



LIFE **Integrated Project** **Implementation** **of Air Quality Plan** **for Małopolska Region**

Małopolska in a healthy atmosphere

Air quality in Małopolska

Southern Poland is one of the most polluted regions in the European Union. Air quality in Małopolska is particularly bad during the heating season. Standards of concentration of particulates (PM10 and PM2.5) and benzo(a)pyrene are exceeded throughout the region. **The main cause of the air pollution problem is the low-stack emission - the emission coming from burning solid fuels in obsolete heating devices used in households.**

The Air Quality Plan for the Małopolska Region (MAQP) constitutes a strategy for improvement of air quality. Its main objective is a full implementation of the anti-smog resolutions in the region. The MAQP defines the tasks for local governments to eliminate old, inefficient solid fuel boilers and stoves and replace them with ecological heat sources.

In response to the identified barriers to the implementation of the Air Quality Plan and the needs of municipal governments, in 2016 the Małopolska Region launched **the LIFE Integrated Project "Implementation of Air Quality Plan for Małopolska Region - Małopolska in a healthy atmosphere"**.

Benzo(a)pyrene - extremely carcinogenic chemical compound

Target value of benzo(a)pyrene:

1 ng/m³
average annual
target value



Concentration of benzo(a)pyrene in Małopolska, 2018

Anti-smog resolutions



Anti-smog resolution for Krakow

A total ban on the use of solid fuels in Krakow since 1 September 2019

In January 2016, the Regional Assembly of the Małopolska Region adopted the so-called anti-smog resolution. It has introduced **a total ban on burning solid fuels** (coal and biomass) in boilers, stoves and fireplaces in Krakow from 1 September 2019.



Anti-smog resolution for Malopolska

- ✓ Replacement of all inefficient solid fuel boilers, stoves and fireplaces
- ✓ Ecodesign requirements for all newly installed boilers and fireplaces

In January 2017, the Regional Assembly of the Małopolska Region adopted another anti-smog resolution – **for the rest of Malopolska**. The resolution:



- ✓ bans the use of the **worst quality coal and wet wood**,
- ✓ allows to install new solid fuel boilers or local space heaters complying with at least **Ecodesign standard** (since 1 July 2017),
- ✓ obliges to replace all boilers not complying with at least class 3 (EN 303-5:2012) **until the end of 2022** and boilers of class 3 and 4 **until the end of 2026**; boilers of class 5, that were used before July 2017, may be used up to the end of their service life.

The resolution came into force in July 2017.

LIFE Integrated Project

„Implementation of Air Quality Plan for Małopolska Region
–Małopolska in a healthy atmosphere”

2015-2023



Main objectives:

- ✓ Full implementation of the Air Quality Plan what will result in pollution reduction to permissible levels
- ✓ Effective use of available EU and national funds aimed at improving air quality

The LIFE-IP MAŁOPOLSKA is coordinated by the Małopolska Region and engages a total of **69 partners**. Its main goal is to implement the *Air Quality Plan for the Małopolska Region*. The project will be implemented in the years 2015-2023. **The value of the project is around €17 million (PLN 70 million), of which the EU co-financing is €10 million (PLN 42 million).**




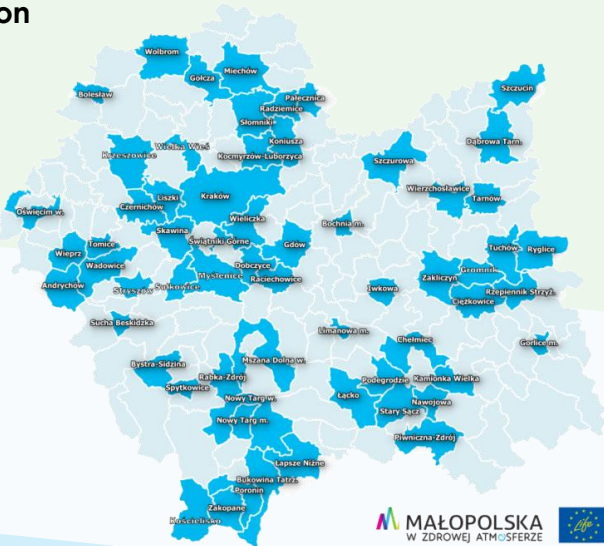
Partners:

- ✓ 62 municipalities,
- ✓ Silesian Region
- ✓ Krakow Smog Alert (NGO)
- ✓ The Polish National Energy Conservation Agency
- ✓ International Partners:
Ministry of the Environment of the Czech Republic,
Slovak Hydrometeorological Institute, VITO Institute (Belgium)



The Project actions

- ✓ Network of **Eco-managers** responsible for implementation of the Air Quality Plan at the municipal level
 - ✓ Support of the **implementation of the anti-smog resolution** in Krakow (replacement of solid fuel boilers)
 - ✓ Regional **Excellence Centre** providing training and knowledge base for local authorities and Eco-managers
 - ✓ **Information and education campaigns** at the regional and local level
 - ✓ **High-resolution modelling** of pollution dispersion for Krakow and variant analysis of possible measures targeting traffic emissions
 - ✓ **An international air-pollution modeling system** for Małopolska, Silesia, the Czech Republic and Slovakia
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Network of Eco-managers

Residents of **62 municipalities in Małopolska** can rely on professional support from a total of **69 Eco-managers** employed under the LIFE-IP MAŁOPOLSKA project. Their role is to provide support to residents in preparing applications for subsidies to replace obsolete heating sources, carry out educational actions, conduct inspections of furnaces and examination of residential buildings with the use of thermovision camera. They also organise local meetings and workshops for children and adults. Eco-managers are involved in creating the local air protection strategy.



Help with obtaining subsidies



Education and information campaigns



Inspections of furnaces



Advice on ecological investments



Help for people suffering from energy poverty



Meetings and workshops for residents

Eco-managers in the field

ADVISE FOR RESIDENTS



Eco-managers actively support the residents in obtaining funds for the replacement of old heating devices. The assistance includes both advising on the selection of a new heat source, as well as help with an application for funding. Residents receive comprehensive information on available subsidy programmes.

The task of the Eco-managers is to implement information and promotion activities in the municipality. Using various information channels, they increase the awareness of the residents on the impact of air pollution on health, current anti-smog regulations and available sources of financing for pro-ecological investments.

EDUCATIONAL ACTIVITIES



INSPECTIONS OF FURNACES



The aim of the inspections is to prevent the burning of waste and plant residues, and to enforce the requirements arising from the anti-smog resolutions. Eco-managers provide information on the necessity to replace an obsolete heating device and the deadline for its replacement. In case of suspicion of burning illegal fuels or waste, an ash sample is taken from the furnace.

Eco-managers in the field

To reach as many residents as possible, the Eco-managers organise meetings for both older and younger residents. These activities are carried out both in the form of open meetings in municipal institutions and through workshops/lessons at schools. During the meetings the Eco-managers pass on the prepared information materials. They also try to convey them through churches, educational and health institutions, public institutions and of course the Internet.

MEETINGS & WORKSHOPS



IMPLEMENTATION OF THE ANTI-SMOG RESOLUTION IN KRAKOW



Due to the total ban on burning solid fuels in Krakow, it was necessary to engage additional human and technical resources as well as financial means to be able to liquidate all solid fuel devices. As part of the project, the City of Krakow has set up a special advisory point where residents can apply for funding.

Eco-managers prepare applications for co-financing of tasks related to air protection and energy efficiency, e.g. thermo-modernisation of public buildings, heat source replacement, installation of renewable energy sources, modernisation of street lighting, etc. Their activities facilitate more efficient use of available financial resources.

ADDITIONAL FUNDING







Effects of the Eco-managers' work

For each of the Project phases, the objectives related to the Project activities have been set. These tasks are also defined for Eco-managers working in the municipalities. Thanks to the reporting system, the effects of the Eco-managers work are monitored on an ongoing basis.


Effects of the Eco-managers' work in the period October 2016 – August 2021



435 998
participants of
organized events



783 004
advice given to
residents


111 658
children
participating in
workshops and
competitions


1 411 034
educational
materials
provided


5 415
thermal imaging
studies of
buildings


17 121
waste burning
inspections


23 365
supported
applications for
co-financing


72 mln zł
prepared
projects for co-
financing



Excellence Centre

The main objective of the **Excellence Centre** is to strengthen the implementation of the Air Quality Plan by **raising qualification of staff dealing with air protection issues at the local level**. Furthermore the Centre develops competence among other key stakeholders: regional and municipal decision makers (also beyond Małopolska), opinion making circles, etc. It functions within the Marshal Office of the Małopolska Region and provides ongoing support and training for Eco-Managers in all relevant fields identified in the Air Quality Plan.

Main tasks

- ✓ Trainings and workshops for all municipalities
- ✓ Supporting studies and analyses
- ✓ Organization of meetings and conferences
- ✓ Providing postgraduate studies in the field of air protection
- ✓ Education and information materials
- ✓ Regional information and education campaigns
- ✓ Providing tools supporting the implementation of the Air Quality Plan
- ✓ International cooperation in the field of air protection



Support for local governments



Postgraduate studies

2 editions of **postgraduate studies** in the field of air pollution and energy efficiency for **116 Eco-managers and municipal employees**.

Trainings on inspections of furnaces

2 editions of trainings on inspection procedures regarding illegal waste burning and requirements of the anti-smog resolutions with **almost 1000 participants** – municipal employees, the Police and Municipal/City Guards.



Ongoing trainings and workshops on various topics:

- ✓ operation of the inventory **database of heating sources**,
- ✓ available **subsidy programmes** co-financing replacement of outdated heating sources, thermal modernization and RES installations, e.g. STOP SMOG Programme, Clean Air Programme, My Electricity Programme,
- ✓ weekly **online meetings with experts** on the environment, climate, energy efficiency, law, etc.
- ✓ **legal changes** in the field of environmental protection.

Tools supporting the Air Quality Plan implementation



Eco-intervention

A mobile and web application allowing the residents of Małopolska to report cases of burning waste or prohibited fuels and using heating devices that do not comply with the anti-smog resolution. Notifications are forwarded via the application to the relevant authorities.



Regional inventory of heating sources

The first regional database in Poland which enables gathering data collected by municipalities on the heating sources used in households in Małopolska.



The list of low-emission heating devices

The list of heating devices available on the Project website includes solid fuel boilers and space heaters that meet the requirements of the anti-smog resolution for Małopolska.



Newsletter

Newsletter for residents which functions within the Project website. The information includes: current air quality, warnings about air pollution threats and news related to Project implementation.



Modelling tools

An application for high-resolution modelling of air pollution dispersion prepared for the needs of planning activities related to the reduction of traffic emissions in Krakow. It enables the analysis of scenarios of actions to reduce air pollutant emissions, including Low Emission Zone variants.

Awareness raising

One of the activities carried out by the Excellence Centre is the preparation of information and education materials, as well as conducting regional media campaigns related to air protection, available forms of financing or requirements of the anti-smog resolution. Campaigns are conducted using social media, billboards, radio and TV. **Information and educational activities contribute to the increase of the awareness of residents concerning air pollution.**

Education and information materials



Available for free on the Project website

Regional media campaigns



www.malopolska.pl/zmienpiec



„You kill with the smoke from the furnace.
Replace your furnace.”

„A thief lives in your home. The old
furnace steals your time, health and
money. Receive a subsidy. Get rid
of him before it's too late”

Inspired by the LIFE Project activities

Anti-smog resolutions in Poland



In 2016, the Małopolska Regional Assembly adopted an anti-smog resolution for Krakow. It was the first such resolution in Poland. Together with the resolution for Małopolska, it became an inspiration to introduce similar restrictions on the use of solid fuel appliances throughout Poland. **As of November 2021, regional anti-smog resolutions are in force in 14 out of 16 regions.**



List of green devices and materials

Based on the assumptions of the Małopolska list of devices complying with the requirements of the anti-smog resolution, **a ZUM list (green devices and materials)** was created at the national level. The list provides assistance to residents who are applicants to the national Clean Air Programme in selecting eligible equipment and materials. It is co-developed by producers.

Central Emission Register of Buildings



The provincial database of building heating sources has become an inspiration for the creation of **a national database**. Acquisition of data began throughout Poland on 1 July 2021 - it is a statutory obligation for residents to submit a declaration on the source of heat used.



LIFE Integrated Projects

The assumptions and experiences of the LIFE Małopolska project have been used in other LIFE Integrated Projects for air protection. **Twin projects** have been launched in Hungary, Bulgaria, Slovakia. Moreover, projects within the framework of which the network of Eco-managers is created, were also established in Poland - in Silesian and Opolskie regions.

More information about the LIFE IP Małopolska



<https://powietrze.malopolska.pl/en>



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