



# ACTIVELY INVOLVED IN CLIMATE CHANGE MITIGATION

ENVIRONMENTAL REPORT 2020



## 5G HELPS TURN WORDS INTO ACTION

The environment is running out of time, and we can no longer limit ourselves to just inspirational words and lofty goals. Fortunately, a new paradigm in network technology is helping us reduce our environmental impact.

The coronavirus has accelerated the pace in which society and corporations are going digital. However, we must also ensure that this digital leap is taken in a responsible manner, as the coronavirus has exposed the long-lasting effects that a truly global crisis can have. There is a good chance that the next crisis will focus on climate change, which continues to accelerate at a rapid pace.

The future of the planet is strongly linked to the decisions that we, the companies, make. We at Telia cannot limit ourselves to reduce just our own carbon footprint – as a tech-

## EMISSION SAVINGS AND CIRCULAR ECONOMY PRACTICES

Telia is committed to become a zero emission company throughout the value chain and zero waste enabling circular economy by 2030. Our work is supported by our certified ISO 14001 environmental management system and Energy Efficiency System (EES+), both of which apply throughout our business operations in Finland.

### CARBON FOOTPRINT

As a consequence of our activities, greenhouse gas emissions are generated throughout our value chain, from our suppliers to our customers. We track our carbon footprint annually, in accordance with the calculation principles set in the [Greenhouse Gas \(GHG\) Protocol](#). In principle, the emissions generated in Telia's own operations, such as the fuel consumed by our back-up power supply systems and leased cars, the coolants used in our refrigeration units (Scope 1), and indirect emissions from the generation of purchased energy (Scope 2), are low. The greatest share of our emissions, 98%, is the result of the indirect (Scope 3) emissions consisting primarily of the emissions generated during the manufacturing of the products and producing the services purchased by Telia. These include, for example, the mobile phones, laptops, tablets and other consumer-grade electronics sold by Telia. Knowing our carbon footprint helps us focus our emission reduction efforts at the right targets. Extending the lifecycle of the devices and equipment by maximizing their reuse rate plays an important role in our effort to reduce our carbon footprint.

#### CARBON FOOTPRINT tCO<sub>2</sub>e

YEAR	2018	2019	2020
Scope 1	400	1 000	0
Scope 2 market-based	5 000	2 000	0
Scope 2 location based	65 000	29 000	28 000
Scope 3	220 000	234 000	187 000
1. Purchased goods and services	124 000	141 000	113 000
2. Capital goods	25 000	25 000	34 000
4. Upstream transportation and distribution	20 000	17 000	20 000
11. Use of sold products	31 000	14 000	5 000
13. Downstream leased assets	4 600	4 000	4 000
Other categories	36 000	33 000	11 000
Total emissions (scope 2 market based)	225 400	237 000	187 000

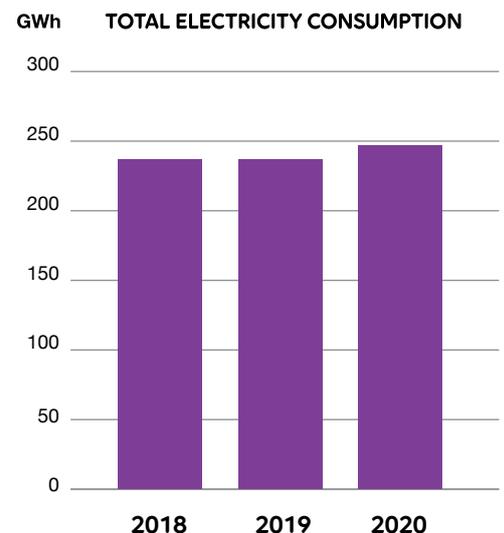
A more detailed breakdown of Telia's Scope 3 emissions is available on our [sustainability website](#).

### AIMING FOR ZERO EMISSIONS

In 2020, we achieved carbon neutrality for the greenhouse gas emissions caused by our operations (Scope 1 & 2) and business travel (Scope 3, Category 6).

We reduce our emissions by purchasing only 100% renewable energy. We have also improved our energy efficiency through several energy efficiency projects and cut our growing energy consumption despite our increased data usage. We are part of Motiva's and the Energy Authority's [Energy Efficiency Agreement for the years 2017–2025](#), and we are committed to improve our energy efficiency by 7.5% by 2025 from the baseline set in 2015. In fact, we exceeded this target in 2020, when we achieved an energy savings rate of nearly 9%. Our energy efficiency initiatives include the [modernisation of our radio network in collaboration with Nokia](#) and the discontinuation of older technologies, such as our [3G network](#). Along with these initiatives, we have also explored other opportunities to improve energy efficiency, such as installing solar panels and wind turbines at our base station (mast) sites.

After emission reduction measures the remaining unavoidable greenhouse gas emissions we have compensated. Our compensation focus on supporting biological carbon sequestration and new technologies that help bind carbon from the atmosphere.



We work closely with our suppliers to reduce our Scope 3 greenhouse gas emissions. Our goal is to have our suppliers commit to our target of zero emissions by 2023. In 2020, we made CO<sub>2</sub>e emissions part of our supplier selection criteria. We evaluate each supplier based on the emission reduction measures they have implemented. In the future, we will only collaborate with those suppliers whose climate targets are aligned with ours.

## CARBON HANDPRINT

Our carbon handprint describes the emission reduction potential our products and services have, to our customers. According to a study by [GSMA](#), the industry's umbrella organisation, mobile technology products and services can help reduce CO<sub>2</sub>e emissions by up to ten times the rate of emissions they cause.

We want to enhance our positive carbon handprint by offering our customers the opportunity to reduce their carbon footprint through our services. For example, Telia's "[Connected Vehicle](#)" IoT solution helps our customers control and optimise their driving

habits and cut back on their fuel consumption and mileage. Our IoT-based [smart electricity metering solution](#) also allows our customers to monitor and optimise their power consumption. Our [Crowd Insights](#) service, which analyses the location data collected by mobile devices, provides anonymised crowd-level data for various purposes, such as the development of more sustainable cities and mobility solutions.

## CLIMATE TARGETS FOR 2021

In 2021, we want to reduce our emissions by 40,000 CO<sub>2</sub>e tonnes. We will reach this target by:

- Continuing to purchase electricity from renewable sources 100%.
- Continuing our energy efficiency initiatives.
- By reducing emissions from supplier logistics by 5% (baseline year 2019).
- Focusing on the targets we have set for the reuse of equipment and devices
- Compensating any remaining and unavoidable greenhouse gas emissions from our own operations.

## CLIMATE TARGETS APPROVED BY SCIENCE BASED TARGETS FOR 2025

At the end of 2020, the [Science Based Targets](#) initiative approved the next milestones in Telia's fight against climate change. This means that Telia's next milestones are verifiably based on scientific research and in line with the Paris Agreement.

The climate targets for 2025 approved by Science Based Targets are:

- Halving the emissions caused by our own activities.
- Reducing all emissions related to the use of sold and service products by 29%.
- Ensuring that 72% of our suppliers (calculated by their emission rates) adopt science-based targets.



DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

nology company, we must create digital solutions that will help other companies reduce their emissions as well.

5G is a truly transformational technology that will help societies evolve and reach their next, fully digital industrial phase. For example, it will revolutionise the ways in which we can remotely control and monitor our machines and equipment, helping to reduce emissions across other of sectors.

New technologies present new challenges. New demand will lead to more devices and an increase in how much electricity we consume. This, in turn, will further emphasise the need for circular economy practices and the use of renewable energy in all our operations.

When it comes to our own operations, Telia is a carbon-neutral company. We have pledged to become a zero emission and zero waste company by 2030. The milestones we have set for 2025 have been approved by the Science Based Targets initiative, meaning that they are based on scientific research and fully in line with the Paris Agreement.

Nearly all activities critical to society are gradually being migrated to new digital platforms. However, this digital leap will only succeed if we do it responsibly, requiring both information security and the environment to be taken into account at all times. Telia remains fully committed to this endeavour.

**Heli Partanen**  
**CEO**  
**Telia Finland**

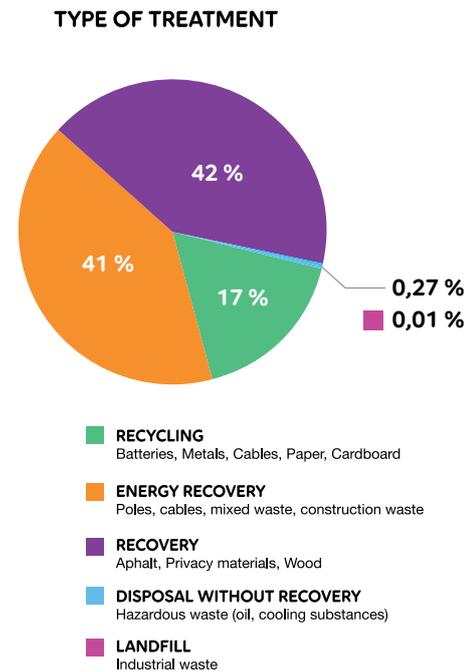
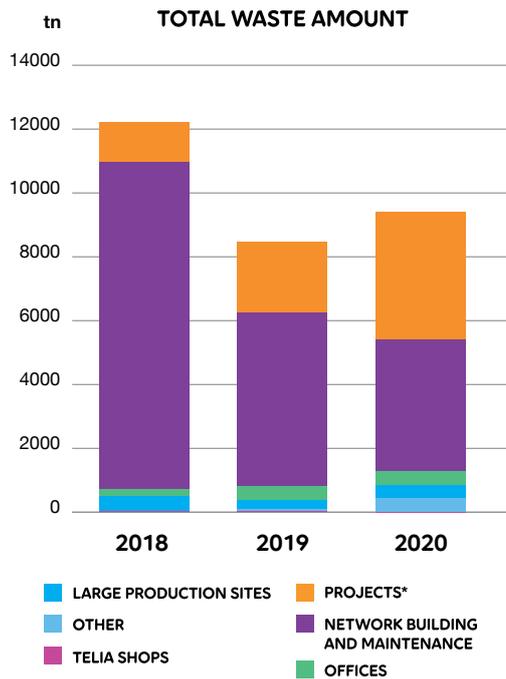


## RECYCLING OUR WASTE

Our operations generate a significant amount of waste. The biggest share is waste from our network construction and maintenance operations (for example, when we need to open a street and remove all the asphalt that is in the way), cable waste, electrical and electronic waste, and the decommissioned back-up power batteries.

Our total waste amount for 2020 was 9,400 tonnes. The progress we made in the demolition of old telephone poles and the integration of the broadcasting company MTV Oy into our waste reporting increased the amount of waste we generated in comparison to 2019. In 2020, 17% of our waste was recycled and 83% recovered.

In 2021, our goal is to reduce the total amount of waste generated in our operations by 10%. We will achieve this by, for example, reducing the amount of packaging materials we use, further improving our waste sorting practices, and increasing the reuse of equipment and devices. Our goal is to also increase our waste recycling rate to 30%. We want to increase the reuse of materials by re-directing our waste for recycling and reducing the amount of incinerable waste we generate. Our top priority will always be to minimise the amount of waste we generate, maximise its reuse, and improve our recycling rate.



\* Separate projects (such as demolishing of poles and real estate renovation).

## PROMOTING THE CIRCULAR ECONOMY THROUGH THE REUSE OF EQUIPMENT AND DEVICES

Our operating model allows the reuse of network and customer equipment and devices, which helps to extend their lifetime and reduce their environmental impact and greenhouse gas emissions. The service equipment and devices we offer to our customers also form a key part of the circular economy and our annual emissions reduction efforts. At the end of the agreement period, they are returned to Telia and either used again or recycled in case it has reached the end of its lifecycle.

In 2020, we significantly increased the reuse of both network equipment and devices. Up to 45% of business customer network equipment can be reused, depending on the service. In addition, we purchased 1.5 times more refurbished customer network equipment from our suppliers than in 2019. We have also successfully continued to promote the reuse and in 2020 tripled the amount compared to 2019. In 2021, our goal will be to significantly increase our reuse of network and customer network equipment, thereby reducing the need for new purchases.

In addition to promoting the reuse of network and customer network equipment, we introduced the **Telia Recycled** product family, which focuses on providing reused devices to consumer customers. In 2020, the popularity of Telia Recycled phones grew by 50% in comparison to 2019. We collected thousands of used phones and other devices from our customers as part of Telia's **Vaihtodiili** buyback program, as we have done in previous years. In the buyback program, customers are paid for the old devices they return to us. Thanks to our efforts, we have been able to provide a new lease of life to almost every phone returned under our Telia Recycled initiative.

## THE STORY OF THE TELIA RECYCLED CONTAINER

Only a fifth of the two million smartphones sold annually in Finland are recycled. This is simply wasteful, as 99% of the materials used in phones can be recycled and reused. In 2020, we wanted to increase our customers' awareness of how they could recycle their phones. For this purpose, we introduced the **Telia Recycled container**, which toured across Finland in the autumn of 2020 and helped educate consumers while collecting any used and unnecessary phones. Customers were also provided with the opportunity to purchase their own refurbished **Telia Recycled** phone as an environmentally friendly and more inexpensive alternative to a completely new device. This initiative was so well received that its story will continue in 2021 in the form of a new tour. Boosted by the Telia Recycled tour, in 2020 we collected as part of producer responsibility a total of 1,300 kilos of so-called data-SER waste (electrical and electronic equipment containing memory) from our customers for secure recycling, more than double the amount in 2019.

### WORKING TOGETHER TOWARDS COMMON GOALS

Our aim is to reduce the emissions generated by our supply chain by requiring our suppliers to set their own zero-emission targets. We have actively raised the issue in discussions with our suppliers in various workshops and cooperation meetings.

In 2020, we collaborated with our suppliers **Eltel** and **Enersense** to find solutions that would help improve our environmental performance. Together, we discovered new opportunities for optimising transports, both in terms of practical driving and material transport practices, which then helped us reduce our transport-related emissions. In addition, we have encouraged our suppliers to switch to lower-emission car fleet. We regularly monitor the realisation of the targets we set for our contractors. By jointly developing our reporting practices, we have improved the transparency of our environmental performance and enhanced the monitoring of our emission and waste reduction measures.

### CISCO REFRESH – PROVIDING A NEW LEASE OF LIFE FOR EQUIPMENT

We place a great deal of expectations on the equipment we use in our services: they must be safe, reliable, and always available. The **Cisco Refresh** service, which is included in Cisco's Lifecycle Asset Management program, includes professional and secure refurbishment and reuse of used service equipment. This helps extend the lifecycle of customer network equipment, enhance their reuse, and improve their availability.

Telia has been a pioneer in utilizing the Cisco's Refresh program and has helped Cisco develop its service even further. Cisco's refurbished equipment is carefully checked and tested during the Cisco Refresh process before being approved for resale. In addition to promoting the circular economy, Telia's collaboration with Cisco has paved the way for new, cost-effective, and safe ways for managing the lifecycle of service equipment.

### RECYCLING AS PART OF THE INLIFECYCLE SERVICE

Telia's **INlifecycle service** helps companies acquire the equipment management and lifecycle services they need as a comprehensive service. Our service helps companies ensure that their devices remain in optimal use, replacing any devices whenever necessary. We analyse the device environment and special requests and needs of each customer in great detail in the development of each individual service package. Based on these factors, we create bespoke solutions that take into account the customer's requirements for procurement, preinstallation, in-service management, maintenance and recycling need. At the end of the agreement period, the devices return to Telia for certified data erasure process, after which they are either carefully refurbished for reuse or at the end of their lifecycle placed in material recycling.



Inspecta Sertifiointi Oy

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