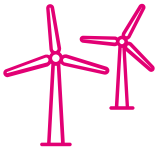
Environment

Climate protection: our path to achieving net zero by 2040

We are pursuing ambitious, science-based climate targets set out through the Science Based Targets initiative (SBTi) have been confirmed. By 2040, we aim for net zero emissions along our entire value chain. A climate transition plan sets out the path for this and describes the measures we want to take to achieve this. The framework for this is provided by our Group-wide climate strategy and our climate targets.

You can find more detailed information on the topic of climate protection in our audited Sustainability statement 2025.

Our Group-wide climate targets

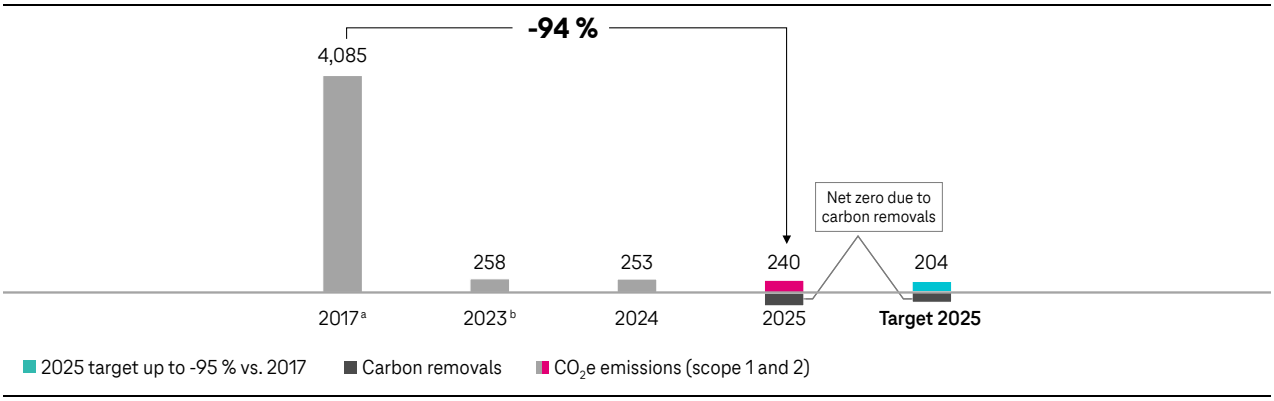


2021: We achieved our goal of sourcing 100 % electricity from renewable sources (Scope 2, market-based method).

2025: We achieved our goal of achieving net zero emissions in our own operations (Scope 1 and 2). To this end, we have reduced emissions from our own operations worldwide by more than 94 % compared to 2017. We neutralize the remaining emissions of our CO_2e footprint through high-quality projects that bind CO_2e from the atmosphere, e.g., through reforestation.

Scope 1 and 2 emissions

in kt CO_2e



[a] Base year 2017 adjusted for the companies that have since been sold and newly added. Due to the relevance of 2017 as the base year, the value was adjusted retrospectively due to methodological changes (cf. b)

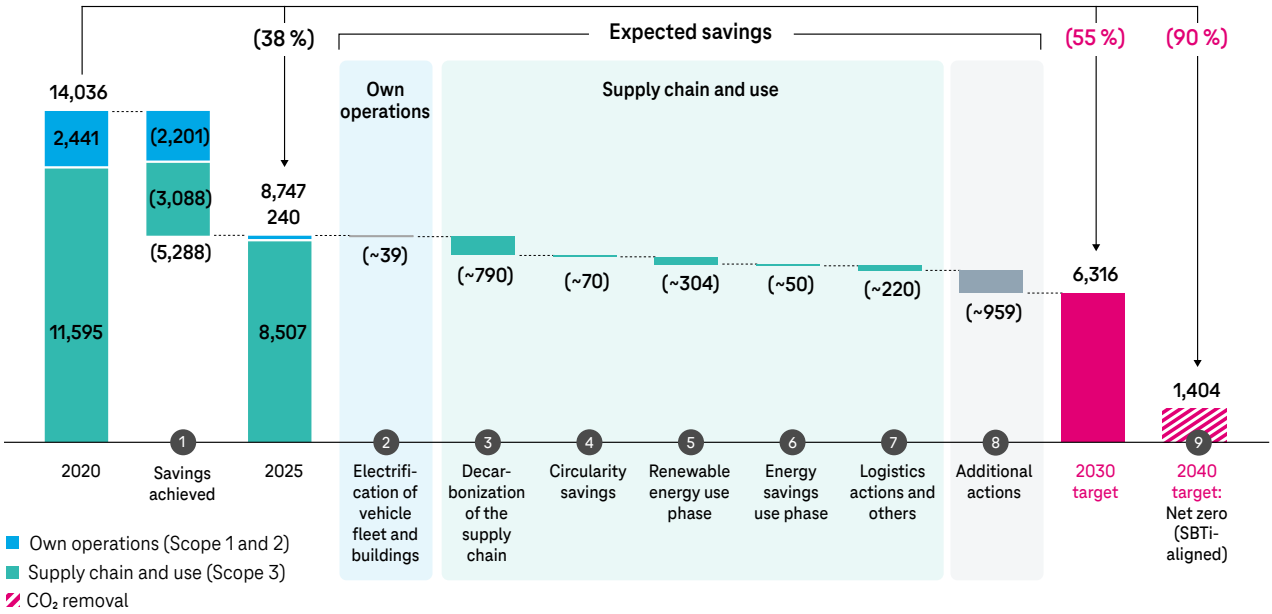
[b] Since 2023, values also include so-called 'fugitive emissions' from refrigerants and fire suppressants.

By 2030: By the end of the decade, we aim to reduce CO_2e emissions across Scopes 1–3 by 55 % in absolute terms compared to 2020. To achieve this, we are in close dialogue with our suppliers. The aim is to reduce emissions in production and the products manufactured in the use phase should consume less energy. This is our interim goal on the way to net zero emissions along the entire value chain.

"Net zero" by 2040**:** In 15 years at the latest, we want to achieve net zero emissions along the entire value chain – across all three scopes. To achieve this, it is necessary to reduce emissions by at least 90 % compared to 2020. Only up to 10 % may be neutralized via high-quality projects that bind CO_2e from the atmosphere.

Climate transition plan – our path to net zero

Our transition plan helps us to steer the measures with which we want to achieve our SBTi-validated climate targets by 2030 and 2040 respectively. The basis for this is the calculations of greenhouse gas (GHG) emissions in recent years as well as our short-, medium- and long-term climate targets. The transition plan was confirmed at the highest level – by the Board of Management and the Supervisory Board of Deutsche Telekom AG. The chart below illustrates our milestones and levers.



1 **Savings achieved and expected savings**
Savings achieved between 2020 and 2025 were 14.0 % for Scope 1 emissions and 99.2 % for Scope 2 emissions. Scope 1 and Scope 2 emission savings are expected at approximately 39 kilotons of CO_2e emissions by 2030. Savings achieved for Scope 3 emissions were approximately 26.6 % between the base year and 2025. We expect general savings of approximately 2,431 kilotons of CO_2e emissions by 2030.

2 **Electrification of vehicle fleet and buildings**
Electrification and reduction of the vehicle fleet and modernization of buildings and reduction of floor space are key actions for lowering Scope 1 emissions. Using 100 % green energy and increasing the number of electric vehicles helps to reduce emissions. The number of electric vehicles rose by 2,836 in the reporting year. Scope 1 emissions were reduced by 5.3 % year-on-year in the reporting year.

3 **Decarbonization of the supply chain**
In line with our sustainable procurement strategy, a Group-wide task force is leading an initiative to reduce GHG emissions at both the supplier and product level. Our efforts in this regard are guided by our own ambitious climate targets.

4 **Circularity savings**
Circular economy actions help to lower our CO_2e emissions. We continuously increase the proportion of recycled materials in our network technology, promote reuse of used equipment, and increase the proportion of refurbished equipment within the Group. By selling more refurbished smartphones, we also reduce emissions caused by new devices.

5 **Renewable energy use phase**
We expect the share of renewable energy in the countries' electricity mix to increase, which will lead to emissions savings in the use phase.

6 **Energy savings use phase**
In addition to increasing the efficiency of our suppliers' end products, we are also investing in our own product development. Increasing the efficiency of products and solutions in the use phase and hence reducing emissions in the downstream value chain will be key leverage here.

7 **Logistics actions and others**
Optimizing logistics solutions for deliveries to our retail and business customers and extending product life cycles, e.g., by reusing refurbished devices, reduces our Scope 3 emissions. In addition, considering criteria for sustainable sourcing supports the concept of a circular economy, e.g., refurbishment and reuse.

8 **Additional actions**
Based on the assumptions made in the reporting year, we still have a gap of 7 percentage points to close in order to achieve our 2030 climate target. In addition to the actions already taken, we will need to implement further measures in the coming financial years.

9 **CO_2 removal**
To achieve our goal of climate neutrality by 2040 (net zero), we will offset up to a maximum of 10 % of our remaining total emissions by means of high-quality carbon offset projects. We use internationally recognized standards (Oxford categories IV/V) for quality assurance.

The figures are based in part on estimates, assumptions, and projections. The figures for 2020 were adjusted retrospectively in the reporting year due to updated emissions factors and changes in methods and structures applied. These adjustments have yet to be made in the case of 51 % of the Scope 3 emissions in categories 1, 2, and 4. Adjustments to the base year have necessitated adjustments to the absolute target values.

The transition plan sets out important next steps to continuously reduce our emissions across the entire value chain. On this basis, we can derive necessary measures. This also includes the planning of necessary investments and budgets. We also include target values in other technical and financial planning parameters of the company. The consistent implementation of the necessary measures in the coming years is a common challenge that we must face with all departments involved and in close cooperation with our suppliers.

We take the financial impact of our emission reduction measures into account comprehensively in our transition plan.

More information on the climate transition plan, climate protection measures and efforts to reduce emissions can be found in our audited

Sustainability statement in the Annual Report 2025

In the downstream value chain, we plan operating and capital expenditures of approx. EUR 0.2 billion for the period from 2026 to 2029 (2025 to 2028: approx. EUR 0.3 billion). A key lever here is to further improve the energy efficiency of our products and solutions during the use phase. The funds earmarked for this purpose are mainly allocated to investments in property, plant and equipment. The investments mentioned address selected priority measures. A significant part of the emission reduction – especially in Scope 3 – is achieved through changes in the supply chain and in our products and can therefore only be partially covered directly through our own capital expenditures.

In the upstream value chain, the focus of the measures is on our suppliers. Since the implementation takes place there, these measures do not involve significant own operating or capital expenditure.

The electrification of the vehicle fleet is an important lever for our Scope1 emissions. To this end, we are planning operating and capital expenditures of around EUR 0.1 billion in the aforementioned period (2025 to 2028: approx. EUR 0.2 billion).

T-Mobile US is currently not included in the financial quantification of the measures.

Copernicus Data Space Ecosystem: making climate change visible

Climate protection requires reliable data. Because only what is measurable can be effectively managed. In addition to its own measures, Deutsche Telekom, together with other stakeholders, is committed to improving the framework conditions for managing climate risks.

One example of this is the European Union's Copernicus Data Space Ecosystem: It enables transparent and free access to comprehensive earth observation data on climate, the environment, and earth changes. As part of a long-term contract with the European Space Agency, funded by the European Union, and in cooperation with other partners, T-Systems contributes its technological expertise to provide infrastructure for hosting and processing this data and make it available for various user groups.

The Copernicus Data Space Ecosystem particularly supports the observation and analysis of environmental and climate change, such as greenhouse gas emissions, the spread of wildfires, sea-level rise, and long-term climate trends. It thus provides a data-driven foundation for informed decisions in politics, business, and society. Municipalities also benefit from the available information, for example, in climate-resilient urban planning and infrastructure development. In agriculture, the data can support sustainable resource and water management, while emergency services can use it for rapid situational assessment in the event of a disaster.

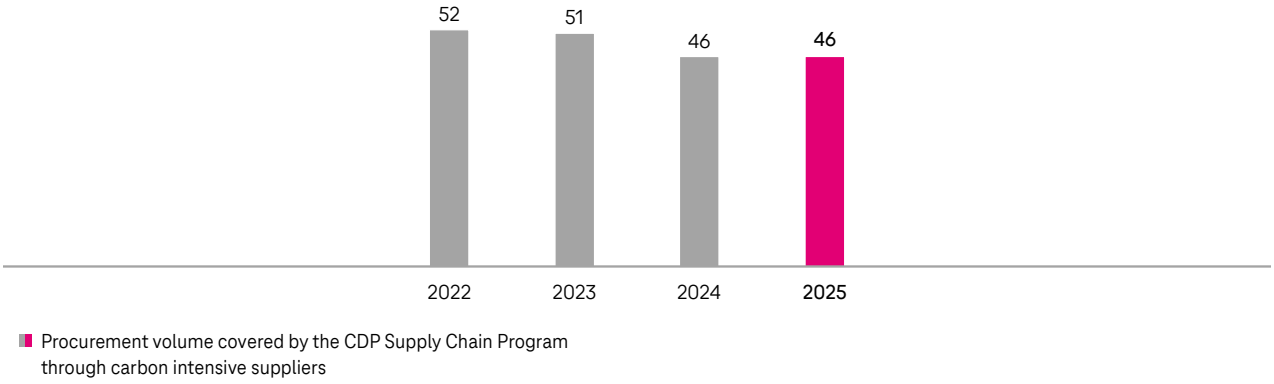
The Copernicus Data Space Ecosystem is therefore a central European data infrastructure for visualizing environmental changes and systematically analyzing developments over time.

Involving suppliers in climate protection

We systematically involve our suppliers in our climate targets. This is done on the one hand through transparency requirements and the structured collection of climate data, for example via the CDP Supply Chain Program. On the other hand, we address suppliers throughout the Group and gradually integrate climate criteria into existing procurement and management processes in order to further strengthen the consideration of climate protection along the supply chain. The "Supplier Engagement Rating" of the non-profit organization CDP evaluates companies according to how actively they work with their suppliers on climate protection. In 2025, CDP once again included us in the "Climate Leader A list" and as a "Supplier Engagement Leader". For more information about our CDP award, please visit CR strategy.

CDP Supply Chain Program

in %



Excluding T-Mobile US

This was helped by the fact that we calculated supplier-specific emission intensities based on the responses of our suppliers in the CDP Supply Chain Program: for this purpose, we compared the total emissions of suppliers to their sales. The KPI "CDP Supply Chain Program" shows how much of our purchasing volume from suppliers is covered by the CDP Supply Chain Program. In 2025, this figure was again around 46 %.

Beyond climate protection, human rights and environmental protection are central fields of action in our supply chain. For more information, see Human rights and supply chain here in the CR report.

Looking ahead

In the reporting year, we achieved our goal of becoming greenhouse gas neutral in our own operations (Scope 1 and 2). This is mainly due to the global purchase of electricity from renewable energies, significantly improved energy efficiency in our grids, and measures in the building and mobility sectors. Our next interim goal is to reduce our CO_2e emissions across Scopes 1–3 by 55 % in absolute terms by 2030 compared to 2020.

Deep Dive for Experts

Scope 1 and 2 emissions

Our Scope 1 emissions are mainly caused by the combustion of fossil fuels, such as fleet fuels, natural gas, and district heating and cooling. In the table below, we go into detail about our Group-wide Scope 2 emissions from our electricity consumption. We differentiate according to the methods "market-based" and "location-based" and thus follow the "GHG Protocol Scope 2 Guidance". Emissions are reported in CO_2 equivalents (CO_2e).

	2025	2024	2023	2022
Scope 1 and Scope 2 ("market-based") [a]				
Total in million	0.2	0.3	0.3	0.2
t CO_2e emissions Scope 1	223,790	236,355	239,602	212,044
t CO_2e emissions Scope 2 ("market-based") [b]	16,375	16,212	17,957	21,019

[a] Since 2023, CO_2 emissions (Scopes 1 and 2) have also included fugitive emissions from refrigerants and fire suppressants.

[b] 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.

Data is partly based on estimates, assumptions and projections. Includes offsets from purchased certificates.

	2025	2024	2023	2022
Scope 2 ("location-based")				
t CO_2e emissions (Scope 2, "location-based")	3,736,800	4,002,218	3,979,565	4,232,913

CO_2 certificates

We use CO_2 certificates from high-quality carbon removal projects that remove CO_2e outside our value chain to neutralize residual emissions. These include, for example, reforestation projects in other regions. In the reporting period, we offset a total of 250,000 tons of CO_2e outside our value chain through verified CO_2e certificates (2024: 35,167 tons of CO_2e). The majority of this was accounted for by CO_2 certificates from removal projects: 243,000 tons of CO_2e. Of this, 188,300 tons of CO_2e are attributable to biogenic sinks (e.g., reforestation) and 61,700 tons of CO_2e to technological sinks (2024: 25,000 and 8,000 tons of CO_2e, respectively). All certificates used were tested in accordance with recognized quality standards and cancelled in the reporting year. Further information on CO_2 certificates and quality standards can be found in our Sustainability statement.

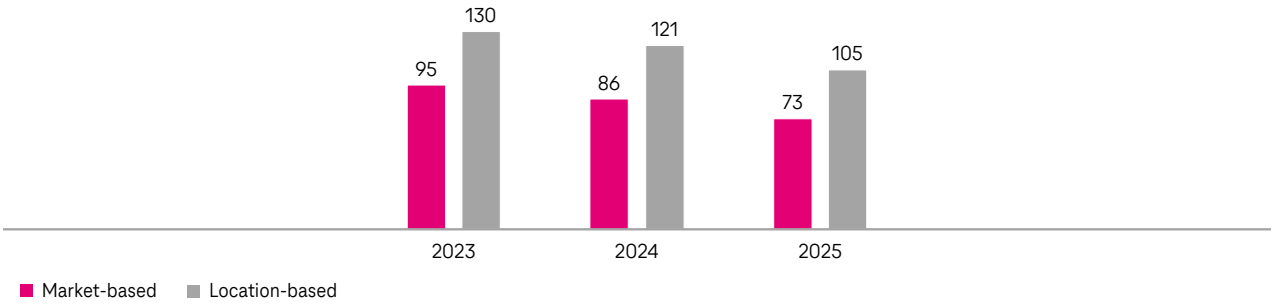
Carbon Intensity

Since 2023, we have been reporting the "Carbon Intensity" KPI on the basis of sales. The numerator of the KPI takes into account the total CO_2e emissions (Scope 1–3) of all energy sources – electricity, fuel, gas and district heating – and the denominator includes revenue. Location-based carbon intensity amounted to 105 metric tons of CO_2e/million € in the reporting year. (2024: 121 tons of CO_2e/million €). Market-based carbon intensity was 73 metric tons of CO_2e/million € (2024: 86 tons of CO_2e/million €). Compared to previous years, carbon intensity has been steadily declining since 2023. As a result, the relationship between economic performance and greenhouse gas emissions has shifted over time: fewer emissions are generated per unit of sales.

The figures reported for 2024 were adjusted retrospectively in the reporting year due to updated emission factors and methodological and structural changes.

Carbon Intensity

in t CO_2e / million € revenue



Alignment with TCFD recommendations

In 2015, the Task Force on Climate-related Financial Disclosures (TCFD) was established at the Paris Climate Change Conference. Its goal is to develop voluntary and uniform climate-related financial disclosures. In 2017, the TCFD published concrete recommendations for implementation. Companies can use these as a guide to inform investors, lenders, insurers and other stakeholders about the risks of climate change for their business model. In parallel with the recommendations in the area of climate, the final standard of the Taskforce on Nature-related Financial Disclosures (TNFD) was published in 2023. This deals with nature-related opportunities and risks. Details on Deutsche Telekom's commitment to biodiversity can be found here in the CR report under Operational resource protection.

We welcome the goals behind the TCFD and are steadily advancing our TCFD-compliant reporting. The physical risks posed by climate change include extreme weather conditions, which are already becoming increasingly evident today. Transitory risks such as the development of the CO_2 price are also increasingly determining the political discourse. This has a direct impact on our work and our stakeholders. The risks to the continuation of our operations are analyzed by our risk management and operationally managed in the business units. In addition, we are internally evaluating how reporting on climate-related financial risks and opportunities can be aligned with the TCFD's recommendations. This is done based on the existing approaches to strategy, controlling and risk management.

Governance

a) Describe the Board's oversight of climate-related opportunities and risks.

- Together with the rest of the Board of Management of Deutsche Telekom, our CEO is responsible for climate-related issues for the entire Group. This includes, among other things, our climate strategy, climate targets and climate-related opportunities and risks.
- The Board of Management of Deutsche Telekom is informed annually about the current status of climate target achievement and company-relevant climate issues.
- Deutsche Telekom's Risk Management department also reports quarterly to the Audit Committee of the Supervisory Board on ESG risks and opportunities. If unforeseen risks occur outside of regular reporting, they are reported on an ad hoc basis and reported to the Management Board and Supervisory Board. The main risks for the Deutsche Telekom Group are disclosed in our Annual Report.

For more information, please visit:

- Risk and opportunity management system
- ESRS E1–3 – Actions and resources in relation to climate change policies

b) Describe the role of management in assessing and managing climate-related opportunities and risks.

- The Group Corporate Responsibility (GCR) department is responsible for managing CR and climate-related issues, supported by Group-wide risk management. This also includes the assessment of climate-related opportunities and risks. The Group's business units and segments are responsible for implementing the climate strategy.

For more information, please visit:

- Risk and opportunity management system
- ESRS E1–2 – Policies related to climate change mitigation and adaptation

Strategy

a) Describe the climate-related opportunities and risks that the organization has identified in the short, medium, and long term.

- A key climate-related risk is the possible failure of the grid infrastructure due to damaged secondary infrastructure (e.g., power outages) or failed cooling systems. Another risk is the possible damage or failure of the grid due to damage to the grid infrastructure itself, which can occur due to extreme weather events or changes in climatic conditions. These risks can cause short-, medium- and long-term damage and also increase insurance premiums. Climate-related physical hazards are expected to increase in the future.
- The increasing demands of stakeholders, especially investors, customers and NGOs, can offer a strategic opportunity for more environmentally sustainable action. The increasing expectations and demands of these groups are driving us to adapt our business strategies and -practices. It also serves as a motivation to develop innovative and more environmentally friendly solutions, which creates financial opportunities. Competitive advantages can also be achieved by positioning itself as a responsible and future-oriented company.

For more information, please visit:

- ESRS 2 SBM-3 E1 – Material impacts, risks, and opportunities and their interaction with strategy and business model

b) Describe the impact of climate-related opportunities and risks on the organization's operations, strategy, and financial planning.

- Deutsche Telekom's business activities are highly resilient to climate change. Nevertheless, climate-related opportunities and risks have impacted our business activities in many ways: Energy efficiency is of great importance to Deutsche Telekom, as energy consumption in the network has a strong impact on operating costs, but also due to the strategic approach to climate protection and the increasing concerns and expectations of our stakeholders. The long-term incentive (LTI) of the members of the Board of Management also includes an ESG multiplier that includes the non-financial environmental performance indicators "Energy consumption" and "CO_2 emissions" (Scope 1 and 2).

For more information, please visit:

- Products and services
- Energy
- Climate protection

c) Describe the resilience of the organization's strategy, taking into account various climate-related scenarios, including a scenario of 2 °C or lower.

- In 2023, we analyzed selected Deutsche Telekom sites in Germany, Hungary, Greece and Croatia with regard to their physical climate risks. The analysis included all data centers as well as critical infrastructure in the fixed network and a sample in the mobile network. In 2024, we expanded this analysis to Austria, Poland, Slovakia, the Czech Republic, and the United States. The analysis thus includes the units that accounted for almost 100 % of our sales in 2025. In this context, locations from the mobile, fixed-network and data center sectors were included, the functionality of which has a significant impact on our business activities: In total, we analyzed more than 8,000 locations with the help of the "Climate Change Edition" of Munich Re's "Location Risk Intelligence" software, which is based on the climate scenarios of the Intergovernmental Panel on Climate Change (IPCC). The analysis included nine climate indices. We looked at the risk hazard for the respective sites in two IPCC climate scenarios: a business-as-usual scenario (RCP 4.5/SSP2–4.5), in which the global temperature increase will be above 2 °C, and a four-degree scenario (RCP 8.5/SSP5–8.5). For transitory climate risks, we use the "Net Zero Emissions 2050 Scenario" (NZE), which takes into account a limitation of global warming by 1.5 °C by 2050. In addition to the climate scenarios, we also examined the risk hazard in different periods: in the reporting year for the years 2030, 2040 and 2050.

For more information, please visit:

- ESRS 2 SBM-3 E1 – Material impacts, risks, and opportunities and their interaction with strategy and business model
- ESRS 2 IRO-1 E1 – Description of the processes to identify and assess material climate-related impacts, risks, and opportunities

Risk management

a) Describe the organization's processes for identifying and assessing climate-related risks.

- When assessing climate risks, we assessed the probability of occurrence and the extent of the risk. We assessed both the physical climate risks and the transitory hazards, taking into account the geographical coordinates of key Deutsche Telekom sites. For the transitory risk assessment, we also analyzed the upstream and downstream value chain. In the reporting year, the physical climate risk analysis was expanded to include a look at the upstream value chain.

For more information, please visit:

- ESRS 2 IRO-1 E1 – Description of the processes to identify and assess material climate-related impacts, risks, and opportunities

b) Describe the organization's processes for dealing with climate-related risks.

- Based on expert knowledge, risks and opportunities are assessed according to their financial impact (on an EBITDA-AL basis) and the probability of their occurrence. If it is not possible to quantify risks and opportunities, qualitative reporting is also possible. Once the risks and opportunities have been identified, they are analyzed and assessed in more detail with regard to their probability of occurrence and their potential financial impact, e.g., with the help of a scenario analysis. We then decide which concrete measures need to be taken, e.g., reduce risks or seize opportunities. The respective risk owner then implements, monitors and evaluates the measures. If necessary, the steps are repeated and adapted to the latest developments and decisions.

For more information, please visit:

- Risk and opportunity management system

c) Describe how the processes for identifying, assessing and managing climate-related risks are integrated into the organization's risk management.

- Our processes for identifying and assessing climate-related risks are fully integrated with company-wide multidisciplinary risk identification-, -assessment and management processes. Risks and opportunities (EBITDA impact of more than € 100 million) are identified on a quarterly basis through a Group-wide risk management process (RMP) designed and managed by the Group Risk Governance department. The RMP provides methods and systems for identifying and assessing risks and opportunities. Responsibility for reporting on Group risks and opportunities is distributed among the respective business units, so GCR is responsible for climate risks. Further information on the risk process can be found in our Annual Report.

In addition, the risk department works closely with GCR to identify material climate-related opportunities and risks.

For more information, please visit:

- Risk and opportunity management system

Key figures and objectives

a) Disclosure of the metrics used by the organization to assess climate-related opportunities and risks in accordance with its strategy and risk management process.

- The key metrics for measuring and managing climate-related opportunities and risks are:
  - Scope 1 To Scope 3 Emissions
  - KPI “Carbon Intensity”
  - Share Of Renewable Energies
  - Energy Consumption
  - KPI “Energy Intensity”
  - Enablement Factor
  - Waste Generation (Incl. E-Waste)
  - Waste Management & Recycling
  - Water Consumption
  - Land Use
- In addition, we calculate the proportion of our sales related to sustainability and continuously analyze products based on defined sustainability criteria.
- Historical key figures of Deutsche Telekom and the national companies are published in the key figures tool of the CR report.

For more information, please visit:

- ESRS E1–5 – Energy consumption and energy mix
- ESRS E1–6 – Gross Scopes 1, 2, 3 and total GHG emissions
- Circular economy
- Operational resource protection
- Products and services

b) Disclosure of greenhouse gas (GHG) emissions (Scope 1, Scope 2 and, where applicable, Scope 3) and the associated risks

- Deutsche Telekom discloses Scope 1–3 emissions annually in its Annual Report.
- We calculate both Scope 1 and 2 emissions as well as Scope 3 emissions on the basis of the GHG Protocol.

c) Describe the goals used by the organization to manage climate-related opportunities and risks and performance against the goals.

- The two non-financial performance indicators “energy consumption” and “CO_2 emissions” (Scope 1 and 2) have been part of the variable compensation of the Board of Management since 2021 and have also been relevant for our international managers (excluding T-Mobile US) and all employees of the Group in Germany who are not covered by collective bargaining agreements since 2022. The achievement of responsibilities-related targets for selected relevant functions are part of the performance-based remuneration, as are targets based on the “Sustainable Investment (SRI)” KPI and the “Listing of the T-Share in the Sustainable Indices/Ratings” target, which reflect climate change issues and the directly related “Energy Intensity” KPI.
- Deutsche Telekom AG’s climate targets are published in the CR report and the Annual Report.
- Our energy efficiency targets are disclosed here in the CR report.

Relevant Standards

Global Reporting Initiative (GRI)

- GRI 3–3 (Management of material topics); GRI 305: Emissions
- GRI 305–1 (Direct GHG emissions)
- GRI 305–2 (Energy indirect GHG emissions)
- GRI 305–5 (Reduction of GHG emissions)

Energy: optimizing consumption and increasing efficiency

Artificial intelligence (AI), cryptocurrencies, streaming services – technological development is proceeding at a rapid pace, and with it the energy demand of digital applications is increasing. Despite growing data volumes and network expansion, we are pursuing the goal of keeping energy consumption at least stable in the medium term (2027 compared to the base year 2023, excluding T-Mobile US). In recent years, we have been able to continuously reduce energy intensity – i.e., our energy consumption in relation to the volume of data transmitted. In addition, the expansion of renewable energies also plays an important role for us: they can help limit energy-related emissions and reduce dependence on fossil fuels – especially in combination with battery storage systems.

We deal in more detail with the topics of energy consumption, mix and efficiency as well as climate protection under "Climate change" and "General disclosures" in our audited Sustainability statement 2025. There we describe our goals and the plans for their implementation. You can also find more information on climate protection here in the CR report.

Milestones achieved, ongoing projects and goals

Since 2021, we have been sourcing 100 % of our electricity from renewable energies (Scope 2, market-based method) throughout the Group – from long-term supply contracts, direct electricity purchasing and certified guarantees of origin. To ensure stable energy consumption in the medium term, we are focusing on modernizing our grid infrastructure and operating our networks and data centers as efficiently as possible.

Where we come from

2012 In the Annual Report for 2011, we reported a key figure on our energy consumption for the first time.

2016 We added the "Energy Intensity" KPI to the previous "Energy Consumption" KPI, which compares our energy consumption to the volume of data transmitted.

2018 We set ourselves the goal of covering 100 % of our electricity needs throughout the Group from renewable energies by the end of 2021.

2020 We implemented our Group-wide Energy Guideline, which provides guidance on how to optimize energy efficiency.

2021 We covered 100 % of our electricity requirements Group-wide from renewable energies (Scope 2, market-based method).

2022 Our company Power and Air Condition Solution Management GmbH (PASM) began to build the first large-scale battery storage systems in Germany.

2024 We doubled our energy efficiency in Germany and Europe (compared to 2020). We measure our progress with the KPI "Energy Intensity" (energy consumption in relation to the volume of data transmitted).

2024 We commissioned the first two large-scale battery storage systems in Germany in Münster and Bamberg with a total capacity of 36 MWh.

Where we stand in the reporting year

2025 We are increasingly using AI and machine learning applications to optimize energy efficiency in the operation of our network infrastructure, for example to analyze and forecast data and voice traffic volumes in the network.

2025 In the data center in Magdeburg, we use AI-based software from the start-up etalytics to control the cooling systems.

2025 We are driving forward the planning and development of the Industrial AI Cloud, Germany's first AI factory, in Munich together with technology partners such as NVIDIA. The AI factory is supplied with electricity from renewable energies.

2025 We will continue to purchase electricity from renewable energies and conclude further power purchase agreements (PPAs), i.e., long-term electricity supply contracts – in the reporting year, for example, a 10-year contract with a new PV park in Mecklenburg-Western Pomerania.

Where we want to go

2027 In Germany and Europe, we want to keep our energy consumption at least stable compared to the base year 2023 by further increasing our energy efficiency – despite grid expansion and increasing data volumes.

2040 By 2040 at the latest, we aim to achieve net zero emissions along the entire value chain – across Scope 1–3. To this end, we want to reduce emissions by at least 90 % compared to 2020; only up to 10 % may be neutralized via high-quality projects that bind CO_2e from the atmosphere.

Grid infrastructure: innovations for energy efficiency

The operation of the mobile and fixed network infrastructure in Europe and the USA accounts for the largest share of our energy needs. We want to avoid that the constantly increasing data consumption of users is accompanied by a corresponding increase in energy consumption. That is why we are continuously working to make the energy consumption of our networks as efficient as possible. We are pursuing the goal of keeping energy consumption at least constant by 2027 compared to 2023 (excluding T-Mobile US). This goal is supported by programs and investments in energy-saving measures for all energy sources, by the optimization of infrastructure and by the use of innovative technology components.

In Group-wide innovation projects, we are developing new approaches to our grid operation: For example, we are modernizing the grid infrastructure, relying on operational energy-saving functions and other technologies to improve energy efficiency. In mobile communications, for example, so-called power saving features are used (excluding T-Mobile US). They automatically switch off certain functions when the network is only under low load.

AI can also help to control the use of energy in the mobile network in a more targeted manner. In Greece, for example, AI and machine learning algorithms are used for this purpose: They analyze the utilization of the network and adjust the energy consumption of a network component – the Radio Access Network (RAN) – according to demand. For customers, this has no noticeable impact.

We also use AI to adapt network capacities more closely to expected loads, for example by dynamically controlling individual mobile phone cells: Antenna power can be increased at major events such as open-air concerts or football matches; during periods of low demand – for example, at night or on non-match days – certain frequencies can automatically switch to a sleep mode.

“Green Coding & AI Community”: sharing best practices and anchoring them in practice

Energy and resource efficiency are also playing an increasingly important role in software development. Under the keyword “Green Coding”, teams at Deutsche Telekom are working on ways to develop applications in such a way that they can be executed in a more resource-efficient way.

A separate Green-Coding-Community brings together developers who want to promote such approaches in their everyday work – for example at hackathons or BarCamps. Prototypes and new ideas are created there. At events such as “Watt the Hack?! – Battle for the Leanest Kubernetes Cluster”, for example, teams explore how different approaches can affect resource requirements. A winning team emerged from the internal competition: Their proposal showed around 30 % lower energy consumption under the test conditions compared to the previous solution, while maintaining the same service quality. Such formats help to test ideas, share experiences and further anchor “Green-Coding” principles in everyday work.

On the initiative of the green coding community, so-called CO_2 labels for cloud projects were also introduced in 2025 in the internal developer portal Magenta CICD. This allows developers to view the CO_2 footprint of their project directly in their everyday work and gain transparency on how cloud projects can be classified based on CO_2 related parameters. From 2026, this labelling will gradually include data from other providers.

Modern telecommunications infrastructure generates a lot of heat during operation. Therefore, cooling systems at telecom sites and data centers also play an important role in overall energy consumption. Data-based and automated systems can control cooling demand according to demand and adapt the output to the actual heat load.

A look at Greece shows what this looks like in practice, where intelligent automation is used at more than 1,500 network locations. They are part of a central energy management system and support the control of the cooling.

In addition, the “Optimal Temperature Set Point” application is used: AI or machine learning-based automation continuously evaluates the temperatures of network elements and derives a suitable setpoint for the air conditioning system in technical rooms.

In the Zagreb data center, too, sensors record the current heat situation every minute. With the help of this data, AI-based controls control fans and cooling units so that they adapt flexibly to the respective load and are switched on and off as needed. In this way, the cooling is adapted to the heat generation. The “White Space Cooling Optimization” (WSCO) project is being implemented in Croatia jointly by Hrvatski Telekom and Siemens.

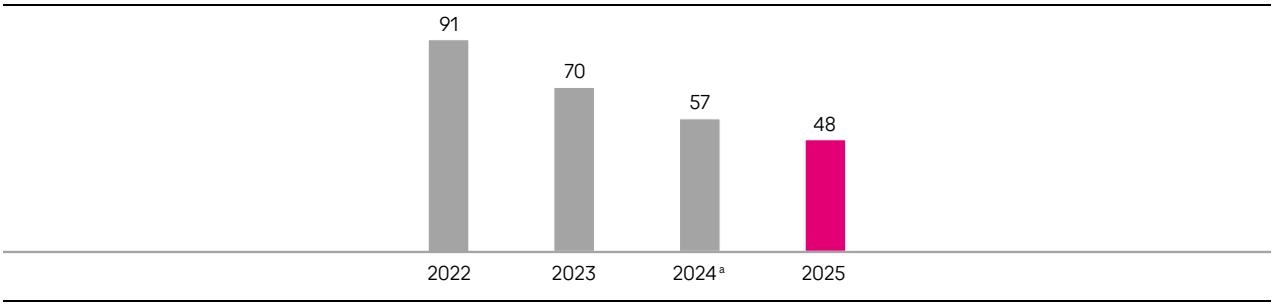
We describe further measures to stabilize energy consumption and increase energy efficiency in the “Deep Dive” section and in our audited Sustainability statement 2025. Closely linked to our approach to energy-efficient grids are also the topics of Operational resource protection and Raising awareness among employees here in the CR report.

KPI “Energy Intensity”

We have been able to steadily reduce energy intensity (i.e., our energy consumption in relation to the volume of data transmitted) in recent years. In the reporting year, energy intensity fell from 57 kWh/terabyte (2024) to 48 kWh/terabyte (2025). This corresponds to a reduction of around 16 %. Investments in modern technology have made this development of recent years possible – as has the shutdown of outdated network technologies. Detailed information on our KPI “Energy Intensity” can be found in our Sustainability statement 2025. As an indicator of the increase in efficiency in our data centers, we also use the so-called PUE value (Power Usage Effectiveness). Detailed information on this metric can be found in the “Deep Dive”.

Energy Intensity – Data volume

in kWh/Terabyte



[a] The figure reported for 2024 was adjusted retrospectively in the reporting year due to changes in electricity distribution at individual sites.

Renewable energies: electricity supply contracts and large-scale battery storage systems

We purchase electricity from renewable sources through various instruments – we conclude electricity supply contracts with electricity producers, so-called Power Purchase Agreements (PPAs), purchase more electricity from renewable sources directly or acquire corresponding guarantees of origin

These supply contracts offer us price stability and can increase planning and investment security.

At the end of 2025, we purchased 31.7 % (2024: 36.2 %) of our electricity Group-wide via PPAs and self-generation. Excluding T-Mobile US, the share was 26.1 % (2024: 22.6 %). We continuously monitor the electricity markets in the individual countries to identify new PPA options and conclude corresponding contracts if they make economic sense and fit our hedging strategy. One example of this is the photovoltaic park in Tützpatz, Mecklenburg, which went into operation in 2025 – the largest of its kind in Germany. We purchase the PV electricity generated there in full via a ten-year PPA. An overview of the annual development of the PPA share since 2022 can be found in the “Deep Dive”.

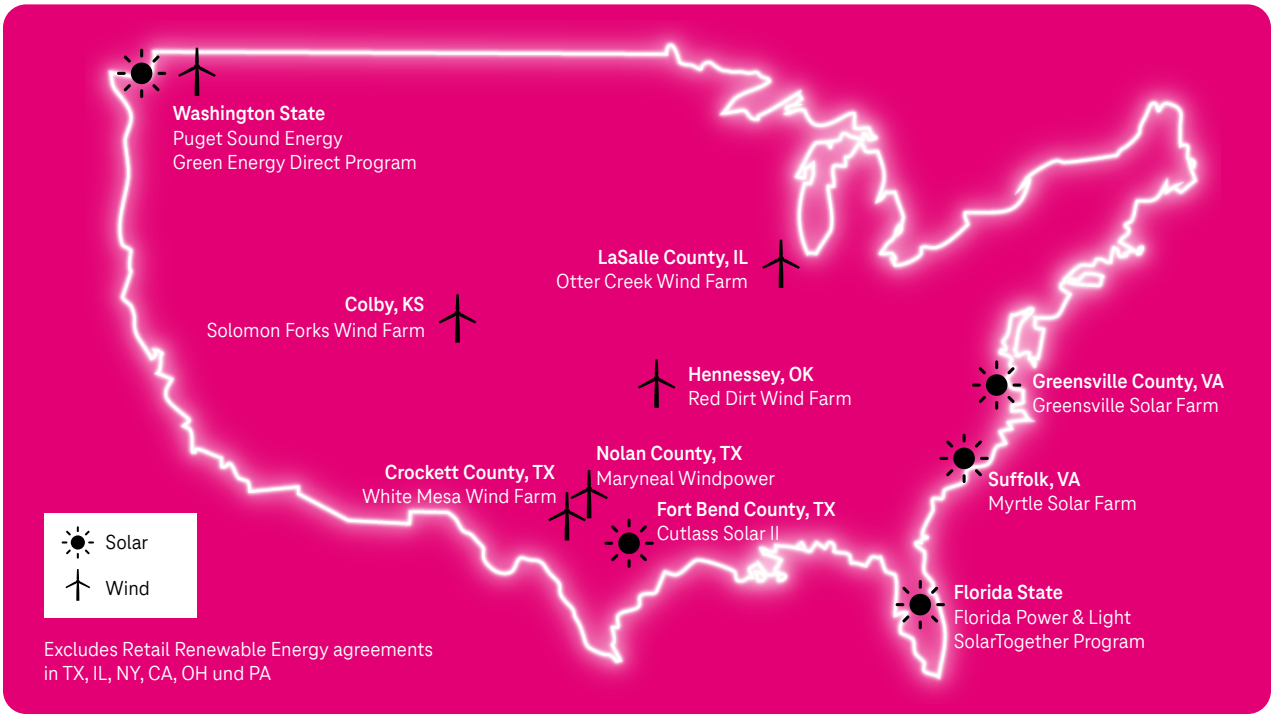
In 2025, PASM operated large-scale battery storage systems at its Bamberg, Hanover and Münster sites. They are used to temporarily store electricity from renewable sources and make it flexibly available. At the end of 2025, a total capacity of 16 MW was reached. The storage capacity is a total of 96 MWh (per day).

USA: diversified energy portfolio

To manage energy sustainably, T-Mobile US deploys energy efficient technologies and focuses on sourcing renewable energy. The company has strategically built a diverse renewable energy portfolio by engaging in a range of projects, including medium- to long-term virtual power purchase agreements (VPPAs) with wind and solar farms, on-site and community solar energy contracts, and shorter-term retail renewable agreements.

This strategy helps to reduce price volatility and maintain a diversified energy portfolio.

Diversified energy portfolio (T-Mobile US)

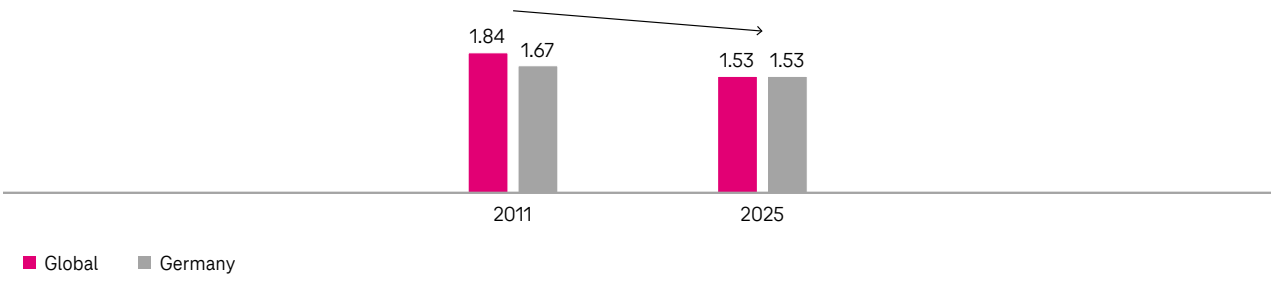


T-Systems: strong performance, efficient performance

T-Systems focuses on the operation of data centers and services for business customers, among other things. Since 2021, our data centers worldwide have been sourcing 100 % of their electricity from renewable energies – either directly, through the conclusion of PPAs, through their own energy generation or by purchasing guarantees of origin. We continuously improve the energy efficiency of our data centers and measure the increase in efficiency via the PUE value (more on the calculation in the "Deep Dive"). The average global PUE value was 1.53, as was the PUE value of our T-Systems data centers in Germany (2024: global: 1.56; Germany 1.53).

Energy efficiency of T-Systems data centers

Data centers are becoming more energy-efficient (PUE factor)



The PUE factors (energy input) include both internal and external (co-location) data centres.

During operation, T-Systems pays attention to the use of server and storage hardware that is as efficient as possible, optimized cooling during the operation of data centers, and automated software features, for example. In the data center in Magdeburg, for example, an AI-based solution from the start-up etalytics has been controlling the cooling systems in regular operation since 2025. After a successful test phase of around a year, the solution takes over the optimization of the complex cooling infrastructure in regular operation. It not only adjusts the outlet temperature of the chillers, but also sets the optimal operating mode for each cooling module, even in changing external and internal conditions. In the test phase, an efficiency potential of up to 33 % was shown under the conditions under consideration in terms of cooling-related energy consumption compared to the initial operation.

In the medium and long term, we would like to further develop our cloud applications from an energy efficiency perspective (“green coding”). T-Systems has been participating in the “EU Code of Conduct on Data Centre Energy Efficiency” since 2014. This is a voluntary code of conduct with the aim of motivating operators and owners of data centers to reduce energy consumption and thus the negative effects on the environment, economy and energy security. At the end of 2025, T-Systems was operating a total of 16 FMO (Future Mode of Operation) twin-core data centers at seven locations in Europe as well as four local, customer-specific data centers. Since 2024, all nine internal FMO twin-core data centers have been listed in the EU Code of Conduct. In addition, T-Systems joined the Climate Neutral Data Centre Pact (CNDCP) in 2021. We have been a certified member since 2023.

Germany’s first AI factory

In the reporting year, the planning and construction of the Industrial AI Cloud, Germany’s first AI factory, was pushed forward in Munich. The aim is to provide AI computing capacity to companies, research institutions and the public sector. The project was created in partnership with technology companies such as NVIDIA, and the opening took place on February 4, 2026. In the future, the AI factory is to form a central component of a sovereign European AI infrastructure. In addition to aspects of digital sovereignty and industrial competitiveness, climate protection considerations also played a role in the planning: The AI factory is supplied with electricity from renewable energies. Furthermore, the AI factory uses a cooling concept in which water from a nearby stream is included in the cooling. Moreover, applications such as digital twins and simulation-based Physical AI approaches are to be supported. These can help companies to make development and production processes more resource-efficient and energy-efficient.

Looking ahead

In the coming years, we want to further stabilize our energy consumption by continuously increasing our energy efficiency – despite rapidly growing data volumes. An important focus is also on the further expansion of renewable energies and large-scale storage solutions. In addition, we are increasingly relying on the use of digital and AI-based solutions to further optimize energy consumption, especially in data centers.

Deep Dive for Experts

Management & Frameworks

- The telecom company PASM obtains the energy for the German Telekom Group companies. Its energy management system is certified according to the international standard ISO 50001.
- We have achieved our goal of sourcing 100 % of our electricity requirements from renewable energies throughout the Group by the end of 2021 (market-based, Scope 2). To emphasize this commitment, we have joined the global RE100 initiative. Its goal is to promote the purchase of electricity from renewable sources.

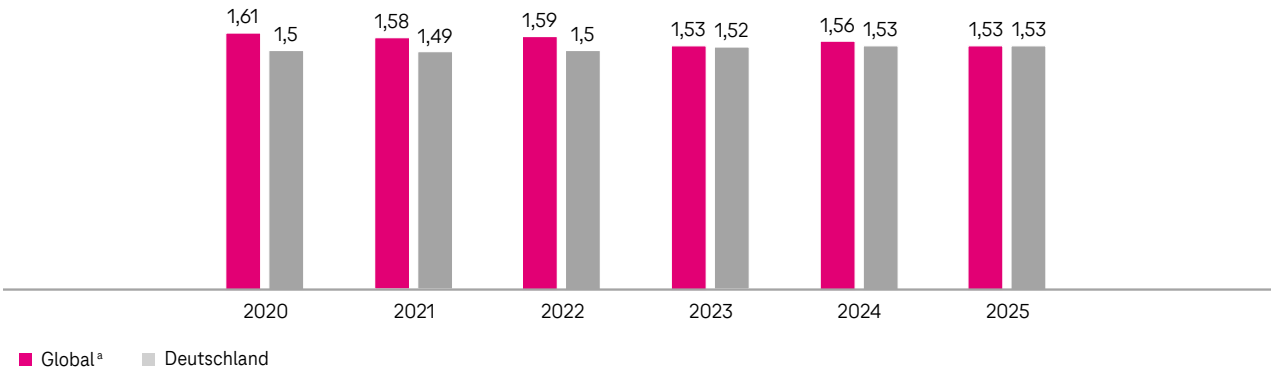
Further measures to stabilize energy consumption and increase energy efficiency

- We have already firmly anchored the topic of energy efficiency in the selection of new technologies in the architecture and design phase through specifications and specifications. The guideline covers technical installations along the entire infrastructure: from network elements and data centers to air conditioning and monitoring systems.
- Group-wide self-production of renewable energies rose from 7.8 GWh in 2024 to 13.9 GWh in 2025. To this end, we cooperate with various suppliers in the field of renewable energies. At the same time, there is a focus on the use of electricity storage systems and the implementation of intelligent load management. In Germany, waste heat is used in PASM's ICT network nodes (information and telecommunications technology). One example is the supply of the Pallaseum building in Berlin (only available in German). In 2025, 732 MWh of heat was generated from waste heat at the Winterfeldtstraße site in Berlin with the help of a heat pump and delivered to GASAG for heating the residential building.

KPI "PUE"

- We are continuously improving the energy efficiency in our data centers [a] with various measures. One indicator of the increase in efficiency of our data centers is the "Power Usage Effectiveness (PUE)" value, which we determine according to the method of the data center standard EN 50600. The PUE value results from the ratio between the total electrical energy consumed by the data center and the electrical energy consumption of the IT.

Data Center PUE



[a] International + DT Group in Germany

KPI "Renewable Energies"

- We use the "Renewable Energies" KPI to measure our progress. The key figure shows the share of electricity from renewable energies in relation to total electricity consumption. In addition, we have developed Group-wide parameters that we use to evaluate electricity purchases in all national companies with regard to sustainability aspects.

[a] Operation and use as multi-customer and multi-platform data centers.

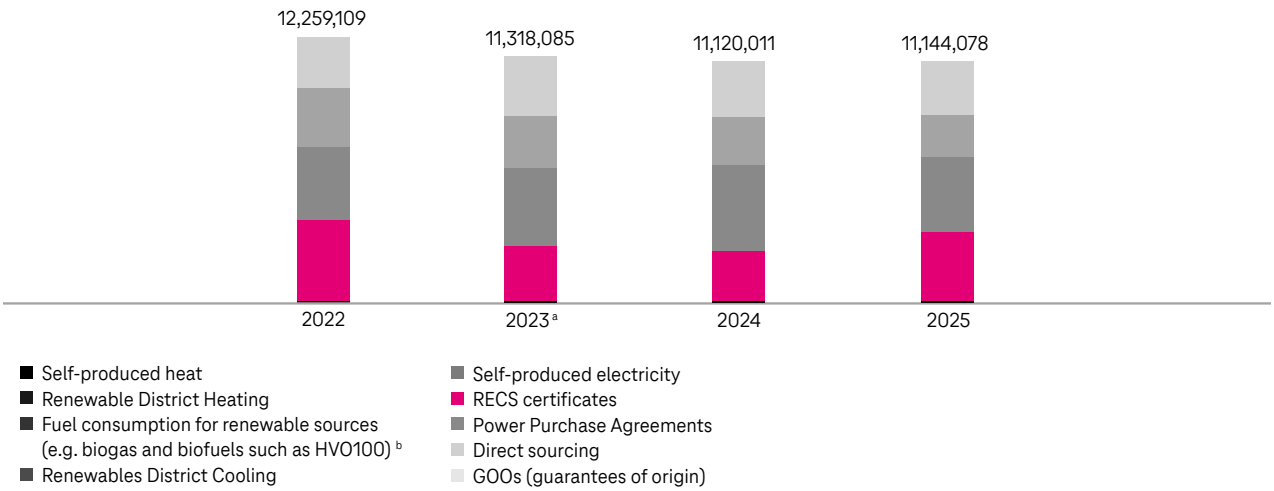
	2025			2024			2023			2022		
	D [a]	EU [b]	Group	D [a]	EU [b]	Group	D [a]	EU [b]	Group	D [a]	EU [b]	Group
Total energy consumption (GWh)	2,184	1,728	11,957	2,274	1,759	11,991	–	–	–	–	–	–
Total renewable energy consumption (GWh)	1,897	1,549	11,144	1,948	1,564	11,120	–	–	–	–	–	–
Share of renewable energy	87 %	90 %	93 %	86 %	89 %	93 %	–	–	–	–	–	–
Total electricity consumption (in GWh)	1,894	1,549	11,139	1,947	1,564	11,118	1,911	1,540	11,316	2,265	1,576	12,252
Electricity from renewable energy (in GWh)	1,894	1,549	11,139	1,947	1,564	11,118	1,911	1,540	11,316	2,265	1,576	12,252
Share of renewable electricity	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %
Certificates	67 %	66 %	51 %	68%	66 %	44 %	74 %	68%	46 %	53 %	63 %	50 %
Power Purchase Agreements [c]	33 %	20 %	32 %	29%	17 %	36 %	26 %	5%	32 %	23 %	0 %	28 %
Direct purchase [d]	1 %	14 %	17 %	4 %	17 %	20 %	0 %	26%	21 %	23 %	22 %	23 %
Self-generation [c]	–	–	–	–	–	–	0.18 %	0%	0.05 %	0.1 %	0 %	0.04 %

[a] Until 2022: D = DT Group in Germany, since 2023 Germany segment is depicted.
[b] Until 2022: EU = National companies in Europe excluding Germany and T-Systems, since 2023 Europe segment is depicted.
[c] From 2024, the share of self-generation is no longer shown separately. Instead, it is included in the share of power purchase agreements.
[d] 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.

- Even though we prefer to cover our electricity consumption through PPAs and self-generation as well as direct purchases, we still have to resort to guarantees of origin due to limited capacities.

Renewable Energy in the Group

in MWh



[a] Starting from 2023, including consumption in the fleet area.
[b] Since this reporting year this position includes other renewable sources next to biogas (e.g. biofuels such as HVO100). The wording and previous year's figures were adjusted accordingly.

Relevant Standards

Global Reporting Initiative (GRI)

- GRI 3–3 (Management of material topics); GRI 302: Energy
- GRI 302–1 (Energy consumption within the organization)
- GRI 302–3 (Energy intensity)
- GRI 302–5 (Reduction of energy requirements for products and services)

Task Force on Climate-related Financial Disclosures (TCFD)

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

GSM Association (GSMA) Indicators for Telecom Operators

- GSMA-ENV-03 (Energy consumption)

Circular economy: a systematic approach along the value chain

Telecommunications services and devices such as smartphones, tablets or routers have become an indispensable part of our everyday lives. However, a smartphone does not only begin its life cycle with its use by customers, but already with the extraction of raw materials, the design and the selection of the materials used – and it often does not end with the first use: devices are repaired, passed on or reused before they are finally no longer used. Repairability, replaceable components, the longest possible service life and recycling at the end of the life cycle are therefore central components of a holistic circular economy approach.

With the growing number of networked devices, the dependence on critical raw materials is also increasing. After use, the amount of electronic waste, in which valuable raw materials are bound, also increases. Geopolitical tensions, supply bottlenecks – for example for semiconductors – and the increasing shortage of critical raw materials illustrate the importance of resilient material and supply chains. If implemented consistently, the circular economy can help reduce dependencies and strengthen security of supply. At the same time, it makes a significant contribution to reducing greenhouse gas emissions.

Deutsche Telekom is responding to this development with a structured circular economy approach for end devices and technology. The aim is to close material cycles, reduce the use of primary raw materials and extend the service life of equipment and technology. In this way, we also want to contribute to the further development of cycles within industry.

We also address the topic of the circular economy as well as our goal, measures and progress in our audited Sustainability statement 2025.

Milestones achieved, ongoing projects and goals

For more than 20 years, Deutsche Telekom has been working to recover resources from end devices and technology and to avoid electronic waste. Our current circular economy approach has gradually developed from various individual initiatives.

Where we come from

2003 Together with Deutsche Umwelthilfe, we launched a mobile phone take-back system in Germany to support environmental and nature conservation projects.

2007 For the first time, we took back 100,000 mobile phones in a single year across the Group.

2010 We established the “Take-back of mobile devices” KPI as a Group-wide performance indicator.

2013 We adopted an International Waste Management Framework, which sets out Group-wide principles for waste management.

2016 We introduced a Group-wide policy with requirements for the recycling of copper cables.

2017 We put packaging machines into operation that can provide packaging tailored to the size of the product. Since then, the machines have been used in Germany for technical infrastructure products to avoid oversized packaging.

2021 In a packaging guideline, we defined ecological criteria for own-brand appliances. With the KPI “Sustainable Packaging”, we also reported the proportion of devices packaged in accordance with the guidelines for the first time.

2022 Since 2022, we have been packaging all new own-brand appliances in accordance with the sustainability criteria of our packaging guideline.

2024 In order to further increase the collection rate of old mobile phones, we set up new, specially designed mobile phone collection boxes in all T-Shops throughout Europe.

2024 We presented the concept for our new measurement and control instrument Telco Circularity Score (TCS) at our Capital Markets Day.

Where we stand in the reporting year

2025 We are taking back around 10.5 million mobile devices across the Group.

2025 Together with suppliers and other partners, we continue to work on approaches to reduce packaging quantities and sizes for network technology.

2025 We launch an internal marketplace for used network technology to support extended service life.

2025 We will introduce the Telco Circularity Score (TCS), which we plan to use as a measurement and control tool from 2026 onwards.

Where we want to go

From 2026 We will use the Telco Circularity Score (TCS) to measure and manage progress within Deutsche Telekom. In the future, the approach is intended to enable comparability within the industry.

2030 Our goal is to ensure that almost all the products we put into circulation can be returned to the cycle. This includes the entire network technology as well as a large part of our own-brand devices and the mobile devices we sell.

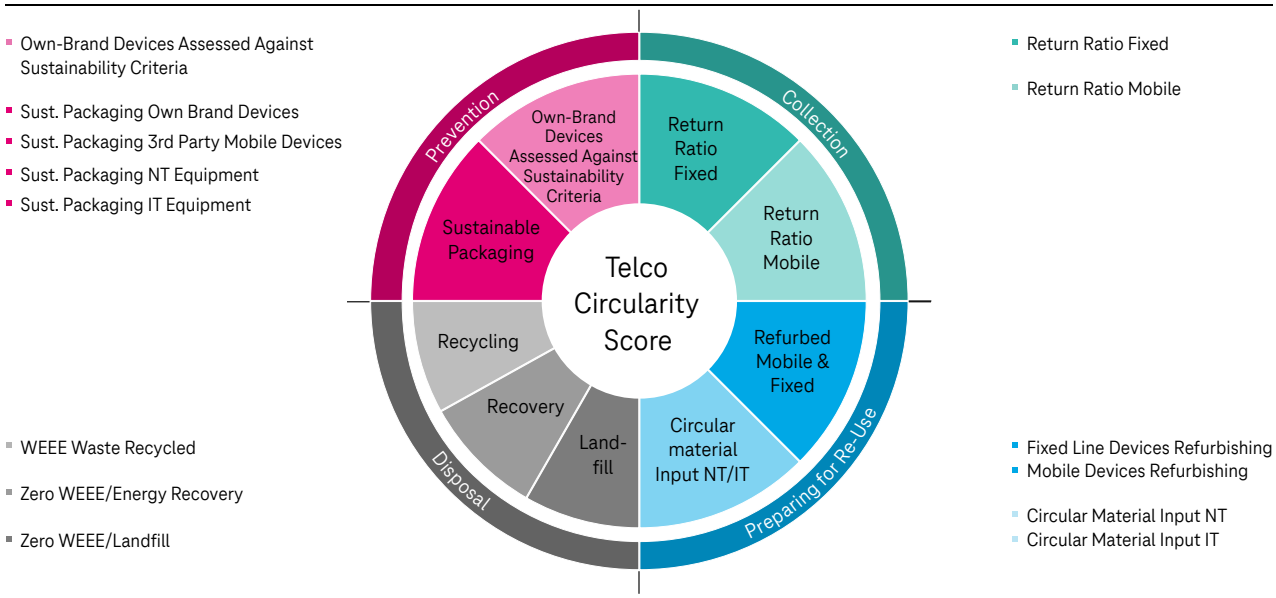
Measuring and managing the circular economy: introducing the Telco Circularity Score

Circular economy is a central lever for responsibly managing raw materials and resources within planetary boundaries and at the same time strengthening the resilience of a company. Against this background, we are pursuing a holistic approach aimed at extending the service life of technology and end devices and keeping materials in the cycle for as long as possible. Building on this, we have set ourselves the goal of being almost completely recyclable in technology and devices by 2030 (excluding T-Mobile US). In concrete terms, this means that by 2030, almost all the products we put into circulation can be returned to the cycle. This includes the entire network technology as well as a large part of our own-brand devices and the mobile devices we sell.

Such an aspiration requires a consistent basis in order to be able to record progress uniformly throughout the Group and manage it in a targeted manner. For this purpose, we have developed the Telco Circularity Score (TCS). It serves as an overarching measurement and control tool for our circular economy activities and forms the basis for a total of 14 TCS KPIs (Key Performance Indicators). T-Mobile US pursues its own circular economy approach with its own methodology and is not included in the TCS. Further information can be found in the “Deep Dive”.

The TCS covers the entire life cycle of end devices, network technology and IT equipment. The conceptual framework is formed by four dimensions that address different levers of the circular economy along the life cycle and together structure the TCS approach.

The 14 TCS KPIs at a glance



To date, there is no established, industry-wide standard for measuring circularity. The TCS can close this methodological gap by bringing together central aspects of the circular economy in a uniform logic and condensing them into an overall score. This allows us to set priorities more clearly, target measures in a more targeted manner and systematically improve the recyclability of the products we put into circulation along key levers – because we can only effectively control what we measure. At the same time, the approach is designed in such a way that it can also support the comparability of circular economy services within the industry in the future.

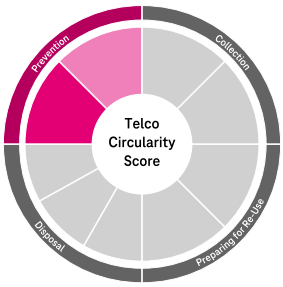
The concept of TCS was first presented at our Capital Markets Day in 2024. In the reporting year, we further specified it and integrated it into our data collection and reporting processes. The publication of an aggregated overall score is planned from the 2026 reporting year, after the newly introduced key figures have been collected over a complete reporting cycle and a reliable starting point has been created.

Details on the methodology of the TCS, the weighting of the four dimensions and the KPIs can be found in the “Deep Dive”.

Avoidance: setting the course in product development

Waste prevention begins long before a device is in use. We make important decisions in the early stages of product development – for example, for product design or packaging. We make both aspects comprehensible with the help of our TCS KPIs, thus creating a basis for measuring progress in waste prevention in the future.

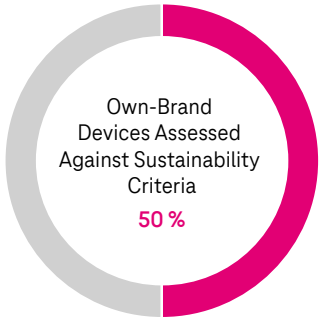
TCS KPI “Share Of Own-Brand Devices Assessed Against Sustainability Criteria”



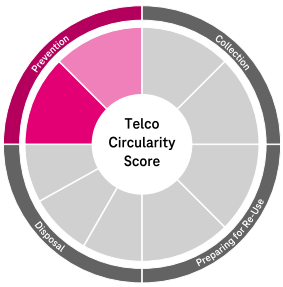
With the TCS KPI “Share Of Own-Brand Devices Assessed Against Sustainability Criteria”, we measure the extent to which ecological requirements are already taken into account in the product design of our own-brand devices. Own-brand devices are considered to be assessed against sustainability criteria if they have either been evaluated against defined ecological criteria as part of our impact measurement process or hold external environmental certifications.

We include own-brand devices in the KPI, for which we have identified ecological improvements in our impact measurement process. We also consider devices with recognized environmental labels such as the Blue Angel or a TÜV Green Label.

The KPI indicates the percentage share of own-brand devices that have been assessed against these criteria in relation to all own-brand devices offered during the reporting year, which was 50 % in 2025.



TCS KPIs “Sustainable Packaging”



In order to make our packaging requirements systematically measurable, we use the TCS KPIs “Sustainable Packaging”. Packaging is considered “sustainable” if it meets our internal packaging requirements. These requirements include, among others, the use of recycled paper and cardboard as well as the avoidance of single-use plastics. The TCS KPIs “Sustainable Packaging” indicate the share of our devices and technical components for which the packaging complies with the requirements of our packaging guideline.

The KPIs are shown in four different device categories:

- **Own-brand devices:** share of devices with guideline-compliant packaging in all own-brand devices sold in the reporting year (2025: 100 %).
- **3rd party mobile devices:** share of devices with compliant packaging across all 3rd party mobile devices sold in the reporting year (2025: 94 %).
- **Network equipment:** proportion of procurement projects completed in the reporting year with a binding clause on packaging in accordance with the guidelines. The ten largest network technology suppliers are taken into account. These procurement projects are scheduled to be recorded in 2026.
- **IT equipment in data centers:** share of IT equipment procured annually with packaging in compliance with guidelines, measured by number of units (2025: 95 %).

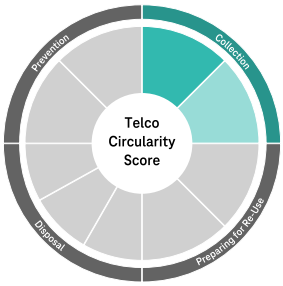
Collection: take-back of devices at the end of the useful life

End devices that are no longer needed often disappear unused in drawers – even though they still contain valuable materials. We therefore focus specifically on making it easier to return devices at the end of their useful life and to support them with suitable take-back solutions.

The focus is on two groups of devices:

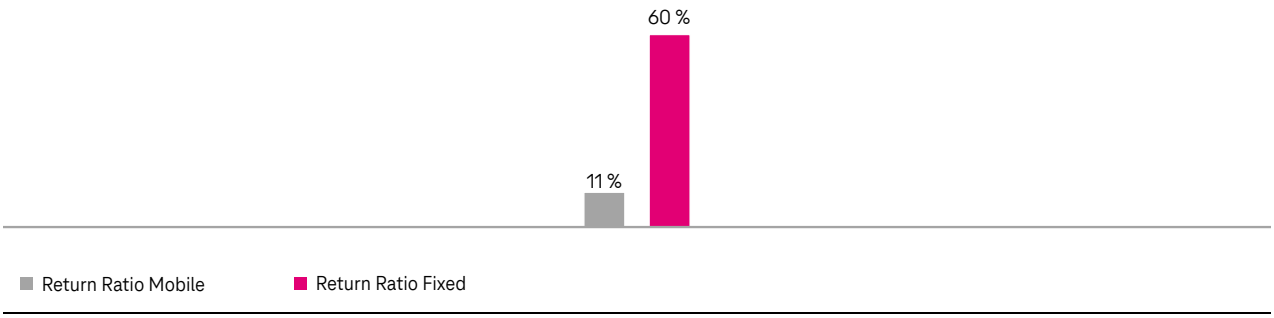
- **Fixed devices:** take-back of routers, repeaters, media receivers and other stationary devices, especially in the context of rental and exchange models.
- **Mobile devices:** take back smartphones, tablets and mobile routers via appropriate return channels.

TCS KPI “Return Ratio Fixed and Mobile”



With the TCS KPIs “Return Ratio Fixed and Mobile”, we record the percentage of taken back devices in all fixed and mobile devices sold in the reporting year. The KPIs include devices that were recorded in the reporting year via defined take-back channels. Both own-brand devices and third-party mobile devices are considered.

In 2025, almost 700,000 mobile devices and around 4.9 million fixed line devices were taken back. This equates to a take-back rate of 11 % for mobile devices and 60 % for fixed devices. The figures refer to the TCS assessment excluding T-Mobile US. The Group-wide value is disclosed in the “Deep Dive” section.



Practical examples: activating returns in a targeted manner

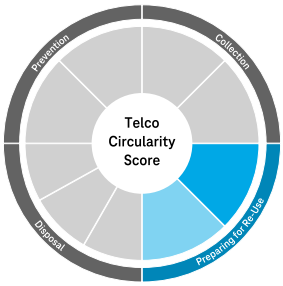
Whether in the shop, as part of promotions or together with partners: We want to make it as easy as possible for customers to return devices that are no longer in use and provide targeted incentives. The following examples show current measures from different countries:

- **Germany:** In Germany, we operate the mobile phone collection center together with our partner Foxway to collect used mobile phones. In 2025, we were able to collect over 66,000 old devices via our take-back system. This has been awarded the state eco-label “Blue Angel”. For every device returned, we donate money to local environmental and social projects. In addition, customers were able to sell used devices to our partner Assurant in the reporting year via the “HandyAnkauf”, which uses them for refurbishment. In addition, we implemented the collection campaign “From old to gold” in 2025. Customers had the opportunity to take part in a competition when they handed in an old device to a Telekom shop and win a 1-kilogram gold bar made of recycled gold. In addition, we donated two euros for each returned smartphone to the children’s aid organization “Ein Herz für Kinder”. As part of the campaign, we collected around 30,000 old devices.
- **Hungary:** Magyar Telekom collaborated with refurbishment provider Recommerce in 2025 to offer take-back solutions for mobile phones, tablets and game consoles. In addition, used equipment was collected together with partners such as Budapest Sportiroda (BSI) and UNICEF in order to reuse or recycle it. In addition, the company supported the Jane Goodall Institute’s “Pass it back, bro!” program with around one euro per device, which was collected through its own logistics channels. In total, over 40,000 mobile devices were taken back in Hungary in 2025.
- **Slovakia:** Slovak Telekom continued the collection of WEEE in 2025 and recorded over 45,000 taken back devices by the end of 2025. In addition to acceptance in the shops, a new digital return option has been introduced. Customers can initiate the return process via the website and return their old devices by parcel delivery.
- **Greece:** OTE Group implemented targeted initiatives in the reporting year to further develop the collection of mobile devices in the COSMOTE and GERMANOSE retail network. These included information campaigns, buy-back and recycling offers, as well as the introduction of an AI-supported evaluation process for buy-back devices in the shops. In this way, over 70,000 mobile devices were collected in 2025.

Preparation for reuse: preparation for further use

Not all returned devices have reached the end of their service life. We therefore rely on preparing suitable devices and components for further use and extending their use as much as possible. The focus is on two approaches: the reprocessing of devices and the use of circular materials. We make both of these things traceable through our TCS KPIs, thus creating the basis for being able to measure progress in preparing for reuse in the future.

TCS KPIs “Number of Fixed Line and Mobile Devices Refurbished“



With the TCS KPIs “Number of Fixed Line and Mobile Devices Refurbished”, we show how many returned devices are being refurbished for reuse. To this end, we have end devices and technology tested by specialized service providers and – if they are suitable for this purpose – prepared for further use.

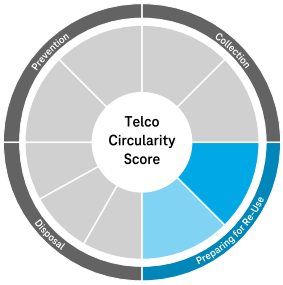
To this end, we record the number of fixed and mobile devices refurbished in the reporting year, both of our own brands and of 3rd party providers. Fixed devices include routers, repeaters, media receivers and TV ticks; to mobile devices, smartphones and mobile routers.

In 2025, around 2.5 million fixed line devices and around 224,000 mobile devices were refurbished by external service providers.

Number

	2025
Fixed line devices refurbishing	2,451,124
Mobile devices refurbishing	224,077

TCS KPIs “Circular Material Input”



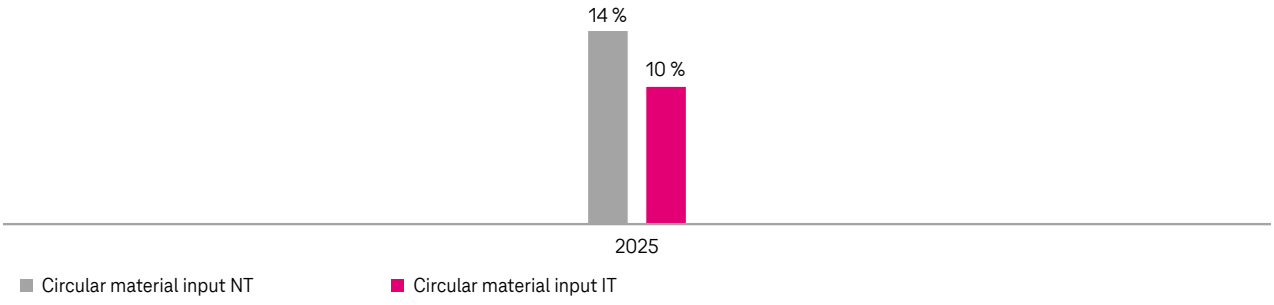
In addition to the reuse of returned equipment, we also look at the use of materials in new purchases. With the TCS KPIs “Circular Material Input”, we make it visible to what extent recycled technology and materials with recycled content are taken into account – measured by weight.

When it comes to the network technology used in our network infrastructure, we look at both the proportion of remanufactured or reused components and the proportion of recycled materials in new products. These include metals such as iron, aluminum and copper in particular and, to a lesser extent, recycled plastics.

The IT equipment in our own data centers and those leased by us includes both refurbished and reused equipment as well as newly procured equipment with proportionately recycled materials.

We use reliable average values as the basis for the calculation. The KPIs set the weight of the remanufactured technology and the recycled materials used in relation to the total weight of the network technology or IT equipment procured annually.

In 2025, the circular use of materials was 14 % for network technology and 10 % for IT equipment.



Practical examples: refurbished is in demand

End devices: refurbished as a second phase of use

Customers can purchase used smartphones in connection with the conclusion of a contract in several national companies, including in Germany, Croatia, Austria, Slovakia and Hungary. The European national companies mainly offer fixed devices in a rental model. After replacement, the devices are technically tested and, if suitable, refurbished and reused.

- **Greece**: OTE Group has established a process for reconditioning terminal equipment such as routers, network sockets and TV receivers. With an annual capacity of 265,000 devices (as of 2025), this project is intended to meet the growing demand for used equipment. In addition, more than 2,000 smartphones suitable for refurbishment were collected in 2025 as part of a shop-based Buy-Back program.
- **Hungary**: Magyar Telekom offers refurbished mobile phones. Since the launch of the service two years ago, more than 30,000 such devices have been sold in cooperation with partner Recommerce.
- **Croatia**: Hrvatski Telekom has introduced a refurbishment process for fixed and mobile devices. In 2025, 187,000 end devices were refurbished. A large proportion of these refurbished devices were put back into use in the same year: 138,000 devices were rented to customers.

Current figures from Germany

- Around 1.3 million customer devices such as routers and TV set-top boxes have been refurbished for reuse in Germany. In addition, about 200,000 smartphones were refurbished.
- Around 800,000 refurbished fixed line devices were sold or rented, of which around 300,000 were offered as service replacement devices.
- About 600,000 non-reusable fixed line devices and about 100,000 smartphones were recycled.

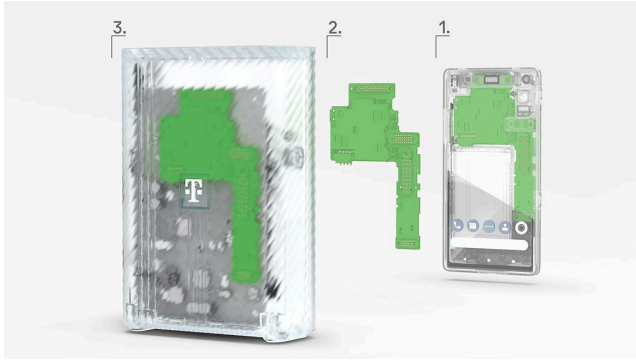
Network technology: internal marketplace for reusable equipment

Due to the network expansion and the transition from 4G to 5G mobile communications, discarded network technology is regularly produced. Since 2025, we have been using the internal marketplace Telekom Equipment Exchange (TEE) throughout the Group, with the exception of T-Mobile US.

Through the TEE, we systematically make used network technology available within the Group, thus enabling it to be reused at other locations and in alternative technical contexts. This should help to ensure that less new equipment is needed and that technical components can be used for longer. The TEE is a central instrument of our circular economy strategy in the grid sector and complements existing measures for the reuse, processing and recycling of technology.

From old to new: prototype of the NeoCircuit router

In cooperation with an industry consortium (including Citronics, Evonik, Fairphone, Infineon, MaxLinear, Sagemcom and the INC Innovation Center), we have developed an innovative approach to use electronic components from old devices for the production of new devices. The first prototype, the NeoCircuit Router, is already fully functional and was unveiled at Mobile World Congress 2025.



For the router, central electronic components such as the motherboard, processor and memory chips from old devices – including smartphones such as the Fairphone 2 – as well as from DSL and USB cores, cables and power plugs are reused. The housing is also made of 100 % recycled plastic.

In the first expansion stage, the prototype achieves a degree of circularity of around 70 % in relation to the electronics on this basis. According to initial calculations, the CO_2 footprint is around 50 % lower than that of conventional routers.

The assessment of the degree of circularity and the CO_2 effects is based on a weight-related analysis of the reused electronic components as well as an indicative comparison with existing life cycle analyses of conventional routers. The router is still in prototype status, will not be mass-produced and will not be offered on the market.

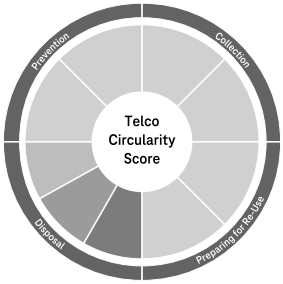
You can find more information about the NeoCircuit router on our website.

Waste: handling equipment at the end of its life cycle

At the end of the product life cycle, there are materials and devices that cannot be reused. Our goal is to avoid waste as much as possible and to recycle any waste generated in the best possible way – especially in the case of electrical and electronic waste.

To this end, we implement various measures along the waste hierarchy. This includes clearly regulated processes for the collection, treatment and professional recycling of electrical and electronic waste in order to ensure controlled handling and avoid its disposal in landfills.

TCS KPIs “WEEE Waste Recycled”, “Zero WEEE/Energy Recovery” and “Zero WEEE/Landfill”

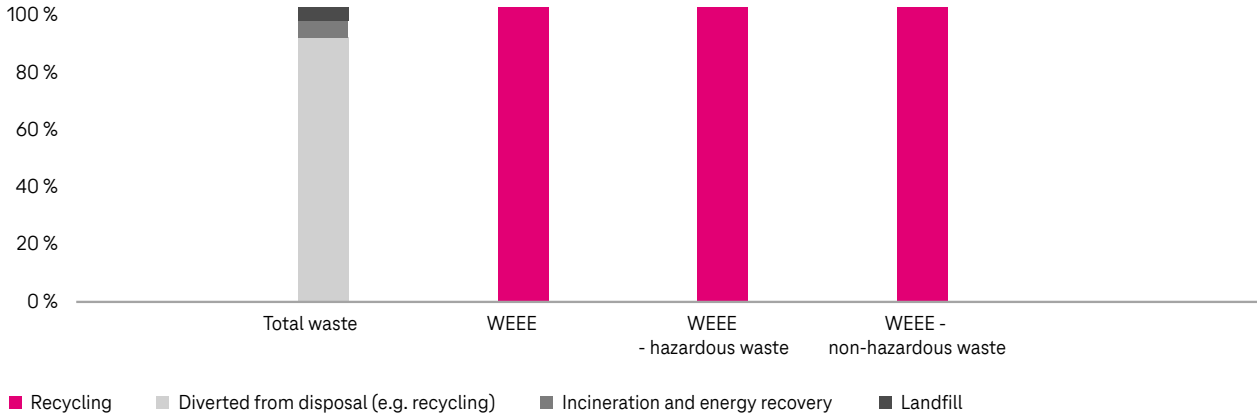


With these TCS KPIs, we record the treatment of electrical and electronic waste at the end of its life cycle. We distinguish between three forms of treatment:

- recycling,
- energy recovery
- landfill

To this end, we collect the TCS KPIs “WEEE Waste Recycled”, “Zero WEEE/Energy Recovery” and “Zero WEEE/Landfill”.

The respective waste quantities are set in relation to the total amount of electrical and electronic waste generated. This makes it possible to understand what proportion of waste is recycled, energetically recovered or landfilled.



Looking ahead

From 2026 onwards, we will focus on the practical application of the Telco Circularity Score as a measurement and control tool. In the future, the TCS is designed to create a reliable benchmark and to be able to compare circular economy approaches in the telecommunications industry.

Deep Dive for Experts

Background: Telco Circularity Score (TCS)

The TCS covers the entire device lifecycle of end-user devices, network equipment, and IT hardware. To this end, it considers four dimensions:

- **Avoidance:** influencing design, materials, and packaging during product development.
- **Collection:** supporting the return of devices at the end of their useful life.
- **Preparation for reuse:** refurbishment of used devices and components for further use.
- **Waste:** management of devices and materials at the end of their lifecycle, in particular electrical and electronic waste.

The four dimensions are equally weighted in the TCS (25 % each). Key performance indicators (KPIs) have been defined for each dimension. They depict quantities, shares and developments along the four dimensions in a comparable way. In doing so, we are partly drawing on established key figures related to the circular economy that have already been collected in recent years. In addition, we defined further KPIs in the reporting year to reflect all four dimensions.

In the following, we explain our approaches in the four dimensions:

Avoidance: The framework is formed by defined requirements for the design of equipment and packaging. These are set out in internal guidelines (excluding T-Mobile US).

- Telekom Design Specifications: In the development of our own-brand devices, the responsible departments are guided by the Telekom Design Specifications. Among other things, they define requirements for the use of materials, the handling of potentially critical ingredients and the energy efficiency of appliances.
- Packaging guideline: As part of the Telekom Design Specifications, the packaging guideline makes binding specifications for packaging for end devices, as well as for network technology and IT equipment. Among other things, the guideline provides for the use of recycled paper and labels without ingredients that are hazardous to health, and excludes the use of single-use plastic. In addition, only materials that are either biodegradable in municipal composting plants or suitable for material recycling may be used.

To measure progress in the “avoidance” dimension in the future, we use five KPIs in the TCS that map how our ecological requirements are implemented in product and packaging design.

Collection: The collection of old devices is based on clearly regulated processes (excluding T-Mobile US). The basis for this is, among other things, the legal requirements for the handling of waste electrical and electronic equipment, contractually regulated take-back processes in sales, service and logistics, as well as requirements for the handover of equipment to certified service providers.

In the private customer business, our customers can use specially designed collection boxes in Telekom shops that are designed for the safe return of disused devices. In addition, we regularly support collection campaigns and work together with various organizations to do so. We also offer purchase options where customers can sell their used phones online or in the Telekom Shop. In the business customer sector, take-back processes are integrated into end devices and service models, for example as part of device-as-a-service offerings.

After the devices are returned, data is deleted and, depending on the condition of the device, prepared for reuse.

To measure progress in the “collection” dimension in the future, we use two KPIs in the TCS that record the shares of returned fixed-line and mobile devices in all devices sold.

Preparation for reuse: Preparation for reuse is carried out according to clearly defined processes. After take-back, devices are checked by specialized service providers to determine whether they are fundamentally suitable for further use. Remanufacturing involves several stages – from optical and functional testing to repairs and replacement of individual components. In the case of end devices, data is also deleted. Devices that do not meet the requirements for recycling are sent for recycling.

We also look at the circular use of materials in network technology and IT equipment. In doing so, we look at our procurement processes: We record refurbished or remanufactured technology as well as recycled materials (e.g., metals or plastics) in newly procured technology. With this view on the procurement side, we want to provide clear impetus for the use of circular materials along the supply chain.

To measure progress in the future dimension of “preparation for reuse”, we use four KPIs in the TCS that map the reprocessing of equipment and the circular use of materials.

Waste: The handling of waste is regulated by the "International Framework for Waste Management" (excluding T-Mobile US). The framework represents a uniform standard and at the same time makes it possible to respond flexibly to country- and company-specific framework conditions.

The aim is to avoid waste as much as possible and to recycle waste as much as possible. In this context, we are pursuing various approaches, for example, to ensure the controlled handling of electronic waste and to avoid its disposal in landfills. The waste hierarchy serves as a methodological orientation framework for us: waste prevention comes first, followed by reuse, recycling and other recovery (e.g., energy) – so that in the end only those materials remain for disposal that cannot be treated at upstream stages.

The central regulatory basis for the handling of electrical and electronic waste in Europe is the EUWEE Directive (Waste Electrical and Electronic Equipment). It regulates the treatment of waste electrical and electronic equipment.

Against this background, the European sub-goal "Zero ICT Waste to Landfill" is relevant for Deutsche Telekom. It is based on the EU legal requirements for the professional disposal and recycling of electronic waste and returned devices. The sub-target was already achieved at the end of 2022.

In addition, we try to ensure that electronic waste is not incinerated, but – where possible – professionally recycled by external bodies. For professional recycling, we work together with recycling companies so that metals, plastics and rare earths can be kept in the cycle as much as possible.

To measure progress in the "waste" dimension in the future, we use three KPIs in the TCS that record the proportion of electrical and electronic waste that is recycled, recovered for energy or landfilled at the end of its life cycle.

End of life for devices at T-Mobile US

T-Mobile US is currently not integrated into the Telco Circularity Score (TCS), but is implementing its own measures:

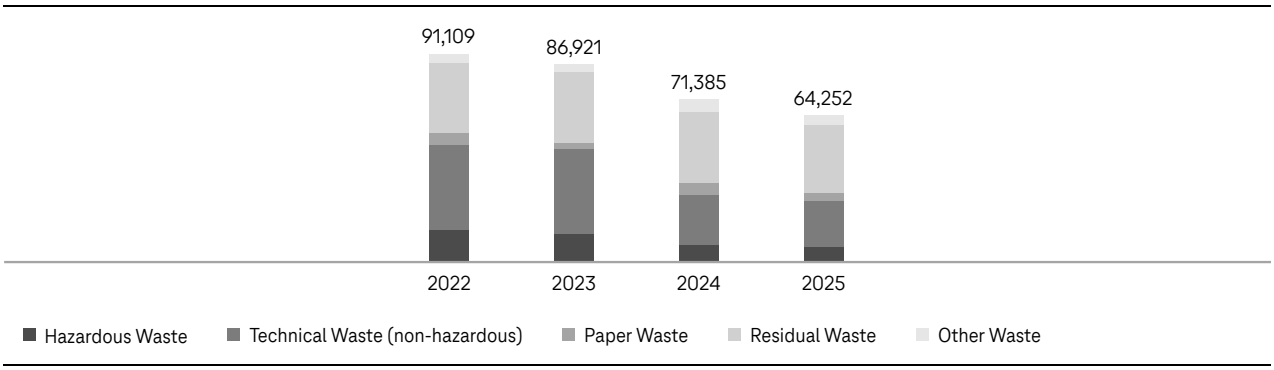
- T-Mobile US offers customers redemption options for eligible devices, which are supported by a Trade-in Estimator Tool.
- A free Device Reuse and Recycling Program is available in stores, including for smartphones, tablets, smartwatches, hotspots, internet routers, and IoT devices.
- In 2025, group-wide 10.5 million mobile devices were collected and processed for reuse, resale or recycling. The majority of these devices – 9.8 million mobile devices – were collected and processed by T-Mobile US.

Waste generation (including e-waste)

As part of our waste management, we transparently map our waste volume. We have not set a Group-wide target for the reduction of hazardous and non-hazardous waste. Rather, the national companies are guided by our "International Framework for Waste Management"; on this basis, they develop or update their own waste strategies. The Group-wide amount of waste fell by 10 % compared to 2024. In our interactive key figure tool for company comparison, we provide detailed information on the key figures of the individual companies.

Waste generation Deutsche Telekom Group

in t



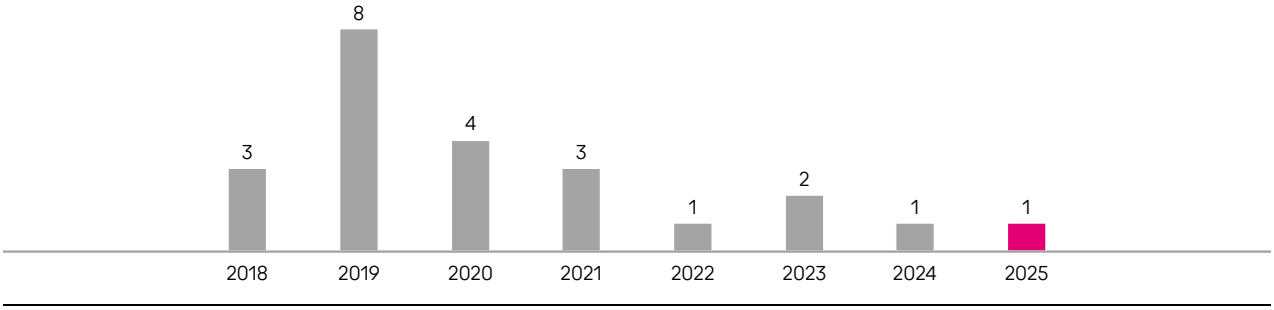
Data is partly based on estimates, assumptions and projections. Data is partly provided by external service providers.

Reclaimed copper cables

For decades, telephone lines consisted largely of copper cables, which are now being successively replaced by fiber optic expansion. In 2025, we pulled around 1,200 tons of copper cable from cable duct systems in Germany or recovered them from assembly and cable residues. Certified waste management companies process them and, if possible, return them to the raw materials market.

Copper cable recovered since 2018

in thousand tons



Management & Frameworks

- With our HSE management system for health, safety and environmental protection, we are committed to continuous improvement. It has been recertified according to international standards such as ISO 14001. Our Environmental Guidance summarizes key ecological commitments, e.g., on the circular economy and biodiversity.

Requirements for handling conflict-prone raw materials are enshrined in our Supplier Code of Conduct, which is part of the General Terms and Conditions of Purchase (excluding T-Mobile US). T-Mobile US addresses procurement risks through its own Responsible Sourcing Policy. Further information on our handling of conflict-prone raw materials can be found in our audited Sustainability statement.

Relevant Standards

Global Reporting Initiative (GRI)

- GRI 3–3 (Management of material topics); GRI 301: Materials
- GRI 301–3 (Reclaimed products and their packaging materials)
- GRI 3–3 (Management of material topics); GRI 306: Waste
- GRI 306–1 (Waste generated and significant waste-related impacts)
- GRI 306–2 (Management of significant waste-related impacts)
- GRI 306–3 (Waste generated)
- GRI 306–4 (Waste diverted from disposal)
- GRI 306–5 (Waste directed to disposal)

Sustainability Accounting Standards Board (SASB)

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

GSM Association (GSMA) Indicators for Telecom Operators

- GSMA-ENV-04 (Circularity)
- GSMA-ENV-05 (Waste)

Task Force on Climate-related Financial Disclosures (TCFD)

- The most important key figures for the recording and management of climate-related opportunities and risks)

Products and services: an overview of the entire life cycle

How can we reduce negative impacts throughout the lifecycle of our products? This is a question that concerns us in product development. The focus is on aspects such as resource conservation, energy efficiency and emission reduction. In order to systematically evaluate possible effects, we use a structured approach to impact measurement.

We also deal with these aspects in detail under "Climate change" and "Resource use and circular economy" in our audited Sustainability statement 2025.

Milestones achieved, ongoing projects and goals

Since 2014, we have been analyzing the impact of our product portfolio. In 2020, we introduced an impact measurement approach that helps us to systematically record and evaluate the impact of our products and services. In 2023, this approach was validated by TÜV Rheinland. We use the results to create transparency and support the (further) development of our products and services.

Where we come from

2014 We evaluated the ecological properties of our products for the first time using our own analysis method. The results are included in the calculation of our KPI "Share of sales related to sustainability".

2019 Launch of the "We Care" label to make specific environmental or social characteristics of our products and services visible. The basis is our impact measurement process, with which we look at defined criteria and use cases.

2021 We introduced the #GreenMagenta and #GoodMagenta to transparently present the environmental and social characteristics of selected products and measures. They replaced the "WeCare" label.

2022 We introduced a packaging guideline that sets out specific ecological requirements for the design of packaging – such as avoiding single-use plastic.

2023 TÜV Rheinland validated the process and methodology of our IT-supported impact measurement.

2024 Deutsche Telekom's 50th product has gone through the impact measurement process.

2024 We introduced the T Phone 2 and T Phone 2 Pro. Compared to their predecessors, the devices have 33 % (T Phone 2) and 47 % (T Phone 2 Pro) lower greenhouse gas emissions in the manufacturing phase. The information is based on a life cycle analysis, on the basis of which the Product Carbon Footprint (PCF) was determined according to recognized standards.

2024 We published the "Principles for Green Artificial Intelligence (AI)". These define internal guidelines for the consideration of ecological aspects in the development and application of AI solutions.

Where we stand in the reporting year

2025 We will introduce the Telco Circularity Score (TCS), which we plan to use as a measurement and control tool for our systematic circular economy approach from 2026 onwards (excluding T-Mobile US).

2025 We are developing a tool that can be used to determine the Product Carbon Footprint (PCF) of Deutsche Telekom's most important products and services along recognized ISO standards (excluding T-Mobile US).

Where we want to go

From 2026 Business customers will be able to receive information on the Product Carbon Footprint (PCF) of our most important products and services (excluding T-Mobile US) upon request for their greenhouse gas accounting.

Specifications for product design

As early as the development of our own-brand products, we take into account potential environmental impacts along the entire life cycle. Our product developers are guided by the Telekom Design Specifications. They specify specific requirements, for example, on the use of materials or the handling of potentially hazardous ingredients.

The design of packaging is regulated in our packaging guideline, which is part of the Telekom Design Specifications. Detailed information on the topic of packaging can be found under Circular economy here in the CR report.

In addition, we are working with partners to make the use of streaming services more energy-efficient. In 2024, we collaborated on a guide to help decision-makers, development teams and consumers better understand the energy needs of video streaming.

Validated methodology: product impact at a glance

In order to assess the possible ecological and social impacts of our products, services and digital solutions in a well-founded manner, we use IT-supported impact measurement. Our approach defines clear criteria and usage scenarios along the product life cycle.

The focus is on a comparison: We examine what changes as a result of a concrete solution compared to an initial situation – for example, in the use of resources. To do this, we determine in advance which assumptions are based and which parts of the value chain are relevant.

The process and the underlying methodology were validated by TÜV Rheinland in 2023. The validation was confirmed again in the reporting year.

Step 1

Define the starting point, target image and evaluation criteria

In the first step, we determine what we evaluate and how we measure the impact. To do this, we first describe the initial situation, the desired target image and the measure under consideration. We also define the time period to which the assessment relates. We then determine the basis for comparison of the valuation.
Depending on the question, we use a real situation, a benchmark or a scenario:

- Real-world situations compare options that are actually used today.
- Benchmarks compare our solution with external benchmarks or industry-standard alternatives.
- Scenarios describe a possible future state that serves as a comparison or target image.

Step 2

Define relevant parts of the value chain

In the second step, we determine which parts of the value chain are relevant for the assessment. In doing so, we concentrate on those phases of the value chain in which the use of resources can differ between the initial and target situations. In this way, we ensure that we look at the impact where change can actually occur.

Step 3

Compare resource use and greenhouse gas emissions and quantify changes

In the third step, we compare the use of resources and the product carbon footprint of the initial and target situations along the value chain and quantify the changes caused by the measure. To do this, we record which resources the selected stakeholders need in each case. Depending on relevance and availability, the data basis is validated supplier data, internal data or recognized databases such as “ecoinvent”. On this basis, we determine and compare the use of resources in both situations. The results form the basis for the calculation and evaluation of the CO_2 footprint in the next step.

In order to be able to calculate the changes caused by the measure, we define a functional unit at the beginning. It determines what the comparison refers to – for example, the resource consumption per 1,000 product units.

Step 4

Assess the environmental and social impacts of the measure

In the fourth step, we assess the ecological and social impacts of the measure. We measure the ecological impacts in particular with the help of the CO_2 footprint and also assign the effects to the Sustainable Development Goals (SDGs). We also assess the social impact on the basis of the SDGs.

4.1

We record the ecological impact with the help of the CO_2 footprint. To do this, we translate the changes in resource use determined in step 3 into CO_2 equivalents.

To do this, the respective changes are multiplied by recognized CO_2 emission factors, for example from the “ecoinvent” database. On this basis, we calculate potential CO_2e savings or additional CO_2e emissions as an overall balance across all relevant value creation phases.

In addition, we take other ecological dimensions into account, such as savings in water consumption or the use of materials. We assign the effects identified to the SDGs.

4.2

We also assess the social impact on the basis of the SDGs. They help us to classify the social effects of the measure in a structured way – for example, improved affordability or improved working conditions. In doing so, we evaluate the contribution of the product or solution to the SDGs based on measure-specific criteria, for example on the basis of hours saved.

SUSTAINABLE DEVELOPMENT GOALS

After evaluating our impact measurement, we summarize the results. We use the knowledge gained to further develop our products and services. In addition, the results serve, among other things, as a methodological basis for measuring progress on the basis of defined key figures on aspects of the circular economy. Further information can be found here in the CR report under Circular economy.

Since the introduction of the methodology, we have used the impact measurement process for over 50 Deutsche Telekom products and solutions to determine environmental or social effects in accordance with our defined criteria. Six further products and measures were added in the reporting year. An overview of all products and services that have undergone the TÜV-validated impact measurement process can be found on our website.

In the following, we present current examples:

E-charging infrastructure from Comfortcharge

The expansion of publicly accessible charging infrastructure is an important building block for the mobility turnaround in Germany. With Comfortcharge, Deutsche Telekom is specifically using existing infrastructure on its properties throughout Germany to set up fast-charging stations – such as existing power connections or cable trays. If these prerequisites are already in place at the location, the development of charging infrastructure can be carried out more quickly and with less additional material and construction effort. This avoids emissions that would otherwise occur during earthworks, additional cable laying or the production of additional components. According to our impact measurement, the use of existing infrastructure when installing a fast-charging station results in potential savings of over 29 tons of CO_2e. In the reporting year, Comfortcharge operated around 300 fast-charging locations at our locations in Germany.

Further information on the charging infrastructure at our sites and beyond can be found under Mobility here in the CR report.

SD-X: Centralizing network functions

With SD-X (Software Defined Everything), network functions are no longer controlled by individual devices in different locations. Instead, they run through a central, software-based platform in the cloud that connects multiple locations. End devices and internal network components can thus be set up, updated and managed remotely. In addition, SD-X allows several functions to be bundled in a single device that would otherwise be spread across several devices. As a result, fewer hardware components are needed per site – which can help reduce the amount of e-waste.

In the reporting year, the SD-X solution of the Hungarian subsidiary Magyar Telekom underwent our impact measurement. The analysis showed that modelled CO_2e savings potential results from the bundling of functions. Under the assumptions used in the Impact Measurement, up to 43 kilograms of CO_2e per multifunctional network device can be avoided. In 2025, the number of SD-X endpoints used by customers in Hungary was over 50, which corresponds to a potential saving of over 23 tons of CO_2e in 2025.

T Phone: Further development along defined design specifications

In the further development of our 5G smartphones T Phone and T Phone Pro, we are guided by the requirements of the Telekom Design Specifications, which include specifications on the use of materials.

In 2025, the new generation T Phone 3 and T Phone 3 Pro came onto the market. The emission values achieved in the previous generation were taken into account as a reference. The current models were rated 90 out of 100 (T Phone 3) and 88 out of 100 (T Phone 3 Pro) points in the Eco Rating. For comparison, the predecessor models T Phone 2 and T Phone 2 Pro achieved 88 and 84 points, respectively.

The Eco Rating is an industry-wide initiative to evaluate selected environmental aspects of mobile devices and is open to all device manufacturers. Among other things, material efficiency criteria are included in the evaluation, including aspects of repairability, durability and the use of recycled materials.

The improved Eco Rating of the T Phone 3 compared to its predecessors is due to improvements in material efficiency. For example, repairability has been increased. In addition, improvements have been made in the handling of hazardous substances and in the use of recycled materials.

Making impact visible

Sustainability should provide orientation – and be resilient. That is why our TÜV-validated impact measurement forms the basis for presenting the ecological and social effects of our products, services and measures to private and business customers, investors and other stakeholders in an understandable and transparent way.

If products or services meet our defined criteria, we make this rating visible. Since 2021, we have been using the hashtags #GreenMagenta and #GoodMagenta:

- **#GreenMagenta** refers to identified ecological effects of products, services, projects, measures and initiatives that can contribute to climate protection or the responsible use of resources.
- **#GoodMagenta** is used for projects, measures and initiatives in which social or societal effects have been identified.

The presentation is always made with a brief explanation of the specific characteristics, on the basis of which the classification is made. However, the hashtags do not represent an overall rating of a product or service and do not mean that an offer is sustainable in all areas.

Expectations of credible sustainability communication are increasing, also in regulatory terms: From September 2026, new requirements will apply with the European directive “Empowering Consumers for the Green Transition” (EmpCo Directive). Our aim is to continuously develop our sustainability communication and to address high transparency standards at an early stage. Against this backdrop, we began in 2025 to review the communication of the sustainability characteristics of our products and services. We will decide on the future communication of the results of our impact measurement process in 2026.

Product Carbon Footprint (PCF): transparency about product-related emissions

Against the backdrop of increasing transparency and comparability requirements, we are also further developing the methodology of our impact measurement approach. One focus is on the stronger integration with product-related emission calculations. In the reporting year, we developed a tool to calculate the Product Carbon Footprint of our most important products and services, which was validated by TÜV Rheinland in 2026. From 2026, the software solution will enable the calculation of the PCF and the creation of corresponding reports in accordance with ISO 14067.

In this way, we not only want to further develop our approach, but also meet the increasing information needs of our business customers regarding product-related greenhouse gas emissions – especially from companies with extensive product portfolios. From 2026 onwards, we want to provide you with information on the Product Carbon Footprint (PCF) of our most important products and services on request for your greenhouse gas accounting.

Digital solutions for business customers

With digital applications, we support business customers in addressing environmental and regulatory challenges. The following examples show how digital technologies can contribute to the more efficient use of resources and the management of sustainability and energy data.

Digital water management

In large parts of Europe, the groundwater level is falling, endangering habitats for many creatures and making countermeasures increasingly urgent. T-Systems offers municipalities and companies a solution for digital water management (only available in German). Networked water meters automatically transmit consumption data with the help of “Internet of Things (IOT)” technology. This makes it possible to monitor water withdrawals and detect changes in the groundwater table. Under suitable operating conditions, such digitally supported control of water withdrawal can help to reduce groundwater consumption and support more efficient irrigation.

Applications for ESG data management and energy control

In the “Digital Sustainability” service portfolio, we offer business customers a digital solution in the form of the Telekom Sustainability Manager, which enables them to record ESG data centrally, meet regulatory requirements and measurably manage sustainability goals. The offering includes a central ESG data platform, applications for greenhouse gas accounting and solutions for supply chain or compliance management. The portfolio is complemented by data-based analyses, including AI-supported evaluations, as well as consulting services along the entire transformation process.

Digital solutions are also used in energy management. IoT-based complete solutions with retrofittable sensor technology and software-supported evaluation enable the digitization of energy consumption in buildings. This creates transparency about energy use, which forms an important basis for efficiency increases and energy savings.

Cloud4Log: digital and paperless logistics

Cloud4Log is a digital logistics platform from T-Systems, the German Logistics Association (BVL) and the company GS1 Germany, which enables the paperless exchange of transport documents. Companies from industry, trade and logistics can use this platform to accompany goods deliveries in real time with digital delivery notes. Since June 2025, the electronic international consignment note (eCMR) has also been available as an add-on, which can be used to process cross-border transports digitally and in a legally compliant manner – in accordance with regulatory requirements. Digital solutions like these can significantly reduce paper consumption in logistics. The number of transactions processed via Cloud4Log in the reporting year, results in a mathematical savings potential of around 800,000 pages of paper.

X-Creation – driving innovation and value creation together

We actively collaborate with partners in innovation projects to develop digital solutions for sustainable applications. One example is the X-Creation program from T-Systems. In this community, the participants work together to develop solutions to social and ecological issues. The UNFCCC Secretariat (United Nations Framework Convention on Climate Change) became an official partner of the program in 2024.

After an initial success in 2024 – an AI-supported app against disinformation on social media – X-Creation once again turned its attention to current challenges in the reporting year. In addition, around 1,000 participants from over 140 partner organizations such as industrial customers, authorities, universities and NGOs came together at a digital event.

The participants developed more than 27 solutions, including the financing of municipal climate protection measures, the health ecosystem of the future, building efficiency and strengthening media literacy. In addition, the program resulted in two startups that deal with environmentally related technologies.

In 2026, the plan is to transform X Creation into a non-profit organization to further strengthen collaboration and innovation in the long term.

Enablement factor: potential CO_2e savings on the customer side

Since 2014, we have been analyzing the extent to which our ICT solutions can help reduce greenhouse gas emissions for customers. The calculations are based on data and assumptions on various usage scenarios – for example, how to avoid business travel by using Business-Conference solutions. Every year, we use modelled scenarios to determine the potential climate protection impact of our solutions on the customer side.

To measure progress, we determine the KPI “Enablement Factor”. It compares the potential CO_2e savings potential for customers to our own CO_2e footprint (Scope 1 to 3).

For Germany, an enablement factor of 6.09 was determined in 2025. This value describes the relationship between the potential savings effects of using our solutions and our own emissions. This means that for every ton of CO_2 that we cause in Germany by providing these products and solutions, there is a potential savings volume of approx. 6 tons of CO_2e on the customer side. The calculations are based on model assumptions and do not represent actual emission reductions.

Much of the potential savings on the customer side in Germany comes from:

- Home office and our business and video conferencing solutions,
- Cloud Computing and
- more powerful servers, more energy-efficient data centers, and higher infrastructure utilization.

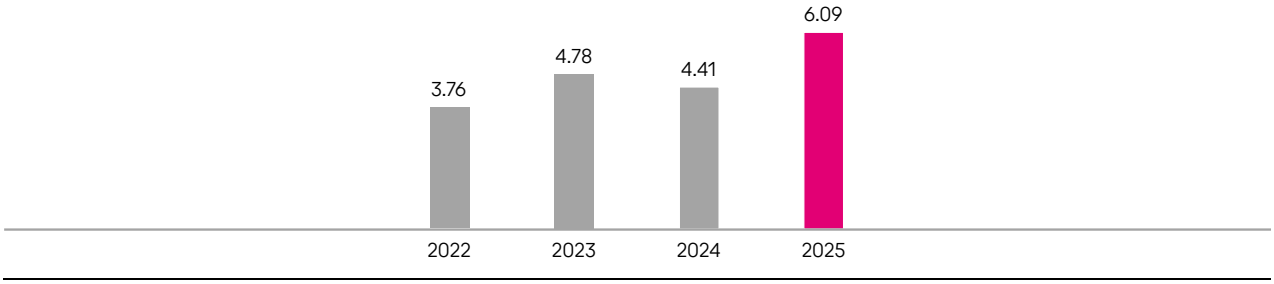
To ensure even greater transparency and comparability, we will continue to support the European Green Digital Coalition (EGDC) in developing an industry standard for calculating emission savings from ICT products in the reporting year.

KPI “Enablement Factor” Deutsche Telekom in Germany

The modelled, potential positive CO_2e effects that are made possible on the customer side by the use of our products and solutions amounted to a total of 23.5 million tons of CO_2e in Germany in the reporting year. This roughly corresponds to the average CO_2e footprint of the inhabitants of the cities of Munich and Frankfurt am Main combined. [a]

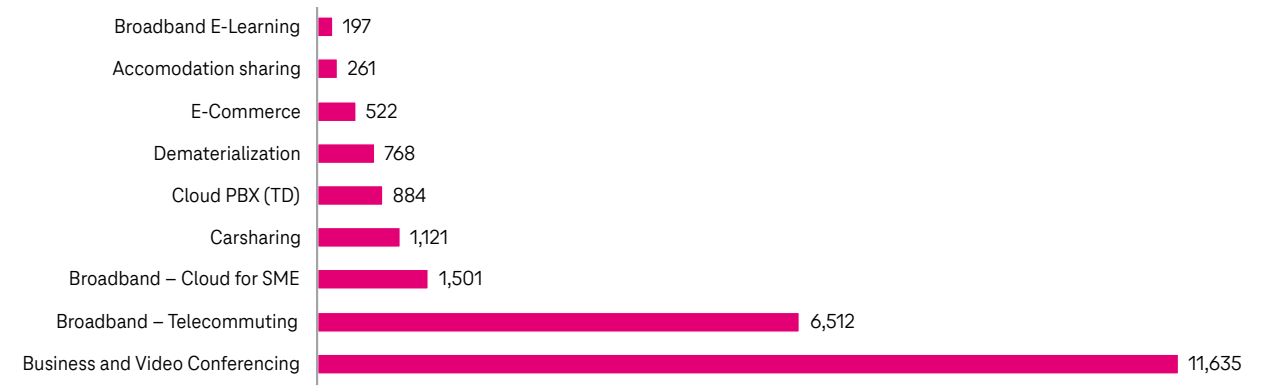
This results in an enablement factor of 6.09 for 2025. The enablement factor is thus higher than in the previous year (4.41). This development can be attributed to several influencing factors: These include higher sales volumes of selected digital solutions and changes in user behavior, for example due to increased working from home. In addition, lower Scope1, 2 and 3 emissions from Deutsche Telekom had an impact on the enablement factor.

Enablement factor from 2022 to 2025



Extract: Positive CO_2 effects facilitated for our customers

in kt CO_2e



For a comprehensive classification of Deutsche Telekom’s positive and negative impacts in connection with greenhouse gas emissions and energy consumption, please see “Climate change” in our audited Sustainability statement 2025.

AI development: focus on energy and resource requirements

Applications based on artificial intelligence (AI) have a particularly high energy and resource requirement. In order to support the development and use of AI that is as resource- and energy-efficient as possible, we developed and published nine principles for “green AI” in 2024. They provide guidance on how ecological aspects can be taken into account in the development of AI solutions. With these principles, we not only want to give our developers practical guidelines, but also provide impetus in the ICT industry. For example, the principles stipulate that AI models should be used multiple times and hardware equipment should be adapted to demand. At the same time, AI – used responsibly – can help to use energy more efficiently: For example, an AI-based solution for controlling cooling systems has been tested in regular operation at the data center in Magdeburg since 2025. In the test phase, an efficiency potential of up to 33 % was shown under the conditions under consideration in terms of cooling-related energy consumption compared to the initial operation. For more information, see Energy here in the CR report.

[a] The calculation is based on the average CO_2 footprint of a German according to the Federal Environment Agency 2025 and the population of major German cities.

Looking ahead

From 2026 onwards, we will further develop our impact measurement in order to methodologically sharpen product-related emission calculations and link them to the PCF-Tool. In doing so, we examine alignment with recognized standards, such as the ISO standards (International Organization for Standardization) and recommendations of the International Telecommunication Union (ITU).

At the same time, “green AI” continues to gain in importance for us. One example is the AI factory in Munich, which opened in 2026. The AI factory is supplied with electricity from renewable energies. In the AI factory, business customers can, among other things, operate so-called digital twins, which can be used to virtually map, simulate and further develop production lines or entire factories before real-world projects are implemented. Such applications can help to make processes more efficient and reduce resource consumption and emissions.

Deep Dive for Experts

Management & Frameworks

- Our nine principles for “green AI” are intended to provide our developers with guidance on how AI solutions can be developed and used from an ecological point of view. They are intended to show a way in which we can counter risks – such as a significantly increasing GHG footprint – at an early stage.
- Our packaging guideline is part of the “Standard Design” specifications, which also include ecological requirements for product components and design. All manufacturers must meet these criteria when developing telecom devices.
- Certificate of testing and validation of the Impact Measurement & Evaluation Process (IMEP) by TÜV Rheinland (only available in German).

Sustainability-related products and their share of total sales

- Since 2014, we have been determining the share of sustainability-related products in total sales. The methodology takes into account ecological and social criteria. Detailed information on the methodology can be found here.

Relevant Standards

Global Reporting Initiative (GRI)

- GRI 302–5 (Reduction of energy requirements for products and services)

Task Force on Climate-related Financial Disclosures (TCFD)

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

Other sources of information on impact measurement

ⓘ #GreenMagenta and #GoodMagenta

ⓘ Products and initiatives with #GreenMagenta and #GoodMagenta

ⓘ Our contribution to the SDGs

Analysis of selected sustainability-related products

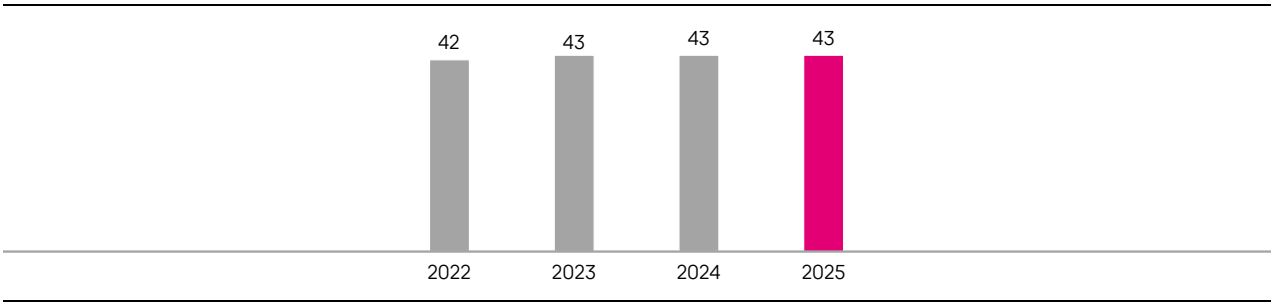
Products that take environmental or social aspects into account at different stages of their life cycle are of strategic importance to Deutsche Telekom. However, there is still no industry-wide standard that provides comparable sustainability information on ICT products and services. We therefore consider corresponding aspects with the help of our own analysis method. Among other things, this examines aspects of product safety and recyclability. In this way, we want to create transparency at the portfolio level and supplement our impact measurement with a sales-related view.

Measuring progress 2025: analysis of selected products

We use the KPI "Share of revenue with sustainability relevance" to determine how much revenue we generate (excluding T-Mobile US) from products that, based on our analysis, have no or low probability of environmental or social risks and can make a potential positive environmental or social contribution.

KPI "Share of revenue with sustainability relevance"

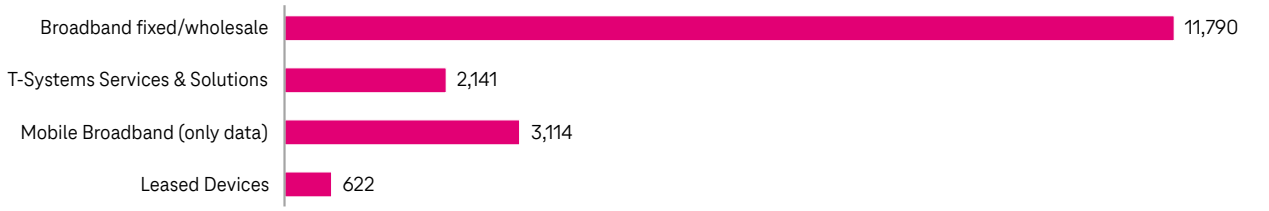
in %



In the reporting year, the share was 43 %, as in the previous year. For the calculation of the KPI "Share of revenue with sustainability relevance", a total of 37 products and solutions were examined in detail in 2025 (2024: 37).

Extract: Share of revenue with sustainability relevance per product

in million €



The determination of sales for individual product clusters is partly based on assumptions.

The products and solutions examined are divided into four product clusters:

- **Broadband (fixed)/wholesale**: Revenues from fixed-line broadband services as well as from wholesale and wholesale business for residential and business customers.
- **T-Systems Services & Solutions**: Revenues from infrastructure and cloud services as well as from selected industry-specific solutions for business customers.
- **Mobile Broadband (data only):** Revenues from mobile data services without voice components for private and business customers.
- **Leased devices**: Revenues from the rental of mobile and fixed-line terminals, as they are also taken into account in the context of the EU taxonomy.

The following criteria apply to the calculation of the KPI: A product can only be considered if, according to our analysis, it has a very low probability of having one of the seven risks defined by us in the production and application phase.

These risks include: pollution in the manufacture of ICT products; avoidable, non-recyclable e-waste; ethically unacceptable working conditions; use of conflict minerals in the production phase; social exclusion; radiation and health effects; Information security.

In addition, a product is only considered if at least one of five environmental or social characteristics can be assigned to it on the basis of our analysis: reduced energy consumption in the production and/or application phase; a potential reduction in CO_2 emissions; approaches to the circular economy; a reduction in the amount of time spent; as well as the support of social participation.

Economic aspects, such as cost savings, have no influence on the allocation of products in the context of the KPI survey.

In line with the logic of the EU taxonomy, we have also included revenue from the rental of terminal equipment in the fixed-network sector since 2023. These account for about two percent of the total value. In the case of mobile broadband revenues, data and voice revenues can only be separated to a limited extent. The crediting is therefore based on assumptions. The background to this consideration is that the EU Taxonomy Regulation still did not reflect significant parts of our service-based business model in the reporting year.

Basis for the assessment
Fiscal year 2025, excluding the U.S.

Criteria for scope of assessment

In the scope of assessment

Region
Europe

Services
- Market-oriented core products for B2C and B2B (including B2G)
- Broadband for fixed, mobile and wholesale
- TV
- Value-added services
- Market-oriented non-core products for B2C and B2B, e.g., hosting services
- Enterprise solutions for B2B (including B2G)

Physical products
- ICT infrastructures, such as data centers
- Rented devices, such as routers

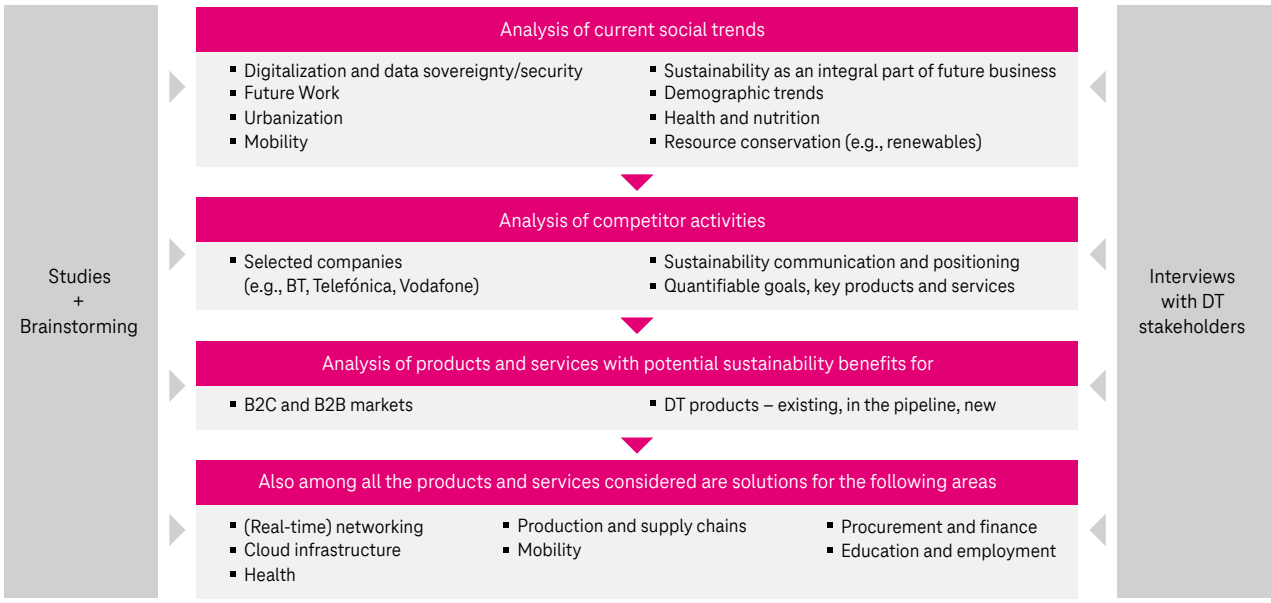
Outside the scope of assessment

Region
USA

Services
- Internal services, e.g., consulting, facility management or transactions with national subsidiaries
- Financial assets

Physical products
- Physical facilities needed to perform business functions, such as buildings

Analysis and evaluation basis for sustainability-related products and services



Operational resource protection: environmentally conscious in everyday work

Resource conservation begins in everyday work: where we use energy, occupy space and consume materials. Accordingly, since the 1990s, we have been looking not only at the environmental impact of our network operations and our product portfolio, but also at the operation of our offices, canteens and telecom shops – from heating and hot water systems to electricity and water consumption to paper, office supplies and food. Biodiversity also plays a role in this: we take it into account wherever it is relevant in connection with our business activities – in the immediate vicinity of our sites as well as along the upstream value chain.

Further information on the topics of recycling and waste reduction can be found here in the CR report under Circular economy, on the topic of energy consumption under Energy and on our climate targets under Climate protection.

Milestones achieved, ongoing projects and goals

We sent the first online invoice over 25 years ago to reduce our paper consumption. Since then, we have been continuously developing our approaches to operational resource conservation.

Where we come from

1998 We introduced a management system in accordance with EN ISO 14001 to control environmental impacts.

2000 We introduced online invoices as an alternative to paper form.

2014 For the first time, we examined the impact of our business activities on biodiversity, including the upstream value chain.

2018 For the first time, we set up digitally networked beehives at some Telekom locations in Germany and created flowering meadows and insect hotels.

2018 We decided to only procure office paper with the environmental certification “Blue Angel”.

2018 We introduced the “RECUP” deposit cup nationwide in all fully operated canteens at Deutsche Telekom locations in Germany.

2021 We expanded the deposit system in German canteens to include reusable bowls (“REBOWL”).

2022 We achieved the Group-wide target of planting 100,000 trees.

2023 We again analyzed the impact of our operations on biodiversity, using the parameters of the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) tool.

2023 We took on a nature sponsorship in the “Magenta Blossom” project in the Cologne/Bonn area and created flowering islands for bees, beetles and butterflies.

2023 We revised our environmental guidance and made adjustments with regard to the circular economy, biodiversity and building infrastructure, for example.

2024 We conducted a biodiversity assessment of the mobile communications industry together with the industry association GSMA.

2024 We introduced Ecosia as the Group's default search engine across the Group, supporting Ecosia's reforestation programs.

Where we stand in the reporting year

2025 In Germany, we will have installed 18 large heat pumps and 80 small heat pumps by the end of 2025.

2025 In the reporting year, we reduced greenhouse gas emissions from our operations (Scope 1 and 2) by more than 94 %. Remaining emissions were neutralized via high-quality CO_2 sequestration projects. In this way, we made the Group greenhouse gas-neutral in terms of its own operations. Important levers for reducing greenhouse gas emissions in our own operations were the modernization of our buildings and the optimization of space utilization.

Where we want to go

By 2030 we aim to reduce CO_2e emissions by 55 % in absolute terms across Scopes 1–3 compared to 2020. According to our Climate Transition Plan, the modernization of buildings and space optimization are important levers for further reducing Scope 1 emissions.

2040 We want to achieve net-zero emissions along the entire value chain – across all three scopes. To achieve this, it is necessary to reduce emissions by at least 90 % compared to 2020. Only up to 10 % may be neutralized via high-quality projects that bind CO_2e from the atmosphere.

Our approach

We pursue various concepts for improving resource efficiency in the workplace – we take into account the energy consumption and space utilization of our buildings as well as water and paper consumption. Like the topic of circular economy, operational resource conservation is also organized in accordance with our International Waste Management Framework (excluding T-Mobile US). We also take biodiversity into account where it is relevant to our business operations – especially along the upstream value chain (more information below).

In 2025, we made 87 % of all customer invoices available electronically across the Group.

Building operation: energy and emissions at a glance

The operation of our own sites (including heating, cooling and power supply) requires energy and generates greenhouse gas (GHG) emissions. Overall, we obtain more than 90 % of our total Group-wide energy requirements from renewable energies. We break down our energy consumption in detail in our audited Sustainability statement 2025.

Conventional energy sources such as natural gas are only used to a limited extent, for example for heating systems. In line with our climate transition plan, we are gradually converting our heating systems. Among other things, heat pumps are used: In Germany, a total of 18 large heat pumps and 80 small heat pumps were installed by the end of 2025. In combination with the purchase of electricity from renewable energies, for example from long-term supply contracts (PPAs), this can help to reduce CO_2 emissions and lower operating costs.

HVO100 is used to a limited extent in Germany as a bridging technology to reduce the remaining fossil fuel content in existing heating systems. HVO100 is made from waste and residues and contributes to the reduction of CO_2 emissions compared to conventional heating oil. The use is limited to technically suitable oil heating systems; in 2025, 71 locations were converted accordingly. The share of HVO100 in the relevant heating oil consumption in Germany was 19.7 % in 2025.

In addition, we are driving forward intelligent building control. With the help of sensors, we collect data on temperature, humidity, occupancy and energy consumption in real time. On this basis and with the support of artificial intelligence (AI), we dynamically adapt the building technology. We have already tested the intelligent building control system at various locations in Bonn, Hanover,

Mannheim and Athens. Savings of around 20 % CO_2e were observed compared to the initial operation. In addition, we raise awareness among our employees about saving energy with campaigns.

Internationally, we implemented various operational measures to optimize energy in the reporting year, including adjustments to major sites and temporary night-time shutdowns of advertising pylons. Simulations showed that in many cases technical systems can be operated reliably even with reduced output.

We describe the measures we are implementing specifically in Germany for energy-efficient building use in the "Deep Dive" at the bottom of this page.

Certified Buildings

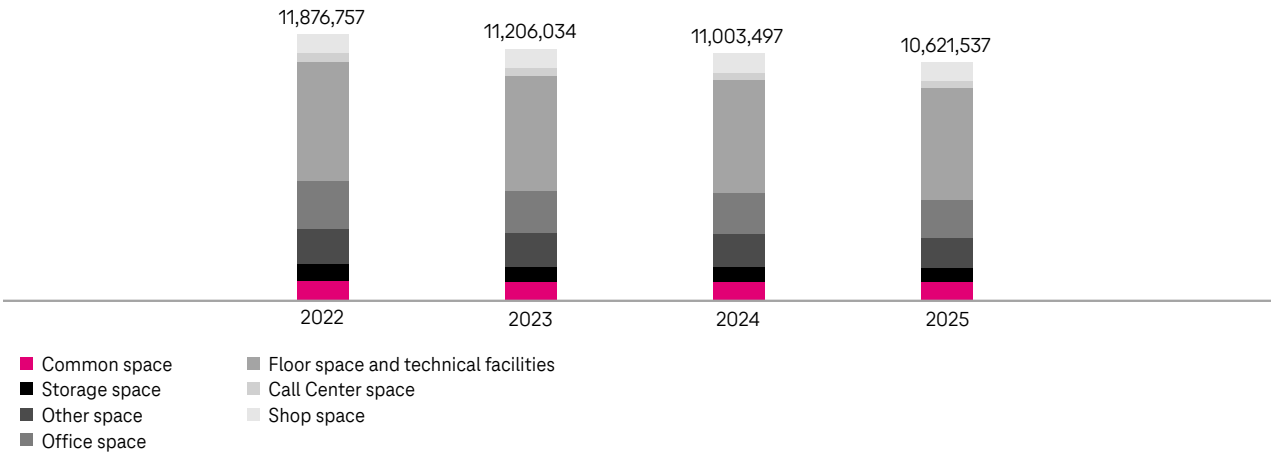
Deutsche Telekom uses around 10.6 million square meters of building space across the Group. In 2025, more than 583,000 square meters of these were certified according to the LEED (Leadership in Energy and Environmental Design) or BREEAM (Building Research Establishment Environmental Assessment Method) certification systems for sustainable building. Around 900,000 square meters met the criteria of a sustainable building standard, but did not go through the formal certification process.

Optimized use of space

Reducing vacancies through space reduction and better space utilization are also important levers for reducing energy consumption and GHG emissions. To this end, we forecast our future demand for office space and test new, more flexible room and office concepts. We reduce space that is no longer needed – for example, by subletting it out. With a total of around 10.6 million square meters, the total of our used space has again fallen slightly compared to the previous year (11 million square meters).

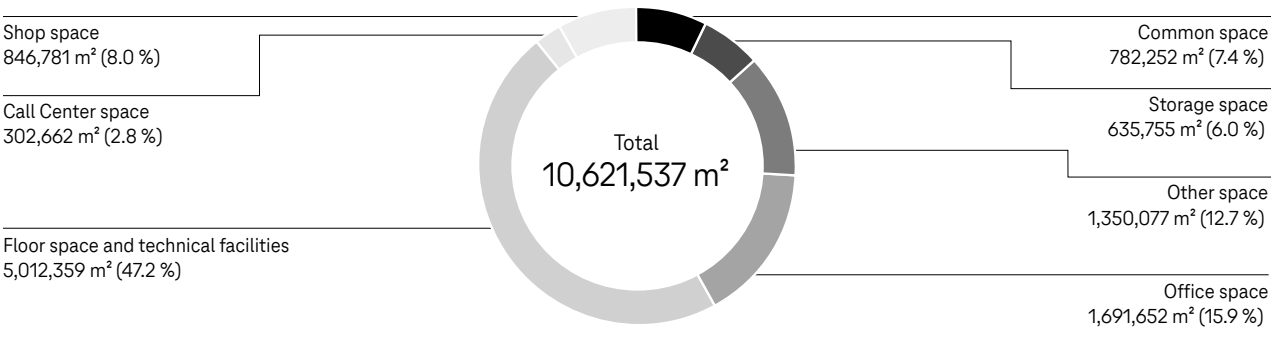
Land use

in m^2



Land use 2025

in m^2



Less paper consumption in offices and shops

We have reduced our paper consumption in recent years by consistently switching to digital processes. Wherever possible, documents such as invoices, flyers and customer communication are made available digitally throughout the Group – both in centrally controlled customer contact and directly in our shops. Internal processes such as sick notes or travel expense reports can also be handled paperless and digitally via an employee app.

We have also introduced print-on-demand systems, i.e., printing on demand and on demand. This has many advantages: Quick start guides are printed on an order-by-order basis and do not have to be pre-produced, transported and stored. Changes to information sheets for our customers can be implemented at short notice – and there are no large quantities of outdated documents that have to be destroyed.

Water consumption at a low level

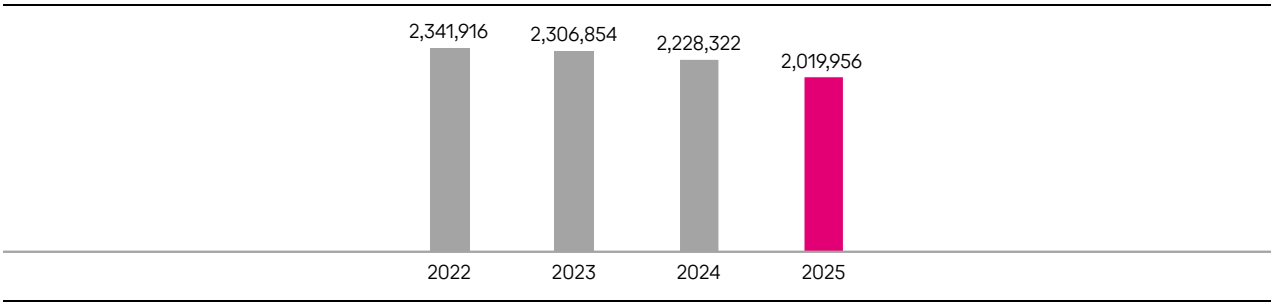
As a service company, our water consumption is mainly incurred in office locations and is low overall. Water used to cool data centers, for example, is not considered water consumption in the narrower sense: it is used in the cooling process and then returned to the water cycle. These uses are subject to official approvals, in which possible effects on the affected waters are examined.

As part of our materiality analysis and the ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure) analysis in 2023, no material dependencies on water resources (e.g., ground or surface water and water quality) were identified for our own operations. Our sites are generally not located in water-stress areas. Water is also not a key influencing factor along our supply chains. Against this background, water is not one of the main topics of our CRM management.

Nevertheless, our environmental policy includes reducing our water consumption. In the reporting year, Group-wide water consumption fell by 9.4 %.

Water consumption 2025

in m^3



Conservation of biodiversity

One of the main causes of biodiversity loss and species extinction is the increasing use of land by industry, agriculture and transport. In 2022, we specified in a statement on the preservation of biodiversity and protection against deforestation how we intend to make our contribution to the preservation of biodiversity and forests.

In 2023, we last analyzed our impact on biodiversity and our dependence on ecosystem services. The basis for this was the parameters of the ENCORE tool. The application supports companies in better understanding and assessing natural capital risks. As part of the analysis, both potential positive and negative impacts of Deutsche Telekom's business activities along the upstream and downstream value chain were considered. Among other things, aspects such as deforestation, species protection and the protection of oceans and other ecosystems were taken into account.

Our analysis showed that our business activities have an impact on biodiversity, especially in the upstream value chain. That is why we expect our suppliers to comply with our environmental principles, which we regularly check on site. In 2024, we also conducted a biodiversity study together with the industry association GSMA, which examined the impact of the mobile industry.

Biodiversity is currently not an immediately material issue for Deutsche Telekom's own business operations. As a telecommunications company, we need little space compared to companies in many other industries. At the same time, we are aware that even comparatively low land use can influence local ecosystems. At suitable locations, we therefore implement measures such as the creation of flower strips or mini-forests. They are intended to help promote biodiversity in the immediate vicinity of our sites.

Our approaches to the circular economy are also closely linked to the topic of biodiversity. Circular solutions can help to relieve ecosystems – for example, by avoiding or reducing waste and pollutants. As part of our circular economy initiatives, we support projects aimed at reducing e-waste and protecting ecosystems, such as the "Pass back, Brother!" program of the Jane Goodall Institute in Hungary. In addition, our employees are involved in other initiatives to reduce environmental pollution, for example in Greece in cooperation with the environmental organization ENALEIA. We also offer a digital solution for monitoring beehives.

Looking ahead

In line with our climate transition plan, we aim to further reduce GHG emissions from our building operations over the next few years. In doing so, we continue to focus on the switch to heat pumps and the use of AI-supported building control.

Deep Dive for Experts

Management & Frameworks

- For the German-speaking region (DACH), the GSUS (Group Supply Services) department is responsible for the central management and implementation of measures in the building sector. In other countries, this is coordinated decentrally by the respective national teams.
- Responsibility for the topic of biodiversity lies with the GCR (Group Corporate Responsibility) department. She monitors relevant developments, analyzes risks and opportunities, and develops the overarching strategy with which we want to promote the protection of biodiversity in line with the company's goals.

Measures in building operation in Germany

In Germany, we are implementing the following measures in the areas of energy management, heating and hot water, electricity, and smarter buildings and innovations, among others:

Energy management

- In order to identify anomalies in energy consumption, we compare similar buildings with each other. For this purpose, we use key figures such as "kilowatt hours per square meter". In addition, we analyze the temporal course of energy absorption (the so-called load profile) of individual buildings in order to avoid load peaks and optimize energy use.
- With the help of communication measures, we sensitize our employees to the conscious use of energy.
- During construction and renovation work on the building envelope, we pay attention to energy efficiency, among other things through the combination of heat pumps and Smart Building Control.

Since 2025, a total of eleven Group companies, each with an annual energy consumption of more than 7.5 GWh, have been certified according to the international standard DIN EN ISO 50001. For associated companies with lower energy consumption (less than 7.5 GWh per year), we carry out energy audits in accordance with DIN EN 16247 every four years.

Heating and hot water

- Energetic optimization of central heating systems (e.g., by replacing outdated burner technologies)
- Renewal of heat generators and associated hydraulic components (such as pumps or valves)
- Use of waste heat (e.g., through the use of heat recovery systems)
- Use of combined heat and power (e.g., through combined heat and power plants or district heating)
- Reduction of supply losses in hot water heating (e.g., by switching to decentralized systems)

Electricity

- Use of LED lighting and motion detectors
- Switching off light sources (e.g., advertising pylons) at night
- More accurate regulation of room temperature in our grid infrastructure
- Use of efficient building technology (e.g., high-efficiency pumps, frequency-controlled motors for ventilation systems)
- Optimization of pre-programmed usage profiles (e.g., through absence profiles)
- Use of efficient building automation systems

Smarter Buildings and Innovations

- Use of sensors to actively adjust indoor temperatures in buildings in real time
- Use of so-called predictive maintenance for the maintenance and troubleshooting of elevators
- Predictive, weather-dependent control of the building technology
- Thermal and fluid dynamics building simulation to improve structural design and building technology efficiency
- Use of sensors to collect land use data; on the basis of this data, we optimize the energy consumption and profitability of our shops across the board

Further sources of information on operational resource protection

ⓘ Environmental Guidance

ⓘ International Waste Management Framework in the Group

Mobility: expansion of the electric fleet and charging infrastructure

Mobility is an important lever for achieving Deutsche Telekom's Group-wide climate targets. That is why we are working intensively on how mobility can be made fit for the future. The electrification and reduction of our vehicle fleet is one of Deutsche Telekom's key measures to reduce greenhouse gas emissions in its own operations. That is why, since 2023, we have been purchasing new company vehicles in Germany only with electric drive and are continuing to develop the charging infrastructure at our locations.

More detailed information on our climate targets and mobility as a lever in our climate transition plan can be found in our audited Sustainability statement 2025.

Milestones achieved, ongoing projects and goals

We have been dealing with the environmental and climate impacts of mobility for 30 years. In the meantime, we are working intensively on how mobility can be further developed in our own operations – with a clear focus on the electrification of our vehicle fleet and on the smart interaction of existing and new mobility services.

Where we come from

1995 For the first time, we set ourselves a target for reducing the pollutant emissions of Deutsche Telekom's vehicle fleet in Germany. By the year 2000, pollutant emissions should be reduced by around 25 %.

2000 We reduced the pollutant emissions of our vehicle fleet in Germany by 25 % compared to 1995, thus achieving the target set five years earlier.

2002 We started eco-driving training for our employees in Germany.

2010 We introduced the "Green Car Policy" for drivers of company vehicles in Germany. A CO_2 bonus/malus system provided incentives for the choice of lower-CO_2 drives.

2015 Employees in Germany were able to purchase a bicycle or e-bike for the first time as part of a salary conversion. The offer was aimed at enabling low-emission and health-promoting forms of mobility.

2018 Our subsidiary Comfortcharge began to build and operate e-charging infrastructure at Deutsche Telekom locations throughout Germany.

2021 For the procurement of new vehicles in Germany, we set an upper limit for CO_2 emissions of 95 g/km.

2022 T-Systems decided to convert its business vehicle fleet to electric cars worldwide. Since then, only electric cars have been permitted for new orders.

2023 In the Car Policy for Germany, we stipulated that only company vehicles with electric drive may be ordered.

Where we stand in the reporting year

2025

At the end of 2025, more than 50 % of company vehicles and around 10 % of company vehicles across the Group had an electric drive. In Germany, it was 40 % of company cars and 10 % of company cars.

2025

In the reporting year, we reduced greenhouse gas emissions from our operations (Scope 1 and 2) by more than 94 %. Remaining emissions were neutralized via high-quality CO_2 sequestration projects. This means that the Group is greenhouse gas-neutral in its own operations. The electrification and reduction of our vehicle fleet are an important lever for reducing greenhouse gas emissions in our own operations.

Where we want to go

2040

We aim to achieve net-zero emissions along the entire value chain – across all three scopes. To this end, we want to save at least 90 % of emissions compared to 2020; only up to 10 % may be neutralized via high-quality projects that bind CO_2e from the atmosphere. Electrification and the reduction of our vehicle fleet will also be important levers here.

Our mobility strategy

The transport turnaround is changing how mobility is thought of and organized. When it comes to mobility, we focus primarily on our own company. In Germany, our mobility strategy provides the framework. It is based on three pillars:

Diverse mobility in your own company: Development of a fleet with lower-emission drives, which also includes micromobility forms such as bicycles and e-scooters for business trips.

Digital services: App-based car-sharing and shuttle services as well as the Telekom Car App for the company's own fleet, which bundles various functions, e.g., charging station and workshop search or roadside assistance.

Networked mobility: The linking of our mobility offers in order to bring together different modes of transport and forms of use for one's own business operations.

Company and company vehicles: focus on e-drives

Three factors have a significant influence on the level of our mobility-related greenhouse gas (GHG) emissions: the average number of combustion vehicles, the annual mileage and the associated fuel consumption. For many years, we have been addressing these influencing factors in a targeted manner as part of our fleet management. In the reporting year, GHG emissions from the Group-wide vehicle fleet fell by around 14,000 tons of CO_2e from a stock of around 29,000 vehicles. To calculate the reduction, we have put the total GHG emissions emitted by our fleet in relation to the total value of the previous year. We achieved this reduction mainly through the ongoing switch to alternative drive types and the associated decline in fuel consumption.

Of the approximately 9,000 company vehicles currently registered across the Group, 40 % are electric vehicles; another 15 % have an alternative drive system, including gas and hybrid vehicles. The proportion of electric drives is also increasing among the approximately 21,000 company vehicles, such as vehicles for the field service of technicians. In 2025, 10 % of company vehicles were electrically powered (previous year: 3 %). In Greece, for example, we made further progress in the reporting year: at the end of 2025, approximately 900 electric services vehicles were in use, which contributed significantly to a share of electric vehicles of around 33 % of the service vehicle fleet there. At the same time, we face greater challenges with our company vehicles than with company vehicles, for example in terms of available vehicle types, equipment, delivery capacities and charging infrastructure. That is why we are not only setting up more charging stations at our locations, but are also working to create charging facilities at our technicians' homes – so that they can start work from their homes without restrictions.

3,382 fewer combustion engines group-wide compared to the previous year

11 % less fuel consumed compared to the previous year

More than 10,700 bicycles and e-bikes leased by employees in Germany

Our fleet in figures: lower fuel consumption, more electric vehicles

The total number of our vehicles fell in 2025 compared to the previous year. The majority of our fleet continues to be diesel-powered, but we were able to reduce it again by 15 % in the reporting year. At the same time, we increased the total number of vehicles with alternative and electric drives by around 63 % in the reporting year compared to 2024.

Number

	2025	2024	2023	2022
Total	**29,277**	**29,916**	**30,090**	**30,816**
Vehicles with diesel engines	17,733	20,909	22,080	23,256
Vehicles with gas engines	4,446	4,652	5,002	5,197
Electric vehicles	5,451	2,615	1,430	711
Alternative fuel vehicles [a]	1,646	1,740	1,578	1,652
Company cars	8,767	9,214	9,415	9,497
Service vehicles	20,510	20,702	20,675	21,319

[a] This includes e.g. gas and hybrid vehicles.

The fuel consumption of our vehicle fleet fell again in the reporting year. Overall, it fell by around 11 % in 2025. It fell by 7 % for service vehicles and by 21 % for company cars.

in liter

	2025	2024	2023	2022
Fuel consumption (total)	**38,483,542**	**43,457,118**	**45,796,157**	**48,423,063**
Fuel consumption by diesel-powered vehicles	25,221,025	29,599,525	30,611,576	30,886,569
Fuel consumption by gasoline-powered vehicles	12,659,335	13,385,894	14,658,228	17,005,345
Fuel consumption by vehicles with alternative drives	603,181	471,698	526,353	531,150
Fuel consumption by company cars	10,209,274	12,999,592	14,402,330	14,634,852
Fuel consumption by service vehicles	28,274,268	30,457,525	31,393,827	33,788,211

Data is partly based on estimates, assumptions and projections. Some of the data originates from external service providers.

Since 2025, the diesel vehicles in our entire fleet in Germany can be refueled with the synthetic diesel fuel HVO100 if possible. HVO100 stands for Hydrotreated Vegetable Oil and refers to a synthetic diesel fuel. It is made from biogenic residues, for example from used cooking oils or other organic waste that is no longer used for food production. The fuel has a different chemical structure than conventional diesel, but can be used in many existing diesel engines. We are using HVO100 as a temporary solution because a short-term complete conversion of the fleet to electric vehicles is currently not possible in all areas of application for organizational and business reasons. The aim is to operate the diesel vehicles still in operation with as few emissions as possible during their remaining service life.

Nimble on two wheels

Since 2022, our service technicians in Germany have been using e-scooters for shorter and medium distances, especially in urban conurbations with difficult parking situations. Since 2024, the scooters have also been used by technicians who take care of fiber optic expansion in major cities and the maintenance of mobile antennas along ICE routes and at major events. There are now 70 scooters in use throughout Germany.

Our employees in Germany have been able to lease a bicycle or e-bike since 2015. In the reporting period, more than 10,768 bicycles were leased via this model.

Telekom Car Sharing

Telekom Carsharing is a mobility service from Telekom MobilitySolutions. Deutsche Telekom employees can use the app to book vehicles for private or business trips at over 30 stations in Germany. The offer is organized entirely digitally.

E-mobility: charging infrastructure at our sites and beyond

An efficient charging infrastructure is the prerequisite for electromobility to arrive in everyday life. Since 2018, our subsidiary Comfortcharge GmbH has been building and operating fast charging stations at Deutsche Telekom locations throughout Germany. They are publicly accessible and make it possible to recharge electric vehicles in around ten minutes with additional energy for about 100 kilometers. How much range is actually achieved depends, among other things, on the type of vehicle, the state of charge and the respective framework conditions.

Comfortcharge operated around 300 fast-charging stations
at our locations in 2025.

Comfortcharge operated a total of around 750 charging systems (including normal charging stations up to 22 kW)
for charging company, business and employee vehicles at our sites in 2025.

Charging infrastructure for cities, regions and companies
We support cities, regions and companies in building and operating charging infrastructure. Our range of services includes planning, construction, installation and service. In addition to the necessary hardware, the software for the operation of the charging stations and for end customer management is also part of the solution.

In addition to the charging points operated by Comfortcharge at our own Telekom locations, we installed more than 2,700 e-charging stations worldwide in 2025 – around 500 more than in the previous year. The new stations were built as part of charging infrastructure projects for cities, regions and companies.

Number

	2025	2024	2023	2022
eMobility charging stations installed	**2,723**	**2,174**	**698**	**854**
Standard charging stations (≤ 22 kW)	**2,355**	**1,804**	**645**	**653**
Wall-mounted standard eCharging stations	506	429	386	296
Detached mounted standard eCharging stations (outdoor)	1,849	1,375	259	357
HighPower charging stations (> 22 kW)	**368**	**370**	**53**	**201**
Detached mounted high power eCharging stations (outdoor)	368	370	53	201

Technicians in action for e-mobility

Our partners – energy suppliers, electronics retailers, hardware and automotive manufacturers as well as providers of fleet solutions – and their customers benefit from the services of Deutsche Telekom Außendienst GmbH (DTA): It provides qualified technicians throughout Germany who carry out various mobility services on site at the customer's premises. More than 50 partners offer various eMobility services with the help of Technical Service. This includes services such as the installation of charging equipment as well as their fault clearance and maintenance.

- DTA carried out around 6,500 eMobility orders in 2025.

Looking ahead

Mobility is an important lever for achieving our climate targets. For this reason, we are consistently pushing ahead with the expansion of the charging infrastructure for our own fleet and beyond and creating mobility services that combine different forms of use.

Employee initiatives: working for a more sustainable future

Smart textile collection containers, upcycling of old advertising banners, a search engine that plants trees: all these projects – and many more – have been implemented in recent years at the suggestion of employees at Deutsche Telekom. Numerous colleagues around the world are involved in various initiatives and programs that address ecological issues or support local environmental initiatives. The commitment of our employees is an expression of a corporate culture that offers room for personal initiative and addresses sustainability issues related to our CR strategy.

Our employees are not only committed to the environment and climate, but also to social issues. You can find more about this here in the CR report on the Social engagement overview page and in more detail under Volunteering and financial commitment.

Milestones achieved, ongoing projects and goals

Since 2018, Deutsche Telekom has had official sustainability ambassadors – the "Green Pioneers". In the meantime, more than 300 employees are involved.

Where we come from

2018 The internal initiative "Stop wasting, start caring" was launched. It bundled existing and new projects to conserve resources in the workplace.

2018 The "Stop wasting, start caring" initiative gave rise to the internal sustainability ambassadors Green Pioneers. Their goal: to bring a wide range of ideas for improvements into the company.

2019 At the official launch of the Green Pioneers, they defined ten focus topics for their work, which are oriented towards their core business, including paper consumption and mobile phone collection campaigns.

2023 On the initiative of the Green Pioneers and our HR teams, our employees planted mini-forests ("Magenta Pocket Forests") at various locations in Germany.

2024 Up to this point, around 300 employees had been involved in the Green Pioneers.

2024 The Green Pioneers shared their knowledge with colleagues during our "Learning from Experts (LEX)" sessions.

2024 On the initiative of the Green Pioneers, Ecosia was set up as the default search engine on all Telekom computers. Ecosia uses its profits to finance reforestation projects.

Where we stand in the reporting year

2025 First ambassadors expand the Green Pioneers initiative to Mexico.

2025 Since the introduction of Ecosia as the group-wide default search engine in 2024, usage has increased significantly. In total, more than 25 million search queries had been carried out across the Group via Ecosia by the end of 2025. Ecosia uses its own proceeds to finance reforestation projects.

2025 On various occasions, such as Deutsche Telekom's 30th anniversary, the Green Pioneers process disused Telekom advertising banners into new bags and other utensils in upcycling campaigns. They donate the proceeds from the sale to a good cause.

Where we want to go

Ongoing The Green Pioneers are increasingly expanding their activities: Internationally, our sustainability ambassadors are networking more and more and are also exchanging ideas across countries and companies.

Green Pioneers: impulses for more sustainability in everyday working life

As internal sustainability ambassadors, the Green Pioneers are on the lookout for potential for improvement and initiate measures around topics such as resource conservation, circular economy, biodiversity and mobility. Whether it is swap meets, planting and garbage collection campaigns or an in-house carpooling service: With their initiatives, the Green Pioneers create concrete points of contact for colleagues to integrate sustainability into their own everyday work – for example, by offering the opportunity to order second-hand office supplies. In this way, existing materials can continue to be used across locations and unnecessary new purchases can be avoided. In 2025, the central office supplies warehouse in Bonn processed over 160 internal orders for used office supplies.

On the initiative of the Green Pioneers, we have set up the Ecosia 2024 search engine as the standard on all Deutsche Telekom computers for daily online searches. Ecosia uses its own proceeds to finance reforestation projects. By the end of the reporting year, more than 25 million searches had been carried out via Ecosia across the Group. According to the search engine operator, this corresponds to a contribution to the planting of over 500,000 trees.

The Green Pioneers also set impulses away from everyday office life. This is how her commitment gave rise to the idea of shredding cardboard boxes generated in logistics in Germany and reusing them as filling material. In the reporting year, the Green Pioneers implemented several upcycling projects, among other things, in which disused Telekom advertising banners made of PVC and polyester were sewn into everyday products such as bags, baskets and aprons. The products were offered through an online auction and a local bazaar. The proceeds of EUR 10,000 went to the organizations Ein Herz für Kinder e.V. and One Earth – One Ocean.

In Germany, for example, the Green Pioneers are currently involved in about 60 locations and in more than 30 working groups. Depending on their location, interests and know-how, they join together to form thematic or regional “hubs”. In some areas, we support their commitment with a small amount of time.

Smart technology for textile recycling

The Green Pioneers are also dedicated to the topic of textile recycling. In Germany, smart textile containers have been set up at around 40 locations since 2021 on her initiative to collect disused work clothing and other clothing with the Telekom logo, e.g., from our Love Magenta store. IoT (“Internet of Things”) technology is installed in the special collection containers, which displays the level of textiles in the Telekom cloud. This allows us to see when the containers are full and avoid unnecessary trips to empty them. The collected textiles are then professionally recycled. What was initially conceived as a pilot project has now become a regular process. As a result, all Telekom Deutschland employees now have the opportunity to hand in disused Telekom textiles. Since 2024, the concept has also been implemented in Austria.

The commitment of the Green Pioneers in numbers

More than 300 Green Pioneers in Germany and internationally.

More than 25 million search queries via the Ecosia search engine, which uses the profits to support reforestation projects.

Green Pioneers are currently implementing projects in five countries.

Promoting knowledge sharing

The Green Pioneers have extensive knowledge that they pass on as multipliers – including at team meetings, divisional meetings, works meetings or summer parties. In doing so, they provide information in various formats about a more sustainable (working) everyday life. Experts from T-Systems also contribute their expertise and perspectives on sustainability topics, for example in the so-called “Green Talks”. In the reporting year, the topics of the circular economy, opportunities for personal commitment and sustainability training were on the agenda. In addition, T-Systems employees can deepen their knowledge of climate change with the help of creative methods, such as in the “Climate Fresk” workshop.

Greece: collecting marine litter

Deutsche Telekom employees are also active in environmental protection away from the Green Pioneers: for example, together with the environmental organization ENALEIA in the COSMOTE BLUE initiative, which was successfully completed in 2025. The focus of the three-year initiative was on dealing with plastic waste in the Mediterranean Sea around Greece. In cooperation with local fishermen, the organizers of ENALEIA and employees of our Greek subsidiary collected marine waste during regular fishing trips and temporarily stored it in containers provided in the ports. In addition, ENALEIA organized further clean-up campaigns in particularly heavily polluted areas. The collected materials were then handed over to certified waste disposal and recycling companies. Over the course of the project, more than 94 tons of waste were collected, of which 54.6 tons were recycled and processed into new products, according to the project partner. Another component of the initiative was an accompanying training program for fishermen: ENALEIA sensitized more than 300 participants to responsible fishing and how to deal with marine litter as part of their daily work.

Looking ahead

For seven years now, the Green Pioneers in Germany have stood for a joint commitment of employees that provides impetus for sustainability in everyday work. In the future, international exchange will also become increasingly important – in order to share experiences, learn from each other and get to know different approaches.

Deep Dive for Experts

Management & Frameworks

The “Group Corporate Responsibility” (GCR) department organizes meetings, lectures and activities for the Green Pioneers and shapes the framework conditions.