



This project is funded by the European Union



Twinning project Upgrading the National Environmental Monitoring System (NEMS) of Azerbaijan on the base of best EU practices

4.7.2018 7th meeting of the steering committee of the national policy dialogue in water sector in Azerbaijan - **Synergies with other international projects implemented in Azerbaijan**

Twinning project AZ/15/ENP/EN/43

Resident twinning advisor Katja Lovén





This project is funded by the European Union



Project information

Partners



FINNISH METEOROLOGICAL INSTITUTE

umweltbundesamt^U



LATVIJAS VIDES, ĢEOLOĢIJAS
UN METEOROLOĢIJAS CENTRS



S Y K E

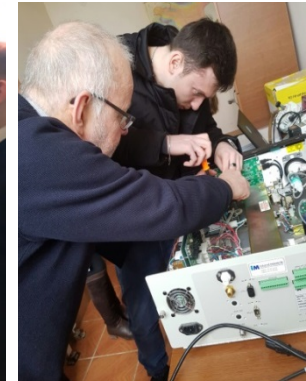
Budget and duration

1.4 million euros (funded by EU)

27 months from Nov 2016 until Jan 2019

Overall Objective

To improve environmental performance of Azerbaijan by ensuring the provision of high quality information that can be used in decision making processes. Main focus in air quality.

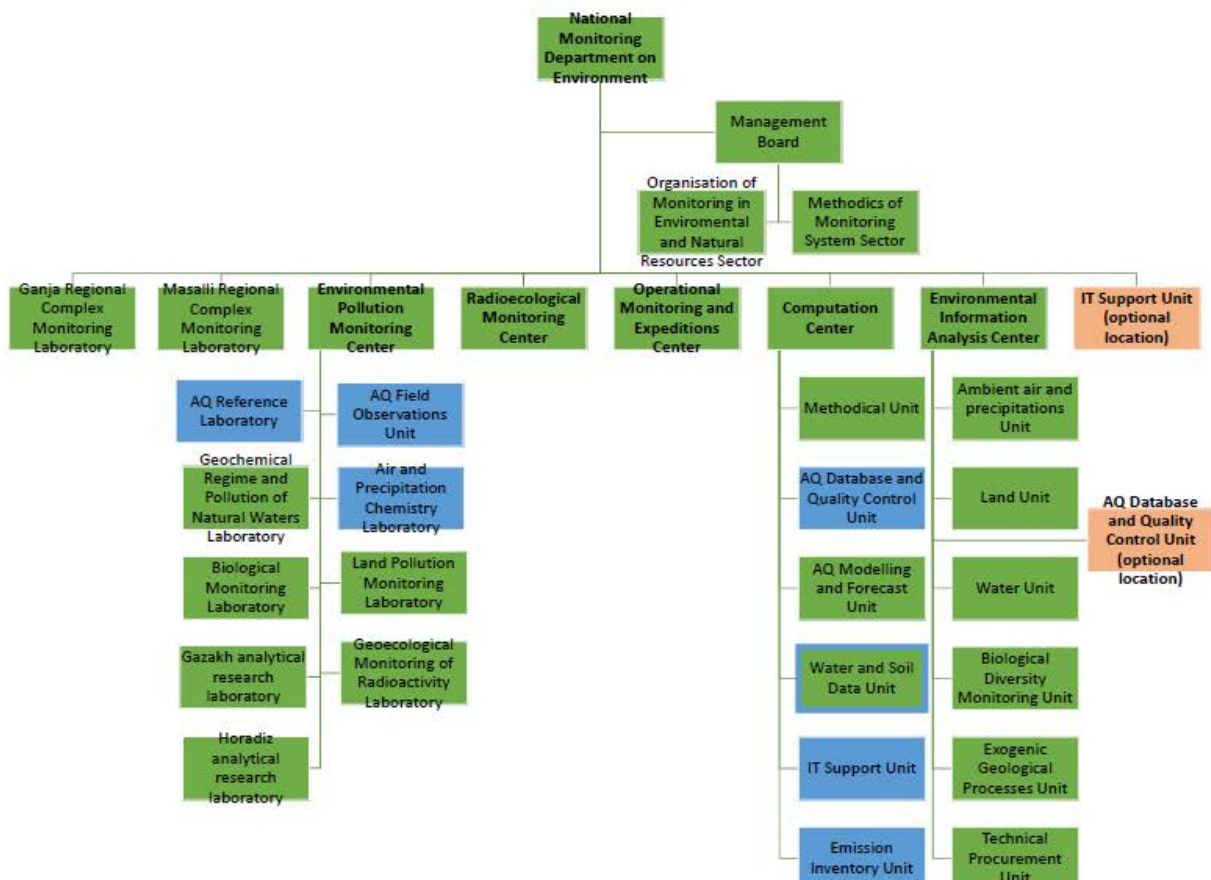




Main achievements within 1,5 years

Component 1.

- Proposal for **new organizational structure** for monitoring department prepared incl. key **job profiles** for air quality monitoring



New organisational structures recommended included:

- **IT Support Unit**
- **AQ Database and Quality Control Unit**



Component 2

- **Modernization plan** and **justification document** for the air quality monitoring network in Azerbaijan prepared
- New Dispersion modeling tools (UDM-FMI, CAR-FMI) and emission inventory tool (COPERT) for traffic emissions installed and training started
- Emission inventory team established, and training started
- Vaisala AQT400 sensor installed and operational



Laboratory

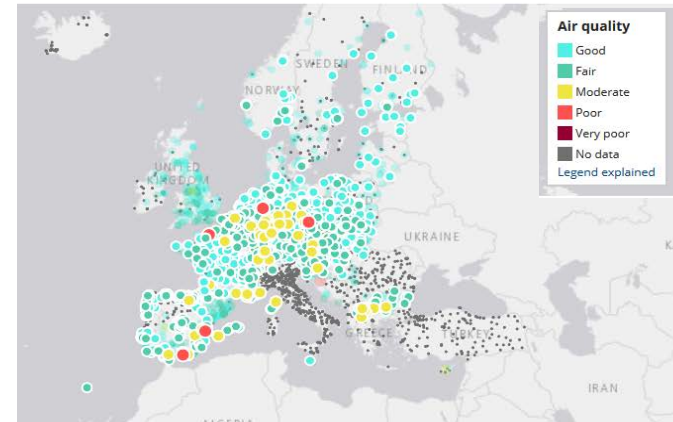
- New analysis methodologies for laboratory (VOCs and metals) developed and **method validation process started**
- **Quality manual** and **internal audit practices** developed for laboratory according to ISO 17025 standard, documentation and SOP's for laboratory analysis prepared
- Cooperation with Azerbaijani Accreditation Centre (AZAC) to make a pre-accreditation audit
- Priority EN standards for AQ monitoring translated in Azerbaijani (cooperation with AZSTAND)





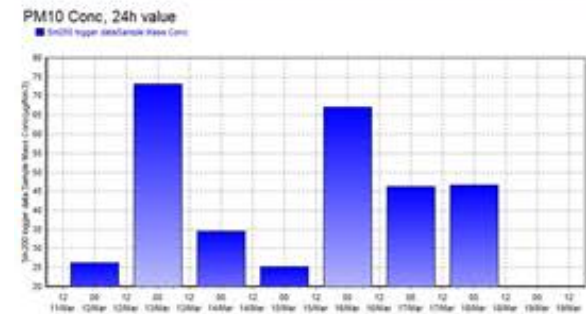
Component 2

- Development of Integrated Electronic Environmental Database Management system (IEEDMS) as been started;
 1. Access database for manual AQ measurements, harmonized data collection and storage
 2. To get online AQ data published as AQI in MENR webpage and possibly also in EEA webpage



Component 3

- **Training plan, program, packages and manuals prepared**
- **Study** visit to Latvia (2017) and Finland (2018) organized for 8 MENR experts
- **18 Training workshops** organized with **230 participants**
- **3 awareness rising seminars** organized with over **120 participants**



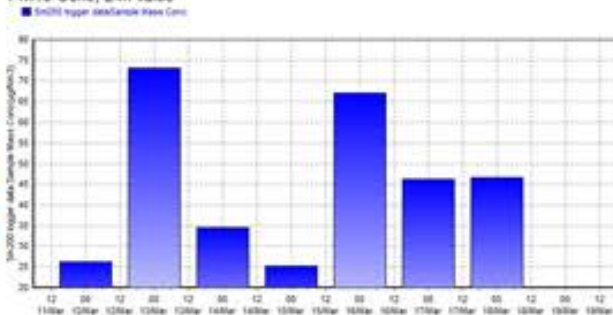


This project is funded by the European Union



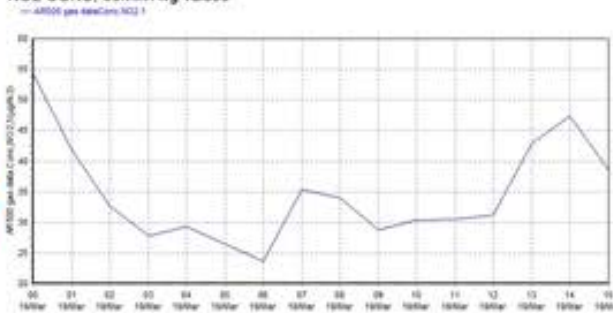
| Particles PM ₁₀ | µg/m ³ | Index level |
|----------------------------|-------------------|-------------|
| 100-1200 | Very poor | |
| 50-100 | Poor | |
| 35-50 | Moderate | |
| 20-35 | Fair | |
| 0-20 | Good | |

PM10 Conc, 24h value



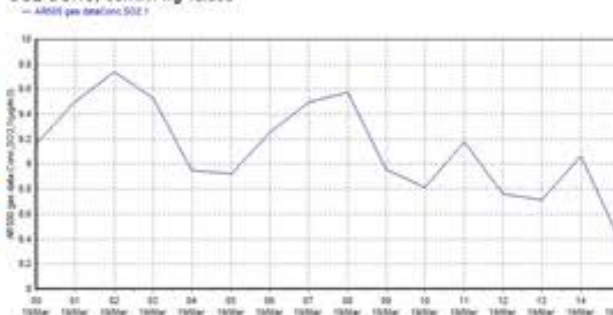
| Nitrogen dioxide NO ₂ | µg/m ³ | Index level |
|----------------------------------|-------------------|-------------|
| 400-1000 | Very poor | |
| 200-400 | Poor | |
| 100-200 | Moderate | |
| 40-100 | Fair | |
| 0-40 | Good | |

NO2 CONC, 60Min/Avg values



| Sulphur dioxide SO ₂ | µg/m ³ | Index level |
|---------------------------------|-------------------|-------------|
| 500-1250 | Very poor | |
| 350-500 | Poor | |
| 200-350 | Moderate | |
| 100-200 | Fair | |
| 0-100 | Good | |

SO2 CONC, 60Min/Avg values

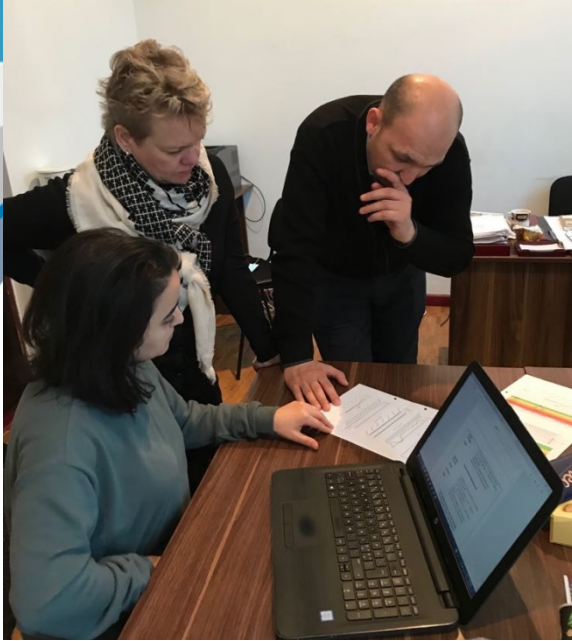




Component 4

- Carrying out **dispersion modeling case studies for Norm Cement and SOCAR**
- **Online air quality data published (as AQI) in MENR website**
- Improved calculation methods (Tier II, Tier III) used for national emission inventories reported to international conventions, enhanced cooperation in data collection between different data providers
- **Public awareness campaign** designed and air quality leaflet for general public prepared
- Preliminary air quality assessment done, zones defined for AQ compliance monitoring







This project is funded by the European Union



Fixing the flow meter...





What is needed for further development...

- It- expertise and systems (hardware, softwares, networks, data flows, it- system administration) available in the department
- Budget for Investments and operational costs of Environmental monitoring (it systems, operation and maintenance of modern online monitoring systems)
- Enhanced cooperation between different stakeholders (Ministries, Agencies and other expert organisations (for example needed for emission inventories, air quality assessments))



