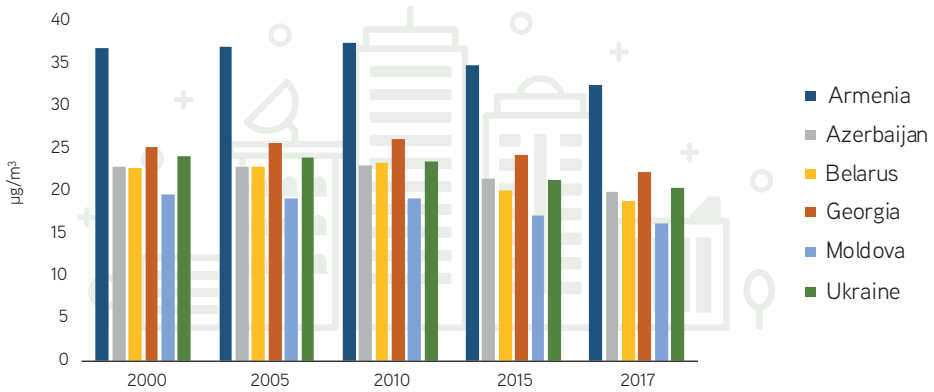
Air pollution
in Georgia

International comparison

Exposure calculated by weighting mean annual concentrations of $PM_{2.5}$ by population in both urban and rural areas



Notes: World Bank Databank data on exposure to ambient air pollution are derived from estimates of annual concentrations of very fine particulates produced by the Global Burden of Disease study, an international scientific effort led by the Institute for Health Metrics and Evaluation at the University of Washington. Estimates of annual concentrations are generated by combining data from atmospheric chemistry transport models, satellite observations of aerosols in the atmosphere and ground-level monitoring of particulates. Exposure to concentrations of $PM_{2.5}$ in both urban and rural areas is weighted by population and is aggregated at the national level.
Source: World Bank Databank, NEA.GOV.GE

List of relevant websites

- Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete Ozone (1995): http://ozone.unep.org/reporting
- Stockholm Convention on Persistent Organic Pollutants (2006): http://chm.pops.int/Countries/Reporting/NationalReports/tabid/3668/Default.aspx
- UNECE Convention on Long-range Transboundary Air Pollution (1999) and EMEP Protocol (2012): http://ceip.at/ms/ceip_home1/ceip_home/status_reporting/
- The World Bank DataBank. Environment Social and Governance (ESG) Data: HTTPS://DATABANK.WORLDBANK.ORG/SOURCE/ENVIRONMENT-SOCIAL-AND-GOVERNANCE-(ESG)-DATA
- NEA.GOV.GE: http://nea.gov.ge/ge/service/haeris-monitoringi/14/haeris-dabindzurebis-yoveldgiuri-biuletini/
- Air Quality Portal: http://air.gov.ge
- Informative Inventory Report of Georgia 2007-2017: http://air.gov.ge/media/pages/IIR_Georgia_2019.pdf
- ENI SEIS website: https://eni-seis.eionet.europa.eu/east/countries/georgia

List of relevant contacts

Ministry of Environmental Protection and Agriculture Department of Environment and Climate Change / Ambient Air Division

Environmental Supervision Department

LEPL National Environmental Agency (NEA) Department of Environmental Pollution Monitoring

LEPL Environmental Information and Education Centre

European Environment Agency

ENI SEIS II East
This project is funded by the European Union

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SLOVAK ENVIRONMENT AGENCY

State and trends in the air pollution in Georgia

Population-weighted exposure to ambient $PM_{2.5}$ pollution

- Decreasing trend between 2000 and 2017
- Concentrations exceeded in largest cities

Main pollutants

- Between 2007 and 2017 emissions of most pollutants increased

Nitrogen Oxides

- Road transport – 70% of total NO_x emissions; increasing trend
- Concentrations exceeded in the largest cities

Sulphur Dioxide

- 90% of SO_2 emissions comes from combustion in manufacturing industries; increasing trend
- Concentrations are significantly below thresholds

photo: Zenith Pictures/shutterstock.com, graphics: www.123rf.com

Air pollution policy framework

International level

Georgia is a party to the:

Vienna Convention for the Protection of the Ozone Layer and Montreal Protocol on Substances that Deplete the Ozone Layer (1995)

UNECE (Geneva) Convention on Long-range Transboundary Air Pollution (1999)

Protocol to the Convention on Long-Range Transboundary Air Pollution Convention on Long-Term Financing of a Joint Program on the Monitoring and Evaluation of Long-Range Air Pollutants in Europe (2012)

National level

Law of Georgia on Ambient air Protection (1999) and corresponding by-laws

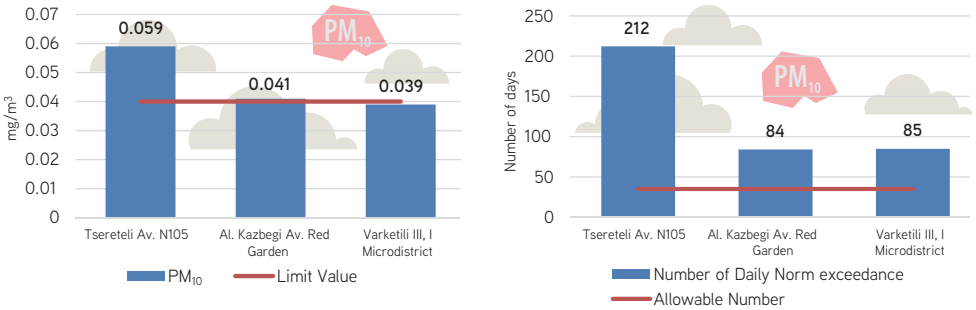
National Environmental Action Program of Georgia 2017 – 2021

National Action Plan on Improvement of Ambient Air Quality Monitoring System

State Program on "Enabling activities to abate ambient air pollution in Tbilisi" 2017 – 2020 (approved in 2017)

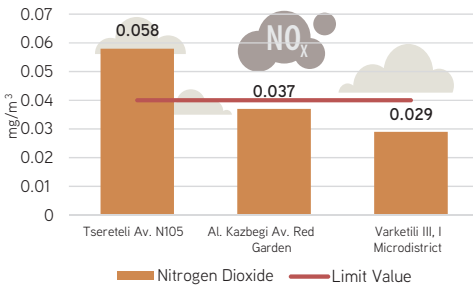
7 commitments under the Batumi Action for Cleaner Air (BACA 2016 – 2021)

Average annual concentration and number of exceedance of PM_{10} daily limit values in Tbilisi in 2017



Source: LEPL National Environmental Agency, air.gov.ge

Average annual concentration of nitrogen dioxide in Tbilisi in 2017



Source: LEPL National Environmental Agency, air.gov.ge

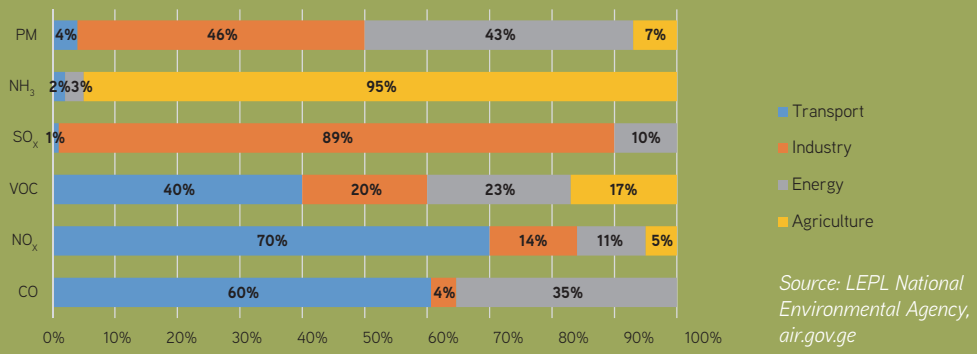
Selected objectives and their evaluation

No bounding objectives are in place in Georgia today, however, new challenges have developed:

Ambient air protection issues are regulated by the Law of Georgia on Ambient Air Protection (1999) and its bylaws. Under said legislation, considering the threshold values for ambient air quality, emission limit values - the emission limits for each harmful substance are set individually for industrial objects, which are large and harmful to humans and the environment. Ambient air pollution from other stationary facilities is governed by the relevant technical regulations. Since August 1, 2018, ambient air quality in Georgia has been assessed by modern European standards.

Today, the major challenge for Georgia's largest cities in terms of ambient air quality is **nitrogen dioxide** and **particulate matter pollution** (mainly PM_{10}).
The improvement in the NO_x situation was stimulated, on the one hand, by an increased excise tax on old cars and fuel, and on the other hand, by tax policy encouraging the import of hybrid cars and the development of an electric vehicle charger infrastructure.
The underdevelopment of pedestrian and bicycle transport infrastructure and public transport remains a challenge for the transport sector.
Ambient air pollution from the industrial sector, although in most cases local, remains a major problem. In this regard, disproportionately small and consequently ineffective sanctions for ambient air pollution are noteworthy.
A significant share of fine particulate matters ($PM_{2.5}$) pollution comes from domestic wood burning.

Share of economy sectors in total emissions of harmful substances,%



Source: LEPL National Environmental Agency, air.gov.ge

In terms of ambient air quality assessment, it is important to further expand the monitoring network with modern monitoring stations.