



**SUSTAINABILITY  
REPORT  
2020**



EGYÜTT. VELED



# 1.

## CLIMATE PROTECTION

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6 CLEAN WATER AND SANITATION



As a leading provider of info-communications services in the region, Magyar Telekom's commitment to sustainable development with a focus on preserving the environment lies at the centre of its mission. As a big emitter we realise that many of our products and services enable our customers to be more climate friendly, thus we set strict emission reduction targets for ourselves. In our new Sustainability Strategy 2016-2020 we set the ambitious goal of reducing the level of our carbon dioxide emission to below 100 000 tons.

7 AFFORDABLE AND CLEAN ENERGY



In 2018 we were the first and only company in Hungary, whose long-term emission reduction targets had been approved by Science Based Target initiatives, in 2019 we updated the targets according to IPCC's 1,5°C scenario:

11 SUSTAINABLE CITIES AND COMMUNITIES



12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- reduce absolute scope 1 and 2 greenhouse gas (GHG) emissions 84% by 2030 from a 2015 base year.
- reduce absolute Scope 3 GHG emissions 30% by 2030 from a 2017 base-year.

13 CLIMATE ACTION



One of our base years for emission reduction is 2015, therefore in this chapter we provide data for 2015 and for the last five years. Emission reduction targets approved by Science Based Target initiatives apply only to Magyar Telekom Plc., not to all subsidiaries of the Group.

WE'VE HAD OUR SCIENCE-BASED TARGET APPROVED



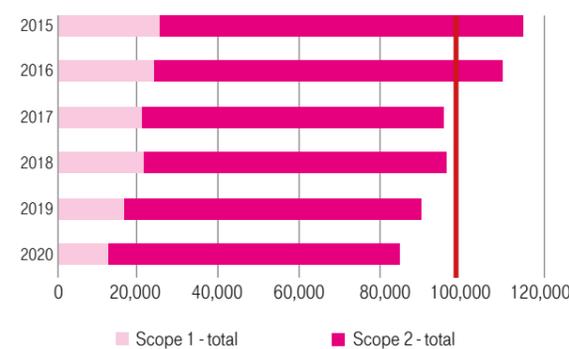
2020 marked the sixth year in which Magyar Telekom Group set the objective of carbon-neutral operation – and reached it. We spent half of the income of our company car policy regulated bonus-malus system to carbon offset. We purchased 180 GWh (648 000 GJ) renewable energy - produced exclusively by wind and photovoltaic power plants. Renewable energy purchased with a guarantee of origin covered 100% of the total amount of electricity used by Hungarian member companies and 66% of the Group's total energy consumption, in addition to which, we purchased and retired 24,434 CER units to be 100% carbon neutral.

Strategic Goals

Magyar Telekom's sustainability strategy for the period 2016-2020 points to the focus of climate protection and the reduction of CO<sub>2</sub>-emissions. Our highlighted environmental and operational ecoefficiency goals are:

- Reducing our CO<sub>2</sub> emissions
- Energy consumption: saving energy (reduce consumption), increase of energy efficiency levels, using green energy
- Increase the energy efficiency of our buildings
- Decrease our fleet consumption, promotion of travel substitute solutions and dematerialisation solutions
- Introduction of sustainable and climate-friendly products and services
- Measure the climate footprint of our customers and suppliers

DIRECT (SCOPE 1) AND INDIRECT (SCOPE 2) EMISSIONS OF THE MAGYAR TELEKOM GROUP, 2015-2020



Risks and opportunities

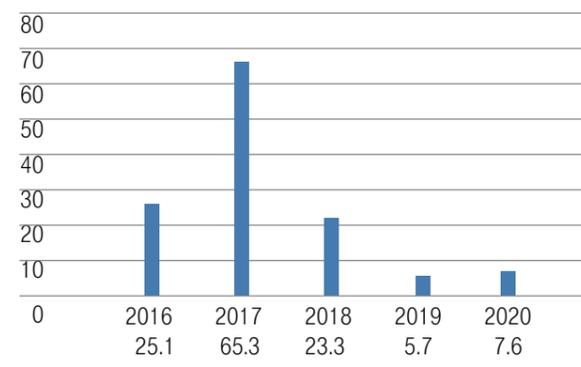
Based on the Business Continuity Management System (BCM) we have identified the critical climate risks (floods and heat waves) that might affect our operations and we have prepared action plans for possible risk management. According to our annual assessment the rate of climate damage in the network did not reach the level of intervention (HUF 50 million damage/month). In 2020 we have identified 74 ✓ climate-related cases (storm damage).

In 2020, business was greatly transformed by the pandemic. Hungarian colleagues worked in home offices in more than half of their working time, which has slightly reduced the energy consumption of the buildings.

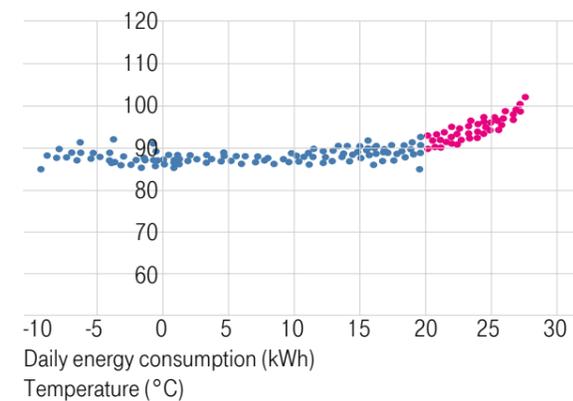
We observed that the energy consumption of our base station starts to increase when the temperature is above 20 C°, therefore there is an expected possibility that our climate change and heatwave-related expenses could rise by tens of millions of HUF in the future.

	KPI BY 2020	RESULTS ACHIEVED	
<b>CO<sub>2</sub> emission</b>	<b>&lt;100 000 t CO<sub>2</sub></b>	<b>85 400 t CO<sub>2</sub></b>	<b>OK</b>
fixed network	min. -44% based on 2008 <sup>1</sup>	-52% based on 2012	OK
mobile network	max. +35% based on 2008 <sup>1</sup>	+36% based on 2012	x
data centre	max. +3% based on 2008 <sup>1</sup>	-65% based on 2012	OK
buildings	min. -16% based on 2008 <sup>1</sup>	-44% based on 2012	OK
<b>Energy efficiency</b>	<b>100 Gbit/kWh</b>	<b>219 Gbit/kWh</b>	<b>OK</b>
<b>Fleet</b>			
fuel consumption	min. -34% based on 2008 <sup>1</sup>	-40%	OK
average CO <sub>2</sub> emission	<100 g CO <sub>2</sub> /km	110 g CO <sub>2</sub> /km	x
share of hybrid and electric cars	min. 30%	26%	x
<b>Emission reduction of devices</b>	<b>general reduction</b>		
CPE's energy consumption	reduction, energy efficiency	mean energy demand decreased by 23%	
<b>Customer greening services</b>	introduction of carbonneutral product	ExtraNet Green 1 GB option	OK
<b>Waste reduction</b>	<b>min. -10% based on 2015</b>	<b>-32%</b>	<b>OK</b>
<b>Paper usage in the shops</b>	<b>min. -90% based on 2015</b>	<b>-84%</b>	<b>x</b>

STORM DAMAGE (HUF M) MAGYAR TELEKOM PLC. ✓



BASE STATION POWER CONSUMPTION DEPENDING ON TEMPERATURE LEVELS



Based on the recommendations of the TCFD (Task Force on Climate-related Financial Disclosure) initiative, we identified additional risks and opportunities in our operations, which are also published in our 2020 financial report.

In setting our emission reduction targets, we have considered the Paris Agreement and current EU standards, as well as the IPCC's 1.5°C goals, but we assume that regulators will set stronger emission reduction targets in the future, which may involve financial risks. On the other hand, thanks to our forward-looking climate strategy, we have an advantage over our competitors, along with rigorous regulations.

One of the pillars of our carbon-neutral operation is that we use 100% renewable energy in Hungarian subsidiaries and the uncertainty of future prices poses a risk to this pillar. The more companies switch to green energy, the more the price may rise, which may mean more than 10 M HUF additional expenses for Magyar Telekom. In addition, long-term renewable energy usage can continue to be a business advantage as our customers are increasingly looking for sustainable products and services powered by green energy.

<sup>1</sup> 2008 was the base year adopted from Deutsche Telekom's strategy, data for these categories is available for the Magyar Telekom Group from 2012.

Climate change is a relevant threat to our operations as well as to our supply chain. We can mitigate this risk by evaluating our suppliers. We have a common interest in building a resilient supply chain network. For more information, see our **SUPPLIERS CHAPTER**.

The company pays increased attention to installing energy efficient equipment in our networks and ensuring that all of our products and services comply with the requirements of environmental sustainability. We aim to provide our customers with solutions they can benefit from, allowing them to use less energy and protect the environment. For more information, please refer to the chapter on **ICT FOR SUSTAINABILITY**.

### Race to Zero campaign

The UNFCCC Race to Zero campaign ... Magyar Telekom as the first and only Hungarian company in 2020. The aim of the campaign is for businesses, cities or even public institutions to support the viability of the goals of the Paris Agreement through implementing voluntary emission reductions by themselves in line with the Agreement. Results of the campaign will be presented at the forthcoming Conference of Parties of the UNFCCC, thus strengthening the countries participating in the Agreement to make the necessary commitments or increase their ambitions, as the current ones are not enough to maximise global warming to 1.5° C, preferably. With our joining the Global Compact and our aspiring SBT commitment, we have become automatically involved in the Race to Zero campaign. On 3 December 2020, we participated in the domestic campaign day organised by Business Council for Sustainable Development in Hungary, where we were among the presenters of best practices.

### Environmentally conscious headquarters

At the end of 2018 we moved to our new headquarters and 2019 was the first whole year in these premises, where we tried to implement as many eco-friendly solutions as possible. We already took environmental aspects into account when designing. We also consider the effects of the 100-year flood events. The building has innovative building control that significantly reduces its energy consumption, in addition, the operation of the building is supported by an application tailored to our employees. There are green walls within particular interior spaces and a green roof covers a part of the building-top, which is irrigated with rainwater. We use the waste heat from the server rooms and handle different waste types separately. Our headquarters received the final BREEM Excellent certification in the category of newly built properties, making Hungary's largest office building one of the highest BREEAM-certified buildings in the country.

## RUNNING OUT OF GBS INCLUDED IN YOUR PACKAGE?

TRY IN GREEN!



### Green 1 GB data option

We would like to offer the choice to our customers who consider it as important as we do to fight against climate change to pick a service that serves the purpose of protecting the climate. That is why we came up with the globally unique ExtraNet Green 1 GB option in 2019. By choosing the ExtraNet Green 1 GB data extension option, in 2020 we continued to guarantee that we generate the same amount of energy as the one required to transmit 1 GB data using our solar power plants installed on the top of our Kékvirág street facility.

## EMISSIONS AND ENERGY EFFICIENCY

To present the quantitative greenhouse gas emissions of Magyar Telekom Group's activities, taking into account the global warming potential (GWP), we use the CO<sub>2e</sub> (carbon dioxide equivalent) as an indicator. We do not measure greenhouse gases; they are calculated according to the methodology of GHG Protocol. Emissions from the bio component of fuels are not reported separately.

The details of Magyar Telekom Group's GHG emissions are given in the following table. The emission factors were determined by the GHG Protocol, the recommendation of International Energy Agency Data Services (electricity), the UNEP guidelines (heating oil, fuel, natural gas), DEFRA's coefficients. We present our real emissions with and without carbon offset and emissions taken into account the GoOs purchased.

### AGGREGATED GHG EMISSION OF MAGYAR TELEKOM GROUP (t CO<sub>2e</sub>) REAL AND ADJUSTED BY GREEN ENERGY AND CARBON OFFSET EMISSIONS ✓

GHG emissions (t CO <sub>2e</sub> )	2016	2017	2018	2019	2020
Natural gas	8,266	8,252	8,656	4,310 <sup>2</sup>	3,965
Diesel - stationary	1,206	319	384	430	458
Fuel (total)	13,982	12,974	12,744	12,317	9,474
<i>Fuel (diesel)</i>	<i>8,109</i>	<i>7,248</i>	<i>7,316</i>	<i>7,446</i>	<i>6,038</i>
<i>Fuel (gasoline)</i>	<i>5,873</i>	<i>5,726</i>	<i>5,428</i>	<i>4,871</i>	<i>3,436</i>
Electricity (adjusted with green energy)	16,580	10,590	5,996	10,249	8,255
<i>Electricity</i>	<i>84,725</i>	<i>72,911</i>	<i>72,974</i>	<i>72,061</i>	<i>69,221</i>
<i>Green energy</i>	<i>68,145</i>	<i>62,321</i>	<i>66,978</i>	<i>61,813</i>	<i>60,966</i>
District heating	1,793	1,791	1,778	2,234	2,281
<b>GHG emission of total energy consumption</b>	<b>109,972</b>	<b>96,246</b>	<b>96,536</b>	<b>91,353<sup>2</sup></b>	<b>85,400</b>
<b>GHG emission of total energy consumption (adjusted with green energy)</b>	<b>41,827</b>	<b>33,926</b>	<b>29,558</b>	<b>29,540<sup>2</sup></b>	<b>24,434</b>
<b>Carbon offset</b>	<b>-50,000</b>	<b>-43,971</b>	<b>-30,000</b>	<b>-32,771</b>	<b>-24,434</b>
<b>Cumulated GHG emission</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

In 2020 Magyar Telekom Group's total GHG emission reduced further by 6.5% from 2019 and was 85 400 tonnes of CO<sub>2e</sub>, for

which the Magyar Telekom Group consumed a total of 989,097 GJ of energy in 2020.

<sup>1</sup> <https://ghgprotocol.org>

<sup>2</sup> Natural gas consumption for 2019 was corrected according to data provision to the official energy statistics.

## SCOPE 1 EMISSIONS

Our Scope 1 emissions decreased by 19% compared with 2019. A decrease was observed for all subsidiaries and the use of all fossil fuels, with the exception of stationary diesel consumption.

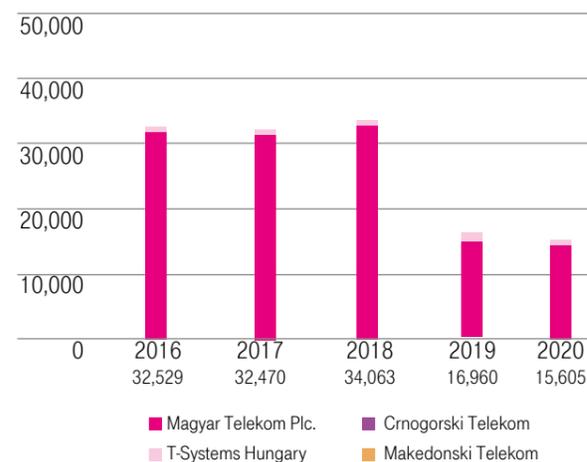
### MAGYAR TELEKOM GROUP'S SCOPE 1 EMISSIONS ✓

Scope 1 emissions (t CO <sub>2e</sub> )					
	2016	2017	2018	2019	2020
<i>by source</i>					
Natural gas	8,266	8,252	8,656	4,310 <sup>1</sup>	3,965
Oil	1,206	319	384	430	458
Fuel (total)	13,982	12,974	12,744	12,317	9,474
<i>tagvállalatok szerint</i>					
Magyar Telekom Plc.	17,889	17,349	17,466	12,502	11,012
T-Systems Hungary	2,825	2,991	3,056	3,287 <sup>1</sup>	1,715
Crnogorski Telekom	997	0	0	0	0
Makedonski Telekom	1,744	1,205	1,261	1,268	1,171
<b>Cumulated Scope 1 emission</b>	<b>23,454</b>	<b>21,545</b>	<b>21,783</b>	<b>17,057<sup>1</sup></b>	<b>13,898</b>

### Gas consumption

The Group's natural gas consumption was halved due to the relocation to the new headquarters in 2019, the higher consumption due to higher occupancy rates at buildings of T-Systems Hungary could only counter it to a small extent. Compared to the previous year, no significant change was observed in 2020, only the decrease in heat demand due to lower occupancy of buildings resulted in less consumption.

### GAS CONSUMPTION (MWh) MAGYAR TELEKOM GROUP ✓



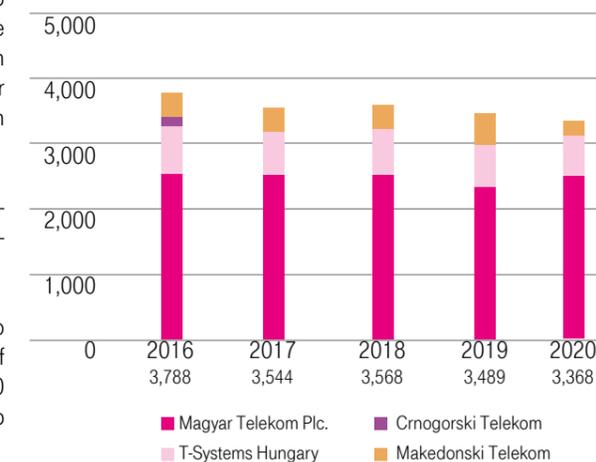
### Vehicle fleet

The number of vehicles in the fleet at a Group level continued to decrease in 2020 as well, there were less benefit cars meanwhile the number of service cars was slightly increased. Moving on with the greening of the fleet the number of hybrid cars increased, their share in the benefit cars of Magyar Telekom Plc. reached 26% in 2020, approaching the 30% target.

The fuel consumption (-24% ✓), the mileage (-20% ✓) and the average fuel consumption of vehicles (-4% ✓) has considerably decreased at group level as compared to the previous year.

Electric cars' consumption decreased from 17.1 MWh to 8.8 MWh ✓. Personal use is more significant due to the lack of refill-station capacity of the national network, in addition, in 2020 measures taken due to the pandemic (home office) led to a sharp reduction in their use.

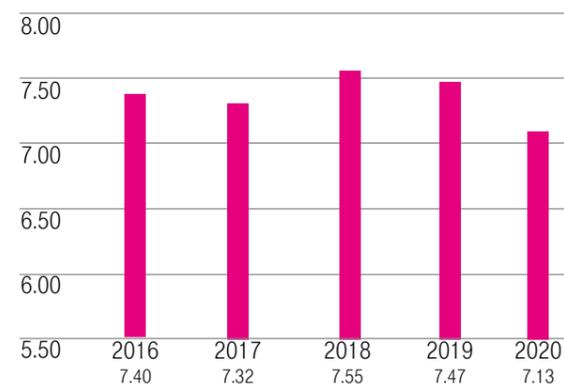
### TOTAL NUMBER OF VEHICLES MAGYAR TELEKOM GROUP ✓



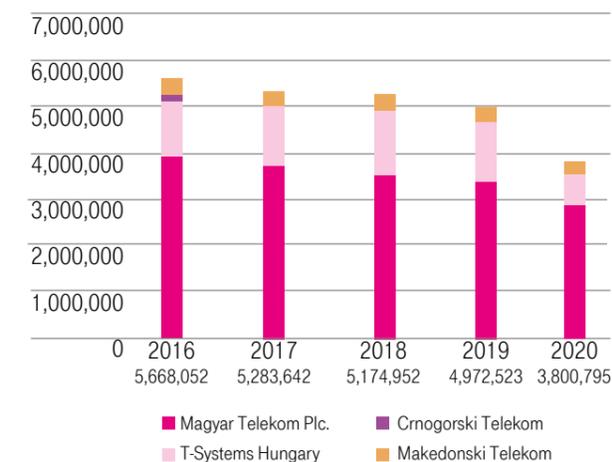
### NUMBER OF VEHICLES BY FUEL AND USAGE TYPE ✓

	2016	2017	2018	2019	2020
Number of vehicles (total)	3,788	3,544	3,568	3,489	3,368
<i>by fuel type</i>					
Diesel	2,181	2,005	2,027	1,956	2,002
Gasoline	1,490	1,371	1,336	1,266	1,064
Hybrid	112	163	200	260	295
Electric	5	5	5	7	7
<i>by usage</i>					
Benefit cars	1,359	1,399	1,450	1,587	1,417
Service cars	2,429	2,145	2,118	1,902	1,951

### AVERAGE FUEL CONSUMPTION, (l/100km) MAGYAR TELEKOM GROUP ✓

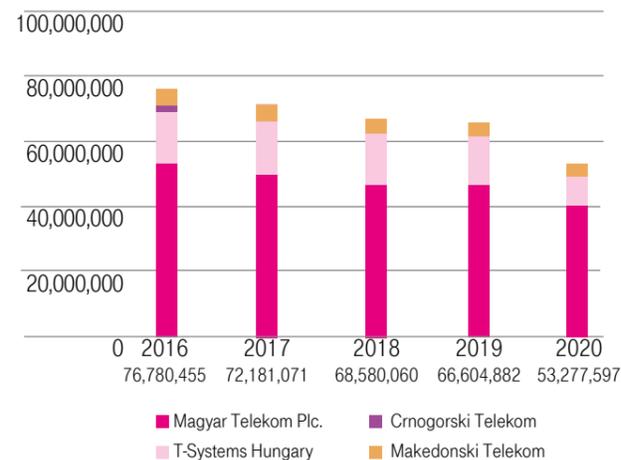


### FUEL CONSUMPTION (liter), MAGYAR TELEKOM GROUP ✓



<sup>1</sup> Natural gas consumption for 2019 was corrected according to data provision to the official energy statistics.

## MILEAGE OF VEHICLES (km), MAGYAR TELEKOM GROUP ✓



## SCOPE 2 EMISSIONS

Our Scope 2 emissions have decreased by 16 % compared to 2019. The surplus of renewable certificates (GoO – Guarantee of Origin) purchased of Magyar Telekom accounted for Makedonski Telekom's emissions. According to the GHG Protocol, CO<sub>2</sub> emissions from renewable energy were calculated as 0 tonnes of CO<sub>2e</sub>.

## MAGYAR TELEKOM GROUP'S SCOPE 2 EMISSIONS<sup>1</sup> ✓

Scope 2 emissions (tCO <sub>2e</sub> )					
	2016	2017	2018	2019	2020
<i>by source</i>					
Electricity (adjusted with green energy)	16,580	10,590	5,996	10,249	8,255
District heating	1,793	1,791	1,778	2,234	2,281
<i>by member companies</i>					
Magyar Telekom Pl.	1,534	1,556	1,493	1,889	1,796
T-Systems Hungary	35	28	145	204	299
Crnogorski Telekom	5,756	0	0	0	0
Makedonski Telekom	11,048	10,797	6,136	10,390	8,441
<b>Aggregated Scope 2 emissions</b>	<b>18,373</b>	<b>12,381</b>	<b>7,774</b>	<b>12,483</b>	<b>10,536</b>

<sup>1</sup> The data are calculated based on the information available at the end of the calendar year discussed, which are then updated by the date of their official disclosure in course of the following year, but the Sustainability Report does not reflect the final updated data.

## Electricity consumption

In 2020 Magyar Telekom Group continued with its efforts in energy-efficient operations, the electricity consumption decreased by 4% ✓ compared to 2019. Electricity consumption accounted for 74% of total energy consumption. We continue to improve our energy efficiency in accordance with our Sustainability Strategy, and in compliance with the ISO 50001 standard.

The projects that could yield major savings (PSTN-replacement, data centre ventilation, printer consolidation) had been completed by Magyar Telekom, in place of which several minor changes and maintenance projects ensured that energy consumption did not significantly increase.

Thanks to the EMS (Energy management system) introduced in 2017 we could measure one by one the consumption of the most energy-intensive sites and we could correct the energy consumption immediately in case of over-consumption.

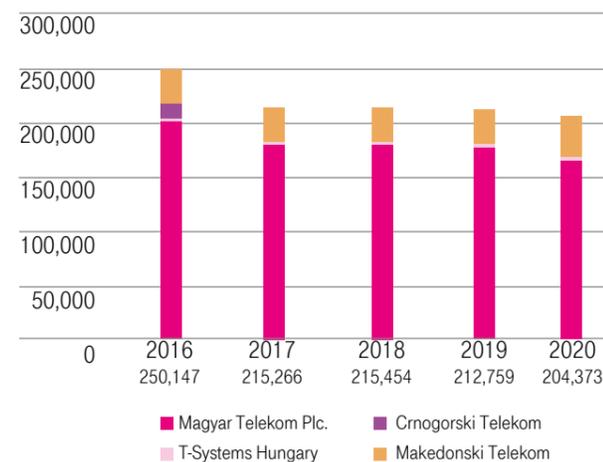
In 2019 we have achieved electricity reduction of 1 081 MWh through 3 main projects:

- Replacement of technological air conditioners: 66 MWh
- Replacing chargers: 725 MWh
- Battery replacement: 290 MWh

In 2020 our purchased electricity consumption was reduced by a total of 1 105.72 MWh, which also included our own newly-entered solar systems - more information on which, can be found in the Szeged solar panels section. In addition, the following projects resulted in energy savings (in brackets, the annual amount of savings achieved by the project):

- Replacement of technological air conditioners (120.9 MWh)
- Replacement of technological air conditioners extending from 2019 (104 MWh)
- Replacing chargers (122.6 MWh)
- Battery replacement (221.8 MWh)
- Technological consolidation of Szolnok (49.6 MWh)
- Development of a new GPON optical network (463.5 MWh)

## ELECTRICITY CONSUMPTION<sup>1</sup> (MWh), MAGYAR TELEKOM CSOPORT ✓



<sup>1</sup> Purchased electricity, the own energy production is not included.

## COMMUNITY SOLAR PROJECT FOR EMPLOYEES

As the first in Hungary, Magyar Telekom introduced the Community Solar Project. As part of the project, 100 Magyar Telekom employees were able to rent a solar panel from the company for one year. The solar panels were installed on our Kékvirág Street educational building and the generated energy is used

locally. The system provides a quarter of the energy consumption of the building. The employee solar panel project was also announced in 2020, surpassing the 2019 record, all solar cells were sold out less than 1 hour. The solar system has produced 102 MWh clean energy since its installation, of which 33,8 MWh was produced in 2020. Current production can be followed [here](#).

### Szegedi napelemek

On 20 July 2020, our two solar systems started operating in Szeged, producing a total of 23.42 MWh of electricity last year. The current production of **Szeged I.** and **Szeged II.** can also be tracked.

### District heating

District heat consumption did not increase for the entire Magyar Telekom Group compared to 2019, but a slight rearrangement can be observed in consumption: while consumption decreased at Magyar Telekom Plc., there was a smaller increase at the other two member companies. In the case of T-Systems Hungary, the increase in the occupancy rate of the buildings resulted in additional demand.

## SCOPE 3 EMISSIONS

Our Scope 3 emissions were more precisely measured by our commitment to Science Based Target initiative (SBTi). When we determined our emissions, we considered our own operating numbers, indicators of GHG Protocol and our suppliers' CDP disclosures.

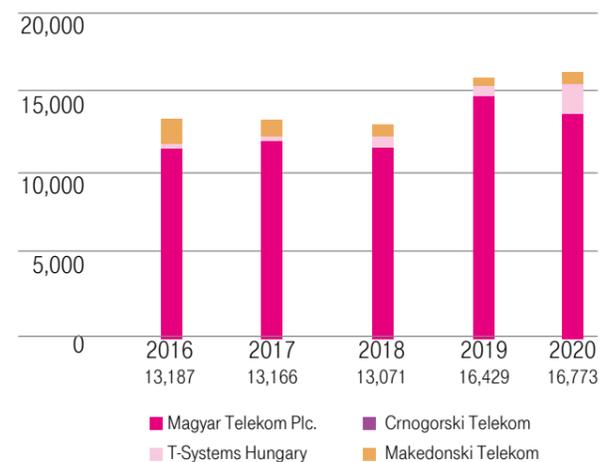
### MAGYAR TELEKOM PLC'S SCOPE 3 EMISSIONS

Category	2018		2019		2020		KPI: 2030
	tCO <sub>2e</sub>	%	tCO <sub>2e</sub>	%	tCO <sub>2e</sub>	%	
1. Purchased goods and services	16,920	12.9%	25,828	17.5%	14,052	11.3%	13,387
2. Capital goods	14,929	11.4%	22,789	15.5%	14,593	11.7%	9,848
3. Fuel- and energy-related activities	1,327	1.0%	2,026	1.4%	710	0.6%	3,306
4. Upstream transportation & distribution	12,338	9.4%	11,906	8.1%	11,279	9.1%	10,909
5. Waste generated in operations	1,987	1.5%	1,947	1.3%	1,214	1.0%	1,857
6. Business travel	410	0.3%	346	0.2%	59	0.0%	344
7. Employee commuting	2,634 <sup>1</sup>	2.0%	2,052 <sup>1</sup>	1.4%	1,379	1.1%	37,846
8. Upstream leased assets	Not relevant. excluded						
9. Downstream transport	637	0.5%	764 <sup>2</sup>	0.5%	674	0.5%	380
10. Processing of sold products	Nem releváns						
11. Use of sold products	14,596	11.2%	14,085	9.6%	13,343	10.7%	6,453
12. End-of-life treatment of sold products	2,734	2.1%	2,638	1.8%	2,499	2.0%	2,417
13. Downstream leased assets	62,153	47.6%	62,861	42.7%	64,578	51.9%	29,797
14. Franchises	Not relevant. excluded						
15. Investments	Not relevant. excluded						
<b>Total</b>	<b>130,923</b>	<b>100%</b>	<b>148,182</b>	<b>100%</b>	<b>124,381</b>	<b>100%</b>	<b>116,543</b>

<sup>1</sup> New methodology was applied according to the EcoAct Guideline for homeworking.

<sup>2</sup> Corrected data.

### DISTRICT HEATING CONSUMPTION (MWH) MAGYAR TELEKOM GROUP ✓



Solely emissions related to the activity of Magyar Telekom Plc. are reported here.

### Equipment in customers' premises

Our customers generate significant energy consumption by operating our CPEs, but that consumption is essential for using our services. Since 2016 we have conducted a precise calculation on the number and performance of CPEs (set-top-boxes, modems, terminals). Taking the number of subscriptions in 2020 into account, the energy consumption of our CPE's was 190,7 GWh ✓, which is equivalent to 64,578 tons of CO<sub>2e</sub> ✓ emission. The average CPE's energy consumption dropped by 3% from 2019 and 23 % from 2016.

### Business travel

In 2020, the number of business trips decreased significantly due to the pandemic. In the calculations, we assumed the following emission factors: 180 g CO<sub>2</sub>/km for flights and 111 g CO<sub>2</sub>/km for passenger cars at the entire group level.

While in the case of Magyar Telekom, the trips emitted a total of only 59 tons of CO<sub>2e</sub>, of which 91% could be accounted for air travel and 9% for cars. The entire Magyar Telekom Group increased the amount of atmospheric GHGs by 114 tons of CO<sub>2e</sub>.

### Teleworking

Magyar Telekom has also been supporting telework during the pandemic, as it is beneficial for the employer and the employee alike. In 2017 we started monitoring the commuting habits of our employees (based on a small sample, but for a large office building in a good location in terms of public transport): approximately 1/3 of the employees choose to come to work by car, driving a daily average of 40 kilometres and 2/3 choose community services commuting a daily average of 30 kilometres. In 2020 there were 610,269 telework days – which has tripled compared to 2019 - registered, saving 20 million km of travel and 108 years of travel time. Considering this result, teleworking has a significant role in replacing travel. For additional information on teleworking see the chapter entitled **Human rights and equal opportunities**.

### Bicycle courier service

Since 2012 Magyar Telekom has been sending some of its consignments using bicycle courier services. In 2020 we used bike carriers 106 times and saved 924 km of car travel. Due to increased teleworking, we used fewer courier services, especially during the period of partial lockdown.

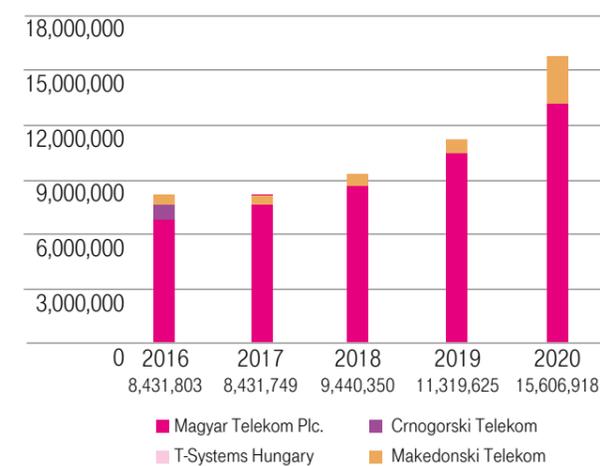
### Electronic contract and billing

In the last couple of years Magyar Telekom has introduced e-signature and e-Terms of Service in its stores thus renewing personal customer service operations. This innovative solution may considerably reduce the number of printed documents, the working time and costs of printing, filing and storing.

This will also improve the operational efficiency and reduce the environmental impact as well. Telekom's aim is to set up a full range of electronic customer services in the future where legally binding documents with electronically recorded signatures will replace all paper-based contracts. The introduction of e-signatures through tablets marks the first step of this process, as a result of which we were able to reduce the number of printed pages by 84% compared to 2015.

Thanks to the campaign Magyar Telekom achieved outstanding growth, electronic invoicing constitutes 36 % of all residential billings in 2020, this ratio is 10% higher than in the previous year, while the volume of total invoice issuance remained essentially unchanged.

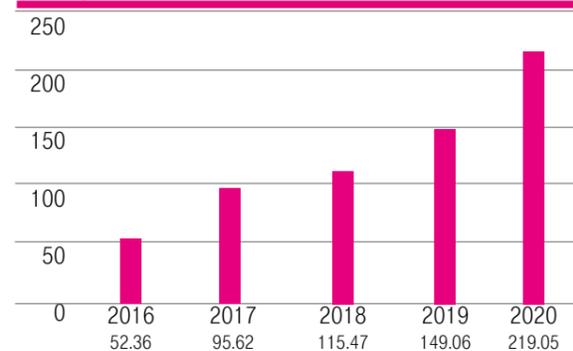
### ELECTRONIC BILLS (pcs) MAGYAR TELEKOM GROUP ✓



## ENERGY EFFICIENCY

We apply three kinds of energy intensity indicators in order to show the changes in three factors: the electricity intensity of the network, emission factor of the fleet and the ratio of the revenue and the energy consumption. The effectiveness of the energy consumption of Magyar Telekom Plc.'s operation is characterised by the Gbit/kWh (transmitted bits/electricity consumption) energy efficiency indicator. The indicator shows that as the quantity of transmitted information grows the energy consumption proportionally reduces (i.e. we transfer more information with less energy). The fuel consumption efficiency is characterised by car fleet average emissions in g CO<sub>2</sub>/km. For the revenue-related energy consumption indicator, we use the GJ/HUF M. We aim to increase the first and reduce the second and the third indicators, all of which we achieved in 2020, too.

In the case of energy efficiency, our goal was to reach 100 Gbit/kWh, this has been largely achieved. In 2020 the value of this indicator was 219,05 Gbit/kWh ✓.

**BITS TRANSMITTED/ENERGY CONSUMPTION (GBIT/KWh) MAGYAR TELEKOM PLC. ✓**

Average CO<sub>2</sub> emissions of vehicles have further decreased to 125,4 g CO<sub>2</sub>/km ✓, due to the restrictions.

We have limited the emissions of the employee benefit cars and maximised their power.

**ENVIRONMENTAL IMPACTS**

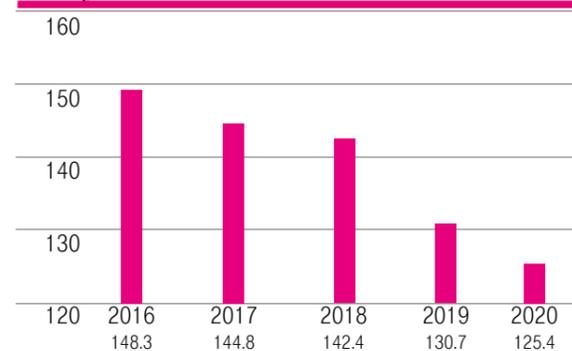
Magyar Telekom Plc.'s developments are generally not obliged to prepare impact assessment studies (EIA). In 2020, one case required an impact assessment for an investment in a Natura 2000 area. The National Park Authority did not raise any objections to the investment. During our operations no damage occurred to the natural habitat and biodiversity of the concerned territories. We continue to pay increased attention to the protection of our shared natural heritage, by planning all our developments in compliance with the relevant rules and regulations.

**Land use, landscape impact**

It is important to the Group to implement its projects with only the necessary proportion of land use, thereby preserving the original biodiversity of the natural environment. Among our property investments we also make sure that our buildings fit into the original landscape.

The composition of the mobile network represents no significant change in 2020, there were 8044 base stations at Group level, the number of towers shared with other operators was 1801.

We contribute to local communities by creating community gardens and taking uncultivated land in use, thereby increasing the diversity of the area. Magyar Telekom and the Contemporary Architecture Centre continued to operate community gardens in 2020 as well. The Csárdás Garden and the Kerthatár Community Garden provided gardening opportunities for more than 150 families in the city on a total of 105 plots

**THE AVERAGE CO<sub>2</sub> EMISSIONS OF THE FLEET (g CO<sub>2</sub>/km) MAGYÁR TELEKOM PLC. ✓**

We have introduced new incentives to make the hybrid and electric cars more favourable. The revenue related energy consumption was 1,093 GJ/million HUF. ✓

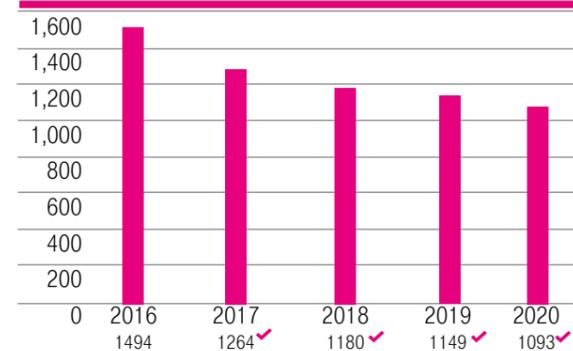
**Noise and vibration protection, electromagnetic fields (EMF)**

In Magyar Telekom Group sites, we must pay increased attention to the following potential noise sources: outdoor air-conditioning equipment and emergency diesel generators. In 2020, there were no reports or measurements related to noise protection.

As to EMF issues, we carried out measurements in 19 cases, 1 of which was prompted by complaints by residents (here, despite the appropriate measurement results, the investment failed due to a public protest), 9 upon the requests of lessors and 9 due to changes in technical content. The results of the measurements were in all cases in compliance with the relevant regulations.

**Water consumption**

The water consumption at Magyar Telekom Group is exclusively for social purposes. Group-level water consumption decreased by 4.6 %. In the case of T-Systems Hungary, the previous estimate was replaced by accurate data collection, so the increase is the result of a methodological change. In case of Magyar Telekom Plc., water consumption increased due to pipe fracture.

**REVENUE RELATED ENERGY CONSUMPTION GJ/HUF M MAGYAR TELEKOM GROUP****Producer's and distributor's responsibility**

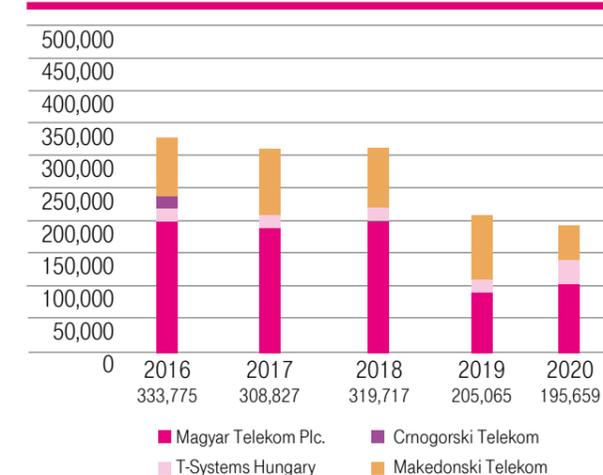
In cooperation with equipment manufacturers Magyar Telekom is committed to environmentally friendly equipment manufacturing and recycling processes. For more details on our procurement requirements, please see the chapter entitled **SUPPLIERS**. Sustainable products are elaborated in detail in the chapter **ICT FOR SUSTAINABILITY**.

The major aim of the company is to carry out its operations with the least possible impact to the environment; we pay special attention to the revision, repair and re-use of the equipment in our network. The re-use rate of CPE devices is 52,6%.

Hungarian companies are obliged to comply with producer's responsibilities as follows:

- In the case of electronic equipment subject to product fee regulations most companies choose the payment of the product fee payment and the use of the national collection system. Magyar Telekom Plc. paid the mandatory product fee for electric and electronic equipment in 2019. The national collection rate requirement was 45% in the IT sector (the national system does not report company-level data.)
- In the case of batteries, in accordance with the provisions of law, Magyar Telekom Plc. partly transferred the obligation to intermediary organisations. Each year, our contracted partner, ReLem Limited Liability Non Profit Corporation fulfils its obligation above the legally-enforced level.

In accordance with the legislations in force we inform our customers on our websites about the various waste disposal options for used equipment and batteries. All of our commercially-available products are certified with energy efficiency certificates according to the requirements of the European Union and in compliance with the environmental standards set by Hungarian law.

**WATER CONSUMPTION (m<sup>3</sup>) MAGYAR TELEKOM GROUP ✓**

Manufacturer's statements with detailed information about the life-cycle, reuse, the recycling of the product, the used materials and the reparability features are available in all of our stores. All of our procured network equipment should meet our high energy efficiency standards.

**Emissions to Air**

Magyar Telekom pays an air pollution fee in accordance with national legislation. The amount of pollutants emitted by Magyar Telekom Plc: NO<sub>x</sub>: 1,0401 kg/h , CO: 0,207 kg/h according to clean-air protection measurements. We do not observe SO<sub>2</sub> emissions because there is no sulphur in the fuel in Hungary.

Magyar Telekom takes all necessary measures to treat the risk from operation of equipment containing fluorinated greenhouse gases. Based on the inspections carried out in accordance with the regulations there was no leakage in 2020 as well. There is no more equipment with R22 gas (which is an ozone depleting substance).

**MAGYAR TELEKOM PLC. AIR EMISSIONS (kg) IN 2020**

Air emissions	Value of emission (kg)
Nitric-oxides (NO <sub>x</sub> )	878.255
Sulfur-oxides (SO <sub>x</sub> )	7.633
Persistent organic pollutants (POP)	0
Volatile organic compounds (VOC)	0
Hazardous air pollutants (HAP)	0
Other standard categories of air emissions identified in relevant regulations (e.g. 4/2011. (I.14.) VM regulation) - CO	269.228

## WASTE

The quantity and quality of waste generated greatly depends on the current telecommunication projects and developments: at Group level in 2020, compared to previous year, the total amount of waste decreased by 38%, mainly due to the drastic reduction of municipal waste. The Group level recycling rate further increased and reached 30%.

Within Magyar Telekom Group the largest proportion of generated waste (53% ✓) – was still the residual waste, in 2020 as well. Second by volume was technical waste 23% ✓; hazardous waste was 13% ✓; the proportion of paper waste was 3% ✓

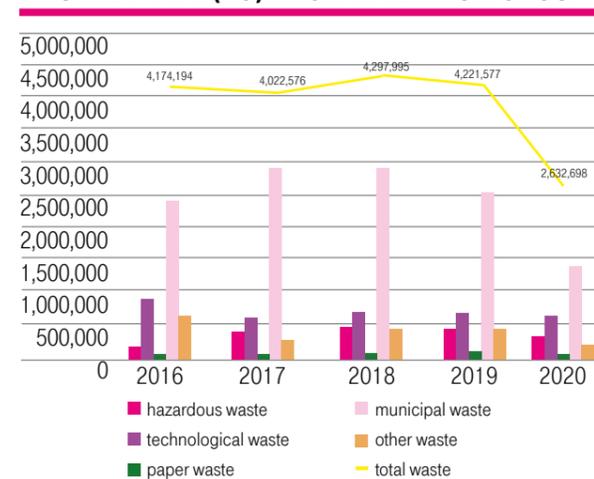
In order to reduce the harmful effects of waste on the environment:

- We make sure that unused equipment gets reused either within the company, or by trading them to employees or external partners, or by renting, leasing or transferring them without compensation (donation).
- We collect waste selectively in more sites
- We improve their effectiveness through the revision of our existing contracts, the regular revision of collection points and through communication
- We continue to operate in accordance with the DT group level policy, released in 2015, for the regulation of the management of cables.

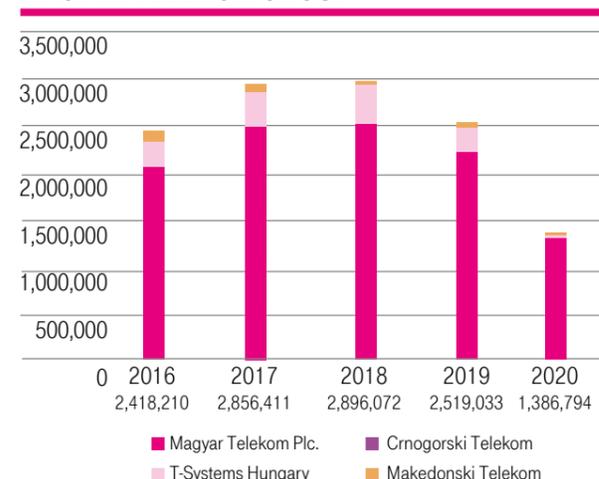
### QUANTITY OF WASTE BY TYPE AND RECYCLING RATE AT MAGYAR TELEKOM GROUP, 2016-2020 ✓

	2016	2017	2018	2019	2020
<b>Hazardous waste [kg]</b>	219,469	241,162	383,097	472,507	337,232
Recycled hazardous waste [kg]	164,327	232,430	366,461	443,689	318,050
<b>Technological waste [kg]</b>	803,249	526,739	590,685	666,479	600,560
Recycled technological waste [kg]	778,975	173,793	189,452	201,806	207,391
<b>Paper waste [kg]</b>	97,046	90,690	126,712	132,646	86,555
Recycled paper waste [kg]	96,346	90,690	126,712	132,646	86,555
<b>Municipal waste [kg]</b>	2,418,210	2,856,411	2,896,072	2,519,033	1,386,794
Recycled municipal waste [kg]	13,317	12,045	1,543	0	0
<b>Other waste [kg]</b>	636,220	307,574	298,856	430,912	221,557
Recycled other waste [kg]	77,103	0	151,374	195,307	164,654
<b>Total waste [kg]</b>	<b>4,174,194</b>	<b>4,022,576</b>	<b>4,297,995</b>	<b>4,221,577</b>	<b>2,632,698</b>
<b>Recycled waste total [kg]</b>	<b>1,130,068</b>	<b>508,958</b>	<b>835,542</b>	<b>973,447</b>	<b>776,650</b>
<b>Recycling rate (%)</b>	<b>27%</b>	<b>13%</b>	<b>19%</b>	<b>23%</b>	<b>30%</b>

### WASTE BY TYPE (KG) MAGYAR TELEKOM GROUP ✓



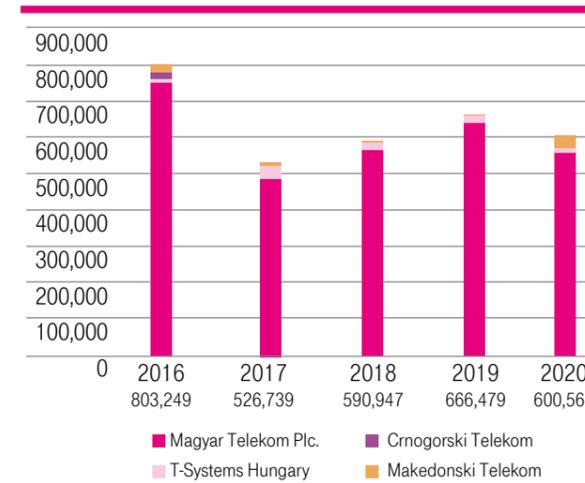
### RESIDUAL WASTE (KG) MAGYAR TELEKOM GROUP ✓



## Technical waste

The amount of technical waste at group level decreased by 10% ✓ whereas its recycling rate increased by 3%.

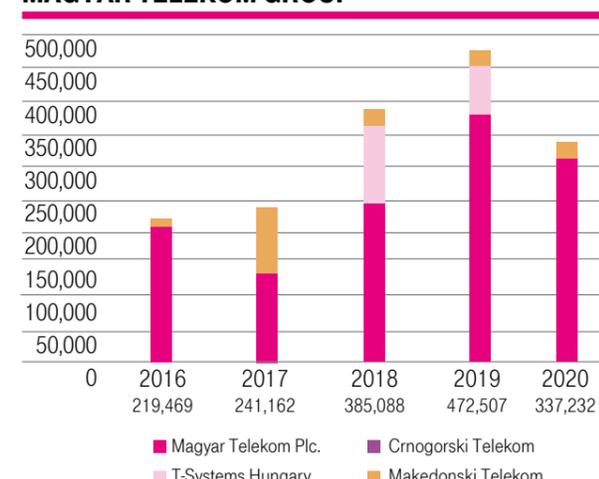
### TECHNOLOGICAL WASTE [KG] MAGYAR TELEKOM GROUP ✓



## Hazardous waste

The amount of hazardous waste decreased by 29% ✓ at Group level due to network upgrade and maintenance (e.g. batteries, replacement of network elements). Intensive network developments and maintenance in previous years required less work in 2020 in the case of the Hungarian member companies, while we saw an increase in the case of the Macedonian member company (primarily in battery replacement). At the same time, the amount of recycled hazardous waste decreased by 28%.

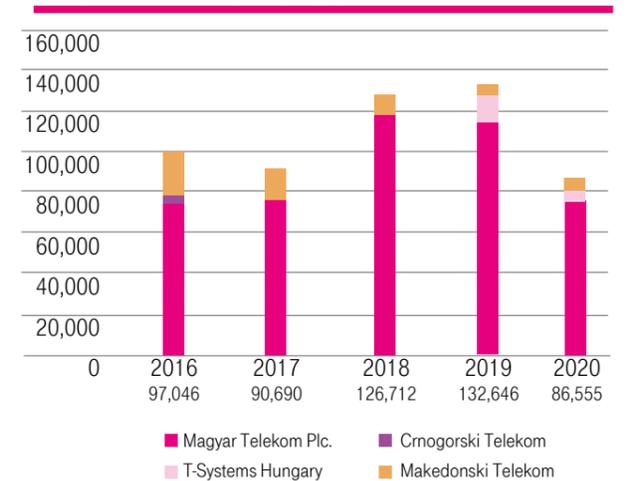
### HAZARDOUS WASTE (KG) MAGYAR TELEKOM GROUP ✓



## Paper waste

The quantity of paper waste decreased at Group level by 35% ✓ in 2020, in line with the amount of paper used, according to our strategic goal. 100% of the waste paper is recycled.

### PAPER WASTE (KG) MAGYAR TELEKOM GROUP ✓



At Magyar Telekom Plc. the recycling rate further increased, it was 30% ✓ in 2020. In the case of municipal waste, local public services must be used, so only estimated data is available; the waste is disposed into licensed landfill sites. The company does not transfer waste directly to incineration or composting.

The management of our stakeholders' environmental complaints is the responsibility of the Group Environment Protection Manager. Complaints and messages could be directed to: [sustainability@telekom.hu](mailto:sustainability@telekom.hu) (Our Hungarian e-mails addresses are [fenntarthatosag@telekom.hu](mailto:fenntarthatosag@telekom.hu) and [kornyezetvedelem@telekom.hu](mailto:kornyezetvedelem@telekom.hu)). We are dedicated to responding to all proposals, complaints and enquiries as soon as practicable.