TEMPLATE

Output factsheet: Pilot actions

Version 1

Project index number and acronym	CE1226 AWAIR
Lead partner	Arpae – Regional Agency for Prevention, Environment and Energy of Emilia-Romagna
Output number and title	O.T2.3. – Tools for population/stakeholder alert in case of SAPEs
Responsible partner (PP name and number)	PP7 – Municipality of Zugló
Project website	https://www.interregcentral.eu/Content.Node/AWAIR/AWAIR.html
Delivery date	04.04.2021

Summary description of the pilot action explaining its experimental nature and demonstration character

There are twelve automatic immission monitoring stations in Budapest and five others in the FUA: Tököl, Vác, Százhalombatta. In AWAIR program we ordered one month air pollution monitoring for two locations in Zugló. Zugló developed an own site for inform the public about the air quality: https://levego.zuglo.hu Here citizens can use an interactive data query modul to be informed about the recent situation and can get forecasts for the next days with colour codes and clear evaluation. The application developed by the AWAIR program also publishes the forecasting data and gives warnings and suggest tips for a proper lifestyle in case of SAPEs.
We focus on the PM10 values, because the most of the SAPE situations develop in consequence of high aerosol concentrations. Unfortunately in Hungary there is no legal daily threshold for PM2,5. In the communication we can refer to the WHO references only.
Hungarian Meteorologial Service (OMSZ) run the forecasting system in Budapest, based on the emission of primer pollutants (CHIMERE air chemical model). They calculate the concentration of four pollutants (PM10, NO2, SO2) every early morning for the next 48 hours and show on a map how the air quality will look like in different points of the city. In AWAIR project we ordered forecasting data for a location of Zugló (Bosnyák square) where unfortunately there is no monitoring station.
Our platform of municipalities has highlighted many weaknesses in the data publicity, the decision support and the regulation of SAPE situations and we published many policy recommendations.

NUTS region(s) concerned by the pilot action (relevant NUTS level)

Budapest and FUA (NUTS01)

Expected impact and benefits of the pilot action for the concerned territory and target groups

The correct communication of the daily air pollution situation is fundamental for the actions in the SAPE situations. Publishing the forecast data every morning can sensitize and orientate the citizens to change their daily habits and activities. This is high priority for the sensitive groups of the population: people with chronical diseases, elderly people, pregnant women, pupils in kindergardens, etc. The awareness of the air pollution problems must be grown, citizens have to learn about the polluters and the health consequences of pollution and the opportunities to avoid the problems.
The collaboration of autorithies, municipalities, state departments and civil organizations will deepen and as result of the common efforts the regulation of smog alert will change, the immission monitoring and the forecasting system will develop, new efficient actions will take effect in prevention of SAPE's.

Sustainability of the pilot action results and transferability to other territories and stakeholders

The efforts of AWAIR project has highlighted many weaknesses of the data publicity, the awareness of the problem, the unefficiencies of legislations and coordination. In the last month we organized many meetings, workshops, trainings about the air pollution problems and the importance of SAPE situations. Our efforts were partially successful, the citizens are more sensitive of the air quality issues, and many things has happened in the state level. The state owned public website is going to updated very soon. The municipality of Budapest is taking over the coordination of the air pollution platform from Zugló, and is willing to continue the legislation efforts and has started to change the policy of the actions in SAPE situation.

Lessons learned from the implementation of the pilot action and added value of transnational cooperation

Municipality of Zugló ordered an assessments about the model performance from the Hungarian Meteorological Service. They calculated 6 statistical indicators and report in every 3 months. According to the report of the last 6 months, the CHIMERE model tends to underestimate in case of PM10 and NO2 forecasting and overestimate in case of the O3 prediction. The reason might be the unproper emission database. We has started the renew the database of the line emitters (car traffic) and the diffuse emitters (residental heating). We also need a sensitive model which can be used in small cases for estimation of impact of any kind of measures or actions.

References to relevant deliverables and web-links
If applicable, pictures or images to be provided as annex

website of Zugló about air quality and forecasting: https://levego.zuglo.hu/
official site of the state: http://levegominoseg.hu/automata-merohalozat
forecasting of OMSZ:
https://www.met.hu/levegokornyezet/varosi_legszennyezettseg/elorejelzes/budapest/pm10/

The relevant reference deliverables are:

- Deliverable D.T2.2.4 “Forecasting system - Zugló”.
- Decision Support System - Zugló
- Deliverable D.T2.2.7 “AWAIR-app - Documentation”.