

IMPROVING AIR QUALITY IN THE DANUBE AND SE EUROPE

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INTRODUCTION From 2013 to 2018, the JRC provided scientific support to policies at the macro-regional level. The emphasis was first on the EU Strategy for the Danube Region (EUSDR) and later on was extended to other macro-regions (EUSAIR and EUSALP). The Danube Air Nexus flag project of this initiative focused on air quality and its interactions with energy, transport and climate policies.



Ex-ante assessment of air quality in EUSALP and EUSAIR macro-regions

> Towards a coordinated science-based approach

ANALYSIS

- Survey to fill information gaps
- Use of emission inventories, measurements and models to identify main causes of air pollution
- Scenario and impact analysis for specific sectors (e.g. transport)
- Identification of critical topics and inconsistencies **IMPORTANT ISSUE**: use of wood as fuel in heating systems is promoted as renewable source however it strongly impacts on air quality.

use of biomass burning in stoves and fireplaces.

Breathing

Together

NETWORKING

- Close collaboration with the EUSDR Priority Areas 6 to improve Air Quality
- Under this PA was created the Task Force on Air Quality (TFAQ) involving:
 - experts in the fields of air quality, bioenergy, health, transport,

- authorities at different levels TFAQ INSTITUTIONS

- Bavarian Ministry for **Environment and Consumer** Protection (DE)*
- Ministry of the Environment (HR)*
- **Environmental Protection** Agency (MNE)
- Helmholtz Zentrum Muenchen (DE)
- State Institution for Public Health (UKR)
- National Institute of Meteorology and Hydrology (BG)
- Republic Hydrometeorological Service (BIH)
- Vinca Institute of Nuclear Sciences (SRB)
- **Institute of Chemical Process** fundamentals (CZ)
- **Institute for Optoelectronics** (RO)
- Institute of Public Health (HR)
- Energy Agency of Plovdiv (BG)
- * EUSDR PA6 coordinators

OUTCOME

- The TFAQ has contributed to the EUSDR objective of improving air quality in the Danube region.

a) carried out pilot air quality measurement campaigns using verified sensors and modern ICT

b) raised the awareness of local authorities, schools, NGOs and public by

involving them in the campaigns

ACTION

- Dissemination of the project findings by means of reports oriented to policy makers

- Implementation of training, workshops and symposia to rise awareness and develop skills on this issue

Development of project concept for action in the area of bioenergy with particular reference to the

- Drafting lists with suggested specific actions to be taken at different policy levels

- The project CONSPIRO, (Danube Strategic Project Fund) lead by SCIENCE IN ltd., has:

- The project recommendations have been taken into consideration for the development of air quality plans in the area.
- The TFAQ has promoted the involvement of experts and authorities in European air quality networks (e.g. FAIRMODE).
 - A validated protocol for citizen air pollution assessment using low cost sensors and mobile devices was developed









The formula adopted in this initiative based on scientific data analysis and networking of relevant actors to support pilot actions has demonstrated to be effective and it is planned to extend it to the accessing countries of the Western Balkans. The know-how developed for the pilot CONSPIRO monitoring campaign is ready for application at a larger scale.









