

# Telekom Srbija



GHG Report for **2025**

**Telekom Serbia** is committed to reducing its environmental impact by actively managing and lowering greenhouse gas (GHG) emissions across its entire business chain. Emissions are regularly quantified in accordance with relevant international standards, and reporting on the results is carried out transparently and consistently.



The purpose of this report is to clearly and transparently present the methodology for calculating greenhouse gas emissions, as well as key quantitative indicators, ensuring a reliable basis for monitoring performance and comparing data over time.

Long-term sustainability remains one of the strategic directions of the company's development and a foundation for future competitiveness.

As a company with significant energy consumption, Telekom Serbia recognizes its responsibility and implements measures aimed at reducing GHG emissions. Through improvements in energy efficiency, infrastructure modernization, and responsible resource management, the company contributes to national and global efforts to mitigate climate change.

By continuously investing in new technologies, digital solutions, and optimization of business processes, Telekom Serbia reduces its own carbon footprint and gradually transitions toward more sustainable business models. With transparent reporting on achieved results, the company sets measurable and ambitious goals in the field of environmental protection. A responsible approach to climate challenges is seen not only as a regulatory and social obligation but also as an opportunity to build long-term value and contribute to a more sustainable future.

## CLIMATE CHANGE AND GREENHOUSE GASES (GHG)







Climate change represents long-term disturbances in climate patterns at the global, regional, and local levels, with significant impacts on natural systems and socio-economic processes. Rising average global temperatures, more frequent and intense extreme weather events such as floods and droughts, melting ice masses, and rising sea levels are some of the visible effects increasingly influencing infrastructure, supply chains, resource security, and quality of life.

Although climate change existed in previous geological eras, what characterizes the present is the speed and intensity of changes, which exceed the adaptive capacity of natural and social systems.

There is scientific consensus on the strong link between the increased concentration of greenhouse gases in the atmosphere and the rise in global temperatures, with emissions generated by human activity recognized as the dominant cause of current climate change.



## Greenhouse gases include:

-  Carbon dioxide (CO<sub>2</sub>)
-  Methane (CH<sub>4</sub>)
-  Nitrous oxide (N<sub>2</sub>O)
-  Hydrofluorocarbons (HFCs)
-  Perfluorocarbons (PFCs)
-  Nitrogen trifluoride (NF<sub>3</sub>)



Because different greenhouse gases have different warming potentials, the unit CO<sub>2</sub>e (carbon dioxide equivalent) is used.

This unit expresses the total amount of greenhouse gases emitted by human activities, enabling comparison of emissions of different gases and sources.

Other gases are converted to an equivalent amount of CO<sub>2</sub> based on their global warming potential—that is, their ability to retain heat in the atmosphere compared to CO<sub>2</sub>.

**A GHG report is prepared in accordance with principles ensuring credibility, reliability, and usefulness for emission-reduction decision-making:**

**Relevance:**

Data and information included in the inventory must be relevant for assessing greenhouse gas emissions and their impacts. This means including all company-specific key emission sources.

**Accuracy:**

Data must be precise and reliable to minimize errors and uncertainties in reporting. Accuracy requires the use of sound methodologies, credible data sources, and appropriate calculations.

**Transparency:**

All data, methodologies, and calculations used in the inventory must be clearly presented, enabling stakeholders to understand how the data was collected and processed.

**Consistency:**

Data must remain consistent over time and across methodologies to allow comparison of results between different periods. If methodology or data sources change, this must be clearly documented.

**Completeness:**

The inventory should cover all sources of greenhouse gas emissions relevant for reporting, without omitting significant data or activities.



## **DEFINING ORGANIZATIONAL BOUNDARIES**

Organizational boundaries represent the framework for defining the scope of the GHG inventory and determine which activities, facilities, and business processes are included in the calculation of greenhouse gas emissions. Their clear definition enables the identification of all relevant emission sources under the organization's control, ensuring completeness and consistency in reporting.

When establishing organizational boundaries, it is necessary to choose a single methodological approach and apply it consistently across all reporting periods to ensure comparability of data. Telekom Srbija applies the operational control approach, meaning that the GHG inventory includes all operations and business processes over which the company has full operational control, regardless of ownership structure. This approach enables precise emissions management and clearly defined responsibility for emission reduction.

## DEFINING OPERATIONAL BOUNDARIES

Operational boundaries define all processes within the company's business activities that generate greenhouse gas (GHG) emissions.

## GHG EMISSION SCOPES

### SCOPE 1 DIRECT EMISSIONS

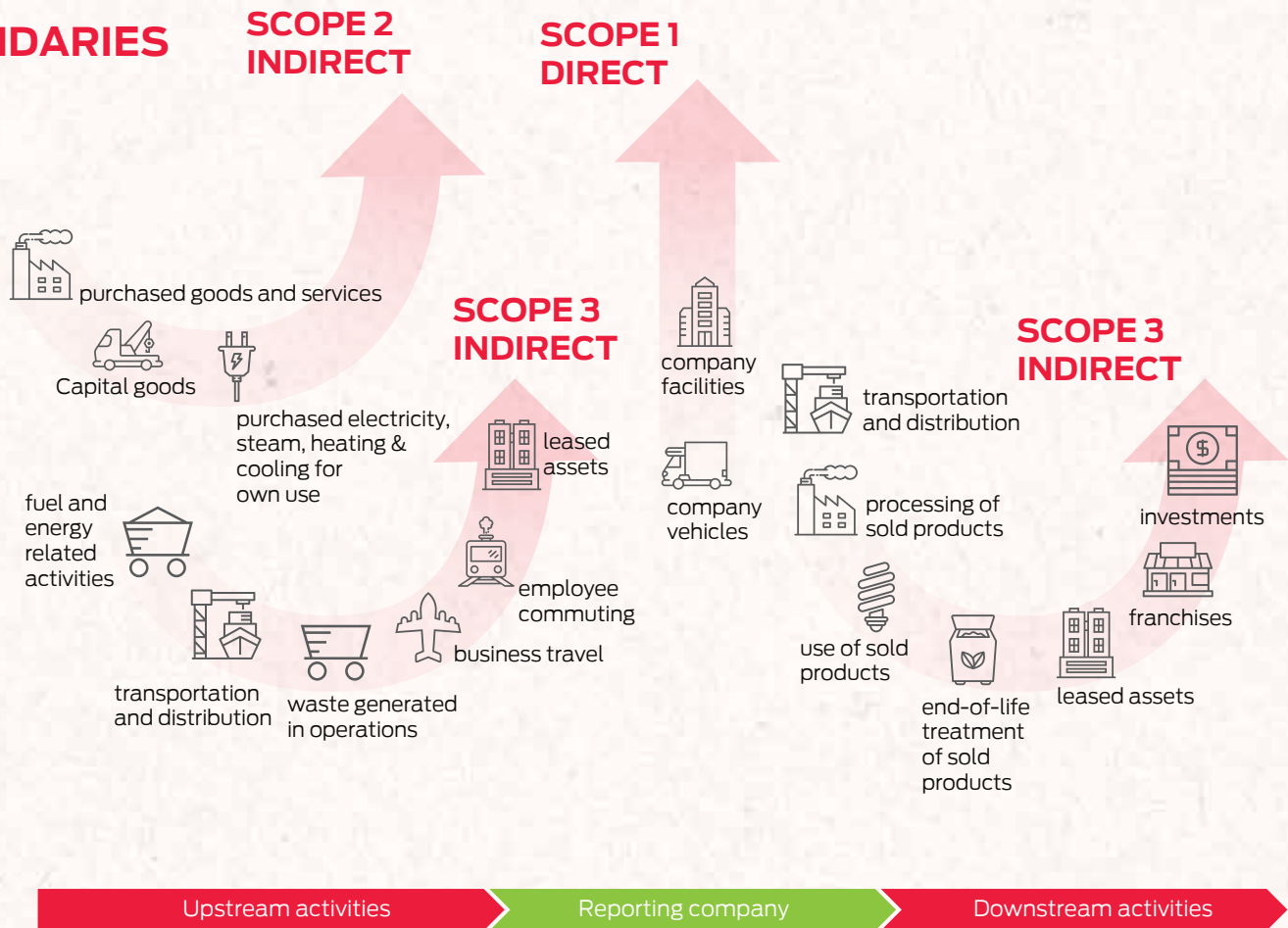
Emissions operations that are owned or controlled by the reporting company

### SCOPE 2 INDIRECT EMISSIONS

Indirect emissions from purchased utilities

### SCOPE 3 VALUE CHAIN EMISSIONS

All other emissions from a company's value chain



## Emissions are classified into three scopes (Scope 1, 2, and 3).

Within the organizational and operational boundaries of the GHG inventory, Telekom Serbia has identified the following activities and calculated their emissions exactly as presented below.

**Scope 1** includes direct emissions of greenhouse gases arising from sources under the company's immediate control. These emissions result from: combustion of fuel in stationary facilities (boiler rooms, individual heating systems, and other heating equipment), operation of diesel generators, use of the company's vehicle fleet, fugitive emissions caused by leakage of refrigerants from air-conditioning and cooling systems.

In line with internationally accepted practice, Scope 1 emissions are classified into stationary, mobile, and fugitive sources. Within the defined organizational boundaries, Telekom Serbia identified the following Scope 1 emission sources:

### Transport:

Vehicles powered by diesel fuel and motor gasoline are used for the transport of personnel and materials.

### Heating:

Heating with different energy sources at locations where boiler rooms and individual furnaces are used.

### Operation of generators for electricity production:

Generators are used to power equipment in case of interruptions in electricity supply from the grid.

### Air-conditioning systems:

Fugitive emissions, primarily refrigerant leaks from cooling systems.



**Scope 2** refers to emissions resulting from the consumption of purchased electricity, thermal energy, steam, and similar energy sources used by the company. These emissions are a consequence of energy production by the supplier but are attributed to the company as the end user. Within the defined organizational boundaries, the following Scope 2 emission sources have been identified:

**Electricity consumption:** The company consumes a significant amount of electricity to power telecommunications equipment and networks, data centres, IT equipment, climate control systems, and other devices. Telekom Serbia purchases electricity from the Serbian Electric Power Industry - Elektroprivreda Srbije (EPS), with electricity supplied directly from EPS originating 100% from renewable sources (hydropower), significantly reducing the company's carbon footprint. However, since not all electricity is procured this way, some of it is obtained through other legal and natural persons—the overall electricity mix is approximately: 70% from renewable sources and 30% from the EPS energy mix.



“ At the business facility located at Bulevar umetnosti 16 in New Belgrade, a solar power plant operates, covering about 30% of the building's annual electricity needs. Several base stations are also equipped with solar panels. ”

In accordance with the GHG Protocol, emissions from electricity consumption are presented using two calculation methods Location Based and Market Based. The location-based method uses the emission factor for the entire country, defined in the Regulation on conversion factors for final energy into primary energy and carbon dioxide emission factors.

### The Market-Based method

uses the supplier-specific emission factor stated in the contract, certificate, or invoice. If such data is unavailable, the Residual Mix (kg CO<sub>2</sub>e/kWh) from the Carbon Database Initiative for Serbia for the corresponding year is applied.

### Purchased thermal energy (district heating system – DH):

Most of the company's facilities are connected to the district heating system, while a smaller number use other fuels—such as coal, heavy fuel oil, extra-light fuel oil, wood, and wood residues—which are reported under Scope 1 as direct emissions.

**Scope 3** includes numerous indirect GHG emissions resulting from the company's activities but not under its direct control. These include 15 categories of emissions generated throughout the supply chain, during the use of various products and services, and through other business-related processes.



**IDENTIFICATION OF SOURCES AND THEIR GHG EMISSIONS**

Scope 1 Direct emissions			Scope 2 Indirect emissions			
Activity	Energy	tCO <sub>2</sub> e	Activity	Purchased energy	tCO <sub>2</sub> e	
Heating	Coal	247,5	Heating	Thermal energy	4.363	
Heating	Extra light fuel oil (EL)	800,3		Operation of TK network, devices, IT equipment, air-conditioning, lighting, etc.	Electricity (Market-based)	45.531
Heating	Low-sulphur heavy fuel oil <1% S	654,2				
Heating	Wood and wood residues	38,4				
Air-conditioning	Refrigerant gases	3.735,7				
Generators	Dieasel fuel	418,5				
Transport	Dieasel fuel	4.724,2				
Transport	Motor gasoline	3.618,4				



## GHG EMISSIONS CALCULATION

Since Telekom Serbia's business activity is not production-based, the largest direct emissions originate from transport, while indirect emissions primarily arise from the consumption of electricity and thermal energy. As a result, calculations are mainly performed based on measured consumption, using appropriate emission factors that are multiplied by the amounts of fuels, energy, and refrigerant gases consumed.

One of the key challenges in this calculation method is determining the appropriate emission factors. A wide range of relevant databases exist that provide emission factor estimates for individual fuels, energy sources, products, and services. The sources of emission factors applied in the calculation of GHG emissions in this report include:

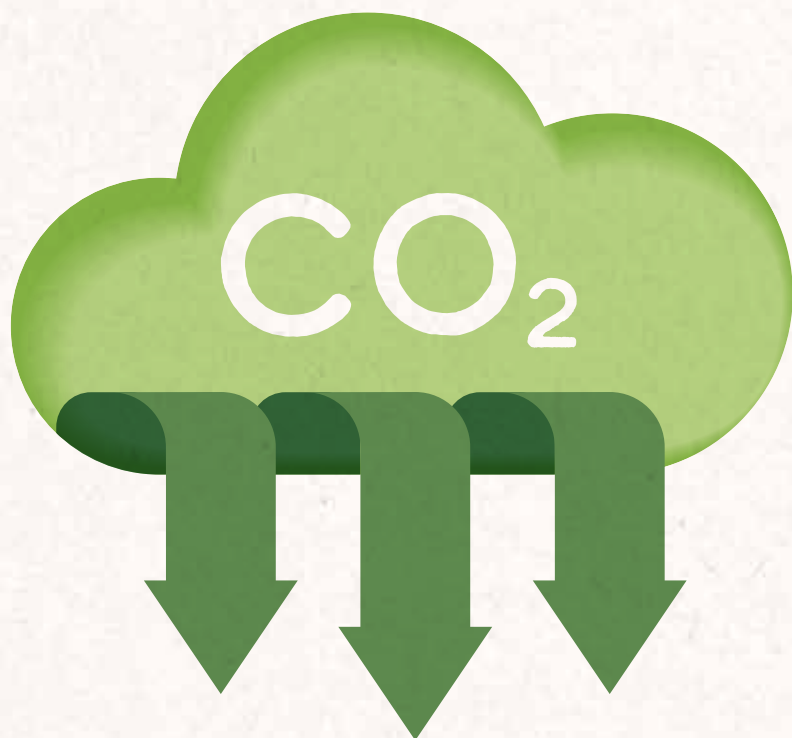
- Rulebook on conversion factors of final energy into primary energy and carbon dioxide emission factors ("Official Gazette of RS", No. 111 of 25.11.2021 and No. 6 of 27.01.2023)
- Defra – Department for Environment, Food and Rural Affairs
- ClimaTiq
- Carbon Database Initiative
- Exceloplossing B.V.



The guiding principle adopted by the company is to apply the emission factor from the official Rulebook on conversion factors of final energy into primary energy and carbon dioxide emission factors.

If the necessary emission factor is not provided in this document, the factor from another referenced database is used.

By applying emission factors to the quantities of consumed energy and fuels, the emissions have been calculated exactly as shown in the table below:



Categories	2024 (tCO <sub>2e</sub> )	2025 (tCO <sub>2e</sub> )	Trend
<b>Scope 1</b>	<b>12.554</b>	<b>14.237</b>	↑
<b>Stationary sources</b>	1.653	1.740	↑
<b>Mobile sources</b>	7.810	8.761	↑
<b>Fugitive sources</b>	3.091	3.736	↑
<b>Scope 2 (Market-Based)</b>	<b>54.191</b>	<b>49.894</b>	↓
<b>Electricity (Location-Based)</b>	184.600	177.373	↓
<b>Electricity (market-based)</b>	50.890	45.531	↓
<b>Thermal energy</b>	3.301	4.363	↑
<b>Scope 3</b>	/	/	-
<b>Total GHG emissions (Market-Based)</b>	<b>66.745</b>	<b>64.131</b>	↓ (3.9%)

To monitor the decarbonization process, the company introduces specific KPIs related to the intensity of GHG emissions.

## Intensity of GHG emissions

Intensity	Unit	2024 (tCO <sub>2</sub> e)	2025 (tCO <sub>2</sub> e)	Trend in relation to previous year
GHG Emission Intensity (total GHG emissions / achieved mobile network traffic)	tCO <sub>2</sub> eq/TB	0,19	0,15	↓
Economic GHG Emission Intensity (total GHG emissions / operating profit – EBIT)	tCO <sub>2</sub> eq/EUR	0,000215	0,000113	↓
GHG Emission Intensity per User (total GHG emissions / number of users)	tCO <sub>2</sub> eq/user	0,00819	0,0078	↓



Telekom Srbija