

IN FOCUS

Emission inventory and air quality monitoring in the ENPI East countries

The Convention on Long-range Transboundary Air Pollution (CLRTAP) and its related protocols call for the contracting parties (all EU member states and other countries which signed and ratified the Convention and its protocols) to comply with all the requirements of an established reporting system. Among other things, the contracting parties are required to report on annual emission and activity data, projected national total emissions of main pollutants, activity data and other related information. The informative inventory reports are submitted annually in standardized format to the EMEP Centre on Emission Inventories and Projections (CEIP) in Austria.

In 2012, national experts from all seven Partner Countries prepared a joint report on Emission Inventory and Air Quality Monitoring which was published on the project website.

The report reviews the status of data submission by all seven countries in accordance with the CLRTAP reporting requirements for 2011 and 2012. It focuses on the main characteristics of emission inventory in each Partner Country by providing a short description of the process used based on the national regulatory requirements. The main characteristics of such reporting covers information on pollution



sources, their definition, types of sources, methodology of emission inventory and reporting frequency.

The report concludes that all Partner Countries have successfully compiled an inventory of emissions from their respective licensed industrial sources. All the countries monitor transport emissions as well, although problems related to the assessment of data from the transport sector continue to exist in many of the Partner Countries.

Instrumental and computational methods continue to be the most commonly used methods for calculating emission inventories. A combination of both methods prevails in some of the Partner Countries. Unfortunately most of the existing methodology is still based on the standards developed during Soviet times, however recent developments indicate that the Partner Countries are gradually moving towards accepted international methodologies such as EMEP/CORINAIR (in case of Armenia) and IPPC (in case of Azerbaijan).

The second part of the report concentrates on air quality monitoring issues. The report briefly reviews the

main requirements of the EU Directive 2008/50/EC on ambient air quality and cleaner air for Europe and presents the main air quality monitoring characteristics in each Partner Country. All available data was collected and evaluated in an effort to assess the possibilities for the Partner Countries to implement the EU system. The evaluation was quite comprehensive in nature and encompassed information about general air quality monitoring systems, existing monitoring networks, monitoring at industrial and national/regional levels as well as air quality information sources and monitoring results currently available.

IN THIS ISSUE :

Pilot project assists Azerbaijan in the improvement of its air quality assessment and management

Regional pilot project continues the kick-off activities

"Let's not stop the train!" - key issues discussed during the Project Steering Committee

Synergies with other EU-funded projects

Project Partners talk about the project

Step forward towards the implementation of an environmental permitting system

Key events, activities, results



Pilot projects launched by the Air Quality Governance project

Pilot project assists Azerbaijan in the improvement of its air quality assessment and management

The national pilot project *on Improvement of Legislation on Assessment and Management of Ambient Air for Azerbaijan* was launched on 18 March 2013. The Air Quality Governance project key experts and the representatives of the Azeri authorities met for a kick-off meeting in Baku with the selected implementer, the Azerbaijan branch office of the Regional Environmental Center for Caucasus.



The project will work towards improving the national air quality assessment and management system of Azerbaijan through ensuring reduced effects of air pollution and climate change and increased environmental cooperation and awareness. In terms of specific objectives the project will:

- Prepare recommendations on amendments to existing legislation to fill any gaps identified during the project and recommendations on institutional set-up to avoid gaps and overlapping responsibilities.
- Draft air quality action plan for Baku to address pollution episodes and exceedances of limit values.
- Draft National Strategy for Air Quality Assessment and Management.

To ensure close cooperation among relevant state institutions and other stakeholders in the field of air quality, a steering committee will be formed in the coming month. Representatives from relevant state institutions such as the Ministry of Ecology and Natural Resources, the Ministry of Health, the Ministry of Transport, the Ministry of Industry and Fuel, agencies, scientific institutions, NGOs and private sector are expected to take part in the work of this committee. With the activities planned over 12 months, the pilot project is expected to finish early spring 2014.

Regional pilot project continues the kick-off activities

A kick-off meeting of the regional pilot project *on Assessment and enforcement of national capacities for joining the Convention on Long-range Transboundary Air Pollution (CLRTAP) protocols and meeting corresponding commitments* took place in Baku, Azerbaijan on 18 March 2013. “This project is of great importance for the country as we need to be aware of the concrete actions Azerbaijan will have to take after joining the CLRTAP protocols” – stated Mr. Rasim Sattar-zada, Head of Environmental Policy Division of the Ministry of Ecology and Natural Resources of the Republic of Azerbaijan.

The project experts met with the working group to present the objectives, the team members and the implementation plan and discuss required actions from all parties involved in the project. The working group consists of representatives from state institutions such as the Ministry of Ecology and Natural Resources, the Statistical Committee, the Sanitary Epidemiological Centre of the Ministry of Health and respective national experts.

The road map and possible scenarios for ratification and implementation of the CLRTAP protocols as well as the draft content of the feasibility study for the selected scenarios were presented and discussed during the two days working group meetings.

Similar kick-off meetings were already held in Armenia, Georgia and Moldova in January and February 2013. The first phase of the pilot project on developing road maps and selecting possible scenarios for further assessment will be finalized by the end of spring in all four countries.



This project is a regional initiative encompassing four countries, namely, Armenia, Azerbaijan, Georgia and Moldova that will continue until January 2014.



Highlights on recent project activities

“Let’s not stop the train!”

Mr. Jesus Lavina, the European Commission representative, encouraged the countries to continue to open themselves to knowledge sharing and network creation and to accelerate the implementation of the Air Quality Governance project.



On 26 February 2013, Moldova hosted the third Project Steering Committee (PSC) meeting gathering 36 representatives from the seven partner countries participating in the Air Quality Governance project. Officials from the ministries of Environment, Industry, Transport and Economic Development of Armenia, Azerbaijan, Belarus, Georgia, Moldova, Ukraine and the Russian Federation assembled to review the project implementation to date, exchange information on the progress of the national legislative reforms and discuss the most acute issues in relation to air quality governance.

The following major project outputs completed since the previous PSC meeting were reviewed and discussed:

- Gap analysis report, emission inventory report and air quality monitoring report containing respective findings and recommendations as well as training needs analysis - under the first project component “Common Activities”.
- National inventories of IPPC Installations, overview of permitting systems including BAT/PPC elements, draft recommendations on technical, regulatory and institutional requirements included in the guidance on integrated permitting, EU BREFs and related sector regulations in Russian language and matrix outlining the status of IPPC permitting in the seven countries - under the second project component “Industrial sector”.
- Concordance table on compatibility of national and EU legislation, draft recommendations for the harmonization of the national legislation to the EU legislation, emission inventory report from transport using COPERT4 and overview of economic instruments to promote sustainable urban mobility - under the third project component “Transport sector”.

In addition, the Team Leader, Mr. Lubomyr Markevych, reported on the status of the national and regional pilot projects and confirmed that all seven national pilot projects have been approved with three having commenced implementation and four more being in the tender selection process. As for the regional pilot projects (RPP), the first one on *Assessment and enhancement of national capacities for joining CLRTAP protocols and meeting corresponding commitments* is already underway in Armenia, Azerbaijan, Georgia and Moldova. The other RPP *Development and implementation of of air pollution assessment system to estimate effects of different urban planning and transportation schemes in the Partner Countries* has been recently approved and will commence in all seven partner countries by May of this year. The remaining RPP deals with improvements of the air quality legislation and is a demand-driven facility responding to requests for targeted interventions for drafting legislation in Belarus, Moldova and Ukraine, with flexibility to include other Partner Countries as well.

Synergies with other EU-funded projects

Mr. Lubomyr Markevych, Team Leader and Mrs. Aiga Kala, Key Expert, attended in Copenhagen, on 9-10 April 2013, the SEIS meeting of the ENPI East National Focal Points to discuss the implementation of data flows and country-level work plans.

The European Environment Agency was assigned by the European Commission to carry out a project for gradually extending the Shared Environment Information System (SEIS) principles to the European Neighborhood Policy South and East countries and to the Russian Federation. The project aims to identify and develop data and information flows and environmental indicators suitable for the design and review of environmental policies. Data reporting tools and methodologies developed and managed by the European Environmental Agency are being customized and have become available to the Partner Countries to facilitate open access, sharing and re-use of datasets in priority areas: air, water and waste. In the case of air emissions/pollutants, the SEIS project deals with data compiled and already reported to meet certain regional or international reporting obligations, i.e. CLRTAP, UNFCCC, Ozone etc.

Against this background, the meeting also focused on air emission data issues and on capacity development in the field of inventories of air emissions/pollutants.

Mrs. Kala presented an overview of the Air Quality Governance project and helped to identify opportunities for synergies between the two projects and other ongoing initiatives and activities to be carried out in the coming months.



Project Partners talk about the Air Quality Governance project

In this new section we will give voice to our Project Partners about the main issues related to air quality management in their respective countries, the expectations of the national stakeholders and their suggestions towards a successful implementation of the project.

As a start of these series, we present an interview with Mr. Martiros Tsarukyan, the project Focal Point in Armenia. Mr. Tsarukyan is heading the Atmospheric Air Policy Division at the Ministry of Nature Protection of the Republic of Armenia.



What are the main problems in the field of air quality management in Armenia?

The way we tackle air quality management could be divided into four main areas: normative base, emission inventory, control and monitoring. There are certain problems specific to each of these four areas.

The main issue related to the normative base is that the current system does not stimulate the introduction of new technologies. The old soviet system is based on hygienic norms and does not promote the use of best available technologies. Therefore, it is important to establish the technological norms and meet the technology based emission limit values.

Concerning emission inventory, Armenia has insufficient normative methodological base. In addition, there is a lack of incentives to improve data reliability. In terms of control, due to lack of resources, the laboratory capacities are insufficient and the control system still requires upgrading. The monitoring system in Armenia is inadequate with an insufficient network of monitoring stations. Although the country has several automatic monitoring stations, some equipment needs upgrading.

What main benefits are expected by Armenia from the project? How does the country see the project?

This is the first project in the sector of air quality of this large scale. I myself have worked all my professional life in this sector and I take this project as a first step for my country to come closer to the European standards.

For us it is very important to enhance our capacities for ratification of the Long-range Transboundary Air Pollution protocols by assessing the potential and providing justification for ratification. We hope that the project will provide such assessment and justification for ratification. Another crucial point is to develop the technological norms to encourage the application of the European practice in implementation of the best available technologies in our national normative system.

Among the results achieved so far, I would like to mention introduction of such tools as COPERT that is used for transport emission inventory. We still expect to implement the integrated air quality forecasting system as a result of one of the regional pilot projects.

How do you assess the project contribution so far?

The country has already gained basic skills and created the grounds for the use of European inventory tools such as COPERT. However, the knowledge has to be expanded and more experience is needed in collecting the necessary data. First of all, it must be clear what kind of data is needed. The second stage is how to get this data, group it and develop a structure for acquiring the information. The foundation for the implementation of the technological norms has also been laid through seminars where participants from different countries shared their experience. With the help of the project we have another important achievement – our decision makers now understand that setting up technological norms is an important step required for improving the situation. Indeed, the current economic situation in Armenia is not very favorable, so introduction of cleaner technologies is hampered by the lack of resources.

Nonetheless, I would like to repeat my words from the last project steering committee meeting in Chisinau at the end of February: “Our project is like a locomotive: slow to start but getting faster while moving. So we are on the fast track now”.

What could be your suggestions for improvement of the project performance in the second half of its implementation?

To my mind it is very important to strengthen or expand coordination among countries. Closer cooperation between the project and the Partner Countries is needed. This is essential for getting more accurate information on the needs and weaknesses of each country through national and regional pilot projects. Closer coordination would help to know about existing problems in advance and have time to take necessary measures to address them.



This project is funded by the European Union

and implemented by a consortium led by MWH

Key events, activities, results

Step forward towards the implementation of an environmental permitting system



The recommendations on the concept for the transformation of the environmental permitting system have been developed in February 2013 as part of the second component of the Air Quality Governance project addressing the industrial sector.

The main objective of the permitting system is to promote sustainable development by providing a possibility to prevent or reduce pollution to the largest extent, ensure competitiveness and economic efficiency. The concept for the transformation of the existing permitting system in the industrial sector is the most important element of the regulatory requirements that will form the basis of the main law on environmental permitting and of the respective by-

laws introducing the integrated permitting system based on general binding rules.

The report analyses the issues related to the existing permitting system in the Partner Countries. The systems currently in place in most countries are still based on the differentiated approach to environmental components coming from Soviet times. The systems are based on the “end-of-pipe” regulatory principle rather than on modern technological solutions, cleaner technology methods or environmental management.

The implementation of the new integrated permitting system will allegedly call for at least 10 years after the proper legislative base is formed. Different methods and resources required for the reform of the permitting system are presented in the report, such as the phase-in of the provisions of the EU Directives 2008/1/EC and 2010/75/EC taking into account the available financial, technological and administrative capacities of industries and state regulatory bodies. The report also indicates the need to establish information reference centers for best available technologies as a result of exchange of information among industries, scientific research institutes, consulting companies, educational, public institutions and other interested parties.

The report also examines the main legal and institutional requirements for the implementation of the integrated environmental permitting system and suggests priority actions.

What's beyond

- Regional workshop on IPPC and Permitting System, 14-15 May 2013, Odessa, Ukraine. Main objectives: provide and discuss a set of recommendations for environmental permitting reform in the ENPI East countries, share best experience in IPPC Directive implementation, environmental permitting and liability issues for industries and regulation of small and medium enterprises in EU Member States.
- The Regional Pilot Project on *Assessment and enforcement of national capacities for joining the Convention on Long-range Transboundary Air Pollution (CLRTAP) protocols and meeting corresponding commitments* will finalize the first phase consisting in the development of the road maps and possible scenarios for Armenia, Azerbaijan, Georgia and Moldova.
- The Regional Pilot Project on *Air pollution assessment system to estimate effects of urban planning and transportation* will start in May 2013. The project will involve all seven Partner Countries.
- In spring 2013 the official Air Quality Governance project webpage will be supplemented with a web forum for exchange of knowledge and information online for pre-registered users. The forum will also contain a panel for adding, archiving and posting files.

For more news and useful documents, visit our website : www.airgovernance.eu

For any comments or suggestions on our newsletter, please contact :

Mr. **Lubomyr Markevych**

lubomyr.markevych@airgovernance.org



This project is funded by the European Union

and implemented by a consortium led by MWH

The views expressed in this publication do not necessarily reflect the views of the European Commission