



Environmental Policy KPN

Our transition plan to a net zero organization and value chain

Our environmental strategy

We are committed to connecting everyone in the Netherlands to a sustainable future, a responsibility we take very seriously. We are committed towards ambitious environmental objectives, both short- and long-term. In doing so, we link our targets directly to our green financing instruments. Through our approach to sustainability, we aim to positively influence the environmental impact of our total value chain, from suppliers to customers, by collaborating towards zero waste and zero emissions. This includes our procurement process, operations, and the impact of our products and services before, during and after use.

Our services also enable our customers to become more sustainable, i.e. via remote working. In addition, we believe that a telecommunications company like KPN is well positioned to play a strategic role in the energy transition by providing real time data solutions for energy related assets within our own network as well as for our customers. In this way, we make a contribution to the achievement of global, European and national goals, such as the UN Sustainable Development Goals, the Climate Agreement of Paris and the European Green Deal (e.g. Fit for 55). Our strategy is aimed at our contribution to limit global warming to 1.5 °C. We have drawn up this Environmental Policy and have integrated it into our business operations and throughout our value chain.

Our long term goals

Our long term target is to reach net zero emissions by 2040. Our initial Science Based Target was approved in February 2017. Since then we increased our ambition to net zero. Therefore this target is currently under revalidation of the Science Based Targets Initiative. Our target is to reduce our emissions by a minimum of 90% compared to a 2015 baseline and we will neutralize remaining embedded emissions.

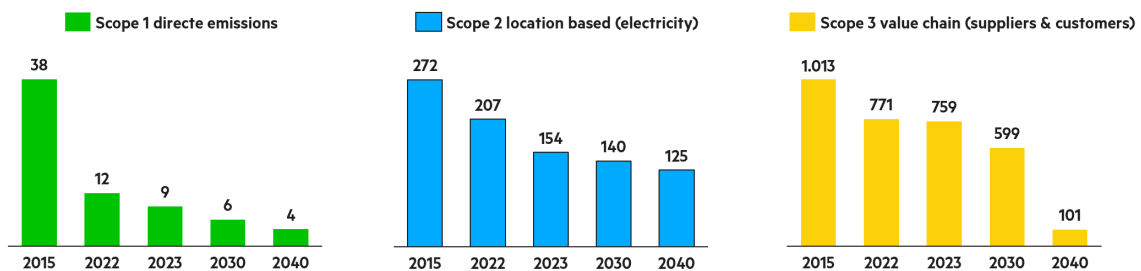


Figure 1.

KPN emissions for scope 1, 2 and 3 in kTon CO₂e vs 2015.

Note: Scope 2 market based is zero as from 2015.

Decarbonization levers, climate mitigation actions and locked-in emissions

Scope 1 (direct emissions):

Our scope 1 emissions mainly relate to the conversion of our fleet to fossil fuel-free. Next to this, we use gas for heating of our buildings and a limited use of diesel for no-break installations.

Goal: 90% reduction by 2040 compared to a 2015 baseline

- We will reduce the CO₂e emissions from our company-car fleet by limiting our inflow to fossil fuel-free vehicles by 2025. We will reach this goal by conversion to electric cars in lease arrangements for our own personnel and in part by using HVO-100 (biodiesel) fueled cars for engineers.
- We continue to transition from gas-based heating to electrical heating for smaller buildings. For larger buildings and offices, we still have a challenge to convert from gas to electric installations.
- We currently still have emissions relating to no-break installations in our network. The usage of these installations is limited to testing and potential power down incidents. We continue to explore alternatives like application of biodiesel in no-break installations or battery-based solutions.

Scope 2 emissions (electricity)

Our scope 2 emissions mainly relate to the electricity usage of our network, offices and stores.

Goal: retain zero emissions based on 100% renewable energy

- Our energy usage has been based on 100% renewable energy since 2011 and we have committed to do so until at least 2040. Therefore, our market based emissions for scope 2 are already zero.
- We will continue to reduce energy usage in our operations, even though data usage continues to grow. Our reduction target is 48% GWh reduction of electricity consumption of KPN Group in 2030 compared to 2010, which translates to using less than 400 GWh by 2030.
- We are updating our energy mix by committing to the Hollandse Kust West wind farm and solar park Kabeljauwbeek for 15 years (> 67% of long-term required capacity) and placing solar panels on technical buildings.

Scope 3 value chain (suppliers & customers)

Our scope 3 emissions reflect our impact in the value chain relating to production, transport, usage and end-of-life of the equipment we buy from suppliers and products we provide to our customers.

The most important drivers in the value chain emissions (scope 3) are:

- the transition to green electricity over time of our customers (consumer and business)
- suppliers becoming CO₂e neutral

Other drivers include:

- usage of customer premises equipment at home (related to fiber roll-out and usage of sleep-modes)
- circularity of equipment
- improvement of measurement (e.g. actual energy use of equipment by B2B customers)
- logistics in the value chain

Goal: 90% reduction by 2040 compared to a 2015 baseline

We will reduce our scope 3 emissions with a minimum of 90% compared to a baseline in 2015 and will neutralize the remainder. We have an intermediate target of 45% scope 3 emission reduction in 2030 versus 2014 (which equates to 41% scope 3 emissions reduction versus 2015).

Upstream value chain

- We stimulate our key suppliers to become net zero based on approved Science Based targets before 2040 via procurement selection criteria and participating in supplier engagement programs from worldwide platforms like Joint Alliance for CSR (JAC), CDP and EcoVadis. In that way we stimulate our suppliers to convert to renewable energy and improve carbon footprints of their products and services based on Life Cycle Assessments (LCA).
- We collaborate in industry bodies like GSMA, JAC, ETIS as all major telecommunication companies will demand net zero strategies from their suppliers to reach their own goals.
- Some locked-in emissions may occur before 2040 as not all of our suppliers operate in circumstances where a 100% green grid is available near their local operations.

Datacenter and cloud computing

KPN commits to cease all revenue generation from activities that contribute to fossil fuel expansion. KPN earns revenues with providing datacenter and cloud computing services. Data traffic is expected to continue to grow exponentially. KPN owned datacenters are already performing on 100% renewable energy. We require our suppliers of datacenter and cloud computing services to be on 100% renewable energy. We aim to have our external datacenters to be on 100% renewable energy latest 2030 (currently > 90% of our datacenter and cloud computing purchasing is already on 100% renewable energy).

Downstream value chain

- We ask our suppliers to continue to improve the energy efficiency of the products we provide to our customers, which is part of our scope 3 emissions footprint. Our customers have the option to use eco-modes on TV equipment at home.
- Some emissions will continue to be locked in the value chain as in-home equipment needs to use energy and not all of our customers are able to use 100% green energy in The Netherlands.
- Although we report avoided emissions enabled for customers, we will not subtract these positive impacts to reach net zero.

Circular economy

To realize our ambition to become net-zero we also see the need for a materials transition. The materials transition involves both finding lower-impact ways to produce materials and applying circular-economy principles. The circular economy departs from the traditional linear economy model which follows a take-make-dispose approach. Instead, it promotes the use of sustainably sourced renewable and secondary resources and the reduction of waste by designing products and systems that are regenerative, restorative, and waste-free. This approach aims to keep products and materials in use for as long as possible, reducing the need for new resources by applying secondary raw materials. It further entails applying circular business practices like close-loop supply chain, second-hand retailing, maintenance, refurbishing and repair, which helps to minimize waste in the outflow of materials.

KPN started its circular economy journey in 2016 by setting a moonshot goal to become close to 100% circular by 2025. We started by focusing on the outflow of products, aiming to improve collection rates and maximize the reuse and recycling of materials. For 2025, we set a target of 86% reuse and recycling. For collected customer premises equipment, we set a target of 92% by 2025. In 2022, we introduced the Circular Transition Indicator (CTI) framework to measure our circular performance on both inflow and outflow. In 2023, we report on a selected scope of our consumer market segment. The CTI measure focuses on KPN-owned equipment. For this scope, our consumer market segment is 77% circular. This figure is compiled from a circular inflow of 70% and a circular outflow of 83%. We strive for a year-on-year improvement of this metric. Our next step is to synchronize our reporting efforts on circularity within the CSRD framework and broaden the scope of our circular metrics on inflow and outflow.

We face challenges in our ambitions to become more circular. Reuse & recycling has limited upside due to technical and commercial limitations. The opportunities to improve designs of products and application of secondary materials have limitations, specifically for electronics and due to our position in the value chain as an end-user. Collecting product based insights is very data intensive and depends on data availability from our upstream supply chain.

Embedding the transition plan in our strategy

ESG (Environmental Social Governance) criteria are embedded in KPN's strategy and organizational structure. ESG themes are defined and approved by the Board of Management, including their ambitions. Our double materiality assessment based on CSRD requirements is ongoing. Every ESG theme is assigned to a member of the senior management team who, as theme owner, is responsible for stakeholder dialogue, targets, progress and results. The theme owners report to KPN's Corporate Social Responsibility (CSR) Manager, who is responsible for the overall reporting, approach and cohesion. The CSR Manager reports to the Director of Corporate Communication & CSR, who in turn reports to the CEO. Four times a year, ESG data is included in the overall set of business KPIs that is reported to and discussed with the Board of Management. To obtain sufficient outside reflection, stakeholder dialogues are held with external experts to advise KPN on its approach to ESG in general and more in-depth on the ESG themes. Climate-related risks and opportunities are considered integral to the governance of operations and ESG themes. This year we will install a ESG committee in the Supervisory board.

Further details on governance and risk are in our Integrated Annual Report chapter Compliance and Risk.

Operational Control

The scope of our Environmental Policy applies to KPN and subsidiaries. When a corporation uses the operational control approach, it will report on everything where it or one of its subsidiaries has complete authority to create and apply operating policies. This is the most typical method for establishing boundaries. The advantage of an operational control approach is that it focuses on the ability as an organization to influence or minimize the carbon emissions it produces.

Reporting on the progress of our transition plan and assurance

We monitor progress and publish the main results and indicators of our environmental performance in our Integrated Annual Report and quarterly results. These results and indicators are assured internally (by our internal audit department) as well as externally (by the external auditor of the annual report). Further information is available on: <https://www.overons.kpn/en/kpn-in-the-netherlands/sustainability>

Process of assessing of risks & opportunities

Climate change is integrated in KPN's Internal Risk Management and Control System and designed to avoid, mitigate or eliminate the risks associated with KPN's strategic, operational, financial, regulatory and compliance objectives. We have taken into account the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), which include matters such as governance, climate strategy, risk and opportunity assessment and key performance indicators.

- We recognize, measure and document the impact – both positive and negative – that our operations, services and products have on the environment.
- We guarantee that, at the very least, we comply fully with all the environmental legislation, anticipate future legislation and, where possible and practicable, go further than the statutory requirements. We also demand that our suppliers do so, and we monitor their compliance.
- We set up adequate management systems for designing, developing, maintaining and managing our operations to prevent and limit the impact on the environment and monitor progress and compliance. These systems covers all relevant aspects (energy, CO₂e emissions, waste and water) and are integrated in our environmental management system which is ISO14001 certified.
- We identify the principle risks in our own operations and within our value chain, including relevant environmental matters (e.g. climate-related impacts).
- We have guidelines to stimulate re-use and safeguard proper handling of e-waste through WEEELABEX (or equivalent) certified operators and licensed contractors.
- We apply the principles of a circular economy to our own operations (network, data centers, offices, procurement) and for the benefit of our customers. This means we try to use fewer materials, enhance product lifespans, take measures to reduce our waste towards zero and focus on energy efficiency of products.

Our climate-related risks

Regulatory risks	Technology risks	Market risks	Reputation risks	Chronic & acute physical risks
Price increases for products and services due to rising energy taxes, grid transport and energy prices	Need for accelerated replacement of equipment required to improve energy efficiency	Higher operational costs due to increased energy prices and availability of critical raw materials in our supply chain	Not meeting environmental goals and reporting requirements will have reputation impact on our stakeholders (shareholders, bondholders, employees, customers and society)	Increased electricity and water usage for cooling with rising global temperatures and sea level, impact of extreme weather events like floods on KPN's infrastructure and supply chain

Our climate-related opportunities

Resource efficiency	Sustainable design	Energy sourcing	Resilience	Financing
Improved efficiency based on savings via our Energy Excellence program. Lowering the need for virgin resources as part of our circular efforts	Via our digital services we contribute to the avoidance of carbon emissions for customers. This is via circular products and services with lower carbon impact of materials	Via Power Purchase Agreements we support additional renewable local energy sources	By integrating climate risks and opportunities into our strategy, we have an impact on investments and network modernization decisions. Closed loop supply chain improves product availability	Access to new sustainable financing increases our investment base and improves terms versus conventional financing instruments

Value chain approach

- We use a value chain approach for identifying environmental impact. In general this means that besides our operations, we also focus on our impact upstream and downstream in the value chain.
- We have environmental criteria for selecting suppliers and partners, and procuring products and services. These criteria cover the entire life cycle and include circularity. We aim for all suppliers we do business with to comply with the KPN Supplier Code of Conduct.
- We actively engage with our key suppliers via projects and circular contract clauses. In addition, we apply ITU standard L.1023 criteria for comparing circular solutions in RFPs.
- We develop new advanced services, solutions and products that are economically and ecologically sustainable and help our customers to reduce their environmental impacts. By enabling our customers for the new way of living and working, we help them save energy.
- We identify and measure the risks in the supply chain and implement improvement plans, both directly in cooperation with suppliers and in international partnerships and agreements.
- We make sustainability part of the assessment criteria for potential mergers and acquisitions.

Stakeholder engagement

- We communicate in a transparent and regular manner with our stakeholders regarding our environmental performance. For this purpose, we benchmark our performance via internationally recognized ratings, e.g. Carbon Disclosure Project (CDP), Sustainalytics, MSCI and EcoVadis.
- We participate in external engagements including industry and cross-industry groups, environmental memberships, partnerships and associations with a sustainability focus.
- We keep our employees informed and engaged about the value of environmental sustainability and about the initiatives and actions that we take to put our environmental principles into practice. We thereby ensure that our employees play an integral part in our sustainability programs.