



LIFE IS FOR SHARING.

Impact Measurement Summary

Refurbished phones (Hungary)

Deutsche Telekom Services Europe Slovakia s.r.o

Version	0.1
Status	Approved
Last revised	14 th , November, 2025

Impact Measurement Name	Impact Measurement Number	Requested label
Refurbished phones (Hungary)	IM-40011	#GreenMagenta
Submitted to Committee	Committee Meeting	
11.11.2025	14.11.2025	

Short info

By offering A+ premium category refurbished product portfolio to our customers MT supports the reduction of CO2 emissions, energy consumption, circular economy, decreases raw material usage and land/soil/water damage, therefore protecting biodiversity.

Define stage

Baseline Situation

Baseline situation captures the pain point. Description of initial situation that would have occurred or has occurred without the implementation of Measure/Offerring (initiative, project, solution, product, idea).

Old or unused smartphone is kept in the household as an unused electronic waste.

Old or unused smartphone is not collected, not refurbished, not reused. Magyar Telekom customers can purchase only new devices from the portfolio.

Target Situation

Target situation describes a situation that has occurred or should occur with implementation of the Measure/Offering.

Old or unused smartphones are collected and half of them are refurbished, and rest half is recycled.

After refurbishment we assume that smartphone is in use 2 years in its 2nd life cycle. Magyar Telekom customers can choose from over 37 handset models (13 Samsung, 24 iPhone) in several color and memory variety in A+ premium category and an average 20% lower price compared to new devices.

Geographic coverage of the offering

Refurbishment in Romania, Bukarest, stock delivery to Magyar Telekom Budapest

Magyar Telekom sales online all over Hungary, and 4models available in 21 stores around the country

Certifications the offering already possess

Other - ISO9001, ISO27001, ECOVADIS PLATINUM LABEL, RCUBE MOBILE LABEL

Baseline Situation

Identification of internal and external stakeholder groups for selected value chain steps for Baseline situation.

Emission factors for Baseline situation was taken from "Epi smartphone sustainability project" study from page 21 where lifecycle assessment of an average smartphone is described.

We included into calculation embodied emissions which include production, transport & distribution and end of life stages.

Use phase was not included in calculation as we assume the same use stage for Baseline and Target situation.

Manufacturing, Processing & Purchasing - Impact of smartphone production (**52 kg CO₂e/smartphone**)

Transportation and Distribution - Impact of smartphone transport & distribution (**3kg CO₂e/smartphone**)

End of Life - End of Life of an average smartphone (**2 kg CO₂e/tablet**)

Target Situation

Identification of internal and external stakeholder groups for selected value chain steps for Target situation.

Emission factor for refurbishing process was taken again from “Epi smartphone sustainability project” study from page 50, where refurbished process is described and average emissions for refurbished process was estimated on 11kg CO₂e per device.

We included into calculation also transportation of device from collecting places in various areas within Europe to refurbishing center in Bucharest, Romania and afterwards to warehouse in Budapest, Hungary and Telekom shops within Hungary, where product owner provided information that average distance which smartphone travels is 4000 km.

We included into calculation also average weight of smartphone.

Manufacturing, Processing & Purchasing
Logistics, Shipping to Customer

Stakeholders
Identify internal and external stakeholder groups for the respective value chain step. ?

Stakeholder Name

Logistic Companies

Resources
After going through the steps of the value chain and the stakeholders, consider which ecological, social, economic and other resources are needed by the defined stakeholder groups.

Resource category	Resource Name	Resource Description	Resource Value	Resource Metric	Action
Ecological	Transport to Refurbishing center and back to customer	from various places in Europe to Bucharest and back	0.682	metric ton*km	

Conversion Factor

Name	Geography	Value	Metric	Year	Source	Comment:
transport, freight, light commercial vehicle, fleet average	Europe without Switzerland	2.02	kg CO ₂ e/metric ton*km	2,024	Ecoinvent 3.11	

Resource Value: 0.6817560976 Resource Metric: metric ton*km

T*4000*0.0001704390244 Calculate Clear

Smartphones transported*Average distance of smartphone transport*Average weight of smartphone

Add New Parameter + -

Parameter Name	Parameter Value	Parameter Metric	Parameter Source
Smartphones transported	1	device	
Average distance of smartphone transport	4000	km	Product owner
Average weight of smartphone	0.0001704390244	kg	https://www.plugin.tech/blogs/news/how-much-does-iphone-weigh

Calculated Impact

Impact is calculated based on the functional unit:

Comparing Baseline and Target situation that has been identified and described in this document, we **save 44,622 kilograms CO₂e per 1 sold refurbished phone.**

CO2 Emission

Environmental Impact : -44.622 kg CO2e per 1 sold refurbished phone

Manufacturing, Processing & Purchasing

Production of average smartphone	-1.000	device	-52.000	kg CO2e
Refurbishment of smartphone	1.000	device	11.000	kg CO2e

Total CO2e impact in Manufacturing, Processing & Purchasing : **-41.000 kg CO2e**

Transport & Distribution

Transport & Distribution of average smartphone	-1.000	device	-3.000	kg CO2e
--	--------	--------	--------	---------

Total CO2e impact in Transport & Distribution : **-3.000 kg CO2e**

End of Life

End of Life or average smartphone	-1.000	device	-2.000	kg CO2e
-----------------------------------	--------	--------	--------	---------

Total CO2e impact in End of Life : **-2.000 kg CO2e**

Logistics, Shipping to Customer

Transport to Refurbishing center and back to customer	0.682	metric ton*km	1.377	kg CO2e
---	-------	---------------	-------	---------

Total CO2e impact in Logistics, Shipping to Customer : **1.377 kg CO2e**

Conclusion:

We save 44,622 kilograms CO2e per 1 sold refurbished phone.

Impact on SDGs

In 2015 all member states of United Nation adopted "The 2030 Agenda for Sustainable Development". It consists of 17 Sustainable Development Goals (SDGs) with integrated 169 targets covering the economic, social, and environmental fields.



At the end of Impact Measurement, we consider positive and negative contribution of evaluated offering towards Sustainable Development Goals (SDGs).

For Impact measurement we identified following contribution(s) towards Sustainable Development Goals.

SDG	Target	Impact	Comment
1	1.4	Positive	Refurbished smartphones are on average 20% cheaper than new phones making it available to more layers of the society.

SDG	Target	Impact	Comment
4	4.3., 4.4.	Positive	By choosing refurbished, young Hungarian people/students can have access to rather affordable smartphones where they can also reach their university program.

SDG	Target	Impact	Comment
6	6.3., 6.4.	Positive	By refurbishing less water will be used for production.

SDG	Target	Impact	Comment
9	9.1., 9.5., 9.C	Positive	Refurbishing finetunes the whole smartphone production model by innovating assessment, procurement, logistics and spare part production as well.

Rövidítések

Rövidítés	Magyarázat
SDG-k	Fenntartható fejlődési célok
CO2e	Szén-dioxid egyenérték