IMPROVING AIR QUALITY IN HUNGARY:

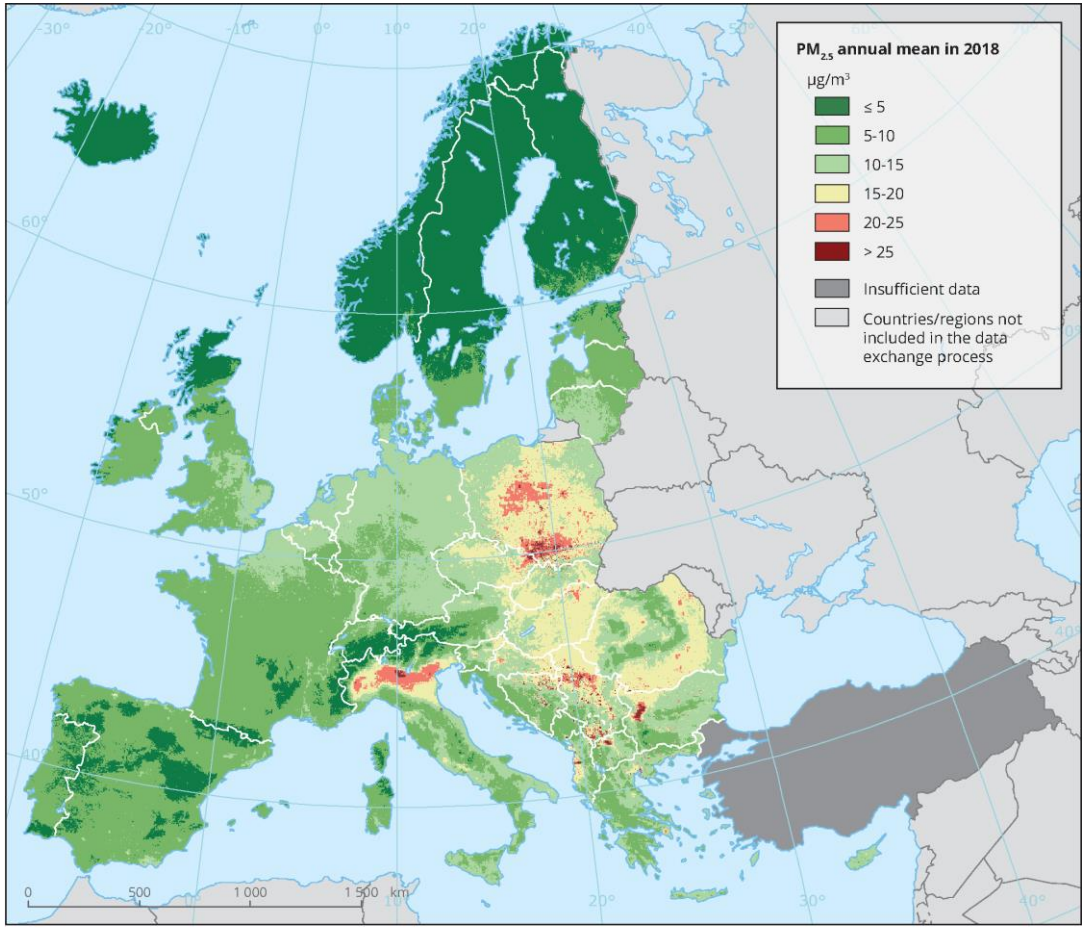
THE FIRST RESULTS OF THE LIFE IP HUNGAIRY

Dr. Tamás Szigeti, Herman Ottó Institute NLtd., Budapest, Hungary
on behalf of the LIFE IP HungAIRy

EFFECTIVE AIR QUALITY MANAGEMENT OBJECTIVES AND IMPLEMENTATION INSTRUMENTS

7 – 8 SEPTEMBER 2021, DIXON HOTEL, BANSKÁ BYSTRICA

AIR QUALITY IN HUNGARY



Reference data: ©ESRI | ©EuroGeographics

Court of Justice of the European Union
PRESS RELEASE No 12/21
Luxembourg, 3 February 2021

Press and Information

Judgment in Case C-637/18
Commission v Hungary (Exceedance of the limit values for PM_{10})

Hungary has infringed the rules of EU law on ambient air quality

It failed to fulfil its obligations to ensure throughout its territory, first, that the daily limit value for particulate matter PM_{10} was complied with and, second, that the period of exceedance of that value was kept as short as possible

Taking the view that Hungary failed to fulfil several of its obligations deriving from the Directive on air quality, [1] the Commission brought an action for failure to fulfil obligations against that Member State before the Court of Justice. Specifically, the Commission criticises Hungary for systematically and persistently exceeding the daily limit value for particulate matter PM_{10}, [2] first, from 1 January 2005 in the Budapest region and in the Sajó valley, and second, from 11 June 2011 (with the exception of 2014) in the Pécs region, doing so up to and including 2017 in the three zones concerned. In addition, the Commission asks the Court to find that there was a failure to fulfil obligations from 11 June 2010, in so far as Hungary failed to comply with its obligation to ensure that the period of exceedance of the limit value in question was kept as short as possible.

Consequently, the Court states that **Hungary manifestly failed to adopt in good time appropriate measures to ensure that the period of exceedance of the limit values for particulate matter PM_{10} was kept as short as possible in the zones concerned.** Thus, the exceedance of the daily limit value for **particulate matter** PM_{10} in those zones remained systematic and persistent for six and eight years, respectively.

In those circumstances, the Court **finds that Hungary failed to fulfil its obligations as regards both the exceedance of the daily limit value for particulate matter PM_{10} in the zones concerned and the breach of its obligation to ensure that the exceedance period was kept as short as possible.**

Sources: https://www.eea.europa.eu/data-and-maps/figures/pm2-5-annual-mean-in-2
https://curia.europa.eu/jcms/upload/docs/application/pdf/2021-02/cp210012en.pdf

ABOUT THE LIFE IP HUNGAIRY

AIM: Improving air quality at eight Hungarian regions through the implementation of air quality plan measures

Project duration: 01/01/2019 – 31/12/2026

Coordinating Beneficiary: Herman Ottó Institute Non-profit Ltd.

Associated Beneficiaries: 19 project partner

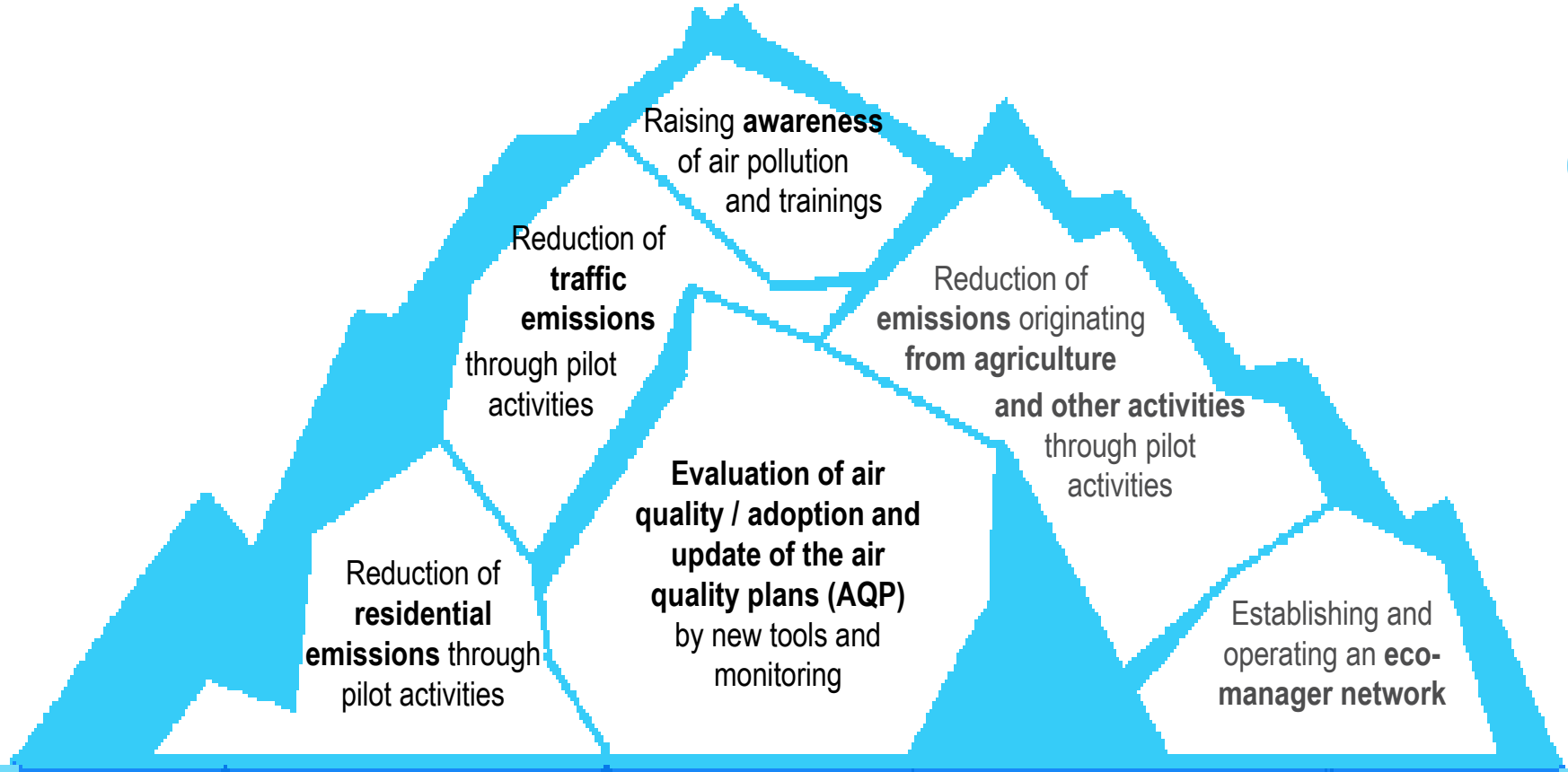
Hungarian Meteorological Service, VITO - Flemish Institute for Technological Research NV (BE), Association of Everyday Cultures, University of Miskolc,10 municipalities and their service companies: Békéscsaba, Budapest, Debrecen, Eger, Kaposvár, Karcag, Miskolc, Pécs, Szolnok, Tatabánya

Project budget: 15 967 741 €

Contribution of the European Union: 60%

PROJECT ACTIVITIES

HUNGAIRY



complementary actions

Networking, knowledge transfer, public policies

Monitoring of the social and economic impacts of the projects

Management

Cross-cutting activities

ECO-MANAGER NETWORK

- an Eco-manager Knowledge Centre (EKC) has been established
- an eco-manager office with 1-4 eco-managers per municipality/partner has started its operation
- professional, communication and management trainings have been organized to the eco-managers by the EKC
- eco-managers meet monthly to discuss different topics
- eco-managers report their activities quarterly to the leader of the EKC
- new AQPs have been prepared and published in collaboration with the local government offices

DEVELOPMENT OF A DECISION SUPPORTING TOOL FOR AQPS

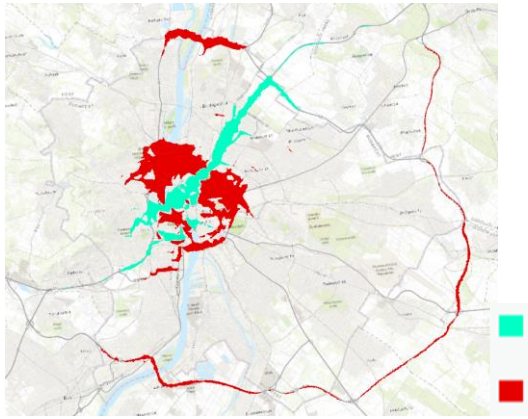
review and update of AQPs: biannually → AIM: integrate efficient actions in the AQPs

development of a **web application** that is used **to assess the impact of user-driven scenarios of actions**

development of local, **high resolution emission databases** (traffic, residential) as input for the air quality modelling

development of **the regional emission database** (downscaling procedure)

example: Effect of the closure of a bridge in Budapest on NO_2 concentration



PILOT ACTIVITIES – RESIDENTIAL EMISSIONS

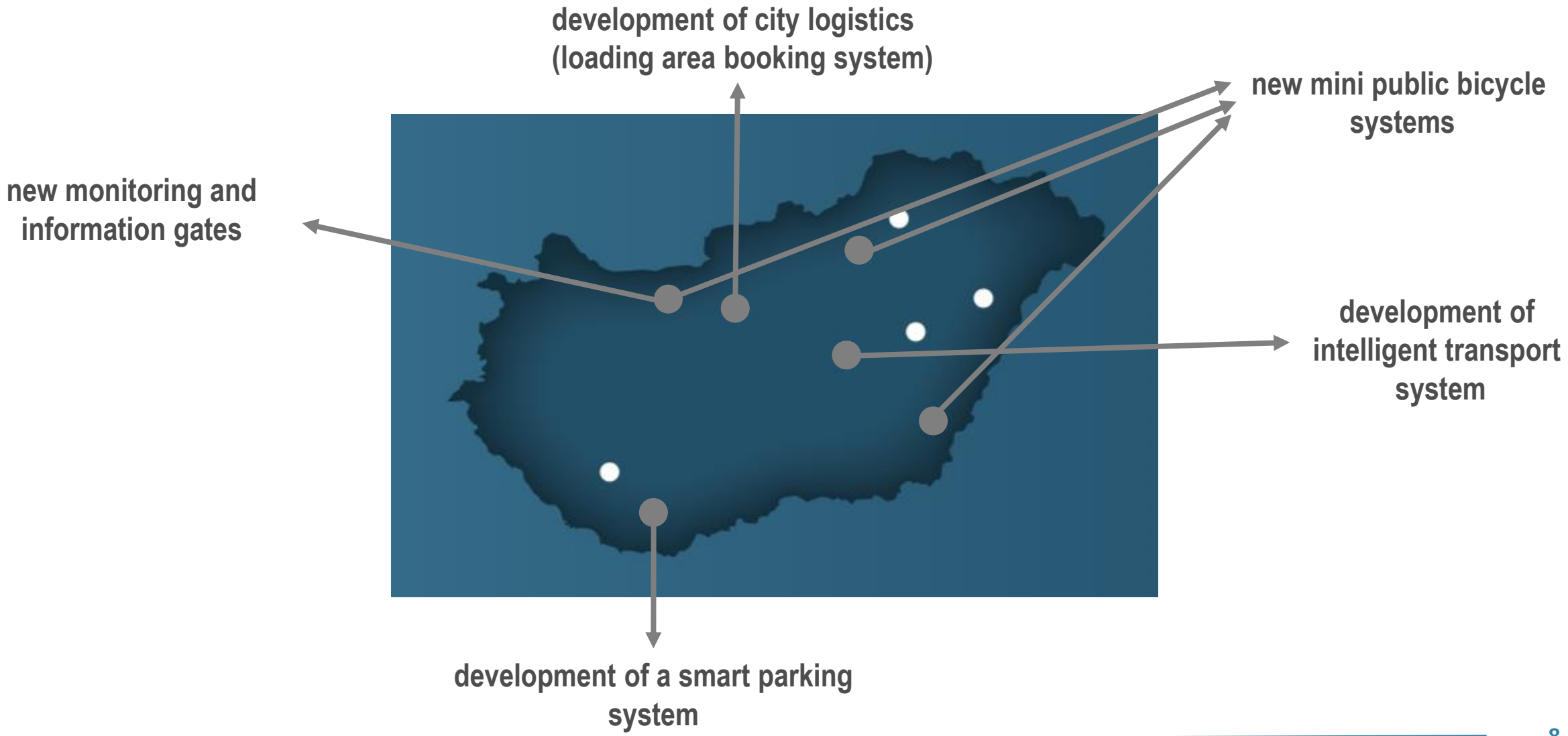
development and promotion
of district heating
(e.g. „chimney free" city center)

composting program,
regulation of burning
of garden waste

optimalization of the
woody biomass
supply chain
(at national level)

increasing energy efficiency
(online platform on energy renovation, indoor air quality monitoring)

PILOT ACTIVITIES – TRAFFIC EMISSIONS



PILOT ACTIVITIES (OTHER SECTORS) AND NEW TOOLS

real-time air quality monitoring

agricultural voluntary program (at national level)

development of green spaces (protective forest)

demonstration house

new air quality monitoring stations

preparation of green cadastre

COMMUNICATION, AWARENESS RAISING I.

Topics:

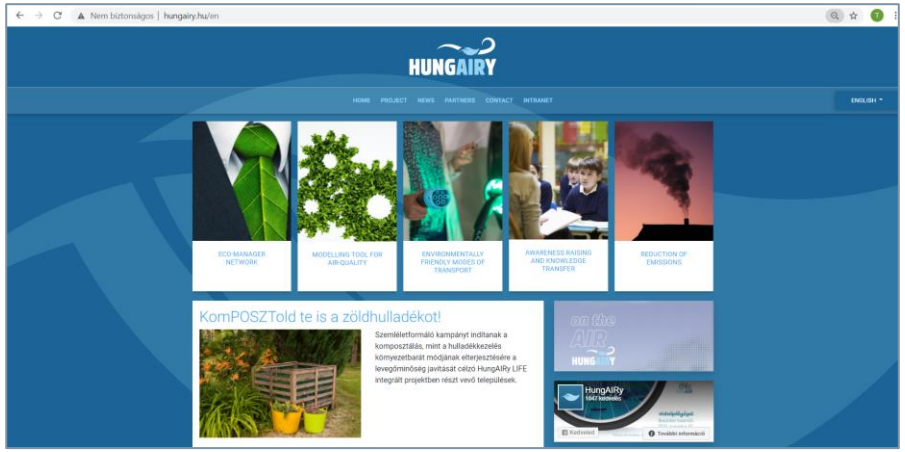
- environmentally friendly solid combustion
- composting, green waste management
- energy efficiency of households
- promoting cycling mobility
- eco-driving
- e-mobility

Materials (only in Hungarian so far):

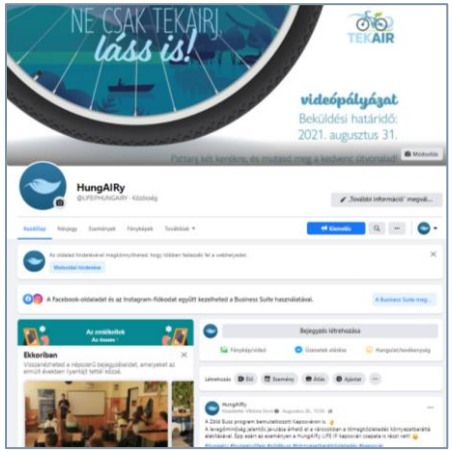
- poster
- roll-up
- video
- leaflet

COMMUNICATION, AWARENESS RAISING II.

Project website, social media:



> 14 000 unique visits



~ 1 100 followers

National awareness raising campaigns:

komPOSZTold

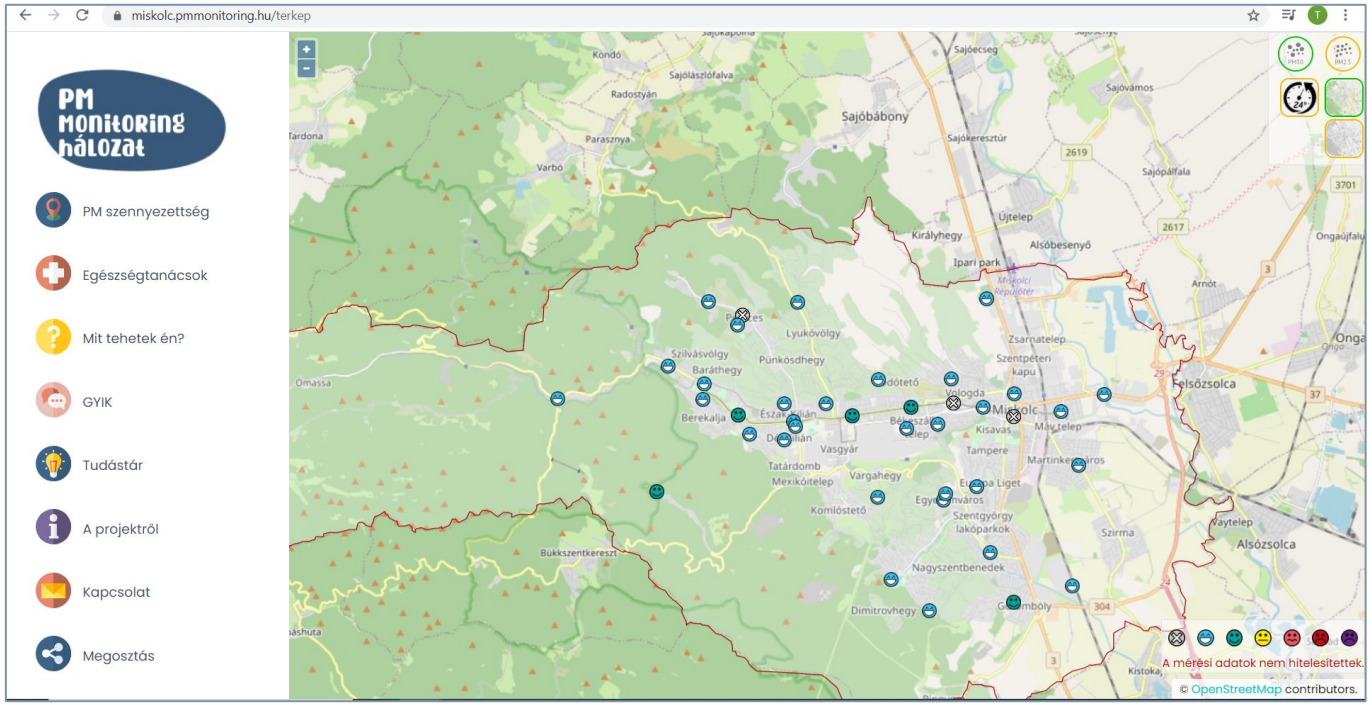
TEKAIR

Education, training:

Participation at national events (examples):

PM MONITORING NETWORK

- Low-cost sensors were tested and the one with the best performance was selected.
- Comparison of the monitoring data with those measured by reference instruments was carried out for more than 1 year.
- Each monitoring device was assembled and the test operation started in 2020.
- The installation of the network including 60 monitoring devices was completed in 2021 in Miskolc.
- The same network with 20 monitoring devices will be established in Kaposvár in 2022.



AGRICULTURAL VOLUNTARY PROGRAM

HUNGAIRY

Collection of good practices

- The focus is on low emission technologies
- Crop production and animal husbandry

Recruitment and training of volunteers

- Involvement of the Hungarian Chamber of Agriculture
- Two workshops were held in 2020
- More workshops are needed

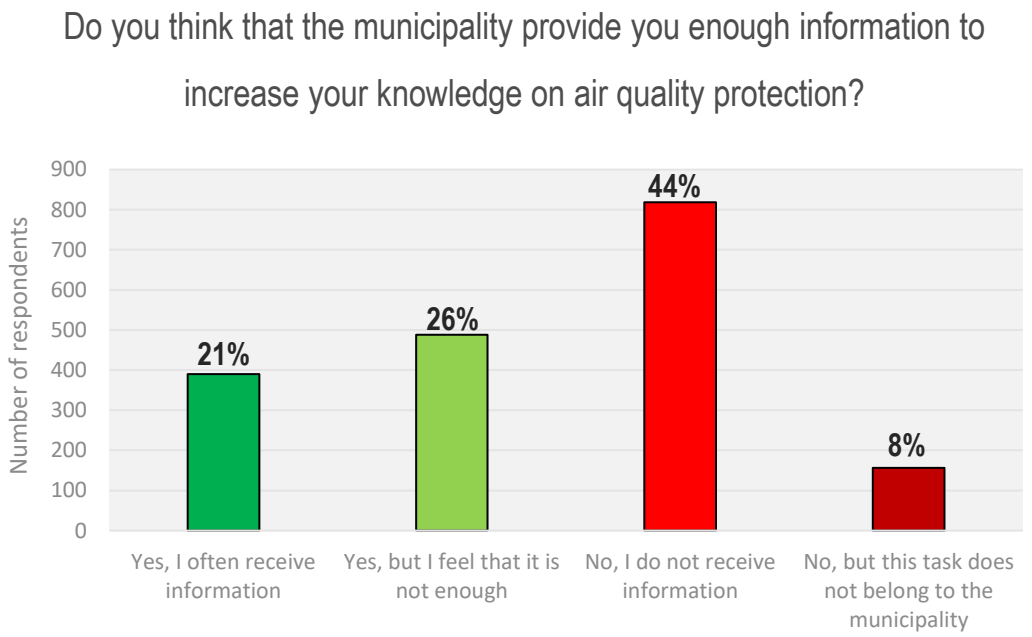
Voluntary program

- Application of good practices by the volunteers
- Monitoring of the program
- Revision of the collection of good practices

2019 → 2020 → 2021 → 2022 → …

MONITORING OF THE SOCIAL AND ECONOMIC IMPACTS

- Besides the air quality and the development of the eco-managers, the social and economic impact of the project activities are monitored.
- A non-representative questionnaire survey was performed in 2020 to determine the baseline.
- The questions raised the following topics:
  general issues related to air pollution, green waste management, heating and energy efficiency, environmentally friendly transport, characteristics of the living environment
- The survey will be repeated in 2022, 2024 and 2026 to assess the impacts.



COMPLEMENTARY ACTIONS

- Several actions must be taken at national, regional, and local levels to considerably reduce air pollution.
- One of the key activities of the eco-managers is to monitor the funding programs and open calls as well as to facilitate the development of proposals at local level.
- The eco-managers and the experts of the relevant authorities work closely together during the regular AQP revisions to, among others, ensure the smooth integration of the accepted proposals into the AQPs.
- All partners report the details of the complementary action to the coordinating beneficiary, and they identify together the future interactions between the LIFE IP HungAIRy and the complementary action.

Type of action/measure	Number of action/measure	Amount foreseen in the application & during the project duration (EUR)	Amount spent by Interim Report (EUR)
Increasing energy efficiency	176	472 739 697 EUR	236 229 660 EUR
Developments in the transport sector	41	316 717 958 EUR	201 218 433 EUR
Increasing or improving green surfaces	24	36 166 395 EUR	19 182 808 EUR
Awareness raising	3	109 603 EUR	12 490 EUR
Total	244	825 733 652 EUR	456 643 390 EUR

Comment: The table containing the details of the complementary actions was updated on 17th March 2021.

Thank you for your attention!

Dr. Tamás Szigeti
lead expert
Directorate for International Projects
Herman Ottó Institute NLtd.

www.hungairy.hu

szigeti.tamas@hoi.hu; hungairy@hoi.hu

+36 30 9084346

https://www.facebook.com/LIFEIPHUNGAIRY

https://www.instagram.com/hungairylifeip