EU – China Environmental Governance Programme

Lot 1: Information Disclosure

Improving air quality information systems and communication and awareness tools in pilot cities of China to enhance public access to environmental information and environmental governance (AirINFORM)

Main Partner	Vlaamse Instelling voor technologisch Onderzoek N.V. (VITO) (Flemish Institute for Technological Research)
Partners	Beijing Antipollution Environmental Engineering Co. ● Chinese Academy for Environmental Planning ● DCMR Environmental Protection Agency Rijnmond ● Beijing LIBOVITO Environmental Technology Co. ●Urumqi City Environmental Monitoring Station ●Shanxi Academy for Environmental Planning ●Yangzhou Environmental Monitoring Central Station
Implementation Period	1 November 2012 – 31 October 2014
Location	China- Yangzhou City, Urumqi City, Taiyuan City
Project Website	http://www.airinform.com/

Project Background

In recent years there has been significant criticism from the scientific community and general public regarding that the Air Quality (AQ) reported by the Chinese government seems to be inconsistent with the actual situation. One of the underlying reasons is that the Chinese Ambient Air-Quality Standard (NAAQS) (GB3095-2012) which was revised just before the project started was over 10 years old and no longer sufficient to assess and reflect the current urban air pollution situation especially regarding complex secondary pollutants such as $PM_{2.5}$ and Ozone (O_3) that pose a significant health risk. Furthermore, the individual limits for some pollutants were set at higher concentration levels than in the US, which also contributed to misunderstandings. The new NAAQS also outlines a new Ambient Air Quality Index (AQI) (HJ633-2012 – on trial). Alongside this standard, in December 2012 just after the project started the "12th Five-Year Plan on Air Pollution Prevention and Control in Key Regions" was issued and during the project period, in 2013, the National Airborne Pollution Prevention and Control Action Plan (2013-2017) was released.

Main Activities/Objectives

The overall objective of AirINFORM was to improve AQ information systems and public awareness in three Chinese cities to enhance public access to environmental information.

Project Outcomes

Results and Impacts

Evaluation of the revised Chinese AQI (HJ633-2012, on trial): This component analysed not only how the AQI behaves technically but also how it works as a communication tool. It provides specific recommendations on how the Air Quality Index (AQI) can be improved from the communication and technical standpoints. The project also development an interactive online educative AQI comparison tool, helping people understand the various AQI's.

Establishment of a cost efficient air quality monitoring and short term forecast system (OPAQ): OPAQ is based on innovative EU developed statistical models, adapted with user friendly tools to suit the Chinese situation. This affordable, reliable, easy to use operational system does not rely on emission data but makes use of available measurement data to help city officials to build adequate air quality improvement policies and improve the quality of life of their citizens. It is running in Yangzhou, Jinan, Chengdu, Tianjin and Nantong with positive results.

Capacity building: The project shared information between the project partners and stakeholders, on air quality management practices in the EU and promoted technical exchanges with regard to all aspects of AQ assessment, forecasting and planning

Raising public awareness: 1000 air quality questionnaires were distributed; 3 short air quality information animation films were produced; numerous articles were published in the local newspapers, and several broadcasts were made by Yangzhou TV News covering the AirINFORM OPAQ forecasting system. The public were also invited to the environmental monitoring centre facilities of the pilot cities.
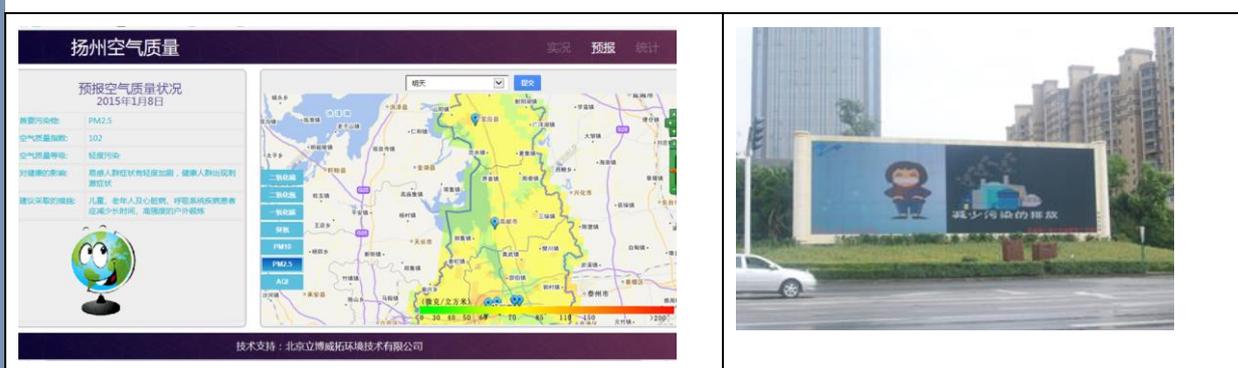
Policy Recommendations

Air Quality Communication for Public Dissemination

- Communication should be an integral and effective part of air quality management.

- The government should 'market' its information professionally engaging (where necessary) communication specialists.

- NGO's and the private sector need to be encouraged to contribute to the development of an active civil society where public participation and the disclosure of information is more open.

Technical Regulation on Ambient AQI (HJ633-2012- on trial):

- The use of the same grid for the hourly and daily PM currently occasionally leads to very high AQI values which are not correct and unnecessarily disturbing. This should be remedied.

- The suggested advisory messages should be reviewed as they are currently related to short term risk communication. The Chinese AQ is not yet good enough for this communication strategy.

Use of Air Quality Models to Support

(1) Implementation of AQ Monitoring and Warning Systems at Local Level

- National government should provide more support (e.g. training, provision of reliable data) and guidance to local EPB's in understanding and implementation of complex air quality information systems.

- A platform (on air quality monitoring & modelling) for exchanging experiences and information on national and provincial level should be established.

- AQ models should be selected based on the fit-for-purpose criteria. Simple statistical models maybe a more reliable, cost efficient option in contrast to complex deterministic air quality models

(2) Implementation of Action Plans aimed at Reducing Air Pollution

- Capacity building and acquisition of scenario modelling tools, reliable emission data (for now and future projections) and data on cost of emission reduction strategies are needed

Key publications

Air Quality Communication with special reference to the AQI, Task 2.2 Parts I, II & III AirINFORM Policy Recommendations

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