

Annex III: Indicator Passport

Title of the indicator	The number of monitoring points in the Tbilisi agglomeration where the annual average concentration of PM2.5 and PM10 exceeds the limit value.		
Level of the indicator	Impact		Outcome
	+		
Link of indicator to Goal/Objective of a strategy	Goal: Improving ambient air quality in the Tbilisi agglomeration.		
Description of the Indicator	The number of ambient air quality automatic monitoring stations in the Tbilisi agglomeration where monitoring records exceed the permissible annual average concentration for fine particulate matter (PM10, PM2.5).		
Source of Verification	Ambient Air Quality Portal - air.gov.ge; Annual Air Quality Bulletin		
Agency responsible for data collection	National Environmental Agency of Ministry of Environmental Protection and Agriculture of Georgia		
Frequency of data collection	Annually		
Methodology	The indicator is calculated in accordance with the methodology defined by the European Parliament and Council Directive of May 21, 2008, on ambient air quality and cleaner air for Europe (2008/50/EC), as well as the corresponding national technical regulations. These include the "Technical Regulation on the Approval of Ambient Air Quality Standards" (Government of Georgia Resolution No. 383 of July 27, 2018) and the "Technical Regulation on the Minimum Standard Number, Placement, and Operation Rules of Monitoring Points/Stations for Air Pollution Levels and the List of Standard Methods for Measuring Pollution Levels" (Government of Georgia Resolution No. 563 of December 1, 2021).		
Indicator Values		Baseline	Final
	Year	2022	2026
	Value	1	0

Title of the indicator	The number of indicative monitoring sites in the Tbilisi agglomeration where the annual average concentration of NO ₂ exceeds the limit values.		
Level of the indicator	Impact		Outcome
	+		
Link of indicator to Goal/Objective of a strategy	Goal: Improving ambient air quality in the Tbilisi agglomeration.		
Description of the Indicator	The indicator measures the number of indicative monitoring sites in the Tbilisi agglomeration where the annual average concentration of nitrogen dioxide (NO ₂) in ambient air exceeds the limit value of 40 µg/m ³ .		
Source of Verification	Ambient Air Quality Portal - air.gov.ge; Annual Air Quality Bulletin		
Agency responsible for data collection	National Environmental Agency of Ministry of Environmental Protection and Agriculture of Georgia		
Frequency of data collection	Annually		
Methodology	The indicator is calculated in accordance with the methodology defined by the European Parliament and Council Directive of May 21, 2008, on ambient air quality and cleaner air for Europe (2008/50/EC), as well as the corresponding national technical regulations. These include the "Technical Regulation on the Approval of Ambient Air Quality Standards" (Government of Georgia Resolution No. 383 of July 27, 2018) and the "Technical Regulation on the Minimum Standard Number, Placement, and Operation Rules of Monitoring Sites/Stations for Air Pollution Levels and the List of Standard Methods for Measuring Pollution Levels" (Government of Georgia Resolution No. 563 of December 1, 2021).		
Indicator Values		Baseline	Final
	Year	2022	2026
	Value	14	12
Title of the indicator	The number of monitoring sites in the Tbilisi agglomeration where the average concentrations of SO ₂ , CO, O ₃ , Pb, Cd, As, Ni, C ₆ H ₆ , and C ₂₀ H ₁₂ exceed the limit values.		

Level of the indicator	Impact		Outcome	
	+			
Link of indicator to Goal/Objective of a strategy	Goal: Improving ambient air quality in the Tbilisi agglomeration.			
Description of the Indicator	The indicator measures the number of ambient air quality monitoring sites (including automatic stations, indicative observation points, and gravimetric measurement points) in the Tbilisi agglomeration where monitoring has recorded that the average concentrations of sulfur dioxide, carbon monoxide, ozone, lead, cadmium, arsenic, nickel, benzene, and benzo(a)pyrene exceed the respective limit values. The averaging period is defined in the "Technical Regulation on the Approval of Ambient Air Quality Standards" (Government of Georgia Resolution No. 383 of July 27, 2018).			
Source of Verification	Ambient Air Quality Portal - air.gov.ge; Annual Air Quality Bulletin			
Agency responsible for data collection	National Environmental Agency of Ministry of Environmental Protection and Agriculture of Georgia			
Frequency of data collection	Annually			
Methodology	The indicator is calculated in accordance with the methodology defined by the European Parliament and Council Directive of May 21, 2008, on ambient air quality and cleaner air for Europe (2008/50/EC), and the European Parliament and Council Directive of December 15, 2004, on the content of arsenic, cadmium, mercury, nickel, and polycyclic aromatic hydrocarbons in ambient air (2004/107/EC). It also follows corresponding national technical regulations, including the "Technical Regulation on the Approval of Ambient Air Quality Standards" (Government of Georgia Resolution No. 383 of July 27, 2018) and the "Technical Regulation on the Minimum Standard Number, Placement, and Operation Rules of Monitoring Sites/Stations for Air Pollution Levels and the List of Standard Methods for Measuring Pollution Levels" (Government of Georgia Resolution No. 563 of December 1, 2021).			
Indicator Values		Baseline	Final	
	Year	2022	2026	
	Value	0	0	

Title of the indicator	Amount of fine particulate matter released into the ambient air in the Tbilisi Agglomeration		
Level of the indicator	Impact	Outcome	
		+	
Link of indicator to Goal/Objective of a strategy	Objective 1.1: Reduction of particulate matter pollution in the ambient air of the Tbilisi agglomeration.		
Description of the Indicator	The indicator measures the total mass of particulate matter emitted into the ambient air from pollution sources in the Tbilisi agglomeration for the reporting year, based on emission inventory reports conducted for the Tbilisi agglomeration.		
Source of Verification	Emission Inventory Report of Harmful Substances in Ambient Air		
Agency responsible for data collection	Ministry of Environmental Protection and Agriculture of Georgia		
Frequency of data collection	Once every 3 years		
Methodology	The methodology for measuring the indicator is primarily based on the EMEP/EEA Air Pollutant Emission Inventory Guidebook 2023, developed by the European Environment Agency (EEA) and the Monitoring and Evaluation Programme (EMEP) under the Long-range Transboundary Air Pollution Convention. Emissions from certain sectors are calculated using national methodologies as outlined in the "Technical Regulation on the Instrumental Method for Determining Actual Emissions of Pollutants from Stationary Sources, the Standard List of Measurement-Control Apparatus for Determining Actual Emissions from Stationary Sources, and the Reporting Methodology for Actual Emissions from Stationary Sources by Technological Processes," approved by Government of Georgia Resolution No. 435 of December 31, 2013. The primary source for the base data used in preparing the inventory is the National Statistics Office of Georgia.		
Indicator Values		Baseline	Final
	Year	2021	2025
	Value	PM ₁₀ – 4,530 tons PM _{2.5} – 650 tons TSP – 14,500 tons	PM ₁₀ – 4,000 tons PM _{2.5} – 600 tons TSP – 12,000 tons

Title of the indicator	The annual amount of nitrogen oxides (NO _x) emissions from road transport in the Tbilisi agglomeration in relation to the number of vehicles	
Level of the indicator	Impact	Outcome
		+
Link of indicator to Goal/Objective of a strategy	Objective 1.2: Reduction of nitrogen dioxide (NO ₂) emissions in the Tbilisi agglomeration.	
Description of the Indicator	The indicator measures the annual amount of nitrogen dioxide (NO ₂) emissions from motor vehicles in the Tbilisi agglomeration, relative to the total number of registered vehicles in the Tbilisi agglomeration.	
Source of Verification	Emission Inventory Report of Harmful Substances in Ambient Air; Ministry of Internal Affairs of Georgia website (information on registered vehicles)	
Agency responsible for data collection	Ministry of Environmental Protection and Agriculture of Georgia	
Frequency of data collection	Once every 3 years	
Methodology	The indicator is calculated using the emission inventory report and statistics on the number of registered vehicles from the Ministry of Internal Affairs of Georgia, with the following formula: $V = \frac{E}{N}$ where: • V is the weighted indicator for the reporting year, • E is the total NO₂ emissions from motor vehicles in the Tbilisi agglomeration, • N is the total number of registered vehicles in the Tbilisi agglomeration for the reporting year. The development of the inventory report follows the EMEP/EEA Air Pollutant Emission Inventory Guidebook 2023, created by the European Environment Agency (EEA) and the Monitoring and Evaluation Programme (EMEP) under the Long-range Transboundary Air Pollution Convention. Emissions from certain sectors are calculated based on national methodologies as outlined in the "Technical Regulation on Instrumental Methods for Determining Actual Emissions	

	from Stationary Sources, Standard List of Measurement-Control Equipment for Determining Actual Emissions from Stationary Sources, and Reporting Methodology for Actual Emissions from Stationary Sources by Technological Processes," approved by Government of Georgia Resolution No. 435 of December 31, 2013. The primary data sources for the inventory are the National Statistics Office of Georgia and the Ministry of Internal Affairs.		
Indicator Values		Baseline	Final
	Year	2021	2026
	Value	5 kg/unit	4,8 kg/unit
Title of the indicator	Improvement of ambient air quality assessment and evaluation of the impact of air pollution on human health in the Tbilisi agglomeration.		
Level of the indicator	Impact	Outcome	
		+	
Link of indicator to Goal/Objective of a strategy	Objective 1.3: Number of ambient air quality assessment tools		
Description of the Indicator	The indicator measures the methods and tools used for monitoring and assessing ambient air quality in the Tbilisi agglomeration.		
Source of Verification	Annual Report of the National Environmental Agency		
Agency responsible for data collection	National Environmental Agency of Ministry of Environmental Protection and Agriculture of Georgia		
Frequency of data collection	Annually		
Methodology	The baseline value of the indicator is calculated based on the following air quality assessment tools implemented on-site: 1. Automatic monitoring 2. Indicative monitoring 3. Gravimetric monitoring 4. Emission inventory in the air The target value of the indicator is calculated considering the number of air quality assessment tools implemented by 2026.		
Indicator Values		Baseline	Final

	Year	2023	2026
	Value	4	6
Title of the indicator	Raising public awareness about ambient air protection in the Tbilisi agglomeration.		
Level of the indicator	Impact	Outcome	
		+	
Link of indicator to Goal/Objective of a strategy	Objective 1.4: Number of participants in environmental activities conducted in the Tbilisi agglomeration		
Description of the Indicator	The indicator measures the total number of environmental awareness-raising activities conducted by responsible agencies and organizations, as defined in the action plan, within the Tbilisi agglomeration during the reporting period, as well as the total number of participants in these activities.		
Source of Verification	Annual Report of the LEPL Environmental Information and Education Center		
Agency responsible for data collection	LEPL Environmental Information and Education Center of the Ministry of Environmental Protection and Agriculture of Georgia		
Frequency of data collection	Annually		
Methodology	The baseline value of the indicator is calculated based on the number of participants from Tbilisi in environmental activities conducted by the LEPL Environmental Information and Education Center in 2023. The target value of the indicator is calculated as the total number of participants in environmental activities conducted within the framework of the 2024-2026 Air Quality Management Plan for the Tbilisi agglomeration.		
Indicator Values		Baseline	Final
	Year	2023	2026
	Value	300	1000