SUSTAINABILITY REPORT

2021

T Együtt. Veled

CLIMATE PROTECTION

T · **Együtt. Veled**

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STRATEGY TARGETS (2021–2030)

One of the main focuses of Magyar Telekom's sustainability strategy for the period 2021–2030 is climate protection and the related operational eco-efficiency targets. Many elements of the previous strategy have been retained and complemented in line with the emission reduction commitments. We have set short- (until 2025) and medium-term (until 2030) targets for the Hungarian affiliates.

Our main target for the period until 2025 is to keep our direct and indirect emissions (scope 1+2) at net zero, while reducing our total energy use by 16%.

We aim to achieve this through the following sub-goals:
- reduction of our fossil fuel use by 40%
- reduction of electricity consumption in our fixed network by 20%
- reduction of electricity consumption in our mobile network by 15%
- reduction of electricity consumption in our data centers by 13%
- reduction of energy use in buildings by 16%
- reaching 3000 MWh in the use of our own renewable energy sources
- voluntarily offsetting the remainder of our scope 1+2 emissions.

Digitalization plays an important role in Europe's green transition, which would use more and more energy without improving its energy efficiency. To achieve the emission reduction targets we have committed to by 2030, and to make them real emission reductions, we have set a number of energy efficiency targets:
- reduce our fossil fuel use by 70%
- reduce the electricity consumption of our fixed network by 27%
- maximize the increase in electricity consumption of our mobile network at 2%
- reduce the electricity consumption of our data centers by 20%
- reduce the energy use in buildings by 20%
- continue to source 100% of our electricity from renewable energy, of which 6000 MWh will be produced by us

In addition to these reductions, we consider it important to offset the remainder of our scope 1+2 emissions in the period 2025–2030, too.

We also aim to reduce our other indirect emissions (scope 3): by 20% by 2025 and by 30% by 2030, in line with our SBT commitment. To this end, we aim to include the so-called shadow carbon price in our selection criteria for procurement, and we will strive to offer an increasingly wide range of climate-friendly services.

We also intend to explore the possibilities of and rely on the internal carbon market and the internal carbon tax to achieve our emission reduction targets and offsets.

In the 2015–2020 period, it already became the practice to include a climate risk and opportunity analysis in business and sustainability reports in line with the TCFD recommendations. In continued TCFD compliance, we intend to build a stand-alone climate risk management process to reduce the company's vulnerability to climate change.

Climate change can only be effectively countered by a shift to a circular economy. As part of the action plan coordinated by Deutsche Telekom, which will run until 2024, we want to contribute to this with the following goals

- increasing the take-back of used mobile phones
- take back and sustainably manage CPE devices used by customers
- our technological waste will not be placed at disposal sites
- sell our own branded products in 100% sustainable packaging

CLIMATE AND ENVIRONMENT PROTECTION

As one of Central Europe's leading ICT service providers, we are committed to sustainable development, including climate and environmental protection, in line with our mission. 2021 was a year of developing a longer-term strategy, replacing the previous 5-year perspective with a 5+5-year vision. Climate protection remained a high priority in our sustainability strategy. Our emission reduction commitments made in 2018, approved by the Science Based Target Initiative (SBTi), and replaced by more ambitious targets in 2019 in response to the IPCC's 1.5°C report, have been placed at the core of the strategy. In the 2030 Strategy, in addition to our commitments to SBTi, which only applied to Magyar Telekom Plc, we have extended our commitments to cover T-Systems Hungary Ltd. Co, too, which are as follows:

- Reduce our Scope 1–2 greenhouse gas (GHG) emissions by 84% compared to 2015;
- Reduce our Scope 3 GHG emissions by 30% compared to 2017.

The European Union's Green Deal also prioritizes energy use and emissions in the telecom sector, recognizing that this sector can make significant contribution to achieving climate neutrality by 2050 through 5G, artificial intelligence, IoT and cloud-based services, but that it could also increase its energy use. It aims to increase energy efficiency and achieve climate neutrality in data centers by 2030 as a first step. This is also one of the main pillars of Magyar Telekom's new climate strategy, in addition to the fact that the Group's entire electricity consumption, including that of its data centers, must be covered from renewable energy from 2021, in line with the parent company's expectations. We are leading the way in this, as we have been following this practice at Magyar Telekom Plc since 2016, and at our domestic affiliates since 2018. So far, this has been achieved predominantly through purchased guarantees of origin (GoO), but our strategic goals also include the expansion of our own (onsite) renewable capacity.

Our new strategic goals include enabling our customers to actively participate in climate protection and reduce their emissions. We want to do this at group level through our ICT services, such as smart solutions. Our goal is that by 2030 at least half of our revenues should come from services supporting climate protection.

One of the base years for our emissions reductions is 2015, so in this chapter we present data for 2015 and the last 5 years. The targets approved by SBTi apply only to Magyar Telekom Plc and not to the other affiliates of the Group.

WE'VE HAD OUR SCIENCE-BASED TARGET APPROVED

SCIENCE BASED TARGETS
DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

In order to provide investors and our value chain partners with a very accurate and detailed picture regarding Magyar Telekom Group's climate protection activities, we have been reporting to the **CDP** (formerly Carbon Disclosure Project) online platform every year since 2010. Despite the increasing requirements, we achieved a B rating in 2021, too, representing the industry well. The new requirements in the CDP have also played a role in shaping our new strategy.

The European Climate Pact is part of the European Union's Green Deal. Its main objective is to encourage citizens, institutions and all organizations to take action against climate change. Magyar Telekom Plc. has become part of the initiative based on its SBT commitments and has received an outstanding **North Star rating**, thanks to the annual reporting on the CDP platform.

Participation in different organizations addressing climate change

The company has been an active member of the Sustainability Working Group of **ETNO** (European Telecommunications Network Operators) for many years. Members help each other to solve a wide range of sustainability-related problems. The ETNO working group has been particularly involved in shaping EU climate change legislation in 2021.

In 2021, Magyar Telekom Group remained carbon neutral for the seventh consecutive year. We believe it is important to contribute to a net zero emissions world, while continuously reducing emissions, for the time being on a market basis, and therefore half of the proceeds from the car use bonus-malus scheme and the employee solar project were used for carbon neutrality.

In order to achieve carbon neutrality, Magyar Telekom Group purchased exactly 200 GWh (720 000 GJ) of renewable energy in 2021, generated exclusively by hydroelectric power plants. The renewable energy purchased with a guarantee of origin covered 100% of the total electricity consumed by the Hungarian affiliates and 99% of the Group's total electricity consumption. The share of renewable energy in total energy consumption is increasing, reaching 75% in 2021. We became carbon neutral by also cancelling 18,517 CER (Certified Emission Reduction) credits.

Risks and opportunities

Within the Business Continuity Management (BCM) framework, we identified critical climate risks (floods, heat alerts) and developed a response plan. In 2021, 546 ✔ cases had to be investigated due to various weather-related problems, but the level of damage to the networks did not reach response level (HUF 50 M per month).

In 2020, the regular run of our business was heavily disrupted by the pandemic. The Hungarian colleagues worked remotely more than half of their working hours, which resulted in a small reduction of energy consumption in the buildings. The subsequent waves of the epidemic in 2021 saw slight increase in this proportion, with colleagues spending 60% of their working hours in home office.

Based on the recommendations of the **TCFD** (Task Force on Climate-related Financial Disclosure) initiative, we have identified risks and opportunities related to our operations, which we published in the **2021 Annual Report**.

In setting our emission reduction targets, we have taken into account the current requirements of the Paris Agreement and the EU, as well as IPCC's 1.5°C target, but we assume that regulators will set more stringent emission reduction targets in the future, compliance with which may involve financial risk. However, our forward-looking climate strategy, even with stricter regulations, gives us an advantage over our competitors.

One of the pillars of our carbon neutral operation is that we use 100% renewable electricity at all affiliates, so future price uncertainty poses a risk to this pillar. The more consumers switch to green energy, the more the price may rise, which in the case of Magyar Telekom could mean tens of millions of forints in extra expenditure. In addition, however, long-term renewable use can continue to be a business advantage as our customers increasingly look for sustainable products and services. As part of our new strategy, we aim to mitigate this risk, including onsite renewable energy generation and reducing electricity consumption.

Not only our own operations but also our supply chain could be adversely affected by climate change. We can mitigate this risk by assessing our suppliers, and we have a shared interest in building a resilient network of suppliers. For more information, see our Stakeholders - Suppliers section.

We especially focus on procuring energy-efficient equipment for our networks, ensuring that all our products and services meet the environmental sustainability requirements, and making sure that our customers can take advantage of the opportunities we offer to save energy and environmental resources. For more information, see the Digitalization chapter.

Race to Zero campaign

Magyar Telekom was the first and only Hungarian company to be listed in the **UNFCCC Race to Zero campaign** in 2020. The aim of the campaign is to encourage businesses, cities and even public institutions to support the achievement of the Paris Agreement targets by implementing voluntary emission reductions in line with the Paris Agreement. The results of the campaign were presented at the climate negotiations in Glasgow in 2021, with the aim of increasing the ambition of the signatories to the Paris Agreement to do their part to maximize global warming at 1.5°C, if possible.

We have been included in the Race to Zero by joining the Global Compact and our ambitious commitment to the SBTi. Another 7 Hungarian entities joined the campaign in 2021, but Magyar Telekom remains the only Hungarian large enterprise to take part.

RUNNING OUT OF GBS INCLUDED IN YOUR PACKAGE?

CHOOSE THE **GREEN 1GB** OPTION THAT ENABLES YOU TO ROAM THE NET AND FIGHT CLIMATE CHANGE AT THE SAME TIME.

ExtraNet Green 1 GB extension option

We also want to give our customers the opportunity to choose a service that contributes to climate protection, if they share our commitment to fighting climate change. This is why we have created our ExtraNet Green 1 GB option in 2019. In 2021 we continued to guarantee that for those who choose the option, we will generate the equivalent amount of energy needed to transmit their data, using our own solar PV system, a small power plant installed on our building on Kékvirág Street in Budapest and our systems on the roof of the data center in Szeged. In 2021, a higher proportion of customers chose this expansion option out of the 1GB options than in previous years.

CLIMATE PROTECTION AND ENERGY EFFICIENCY

The carbon dioxide equivalent (CO_{2e}) – taking into account the global warming potential - continues to be used as an indicator for the quantification of Magyar Telekom Group's GHG emissions . Emissions are not measured, but calculated using the **Greenhouse Gas (GHG) Protocol**[1] methodology. Emissions from the bio-component of fuels are not reported separately. Following the GHG Protocol, we report our indirect (scope 2) emissions both as location-based and as market-based. In market-based terms, Magyar Telekom Group's emissions are at net zero for the seventh consecutive year.

More accurate calculations for the new strategy

Details of Magyar Telekom Group's GHG emissions are shown in the table below. With the new strategy, the calculations have been refined to better reflect reality, so the figures applied in previous reports have been slightly revised. The activity data (quantities of energy used) have not changed, but the emission factors have been changed to country-specific values for the year in question[2]. The quality of emission inventories can be improved by taking regional or even local specificities into account. Since country-specific data are available for Hungary and partly for Macedonia, we have chosen to use them instead of the specific emissions found in the international literature.

Another important consideration was that specific emissions may vary from year to year, reflecting changes in the energy mix or even technological developments, so we replaced time constant factors with time dependent values.

The main change is in the emission factors for electricity, where the factors for Hungarian affiliates are based on the **AIB**[3] publication and for Macedonian data on the basis of the official national statistical publication. For consistency, the recalculated data are reported for the whole timeline. As Crnogorski Telekom is no longer part of Magyar Telekom Group, we do not include it in our emissions either, in line with the new strategy.

In 2021, the total GHG emissions of Magyar Telekom Group decreased by 38% compared to 2015, amounting to 83 358 tons of CO_{2e}, for which Magyar Telekom Group consumed a total of 968 532 GJ of energy in 2021.

Within Magyar Telekom Group, Magyar Telekom Plc. is responsible for the vast majority of scope 1+2 emissions, accounting for 70% of the Group. The following table summarizes the direct and indirect emissions of the affiliates, excluding market measures, for the years 2015–2021.

Magyar Telekom Group's overall and affiliates overall GHG emissions (tCO_{2e}) ✔

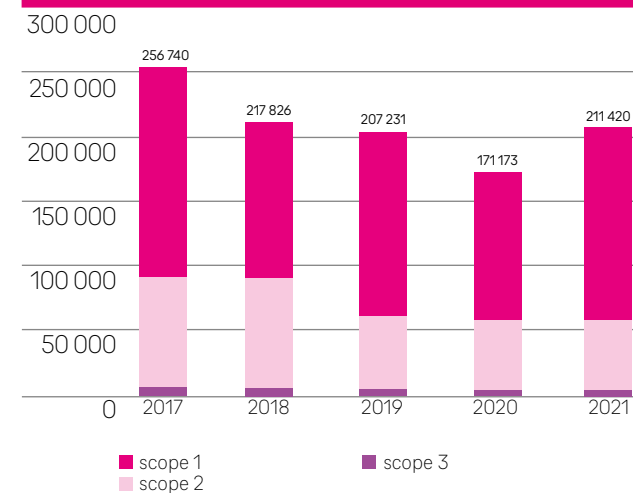| GHG EMISSIONS (tCO_{2e})	2015	2016	2017	2018	2019	2020	2021
Natural gas	7 102	6 588	6 576	6 898	3 416	3 143	2 743
Oil	1 041	681	318	383	429	457	356
Fuel (total)	14 668	13 769	13 251	13 006	12 531	9 632	9 683
Fuel (diesel)	*7 838*	*7 685*	*7 315*	*7 383*	*7 507*	*6 088*	*6 084*
Fuel (gasoline)	*6 830*	*6 083*	*5 936*	*5 624*	*5 024*	*3 544*	*3 599*
Electricity	108 272	100 405	90 200	86 911	76 873	66 201	65 976
District heating	4 127	3 860	3 853	3 826	4 808	4 909	4 601
Total emissions: without scope 1+2 market-based measures	**135 210**	**125 302**	**114 199**	**111 024**	**98 058**	**84 343**	**83 358**
Magyar Telekom Plc.	104 327	98 598	83 319	82 919	67 458	59 573	58 381
T-Systems Hungary	4 610	4 416	4 565	5 201	5 181	3 572	3 048
Makedonski Telekom	26 273	22 287	26 315	22 904	25 419	21 198	21 930
Total scope 1+2 emissions	**135 210**	**125 302**	**114 199**	**111 024**	**98 058**	**84 343**	**83 358**

[1] Greenhouse Gas Protocol is a standard developed to calculate GHG emissions, which is a methodology also recognized by the Science Based Target initiative.
[2] The specific emission values of cars will be updated as soon as available.
[3] Data back to 2015 and currently up to 2020 can be found at the following website: https://www.aib-net.org/facts/european-residual-mix
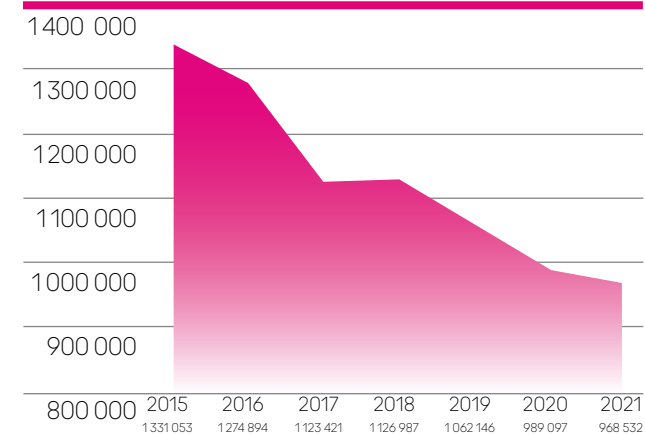
Magyar Telekom Plc is the only company within the Group with a commitment for other indirect (scope 3) emissions. The emissions associated with the company have evolved between 2017 and 2021 as shown in the chart, with details on each later in this section.

Magyar Telekom Group continuously strives for energy efficiency. As a result of the measures adopted, the total energy consumption of the Group significantly decreased compared to 2015 levels.
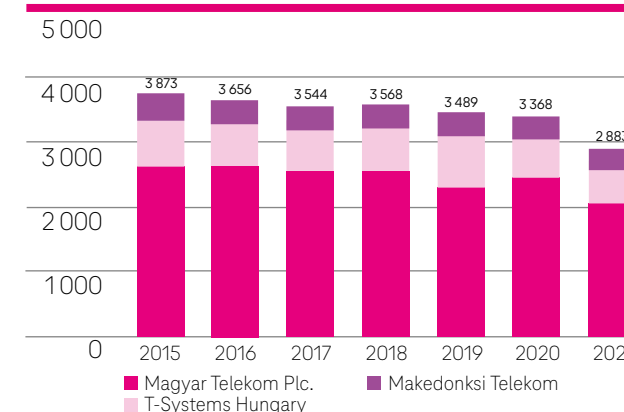
The consumption of electric cars increased from 8.8 MWh to 10.9 MWh✔, while the number of electric cars in the fleet decreased. The slow development of the charging station network has led to a shift from pure electric vehicles to hybrid vehicles.

Within the Group, Magyar Telekom Plc. still has the largest fleet.

Magyar Telekom Plc. scope 1+2+3 GHG emissions (tCO$_{2e}$)

Magyar Telekom Group's total energy consumption (GJ) ✔

Fleet composition (number of vehicles) ✔

FLEET COMPOSITION	2015	2016	2017	2018	2019	2020	2021
Total	**3 873**	**3 788**	**3 544**	**3 568**	**3 489**	**3 368**	**2 883**
By fuel type							
Diesel	2 244	2 181	2 005	2 027	1 956	2 002	1 659
Gasoline	1 541	1 490	1 371	1 336	1 266	1 064	838
Hybrid	*85*	*112*	*163*	*200*	*260*	*295*	*381*
Electric	3	5	5	5	7	7	5
By usage type							
Benefit car	1 423	1 359	1 399	1 450	1 587	1 417	1 217
Service use	2 450	2 429	2 145	2 118	1 902	1 951	1 666

DIRECT OR SCOPE 1 EMISSIONS

Magyar Telekom Group's Scope 1 emissions (tCO$_{2e}$) ✔

SCOPE 1 EMISSIONS (tCO$_{2e}$)	2015	2016	2017	2018	2019	2020	2021
by source							
Natural gas	7 102	6 588	6 576	6 898	3 416	3 143	2 743
Diesel and heating oil – location-based	1 041	681	318	383	429	457	356
Fuel (total)	14 668	13 769	13 251	13 006	12 531	9 632	9 683
by affiliate							
Magyar Telekom Plc.	17 461	16 403	15 876	15 896	11 825	10 343	10 134
T-Systems Hungary	3 045	2 877	3 051	3 114	3 270	1 706	1 529
Makedonski Telekom	2 305	1 758	1 219	1 277	1 282	1 184	1 118
Total Scope 1 emissions	**22 811**	**21 038**	**20 145**	**20 288**	**16 377**	**13 232**	**12 781**

Car fleet

At Group level, the number of vehicles in the fleet decreased by 14%✔ in 2021 compared to 2020, with fewer vehicles for both benefit cars and service use. As the „green transition" of the fleet continued in Magyar Telekom Group, the number of hybrid cars increased by 29% compared to the previous year.

Fuel consumption increased by 1%✔, while mileage decreased by 2% ✔ at Group level compared to the previous year, resulting in a slight increase in the vehicles' average consumption (3%)✔.
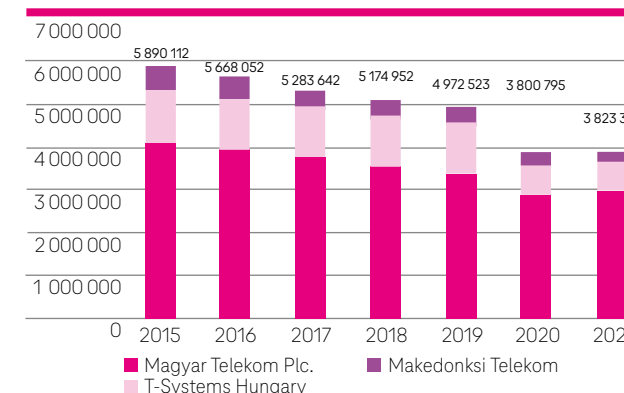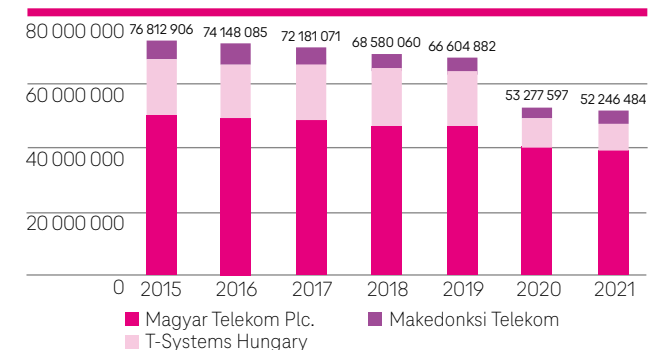
Number of cars, Magyar Telekom Group ✔

Average consumption (l/100km), Magyar Telekom Group✔
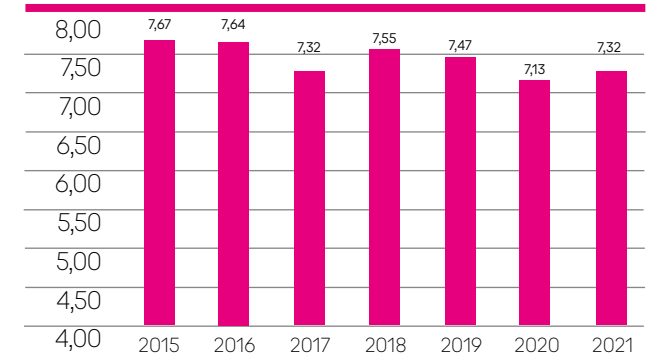
Fuel consumption (liter), Magyar Telekom Group ✔
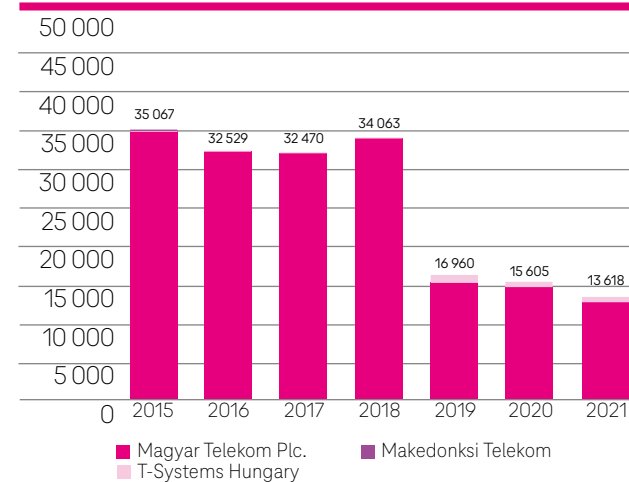

Mileage (km), Magyar Telekom Group ✔

Natural gas consumption

There was a significant 50% reduction in overall natural gas consumption and therefore emissions between 2018 and 2019, following our relocation to our new energy-efficient headquarters building in Hungary. In 2021, the smaller decrease of 13% is mainly attributed to real estate sales.

Natural gas consumption (MWh), Magyar Telekom Group ✔

	2015	2016	2017	2018	2019	2020	2021
	35 067	32 529	32 470	34 063	16 960	15 605	13 618

■ Magyar Telekom Plc.   ■ Makedonski Telekom
■ T-Systems Hungary

INDIRECT OR SCOPE 2 EMISSIONS

Magyar Telekom Group's Scope2 emissions (tCO$_{2e}$) ✔

SCOPE 2 EMISSIONS – LOCATION-BASED	2015	2016	2017	2018	2019	2020	2021
by source							
Electricity	108 272	100 405	90 200	86 911	76 873	66 201	65 976
District heating	4 127	3 860	3 853	3 826	4 808	4 909	4 601
by affiliate							
Magyar Telekom Plc.	86 866	82 196	67 443	67 022	55 633	49 230	48 246
T-Systems Hungary	1 565	1 539	1 514	2 087	1 912	1 866	1 519
Makedonski Telekom	23 968	20 529	25 096	21 627	24 136	20 015	20 811
Total Scope 2 emissions	**112 399**	**104 264**	**94 054**	**90 737**	**81 681**	**71 111**	**70 577**
SCOPE 2 EMISSIONS – MARKET-BASED	2015	2016	2017	2018	2019	2020	2021
by source							
Electricity (adjusted by green energy consumption)	32 522	20 047	22 347	11 046	20 704	14 697	1 135
District heating	4 127	3 860	3 853	3 826	4 808	4 909	4 601
by affiliates							
Magyar Telekom Plc.	11 100	3 302	3 348	3 213	4 065	3 866	3 769
T-Systems Hungary	1 581	75	60	313	439	643	451
Makedonski Telekom	23 968	20 529	22 793	11 346	21 009	15 097	1 515
Total Scope2 emissions	**36 649**	**23 906**	**26 201**	**14 872**	**25 513**	**19 606**	**5 736**

Our Scope 2 emissions are determined in two ways, based on the GHG Protocol's recommendations. We use the so-called location-based method to determine our total emissions, while the market-based calculation reflects how the company can choose to regulate the market given the options available.

The Group's total local emissions decreased only marginally by 1% compared to 2020, with the decrease coming from the Hungarian affiliates, while Makedonski Telekom's emissions increased slightly due to increased electricity consumption.

Electricity

Magyar Telekom Group continued to strive for energy efficiency in 2021, with electricity consumption decreasing by 1% compared to 2020✔, and electricity consumption accounting for 75% of total energy consumption. We are increasing our energy efficiency in line with our Sustainability Strategy and ISO 50001 certification guidelines.

As a responsible company, Magyar Telekom Plc. gives priority to energy efficiency issues. We continuously measure, monitor and evaluate our energy consumption and the significant influencing factors related to it, both in terms of real estate and technological infrastructure (or technology and related service equipment). Based on these measurements, we continuously explore energy efficiency opportunities, which we implement in the form of projects in line with our energy management objectives.
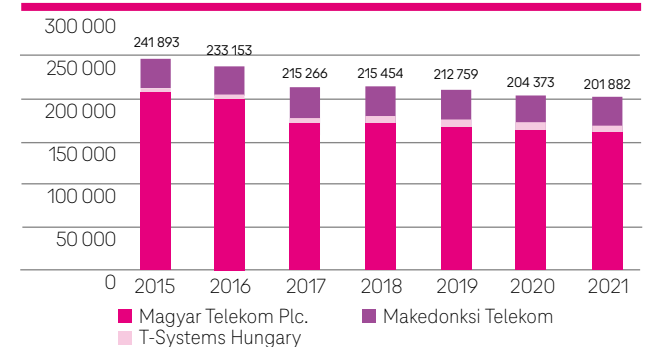
Improvements implemented in 2021 have reduced our energy consumption by a total of 8,500 MWh, consisting of:

■ the phasing out of the copper network, replacing it with optical networks
■ partial switch-off of the 3G network
■ modernization of mobile network equipment
■ intensive use of energy-saving software applications
■ phasing out and decommissioning of obsolete transmission technologies (PDH/SDH)
■ replacement of batteries
■ replacement of charging equipment
■ replacement of technological air conditioning systems
■ site optimization.

We are investing significant resources into improving our energy management system and related automation and intelligence, and increasing the number of metering points.

We do this so that energy consumption anomalies can be identified in time and properly addressed as soon as possible to prevent unnecessary and unjustified consumption.

Electricity consumption[4] (MWh), Magyar Telekom Group ✔

	2015	2016	2017	2018	2019	2020	2021
	241 893	233 153	215 266	215 454	212 759	204 373	201 882

■ Magyar Telekom Plc.   ■ Makedonski Telekom
■ T-Systems Hungary

Employee community solar panel project

Magyar Telekom was the first in Hungary to introduce the community solar panel project. Under the project, our colleagues rent solar panels from us for a year and the energy generated is used locally. In the first project, we installed solar panels on top of our educational building in Kékvirág street, and in 2020 two more solar systems started operating in Szeged.

The employee solar project was announced in 2021, now including the Szeged solar panels, so a total of 200 colleagues participated in the project. Nothing shows the success of the program better than the fact that the quantity offered sold out even faster than before. Since their installation, the solar panel systems have produced a total of 223.4 MWh of clean energy, of which 98 MWh in 2021.

For **Kékvirág utca**, **Szeged I**. and **Szeged II**., the current production can be monitored.


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[4] The procured electric power volume does not include energy produced by us.

District heating

The use of district heating decreased by a total of 6% on Magyar Telekom Group level compared to 2020, which all affiliates contributed to. Some of the decrease in energy consumption was the result of the sale of real estate.

District heating (MWh),
Magyar Telekom Group ✔

■ Magyar Telekom Plc. ■ Makedonksi Telekom
□ T-Systems Hungary
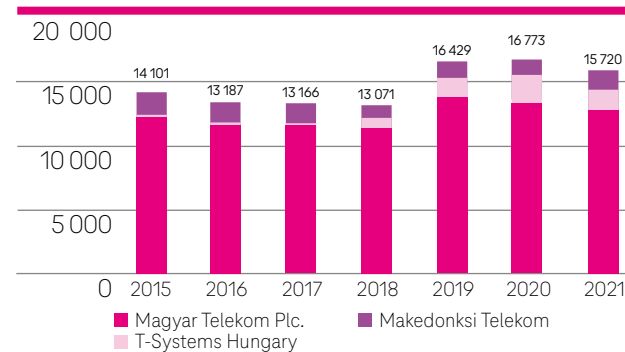
OTHER INDIRECT (SCOPE 3) EMISSIONS

Magyar Telekom Plc. Scope 3 emissions (tCO$_{2e}$)

GHG EMISSIONS (tCO$_{2e}$) BY THE FOLLOWING CATEGORIES	2017	2018	2019	2020	2021
1. Procured goods and services	16 733	16 920	25 828	14 052	39 484
2. Tangible assets	12 311	14 929	22 789	14 593	21 012
3. Activities related to fuel, energy	4 132	1 327	2 026	710	1 140
4. Upstream transport and distribution	10 909	12 338	11 913	11 289	11 947
5. Waste	1 857	1 989	2 006	1 346	*1 070*
6. Business travel	688	410	346	59	37
7. Commuting	47 308	2 638	2 044	1 331	1 139
8. Upstream leased assets	Not relevant				
9. Downstream transport	380	637	764	674	737
10. Processing of products sold	Not relevant				
11. Use of products sold	12 905	14 596	14 093	13 355	14 133
12. End of lifecycle management of products sold	2 417	2 734	2 639	2 501	2 647
13. Assets leased out	63 781	66 390	55 324	51 689	59 694
14. Franchise activities	Not relevant				
15. Investments	Not relevant				
Total	**173 421**	**134 907**	**139 773**	**111 600**	**153 039**

We started to measure our Scope 3 emissions more accurately as we became part of the Science Based Target initiative. In determining our emissions, we used our own operational numbers, GHG Protocol indicators and CDP data from our suppliers. The emissions relate only to Magyar Telekom Plc's operations and as committed, we report these indirect emissions from 2017. Due to corrections to the emission factors related to electricity (see scope 2 emissions), several recalculations have been made in this category to maintain consistency across the timeline.

Equipment ran and leased by our customers

The CPE equipment operated by our customers consume a significant amount of energy, but they are essential for the use of our services. Since 2016, we have been accurately monitoring all networked devices and their performance (set-top boxes, modems, terminals). Taking into account the user numbers at the end of 2021, the energy consumption of the devices used by our customers to connect to our services was 220.2 GWh✔ of electricity, which generated nearly 60 kilotons of CO$_{2e}$ emissions✔. The specific energy consumption of CPE devices increased by 5% compared to 2020, but is still 19% lower than in 2016.

Business travel

In 2021, the number of business trips also continued to decrease compared to 2020 due to the impact of the pandemic. The calculations assume CO$_2$ emissions of 180 g/km for air travel and 111 g/km for car travel as a Group-level standard.

In the case of Magyar Telekom Plc, the total CO$_{2e}$ emissions from travel were only 37 tons – 37% lower than in the previous year – of which 92% was attributable to air travel and 8% to car travel.

Home office

Magyar Telekom has continued to promote teleworking during the pandemic, with mutual benefits for both employees and the employer. According to a survey conducted in 2017, around a third of our colleagues choose to travel by car, which means travelling an average of 40 kilometers a day. Colleagues who choose public transport (around two thirds of our employees) travel 30 kilometers a day. In 2021, we recorded 650 646 teleworking days – an increase compared to 2020 – saving our colleagues nearly 22 million kilometers of travel and 115 years of travel time. These figures show that teleworking is a key driver of travel replacement. For more information on non-typical forms of employment, see the section on Diversity and equal opportunities.

Bicycle courier

Since 2012, Magyar Telekom has been sending some of its consignments by bicycle courier. In 2021, we used bicycle couriers 102 times, replacing 895 km of car trips.

ENERGY AND CLIMATE EFFICIENCY

Energy efficiency remains a priority among the efficiency targets identified in previous years, while a climate efficiency indicator has been introduced from 2021, in line with the new strategy. Both indicators are sector-specific and are only provided for Magyar Telekom Plc, and we aim to continuously improve these indicators in line with the digitalization and climate goals set out in the strategy.

Our energy intensity is measured by the electricity intensity of our telecommunications network, i.e. the amount of data transmitted per unit of electricity consumption (in GBit/kWh).

Energy efficiency (Gbit/kWh), Magyar Telekom Group[5] ✔
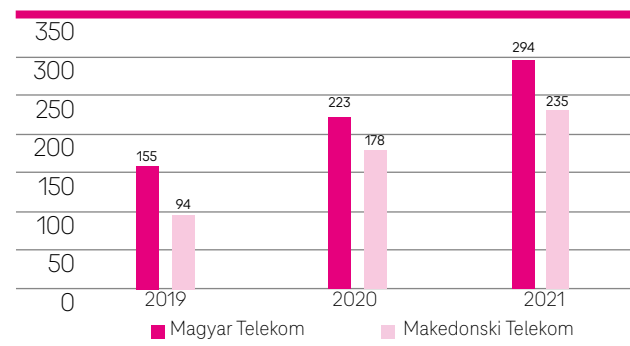
For our climate sensitivity, we look at the amount of greenhouse gases emitted into the atmosphere per unit of data transmitted, expressed in kg CO_{2e}/TB. For the calculations, we have only taken into account our electricity consumption related to the technology.
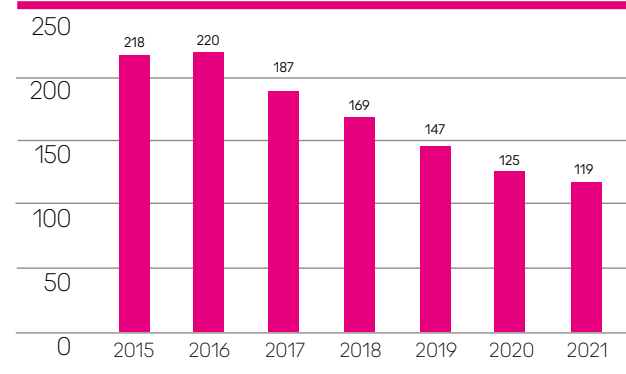
Climate efficiency (kg CO_{2e}/TB), Magyar Telekom Group ✔
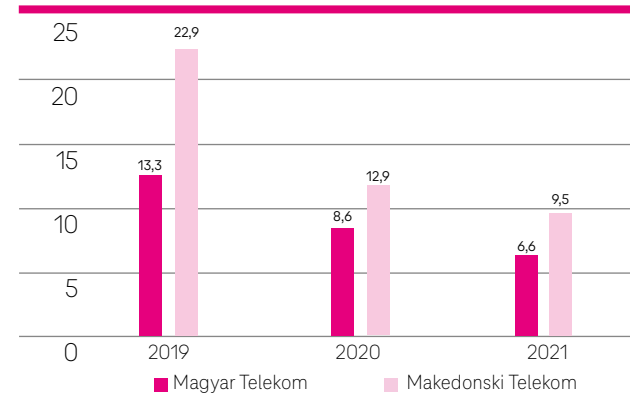
If we wish to characterize climate efficiency by a universal, not ICT sector-specific indicator, it is best to look at emission per revenue. The chart shows values for the whole Magyar Telekom Group (not market-based).

Emissions per revenues (kg CO_{2e}/MFt), Magyar Telekom Group ✔

ENVIRONMENTAL EFFECTS

The developments of Magyar Telekom Plc. are basically not subject to impact assessment. In 2021, we impacted nature conservation areas in the following cases:
- Vámosmikola, 3.5 km;
- Between Balatonboglár and Ordacsehi approx. 1.6km;
- Balatonfüred-Balatonszőlős fiber optics, 2.5 km.

The relevant authorities in the nature conservation areas concerned have not raised any objections to the projects. There was no damage to the natural environment. We continue to respect the protected areas and plan our developments in compliance with all relevant laws and regulations.

Land use, landscape effect

It is important for the group that its investments are realized only with the necessary amount of land use, if possible by maintaining the original condition of the environment, and that its buildings fit the appearance of the given area as much as possible.

The composition of the mobile network has not changed significantly, with 8,043 base stations in 2021 at group level, only one fewer than last year, but with a slight change in the distribution within the group. The number of shared-use towers was 1 841, up by 40 compared to the previous year. The total number of towers in use also showed an increase.

Noise and vibration protection, electric and magnetic fields (EMF)

In the operation of our sites, we need to pay particular attention to the impact of outdoor air conditioning and diesel-fueled emergency generators as potential noise sources. In 2021, no reports or measurements were made related to noise protection.

There were 14 cases of measurements related to electromagnetic radiation, including 1 due to a request from a resident, 9 due to requests from landlords and 13 due to changes in technical content. In all cases, the results of the measurements were in compliance with the relevant standards.

Water consumption

Magyar Telekom Group uses water exclusively for social purposes. Water consumption at group level decreased by 14%. In the case of T-Systems Hungary, the large decrease is related to the higher number of teleworking days.

Water consumption (m³), Magyar Telekom Group ✔
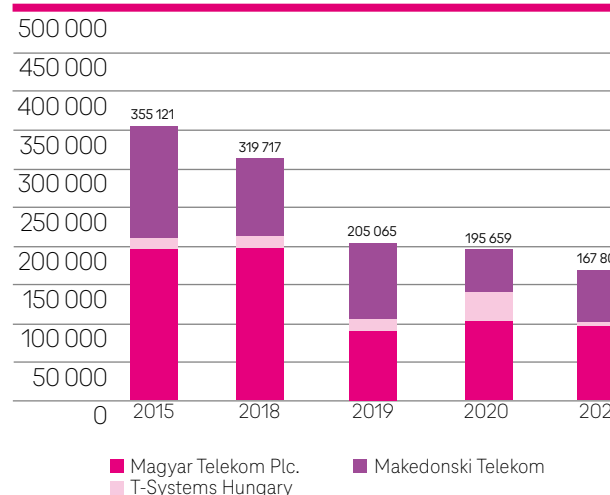
Fulfilling manufacturer and distributor duties

We work with manufacturers to ensure that environmental awareness is part of the manufacturing and recycling processes of our devices. Procurement requirements are discussed in more detail in the Stakeholders / Suppliers csection. Read more about products with sustainable features in the Digitalization section.

It is important to us that we only burden our environment to the extent necessary, so we pay particular attention to the inspection, repair and re-deployment of equipment used in our network. The recycling rate for CPE equipment was 31% in 2021.

A lower level of rollback of copper VDSL HGWs and SAT STBs (technologies earmarked for decommissioning) was achieved on demand in 2021.

Hungarian companies are fulfilling their obligations as manufacturers and distributors as follows:
- In the case of electronic equipment, which is also covered by the Product Fees Act, the companies chose to pay the product fee, the state utilization system. Magyar Telekom Plc. paid the mandatory product fee, the annual collection expectation was 45% in the IT category. (The state system still does not provide company-level data on the results achieved.)
- In the case of batteries, the obligation has been partially delegated to an intermediary organization by Magyar Telekom Plc, as allowed by the law. Its contracted partner, ReLem Nonprofit LLC over-achieves the statutory requirement every year.

On our websites, we inform our customers about the possibility to return used and waste equipment and batteries in accordance with the legal requirements. All manufacturers of the devices we sell have the energy efficiency certificates required in the European Union and comply with the environmental legislation.

Our customers can find information about the service life of the devices, their recycling and the materials used in our stores on the basis of the manufacturer's declarations. The energy efficiency of the network equipment purchased is a priority

Air pollutants

In Hungary, we pay an air pollution charge in accordance with national legislation. The amount of pollutants emitted by the boilers owned by Magyar Telekom Plc. is 0.2891 kg/h for NOx and 0.0643 kg/h for CO, according to the relevant air quality protection measurement reports. Sulphur dioxide is not monitored because desulphurized fuel is the standard in Hungary. This is less than in previous years because several buildings have been sold and the existing equipment has fewer operating hours according to the measurement report. The latter is due to the increase in home office. At Magyar Telekom, we are doing our utmost to manage the risks associated with our fluorinated greenhouse gas equipment. Thanks to controls carried out in accordance with regulations, there were no leakage failures in 2021.

[5] The previously published data included only the data traffic on the IP core network, so the present data are not comparable to the previous report.

WASTE

The quantity and quality of waste generated is largely dependent on ongoing telecoms projects and developments: at group level, total waste decreased by 20% in 2021 compared to the previous year, with municipal waste again making the largest contribution to this decrease. The volume of recycled waste was 43%, an indicator continually increasing since 2017.

To reduce the environmental waste burden:

- our used assets are recycled within the company wherever possible, sold, rented/leased or given to our employees or to external partners free-of-charge (donation);
- we provide separate waste collection facilities at sites where possible;
- we improve efficiency through review of contracts and collection points, inspections, communication;
- the group-wide DT regulation on the management of cable waste was published in 2015, and we comply with it

In 2021, a new project was launched across Deutsche Telekom's affiliates to shift to a circular economy, reduce waste and thus contribute to global climate protection. Goals include increasing the take-back of mobile phones used by customers, avoiding technological waste going to landfills and 100% sustainable packaging for private label products.
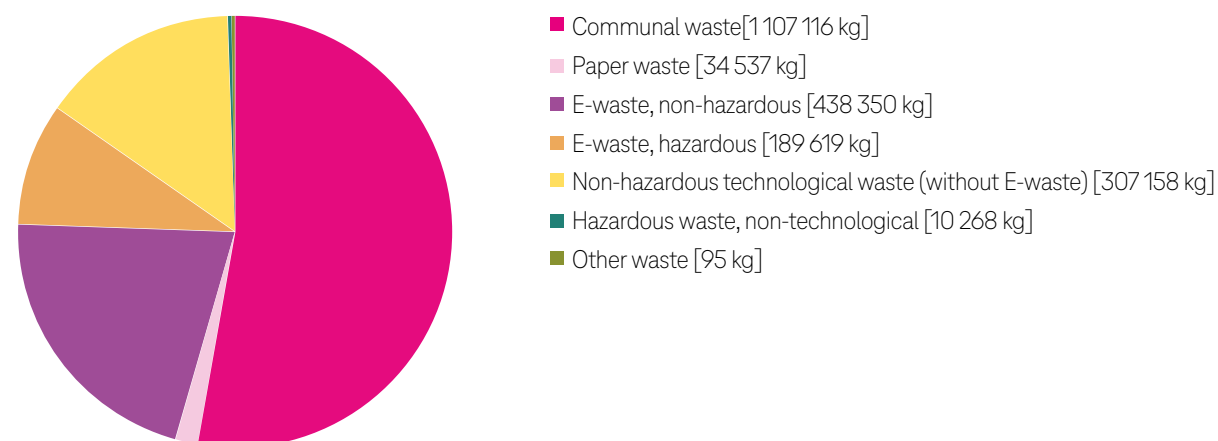
In 2021, Deutsche Telekom standardized the categorization of waste within the group. The typification previously used by Magyar Telekom differs in part from this. In order to apply a uniform methodology, we are moving to the new categories. Currently, no consistent data set is available, so we will only present the breakdown of waste by type for 2021.

A total of 43%✔ of the waste generated by Magyar Telekom Group's activities was recycled. In the case of municipal waste, local public services are compulsory to use, therefore only estimated quantities are available; waste is disposed of in authorized landfills. The company does not transfer waste directly for incineration or composting.

The management and supervision of environmental reports filed by our stakeholders remain the responsibility of the sustainability advisor and the Sustainability Squad[6]. Our contact details for receiving comments have not changed (**sustainability@telekom.hu**).

We will endeavor to respond to any suggestions for improvement, complaints or enquiries received as soon as possible.

Types of waste generated (kg), Magyar Telekom Group ✔

- Communal waste [1 107 116 kg]
- Paper waste [34 537 kg]
- E-waste, non-hazardous [438 350 kg]
- E-waste, hazardous [189 619 kg]
- Non-hazardous technological waste (without E-waste) [307 158 kg]
- Hazardous waste, non-technological [10 268 kg]
- Other waste [95 kg]

Volume of waste generated (kg) and ratio of recycling, Magyar Telekom Group, 2015–2021 ✔

	2015	2016	2017	2018	2019	2020	2021
Total waste [kg]	3 865 417	4 174 194	4 022 576	4 297 995	4 221 577	2 632 698	2 087 143
Waste turned over for utilization [kg]	528 307	1 130 068	508 958	835 543	973 447	776 650	906 307
Utilization rate (%)	14%	27%	13%	19%	23%	30%	43%