E Environment

Energy – Climate – Circular economy

Our goal is to design network infrastructure and business activities in such a way that energy consumption decreases and resources are used more efficiently. Only in this way can we support a more sustainable digital infrastructure and more responsible value creation.

Continuous electricity from renewable energy sources at all company and grid locations
100%

Reduction of scope 1 and 2 emissions in 2025 (compared to base year 2015)
97.5%

Recycling rate of network waste 2025
99.9%

Energy

We use the opportunities offered by digitalisation to reduce energy consumption and CO_2 emissions.

⚙ Strategy

On the way to even greater efficiency and electricity from renewable energy sources

Our environmental and climate strategy focuses on **reducing energy consumption** and **sourcing all electricity from renewable energy sources**, secured by recognised certificates of origin and drawn from various renewable energy portfolios. Through a range of measures, we are specifically reducing our **energy consumption per unit of data** and the associated **energy-related greenhouse gas emissions,** while simultaneously strengthening security of supply. As part of the Telefónica, S.A. Group, we are acting in accordance with the Group-wide goal of net-zero emissions by 2040. Business customers can benefit from our solutions, which contribute to improved energy efficiency and support them in **achieving their decarbonisation targets**. Read more about this in the following section on climate.

📍 Policies

We are committed to effective energy management

Our Environment and Energy Policy forms the basis for the responsible use of energy within the company. It defines how we **optimise our energy consumption** and thereby reduce emissions. These guidelines are a binding component of our e**nergy management system according to ISO 50001**. This ensures that we systematically control and continuously optimise our energy consumption. Our Supply Chain Sustainability Policy obligates O_2 Telefónica' suppliers to calculate and disclose their scope 1 and 2 emissions according to the GHG Standard, reduce their energy consumption, and prioritise the use of renewable energy sources.

🎯 Targets

We had the following targets by the end of 2025:

- To reduce **energy intensity** by up to 87% compared to the base year 2015. Energy intensity is calculated as: total energy consumption (electricity and fuel consumption) divided by data volume per petabyte.

- To continuously source 100% electricity from **renewable energy sources** at all company and network locations.

⏲ Performance

Our approach works

- ✓ Our energy intensity – data volume per petabyte – decreased by over 87% in 2025 compared to the base year 2015 (2024: 85.2%), thus we have achieved our target.

- ✓ The use of electricity from renewable energy sources at all company and network locations is 100% annually – also in 2025.

> 📈 All key indicators and definitions can be found in our interactive KPI tool.

⚙️ Actions

Innovative approaches for a sustainable energy portfolio

100% renewable electricity: We are committed to a sustainable energy portfolio. We have entered into long-term power purchase agreements (PPAs) with two offshore wind farms in Germany, which have been supplying electricity from renewable energy sources since 2025. In addition, we procure annual certificates of origin for electricity from renewable energy sources to offset any remaining conventional electricity purchases. We also utilise a portion of our own renewable energy generation.

Increasing digital efficiency: We switch off unused systems in development and test environments at night and on weekends and introduce technologies such as the AWS Graviton Processor, which offers improved energy efficiency compared to conventional processors. It features lower power consumption per calculation, enables optimised performance per watt for workloads such as databases, and its process architecture promotes less heat generation, thus reducing cooling requirements.

Infrastructure modernisation: Our heating, ventilation, and air conditioning systems in data centres and technical sites are continuously being modernised and optimised. We are replacing outdated air conditioning technology with more energy-efficient hybrid fan units. In addition, we are switching to free cooling and using outside air for cooling to reduce energy consumption.

Making energy consumption transparent: The Eco-Smart label identifies products that meet defined sustainability criteria – particularly energy-efficient operation and a digitally accessible CO_2 footprint. Further information can be found in the Circular Economy chapter.. In addition, we rely on smart energy monitoring with AI and smart meters – both in our data centres and in the networks for our business customers. We consider defined sustainability criteria in our purchasing decisions.

💎 Business value

### Solutions for the future viability of our customers

With us, companies and institutions can support their **climate transition** – through the use of digital technologies that **enable more energy- and emission-efficient processes**. We provide high-performance infrastructures and intelligent data solutions that contribute to reducing emissions and complying with regulatory requirements, as well as promoting the resilience and future viability of sustainable business models. This also includes the continuous expansion of our 5G network, which offers improved energy efficiency per unit of data compared to previous mobile generations. Our solutions include, among others:

1. **IoT and big data platforms** for real-time emissions tracking and operational optimisation
2. **AI-supported network planning** to reduce energy demand and increase efficiency
3. **Cloud-based services**, which – depending on the individual usage scenario and energy consumption – can have a lower CO_2 footprint compared to local systems.

⏩ Next steps

We know where we want to go

We will continue to rely on sourcing electricity from renewable energy sources and continuously improving energy efficiency. These measures contribute to the implementation of our climate strategy and support our goal of achieving **net-zero emissions** by 2040.
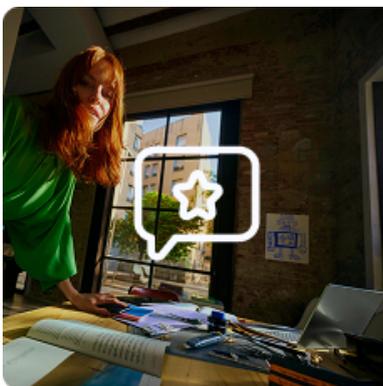
Business impact story: Increasing energy efficiency with O₂ Telefónica

Efficient Residential Heating uses our IoT to smartly connect heating systems – for less consumption and lower costs.

→ **Click here for the story:**
"Less energy, more comfort: Heating control with IoT"

Climate

We are aiming for net zero by 2040 for a more climate-friendly digitalisation.

🧩 Strategy

Managing risks, reducing emissions – climate protection needs both

For us, climate protection means more than just adaptation. We want to take active steps and focus on two key levers to proactively address climate change:

Firstly, we adapt to **climate risks**. We continuously assess locations, processes, and infrastructure for physical risks such as extreme weather events, as well as chronic risks such as temperature changes. In addition, we conduct climate scenario analyses in accordance with European reporting requirements and TCFD standards to systematically evaluate opportunities and risks and thus strengthen the stability of our networks. Furthermore, we have developed a **climate transition plan**. Read more about the analysis and the plan here.

On the other hand, in addition to adaptation measures, we focus on the **continuous reduction of our greenhouse gas emissions** – a key lever for improving our CO_2 balance and promoting the energy transition through concrete actions. Furthermore, we make a measurable contribution to **decarbonisation along the entire value chain**: both in our own business operations (scope 1 and 2) and in the supply chain (scope 3). Detailed information on the methodology can be found at our parent company, Telefónica, S.A. Group; our measures for reducing our energy-related greenhouse gas emissions are described in the Energy chapter, and all key performance indicators are available online in our interactive KPI tool.

With this strategy, we not only respond to potential damage from extreme weather or rising costs during the transition, but also seize opportunities arising from the development of products and services with lower environmental impacts. Furthermore, we provide digital solutions that can support the decarbonisation of other industry sectors.

📍 Policies

We are committed to emissions reduction and sustainable procurement

Our Environment and Energy Policy forms the basis for all emission reduction measures and is anchored in our **environmental management system according to ISO 14001**. For supplier relationships, we have a procurement policy for low CO_2 emissions, which incorporates environmental criteria in the selection of products and suppliers, as well as a Supply Chain Sustainability Policy. This policy sets requirements for **climate management for suppliers,** including scientifically sound emission reduction targets for relevant scope 3 emissions in accordance with the 1.5-degree scenario.

🎯 Targets

Our overarching target is **net-zero emissions** by 2040 across the entire value chain (including scope 3). To achieve this, we have defined interim targets. These reduction targets are aligned with the guidelines of our parent company, Telefónica, S.A. Group, the first telecommunications company with climate targets validated by the Science Based Targets initiative (SBTi).

We had the following targets by the end of 2025:
- **Scope 1 and 2**: reduction of CO_2 emissions by 95% compared to the base year 2015.
- **Scope 3:** reduction of CO_2 emissions by 39% compared to 2016.

From 2025 onwards, all remaining and unavoidable scope 1 and 2 emissions will be offset (market-based) by purchasing **CO_2 certificates**.

In addition, we are making a measurable contribution to CO_2 reduction in business and society through the expansion of 5G and the introduction of digital solutions such as Smart Grids and IoT.

⊘ Performance

Our emissions at a glance

- ✓ Our scope 1 and 2 emissions were reduced by 97.5% by the end of 2025 compared to the base year 2015 (2024: 97%).

- 🕐 Our scope 3 emissions were reduced by 18% in 2025 compared to 2016 (2024: 24.4%).

- ✓ We have already certified offset 100% (4,535 t CO_2e) of the remaining emissions in 2025 (2024: 80%).

> ⌇ All key indicators and definitions can be found in our interactive KPI tool.

⚙ Actions

Greater resilience and fewer emissions

Three approaches to reducing emissions: To reduce scope 1 and 2 emissions, we focus on energy efficiency, the expansion of renewable energy sources and circular economy measures (see chapter Energy and Circular economy).

A significant portion of scope 1 emissions comes from company vehicles. Therefore, in 2024, we adjusted our company car policies and electric vehicle policy to reduce CO_2 emissions and accelerate the electrification of our fleet. At our antenna sites, we are gradually switching to free cooling to reduce greenhouse gases. We offset unavoidable emissions through certified climate protection projects that are audited according to internationally recognised standards such as Verra (VCS).

In 2025, the focus was on optimising our cloud resources, for example through rightsizing for demand-driven resource utilisation. In the supply chain, we can reduce emissions by applying sustainable procurement criteria and including CO_2 costs in the selection process for certain product categories.

Rethinking hardware and processes: Already in the design process, we pay attention to the CO_2 balance of our products, increasingly use recycled materials and design packaging to be more resource-efficient – for example with new routers as part of the "Circular Router Project" (see chapter Circular economy).

We are strengthening our resilience: We remain capable of acting even in crises: Business Continuity Management (BCM) ensures that we remain operational in the event of natural disasters, disruptions, or emergencies. As part of our IT emergency planning, we deploy emergency power generators, for example, to keep our IT systems and networks stable.

At mobile communication sites, we use robust outdoor enclosures (SSCs) that are tested according to ETSI standard 300019-1-4. They protect critical technology such as power supply and control systems from heat, rain, and extreme conditions – thus increasing operational stability at outdoor locations.

◈ Business value

Intelligent solutions for the future viability of our customers

With IoT and cloud solutions, we contribute to **energy efficiency and resource-efficient use**. Our network infrastructure uses electricity from renewable energy sources and supports the reduction of our carbon footprint. IoT and cloud services enable energy-efficient process control and demand-based resource allocation to reduce emissions. In this way, we aim to create **sustainable connectivity with lower environmental impact** and drive decarbonisation along the value chain (see measures in the Energy and Climate chapters and online via our interactive KPI tool).

⏩ Next steps

We drive decarbonisation forward

Our path leads to net zero by 2040. Following the successful reduction of scope 1 and 2 emissions by the end of 2025, we focus on scope 3. We want to drive **decarbonisation forward in the value chain** and are planning new interim targets by 2030. A pilot project combines an internal CO_2 price with product data from our suppliers. In this way, we are laying the foundation for procurement that combines climate protection and economic efficiency.

Circular economy

We are increasingly aligning aspects of our business activities with the principles of the circular economy.

🧩 Strategy

Rethinking design. Less material, more circularity

By 2030, we aim to achieve the target of "Zero ICT Waste" by working towards reusing or recycling 100% of the information and communication technology (ICT) waste generated. The central approaches of our strategy are **reducing resource input**, including through the use of materials with recycled content and integrating circular economy principles into the design process. We also **minimise resource outputs** through the take-back and reuse of hardware, thereby extending the lifespan of devices. Furthermore, we intend to **embed circular economy criteria** throughout the supply chain to promote the **use of secondary materials** and reduce the environmental impact of manufacturing.

📍 Policies

We have established principles for resource conservation and waste prevention

With our Environment and Energy Policy, we have committed ourselves to conserving resources and promoting reuse and recycling. This policy is anchored in our **environmental management system according to ISO 14001**. Our internal Waste Management Policy governs the avoidance, separation, and recovery of waste in the relevant business processes along the value chain. This is complemented by the Supply Chain Sustainability Policy (SCSP), which defines sustainability requirements for suppliers and promotes the integration of circularity principles.

🎯 Targets

We had the following targets by the end of 2025:

- To increase the share of our business customers' digital products and services that are awarded the **Eco Smart seal** to at least 60%.

- To take back 80% of **used devices** (refurbished routers) from customers and return them to the recycling loop.

- To increase the **recycling rate** for network waste to 98%.

As part of the Telefónica, S.A. Group, by 2030, we aim to

- become a "Zero ICT Waste Company", meaning **reuse** or **recycle** 100% of the ICT waste generated in business operations.

📊 Performance

Results of our circular approaches

- ✅ 63% of our digital products and services already carry the **Eco Smart Label** (2024: 63%).

- 🕐 In 2025, the share of **refurbished routers** was 68% (2024: 81%), which was below the target. This was due to a reduced return rate of routers to the leasing partner under the existing contractual agreement.

- ✅ 99.9% of network equipment is already **reused** or **recycled** (2024: 99.7%).

> 📈 All key indicators and definitions can be found in our interactive KPI tool.

⚙️ Actions

More recycling, fewer raw materials

Increased use of recycled and more environmentally friendly materials in products and packaging: One example is the new energy-efficient HomeBox4 router, which has a significantly increased recycled content and will be available from 2026. Furthermore, the device is designed to be easier to repair – see also the section "Business value".

We also design our packaging to be resource-efficient, for example, by using half SIM cards and shipping boxes with reduced plastic content. In this way, we reduce the need for new raw materials and the amount of material used in the design process, thus reducing waste.

Eco Smart criteria: 63.0 % of our products are developed according to Eco Smart criteria, which focus on environmental responsibility and resource conservation:

- low energy consumption during operation
- high recyclability of the hardware components,
- long service life due to update capability and repairability,
- transparent CO_2 balance sheet, which can be viewed via digital platforms.

The initial assessment of the product groups according to the Eco Smart criteria was carried out by the independent certification company AENOR INTERNACIONAL, S.A.U. in accordance with the requirements of the standard EN ISO/IEC 17029:2019. Products and services bearing the Eco Smart label meet the defined, externally verified criteria.

Using devices for longer instead of buying new ones: To conserve resources, we rely on a circular economy: Through leasing and subscription models as well as trade-in programmes like our "O_2 Business Device-as-a-Service" for business customers, we take back used devices, refurbish them, and either reintegrate them into the cycle or recycle them professionally. At the same time, we help to avoid rising costs and longer delivery times that can arise from raw material shortages or geopolitical conflicts.

Bringing used devices back into circulation: Since 2021, our customers have been able to sell used devices to an external partner via the O_2 mobile phone buy-back programme. After receiving and inspecting the devices, the partner refurbishes them and puts them back into circulation.

💎 Business value

Added value through circular economy principles

With the **HomeBox4 router**, we are setting a clear example for a circular economy and more resource-efficient operation of digital infrastructure. The device is durable, repairable, and recyclable, and bears the TÜV Rheinland "Green Product Mark" as independent proof of defined sustainability criteria. We already focus on **efficient material use** and **reducing the CO_2 footprint** during the **design process**. This offers clear advantages for our business customers:

- **Cost-saving potential**: Longer service life and the possibility of refurbishment can reduce the total cost of ownership (TCO) for acquisition and operation. Companies need to purchase new hardware less frequently.
- **Supporting ESG targets**: The use of hardware based on circular principles can help reduce the ecological footprint and support companies in achieving their own sustainability goals.
- **Strengthening security of supply**: In times of geopolitical tensions and raw material shortages, the reuse of equipment can reduce the risk of supply bottlenecks and long waiting times.
- **Innovative installation service**: For business customers, we also offer a free installation service when activating new business plans. This ensures that companies are reliably online from day one – without any additional effort.

⏩ Next steps

On the road to zero waste

By 2030, we aim to achieve the target of "**Zero ICT Waste**". This means that components of our digital infrastructure should be kept in circulation as much as possible, for example, through reuse or recycling, or they should be replaced by suitable alternatives.