

TRANSNATIONAL ADAPTION ACTIONS  
FOR INTEGRATED INDOOR AIR QUALITY MANAGEMENT



## WHO WE ARE

Partners from five Central European Programme countries join their forces to improve indoor air quality in primary and secondary schools.

5  
COUNTRIES

2  
HU

2  
IT

2  
PL

1  
CZ

2  
SI

9  
PROJECT PARTNERS

6  
PUBLIC AUTHORITIES

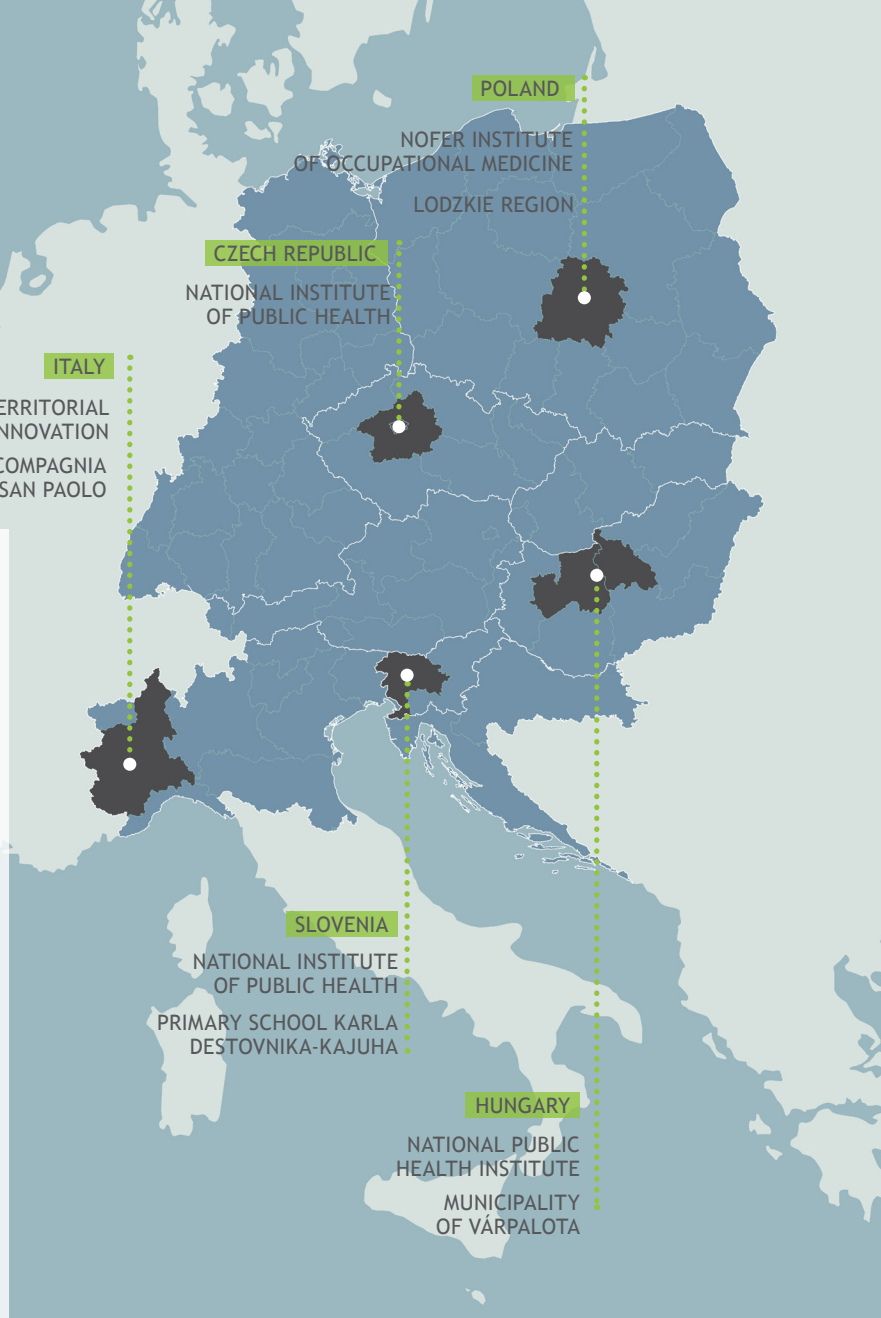
1  
SCHOOL

1  
HIGHER EDUCATION  
& RESEARCH CENTRE

1  
NETWORK  
GDO

7  
PUBLIC

2  
PRIVATE



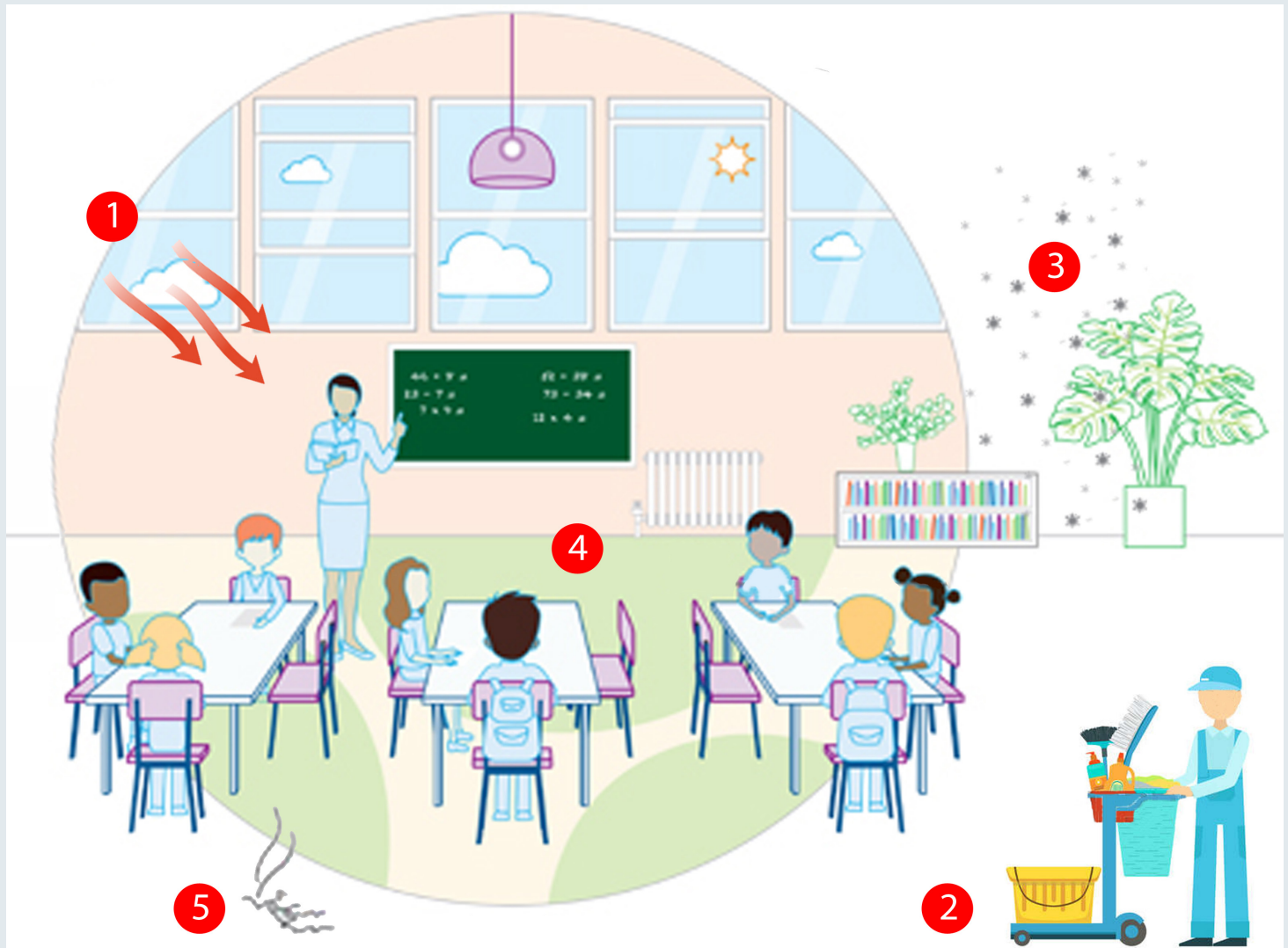
TAKING  
COOPERATION  
FORWARD

# WHAT WE DO:

Many Europeans spend up to 90% of their day indoors. In recent years, the threats posed by exposure to indoor air pollution have become more apparent at the global scale. The [InAirQ project](#) aims to describe the health impacts of indoor air quality on the vulnerable population and to take action to improve the indoor environment in schools in the Central Europe area.

An overview of possible indoor air pollutants:

- 1: Carbon monoxide, nitrogen dioxide, particulate (combustion gases from vehicles, etc.)
- 2: Chemicals (cleaning products, furnishings, etc.)
- 3: Pollens, powder, allergenes
- 4: Moisture
- 5: Radon gas



# ACTIVITIES OF SENSIBILIZATION, COMMUNICATION AND CAPACITY BUILDING

**Involvement and sensibilization activities** are planned during the whole project period.

Meeting with pupils and their families are organized by each state partner in the adhering school, in order to inform and describe the health impacts of the indoor air quality on the vulnerable population.

**Awareness campaigns events** in all Project Partners cities are organized in order to call attention on the importance of better quality of indoor environment in the schools. Social media campaigns are active and follow all the project phases.

Destined to school personnel, teachers, school managers, **capacity building meetings** will be organized, covering subjects as intervention measures for air pollution, use of indoor materials/equipments, maintenance and managers' responsibility.

A second phase of capacity building and sensibilization will be related to the application of the **Action Plans**, which will improve capacities of public actors in charge of planning, controlling and managing of educational institutions, related to the management of indoor air quality in schools.

The new and improved capacities which will be transferred by means of a joint training methodology will cover understanding and recognition of health effects, improvement of environment managerial skills and application of sustainable and innovative technical solutions during the construction of new schools and modernisation of older ones.



# ENVIRONMENT QUALITY FORUM

One of the activities of the project is the organization of the **Transnational Environment Quality Forum**.

Periodically each state partner organizes an event dedicated to the dissemination of air quality data and information, as well as updates on the results of the InAirQ project; it also assists stakeholders to implement indoor air quality improvement protocols.

The first round of EQFs took place in February/March 2017, and the second in June/July 2017, organized and hosted by each partner. For each event, stakeholders were present, including school representatives institutional bodies, research institutes, environment agencies.



Lodz, Poland



Turin, Italy



Prague, Czech Republic



Ljubljana, Slovenia



Budapest, Hungary

# AIR QUALITY MONITORING AND ASSESSMENT OF CHILDREN'S HEALTH AND WELL-BEING

In order to shape an actual strategy for the improvement of indoor air quality of the classrooms, several activities are carried out.

## MONITORING CAMPAIGN

The monitoring of the concentration of several air pollutants and physical parameters in school buildings and outdoors on each partner state's territory is essential to fulfill the project's goals, in order to exhibit evidence issues and propose action plans.

Twelve school buildings per country partner, representative of the building stock of the country in terms of typology, construction technology and age have been chosen. Through a questionnaire/checklist study, each project partner collected detailed information about each school building. Then a proper classroom for each school has been selected for measurements in order to collect data on physical factors (E.g. ventilation, temperature, relative humidity) and the concentration of air pollutants (e.g. volatile organic

compounds, particulate matter, carbon dioxide).

Actual **indoor air quality measurements** according to the protocol are performed between October 2017 and March 2018 in each of the selected school.

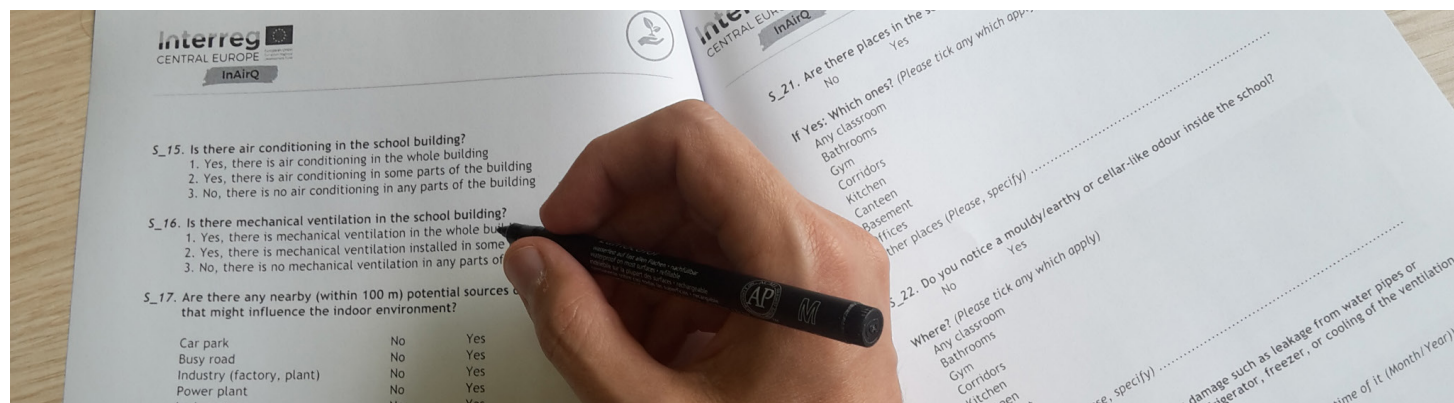
The aforementioned measurements will be matched by environmental monitoring (outdoor) for each indoor measurement series.

## A SURVEY OF THE CHILDREN'S HEALTH

Survey of the occurrence of health symptoms in pupils/students in each class involved in the project has been conducted through a questionnaire study submitted to their parents.

## EFFECTIVENESS OF THE ACTION PLANS

The data gathered are used to plan a series of action for the improvement of Indoor Air Quality in schools. A second monitoring campaign is being performed in the season 2018/2019 in order to verify the effectiveness of the action plan.



# THE TRANSNATIONAL STRATEGY AND THE ACTION PLANS

The core activity of InAirQ project is the development of a **Joint Transnational Strategy** aimed at the planning of actions for the improvement of Indoor Air Quality in schools.

Once the air quality monitoring campaign and the analysis are completed, the Transnational Strategy is being elaborated, in order to set up an Action Plan and related actions for each partner country.

The strategy and related action plans contain:

- an exploration of local and regional problems related to indoor air pollutants in schools;
- legal and policy options of local/regional authorities;

- group of target stakeholders to be involved in the implementation of Action Plans;
- environmental and health surveillance methods;
- a set of integrated tools and actions developed to monitor and mitigate indoor air quality effects;
- capacity building training on implementing action plan.

The joint strategy and action plans are tested and applied under the coordination of different groups of stakeholders including local governments, association and national/regional/local authorities which are responsible for management of schools.



The InAirQ workgroup

National Public Health  
Institute



Lodzkie Region



National Institute of  
Public Health



Municipality of Várpalota



National Institute  
of Public Health



Higher Institute on  
Territorial Systems  
for Innovation



Nofer Institute of  
Occupational Medicine



Primary School Karla  
Destovnika-Kajuha



School Foundation  
Compagnia  
di San Paolo



## INFO & CONTACTS

[www.interreg-central.eu/inairq](http://www.interreg-central.eu/inairq)

Official page where to find information about the aim of the project, the partners involved, development and outcomes.

✉ [inairqproject@gmail.com](mailto:inairqproject@gmail.com)

f [www.facebook.com/CEInAirQ](http://www.facebook.com/CEInAirQ)

in [www.linkedin.com/groups/12011630](http://www.linkedin.com/groups/12011630)

🐦 [@inairqproject](https://twitter.com/inairqproject)

Dr. Tamás Szigeti

NPHI - National Public Health Institute

Lead Partner

✉ [tamas.szigeti@oki.antsz.hu](mailto:tamas.szigeti@oki.antsz.hu)

Dr. István Ferencsik

NPHI - National Public Health Institute

Project Manager

✉ [dr.ferencsik.istvan@planidea.hu](mailto:dr.ferencsik.istvan@planidea.hu)

Arianna Dongiovanni

SiTI - Higher Institute on Territorial Systems for Innovation

Communication Responsible Partner

✉ [inairqproject@gmail.com](mailto:inairqproject@gmail.com)