



Country Fact Sheet

2018-2020



Introduction

This fact sheet was developed by the European Environment Agency under the air component of the EU funded ENI SEIS II East project with an objective to increase the use and public accessibility of air quality measurement data in the ENI East countries. The aim of this document is to describe the state of play of air quality monitoring and data management.

This factsheet was prepared by the team of experts from the European Environment Agency (EEA), Norwegian Institute for Air Research (NILU), 4sfera and the national experts from Georgia.

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1. Legal framework

- # 383 Order of the Government Setting Ambient Air Quality Standards (Limit values for protection of human health, Alert threshold, Upper and lower assessment threshold, Target values, Critical levels for protection of vegetation and eco-systems) and requirements on information dissemination
- Law on Ambient Air Protection
- Georgia is a party of Convention on Long-range Transboundary Air Pollution.
- Association Agreement between the European Union and the European Atomic Energy Community and their Member States and Georgia

2. Institutional framework

- The Ministry of Environmental Protection and Agriculture of Georgia
- National Environmental Agency (NEA)
- Environmental Supervision Department

3. Management of ambient air quality monitoring

- Instrument maintenance (including performance testing) is provided by the staff of the NEA on regular basis.
- Standard Operational Procedures (SoP) are developed for automatic air quality monitoring stations.
- Data is collected by GSM and special software from automatic stations and by mail from non-automatic stations.
- Air quality data is compared with the national standards.
- Reports on daily data on air quality, also monthly bulletins and quarterly reports on passive sampling results and annual yearbooks are prepared by the NEA.
- Daily, monthly and annual air quality reports are published on the website of the NEA (<u>www.nea.gov.ge</u>).

4. Pollution source management related to air quality

- <u>Industry</u>: Ministry of Environmental Management and Agriculture sets emission limit values for large industrial plants. Medium and small size stationary sources are regulated based on appropriate technical regulations.
 - The Environmental Supervision Department executes State control.
- <u>Road traffic</u>: Mandatory roadworthiness test is now re-established step by step.
 National fuel quality standards for petrol meets Euro 5 norms and for diesel fuel Euro 4 (from 1 October 2018).



- <u>House-heating/cooling</u>: Active gasification is going to reduce consumption of solid fuel (wood).
- <u>Maritime traffic</u>: Legislation setting limit values of sulphur content in marine fuel was adopted in 25 May 2017. Requirement will enter into force from 2021 (as it determined by Association Agreement between Georgia and EU).
- <u>Long range transport of air pollution</u>: one background (EMEP) air quality monitoring station operated in Abastumani.

5. Monitoring network

Number of stations

- 8 automatic stations
- 1 mobile automatic station
- 2 manual stations (replaced with automatic stations: 1 2018 and 1 -2019)
- 560 passive sampling analyses in 25 cities per year

Station meta data

- Geo coordinates
- Station type (i.e. urban, suburban, rural)
- Station height above sea level
- Dominant emission sources
- Approximate distance to emission source (ex. meters to roadside)

Instrument specific

- 45 automatic analysers
- 4 manual samplers
- Parameters measured in manual stations: dust, SO2, NO2, NO, CO, O3, MnO2, Pb
- Parameters measured automatic stations: PM10, PM2.5, SO2, NO2, NO, NOx O3, CO
- Passive sampling: NO2, SO2, O3, C6H6

Instrument models

- Teledyne T100 (SO2 analyser)
- Teledyne T200 (NO2, NO, NOx analyser)
- Teledyne T300 (CO analyser)
- Teledyne T400 (O3 analyser)
- Teledyne T700 (calibrator)
- Teledyne T701 (zero air generator)
- Palas Fidas 200 (particulate matters)
- Ogawa Seiki Co, Ltd (PM10, PM2.5, SO2, NO2, NO, NOx O3, CO analyzers)



Data acquisition

- Data from automatic stations collected online on special servers
- National Database using MS-SQL
- Air Quality Management System: Envista, Green Ages
- Air Quality Dissemination System: http://www.nea.gov.ge/

Modelling

No modelling

6. Conclusions from country visit (December 2018)

Status

- Manual & passive monitoring
- Some automatic
- Database is in place
- Manual acquisition with automatic stations (to be improved)
- Calibration & zero generator equipment

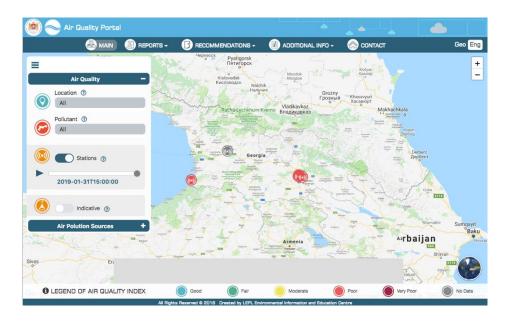
Need for assistance

- Implementation of e-Reporting software
- May require calibration/maintenance protocol
- Review existing data (both automatic/manual)
- Assistance on Health Impact Assessment

Conclusions from Regional AQ Workshops (September 2018 and November 2019)

Status

- Georgia is well advance in data monitoring and reporting.
- AQ portal launched in January 2019
- New monitoring stations and modelling to be provided by Italian Government via some collaboration projects.
- Currently, there is near real time data published in their portal with reference equipment (*see note on station maintenance requirement).
- Ministry is pro-active in AQ monitoring and action planning.
- Ministry in close cooperation with WHO.
- Very good IT infrastructure and prepared team.
- IT team trained in using e-Reporting tool named Raven.
- IT infrastructure in place for centralizing and gathering data from existing and future automatic stations



URL: http://air.gov.ge/en/

Training requirements

- AQ Data management
- Management of AQ monitoring network
- Standardization and modelling
- Data reporting
- Setting up Reference Laboratory for AQ monitoring

Data exchange with EEA

- Raven tool was adopted by Georgia
- Up-To-Date air quality data exchange from Georgia was established in April 2019. The data exchange has been stable since.
- Historical data reported via CDR (E1a) could also be possible.



URL: https://aqportal.discomap.eea.europa.eu/products/data-viewers/utd-viewer/