

Structure of the online report

The CR Report 2021 is a Communication on Progress that looks at the key developments during the reporting period and provides additional information about the latest developments. We use different formats to reach the various target groups:

The landing page gives a brief and interesting introduction to three issues that are relevant to society. Readers can access comprehensive information about these topics by following the links to the pages that follow. Readers who are only interested in Deutsche Telekom’s progress during the reporting period can follow a link to access our “Management & Facts” Communication on Progress directly.

- A news ticker provides continual updates on the latest events and activities. It can be reached from our start page, and it appears topic-specifically, focusing on individual news items,
- in our themed pages and the profiles of our national companies.
- At Nachhaltig #DABEI (#TAKEPART sustainably), we look at key sustainability issues, from various perspectives, and in multimedia presentations. With plain, clear language, Nachhaltig #DABEI is aimed at a general audience. The in-depth themed pages it presents are grouped in keeping with the four societal trends “Good stewardship,” “New way of working,” “Digital life” and “Green future.” We take a look at a new topic every quarter. All themed pages, which are shown in magenta in the menu, are available in simplified language.

- In our Management & Facts progress report, we provide information, in the four main categories (“pillars”) Strategy, Economy, Environment, and Social, about Deutsche Telekom’s sustainability-oriented management structures and about its progress in the year under review. In some topic areas, we invite interested readers to engage in direct discussion with Deutsche Telekom experts. With the report, we meet requirements pertaining to conventional accountability reporting.
- The Management & Facts progress report also includes a section on key performance indicators (KPIs). In addition, we offer an interactive KPI tool that lets users pick and choose indicators to create a customized compilation.
- In our national companies section, a majority of our national companies whose CR activities are described in this report also present their own CR profile.
- The report also includes search, “read-aloud” (text-to-speech) and “share” functionality, for added user convenience. What’s more, an “info cart” lets readers select different content and create a customized PDF file.
- The report is supplemented by the new CR facts format, which individual Deutsche Telekom departments use to report directly on their sustainability-related projects and measures. Readers can access the CR facts section at any time by clicking on the link in the report’s footer.
- The report’s footer includes links to a download center, dialog functions, a glossary, and other relevant websites.



Implementation of high international reporting standards

Deutsche Telekom’s CR Report 2021 complies with the internationally recognized guidelines (GRI Standards) of the Global Reporting Initiative (GRI). We also highlight our contribution to achieving the SDGs in many places. This year, for the first time, we show, with the help of a special index, which content in the 2021 report contributes to meeting the criteria established by the Sustainability Accounting Standards Board (SASB). The CR Report 2021 also serves as a Communication on Progress (CoP) from Deutsche Telekom as part of the United Nations Global Compact. Deutsche Telekom also issues an annual, detailed Declaration of Conformity with the German Sustainability Code.

Independent assurance report

Independent Practitioner's Report on a Limited Assurance Engagement on Sustainability Information¹

To Deutsche Telekom AG, Bonn

We have performed a limited assurance engagement on the disclosures denoted with  in the Corporate Responsibility Report of Deutsche Telekom AG, Bonn (hereinafter "the Company"), for the period from 1 January to 31 December 2021 (hereinafter "Report"). Our engagement in this context relates solely to the disclosures denoted with the symbol .

Responsibilities of the Executive Directors

The executive directors of the Company are responsible for the preparation of the Report in accordance with the principles stated in the Sustainability Reporting Standards of the Global Reporting Initiative (hereinafter "GRI-Criteria") and for the selection of the disclosures to be evaluated.


This responsibility of Company's executive directors includes the selection and application of appropriate methods of sustainability reporting as well as making assumptions and estimates related to individual sustainability disclosures, which are reasonable in the circumstances. Furthermore, the executive directors are responsible for such internal controls as they have considered necessary to enable the preparation of a Report that is free from material misstatement whether due to fraud or error.

Independence and Quality Control of the Audit Firm


We have complied with the German professional provisions regarding independence as well as other ethical requirements.

Our audit firm applies the national legal requirements and professional standards – in particular the Professional Code for German Public Auditors and German Chartered Auditors ("Berufssatzung für Wirtschaftsprüfer und vereidigte Buchprüfer": "BS WP/vBP") as well as the Standard on Quality Control 1 published by the Institut der Wirtschaftsprüfer (Institute of Public Auditors in Germany; IDW): Requirements to quality control for audit firms (IDW Qualitätssicherungsstandard 1: Anforderungen an die Qualitätssicherung in der Wirtschaftsprüferpraxis - IDW QS 1) – and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's Responsibility

Our responsibility is to express a limited assurance conclusion on the disclosures denoted with  in the Report based on the assurance engagement we have performed.

Within the scope of our engagement we did not perform an audit on external sources of information or expert opinions, referred to in the Report.


We conducted our assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised): Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by the IAASB. This Standard requires that we plan and perform the assurance engagement to allow us to conclude with limited assurance that nothing has come to our attention that causes us to believe that the disclosures denoted with  in the Company's Report for the period from 1 January to 31 December 2021 has not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria. This does not mean that a separate conclusion is expressed on each disclosure so denoted.

In a limited assurance engagement the assurance procedures are less in extent than for a reasonable assurance engagement and therefore a substantially lower level of assurance is obtained. The assurance procedures selected depend on the practitioner's judgment.

Within the scope of our assurance engagement, we performed amongst others the following assurance procedures and further activities:

- Obtaining an understanding of the structure of the sustainability organization and of the stakeholder engagement
- Inquiries of personnel involved in the preparation of the Report regarding the preparation process, the internal control system relating to this process and selected disclosures in the Report
- Identification of the likely risks of material misstatement of the Report under consideration of the GRI-Criteria
- Analytical evaluation of selected disclosures in the Report
- Inspection of processes for collecting, controlling, analyzing and aggregating selected data at specific sites of the Company
- Comparison of selected disclosures with corresponding data in the consolidated financial statements and in the group management report
- Evaluation of the presentation of the selected disclosures regarding sustainability performance

Assurance Conclusion

Based on the assurance procedures performed and assurance evidence obtained, nothing has come to our attention that causes us to believe that the disclosures denoted with  in the Company's Report for the period from 1 January to 31 December 2021 have not been prepared, in all material aspects, in accordance with the relevant GRI-Criteria.

Intended Use of the Assurance Report

We issue this report on the basis of the engagement agreed with the Company. The assurance engagement has been performed for purposes of the Company and the report is solely intended to inform the Company as to the results of the assurance engagement. The report is not intended to provide third parties with support in making (financial) decisions. Our responsibility lies solely toward the Company. We do not assume any responsibility towards third parties.

Munich, 24 March 2022

**PricewaterhouseCoopers GmbH
Wirtschaftsprüfungsgesellschaft**

Hendrik Finkppa. Juliane von Clausbruch Wirtschaftsprüfer
(German Public Auditor)

¹ PricewaterhouseCoopers GmbH has performed a limited assurance engagement on the German version of the Corporate Responsibility Report and issued an independent assurance report in German language, which is authoritative. The following text is a translation of the independent assurance report.

Reporting against standards

Imprint

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Telefon: 0228/ 181-0

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Please use our contact forms for questions about the company or products and services provided by our business areas.

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Timotheus Höttges
Adel Al-Saleh
Birgit Bohle
Srinivasan Gopalan
Dr. Christian P. Illek
Thorsten Langheim
Dominique Leroy
Claudia Nemat

Regulatory authority:

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Post and Railway
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Responsible:

Deutsche Telekom AG
Michael Hagspiel
Head of Global Strategic Projects and Marketing Partnerships
Friedrich-Ebert-Allee 140
53113 Bonn

Further information on Deutsche Telekom's corporate responsibility activities can be found at:

<http://www.telekom.com/corporate-responsibility>
and
<http://report.telekom.com/annual-report-2021/>

Concept/research/design/programming:

Deutsche Telekom AG
Stakeholder Reporting GmbH, Hamburg
yoocon GmbH, Berlin
1000°DIGITAL GmbH, Leipzig

Photos:

Frank Bauer
Pictureworld, Deutsche Telekom

The 2021 CR Report is available in German and English.
The English version of the CR Report is a translation of the German version of the CR Report. The German version of this CR Report is legally binding.

Translated by DTAG Corporate Language Management.

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With the exception of historical information, the matters discussed in the materials and documents on this website are "forward-looking statements". These forward-looking statements rely on a number of risks, uncertainties or other factors, many of which are outside Deutsche Telekom AG's control, which could cause actual results to differ materially from such statements. These risks, uncertainties and other factors are described in detail in Deutsche Telekom's financial reports which are available on Deutsche Telekom's website. Visitors of this website are cautioned not to put undue reliance on these forward-looking statements. Deutsche Telekom disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.