ACEPT-AIR

LIFE+ 09 ENV/GR/000289

Action 12

Deliverable D31.

TITLE: Publication of After-Life Communication plan

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Coordinated by: University of Thessaly

EXECUTIVE SUMMARY

An After-Life communication & continuation plan was developed in the framework of LIFE09 ENV/GR/000289 project "Development of A Cost Efficient Policy Tool for reduction of Particulate Matter in AIR (ACEPT-AIR)", with the aim of securing the exploitation of the project outcome after its completion and further promoting its objectives.

ΠΕΡΙΛΗΨΗ

Στα πλαίσια της υλοποίησης του έργου LIFE09 ENV/GR/000289 "Ανάπτυξη ενός Εργαλείου άσκησης αποτελεσματικών πολιτικών για τη μείωση των αιωρούμενων σωματιδίων στον αέρα (ACEPT-AIR)", αναπτύχθηκε ένα Σχέδιο Επικοινωνίας και Συνέχειας, με σκοπό την διασφάλιση της συνεχόμενης χρήσης των αποτελεσμάτων του έργου και μετά το πέρας της υλοποίησής του και την περαιτέρω προώθηση των βασικών στόχων και επιδιώξεών του.

DESCRIPTION OF ACEPT-AIR PROJECT

ACEPT-AIR project aims to **provide the National Authorities at Central, Regional and Local level with the means to control $PM_{2.5}$ and PM_{10} concentrations** in the ambient atmosphere.

During the last decades toxicological and epidemiological data have provided evidence on the significant **detrimental effects** of particulate matter (PM) on **human health**. Despite EU mitigation policies and air quality legislation setting limit values for exposure to PM, pollution from particulate matter remains a major environmental problem in several countries in the EU. Urban areas and some industrial regions in Greece are among those in the EU with a high number of limit values **exceedances** in PM_{10} ambient concentrations.

Air quality in Greece is affected by both the diverse **anthropogenic and natural emission sources**, as well as the Mediterranean climatology which promotes generation and accumulation of air pollutants. The strong solar radiation during most of the year enhances photochemical activity in the atmosphere resulting in secondary generation of pollutants. In addition, the dry Mediterranean climate leads to increased dust resuspension while low rates of rainfall further drive to enhanced airborne particle concentrations. Several problems inhibit policy makers from arriving at concrete conclusions on measures targeting those emission sources responsible for the high concentrations observed at polluted areas. In order to implement effective mitigation measures targeted to specific emission sources, source apportionment of PM concentrations is needed. Knowledge on the **main PM emission sources** and quantitative information on their contributions provide the means to prioritize on control measures and develop more cost-effective environmental strategies.

The **main objectives** of ACEPT-AIR project are:

1. To unravel the relative contribution of the multiple anthropogenic and natural sources to the observed PM air concentrations;
2. To document the relative contribution of secondary aerosol particles in relation to those from primary emissions;
3. To combine all available data on a versatile Environment Policy Tool that may assist relevant authorities to develop cost-effective mitigation strategies for the control of particulate pollution in Greece.

The project has been implemented in three urban areas in Greece: **Athens**, the capital of Greece, **Thessaloniki**, the second larger city in the country and **Volos**, a medium sized city characterized by intense anthropogenic activities (such as a harbour for commercial and passenger vessels and industrial units in close vicinity to the city) and a topography that inhibits dilution and diffusion or air pollutants.

The key **deliverables** and **output** of ACEPT-AIR project are:

- ✓ A database of PM_{10} and $PM_{2.5}$ concentrations and detailed chemical characterization for three urban areas in Greece (Athens, Thessaloniki and Volos);
- ✓ Identification of major PM emission sources and quantification of their contribution to ambient concentrations of PM_{10} and $PM_{2.5}$ at the three cities by receptor modelling;
- ✓ Emission inventories for anthropogenic and natural sources for the years 2000-2013 at the three cities and future projections;
- ✓ ACEPT-AIR Policy Tool, a public software that relates source contribution (from receptor modelling and emission inventories) with ambient PM concentrations and estimates changes in PM levels due to increases or decreases in the emissions of specific sources;
- ✓ Characterization of current situation of ambient air quality in the three areas and assessment of possible decreases in PM levels based on specific emission control scenarios;
- ✓ A set of guidelines for effective formulation of Action Plans for the three studied areas, based on the data collected and the application of ACEPT-AIR Policy Tool;
- ✓ Transfer of experience gained to national, regional and local authorities and training on the use of ACEPT-AIR Policy Tool.

ACEPT-AIR Policy Tool is an **innovative software** that relates PM concentrations with emission strengths and provides estimates of changes in PM concentrations based on emission scenarios. The Tool may be **applied to other regions as well**. The software is provided free of charge to interested end users and is easy to use, which may be drivers for its more extensive application in the future. The Policy Tool may be also useful also to private companies for the assessment of effectiveness of new technological solution on emission control with respect to ambient PM concentration levels.

Environmental benefits: The general objectives of ACEPT-AIR project are in line with the requirements of **Directive 2008/50/EC** for formulation of air quality plans and reductions of PM concentration levels, as well as **WHO** Guidelines on ambient PM concentrations and the protection of public health. The project can improve the effectiveness of National, Regional and Local policies on ambient air quality by providing the means to prioritize emission control measures and take informed decisions based quantified PM reductions.

COMMUNICATION STRATEGY

A comprehensive dissemination plan was developed in the framework of ACEPT-AIR project with the aim to **convey the key aspirations and results** of the project and **raise awareness** towards particulate air pollution and emissions control.

The **target audience** included policy makers, professional groups, general population groups, as well as the scientific community, given that all the above play or have the potential to play a major role in air quality management.

The **dissemination activities** realized during the project implementation included:

- ✓ Organization of an International Conference and an Open Forum dedicated to policy makers, NGOs and stakeholders from the public and private sector;
- ✓ The ACEPT-AIR website, containing details on project objectives, actions and key results and outcome;
- ✓ Training of 110 secondary education teachers through the organization of seminars on air pollution at the three cities;
- ✓ A Layman's report on actions, tools, effects and long term benefits from the project;
- ✓ Production of information material for the general public: Notice boards at the three studied areas, 3 leaflets, 1 brochure and 1 DVD publicizing the project objectives and results;
- ✓ Press releases and articles in the national and local press;
- ✓ 5 publications in international scientific journals and 19 presentations in national on international conferences;

Photos from the Open Forum held in Volos on 3/4/2014 (left) and the Seminar for Secondary education teachers held in Thessaloniki on 16/12/2013 (right).

AFTER-LIFE COMMUNICATION & CONTINUATION PLAN

The After-Life communication & continuation plan aspires to ensure the sustainability of the project outcome and further promote its objectives. Its main aspects are:

- ✓ A **modified project website** including key strategies and experience gained through ACEPT-AIR project. The website will be operating for a minimum of 5 years. A link to the modified ACEPT-AIR website from the Coalition of 21 Local Authorities of North and East Athens webpage has been created, further enhancing the visibility of ACEPT-AIR key messages.

- ✓ Submission of **new proposals** for the continuous funding of NCSR "D" and AUTH research groups in an effort to produce updated source apportionment results in the future. NCSR "D" and AUTH are already collaborating in the framework of other projects and initiatives such as FAIRMODE and have submitted together new research proposals. NCSR "D" is participating in a new LIFE project, AIRUSE, which will provide information on the contribution of natural sources to PM concentration levels in Athens. Source apportionment on new datasets will be also performed. AIRUSE outcome is expected to be very useful with respect to changes in emissions sources and relevant strengths during the beginning of the financial crisis in Greece (ACEPT-AIR campaigns) and the years to follow. All the available results from AIRUSE or other future projects will be used to update the Policy Tool databases and will be made available to the relevant national, regional and local authorities.

- ✓ AXON and TUC have committed to **updating the emission inventories** of the Policy Tool whenever they have new available data.

- ✓ A **technical support desk** has been created for ACEPT-AIR Tool users. Two members of NCSR "D" team (S. Vratolis, permanent staff of NCSR "D" and E. Diapouli) have been assigned to run the help desk which will be maintained for a minimum of 5 years. All stakeholders involved have been given the relevant contact information.

- ✓ ACEPT-AIR Policy Tool manual has been published in the project modified website in order to attract **additional end users**. A contact link to NCSR "D" is included in case there is an interest to obtain the Policy Tool.

- ✓ Demonstration of ACEPT-AIR Policy Tool and the project results by the Project Manager or other ACEPT-AIR team members in workshops, conferences etc. **Enhanced visibility** of the project objectives and outcome may attract new users as well as new collaborations that will assist towards the continuation of work done in the framework of ACEPT-AIR and the production of new data.

A **draft budget** of the After-Life Plan is presented below:

Draft budget of the After-Life communication & continuation plan

After Life Communication Plan actions	Type of activity	Resources	Annual Cost	Source of funding
Dissemination	Website	Infrastructure	None	Internal resources (Own server)
Dissemination	Participation in workshops and open days	Travel costs	500 €	External projects and services
Operation and Development	Database update	Personnel man months	1000 € (1 Man month)	Current and future projects
Operation and Development	Secretariat for the Support desk	Personnel man months	6000 € (6 Man months)	Current and future projects
Operation and Development	Technical support desk	Personnel man months	None (6 Man months)	Permanent INRASTES staff member
Total			**7500 €**	