



**“Air quality information  
management, behaviour change and  
communication services”**

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# About the Project?

- ⇒ A project supported by the Millennium Foundation Kosovo (MFK) and financed by the Millennium Challenge Corporation;
- ⇒ Aims to help the Kosovo Environmental Protection Agency (KEPA) and National Institute of Public Health (NIPH);
- ⇒ Collect and disseminate information on air quality;
- ⇒ Improving the public availability and analytical use of air quality data by businesses, the Government, Civil Society & NGOs;
- ⇒ Promoting data-driven decision-making;
- ⇒ Informing the general public on the relationship between air pollution and health.



# Tools and materials of the project

- ⇒ Air Quality Symbols;
- ⇒ Air Quality Portal;
- ⇒ Air Quality Mobile Application;
- ⇒ Air Quality Brochure;
- ⇒ Air Quality Poster;
- ⇒ Air Quality Infographics;
- ⇒ Air Quality Factsheets for Sensitive Groups;
- ⇒ Air Quality Information Days;
- ⇒ Air Quality Newsletters.



# Air Quality Symbols

- ⇒ 6 different symbols;
- ⇒ 6 different colours;
- ⇒ 6 different smiles;
- ⇒ 6 different messages;
- ⇒ 6 different air quality conditions;



- ⇒ Easy to read and understand by all groups;
- ⇒ Information for general public and sensitive groups.

# Air Quality Portal

<https://airqualitykosova.rks-gov.net>

- ⇒ Real time data form 13 monitoring stations x 5 AQ parameters;
- ⇒ Maps of monitoring stations;
- ⇒ Monthly and Annual Statistics for AQ & Excel free download;
- ⇒ Forecast maps and AQ Index for districts and municipalities;
- ⇒ General Information (air pollution, AQ index, health, user guide).



**INSTITUTI  
HIDROMETEOROLOGJIK  
I KOSOVËS**

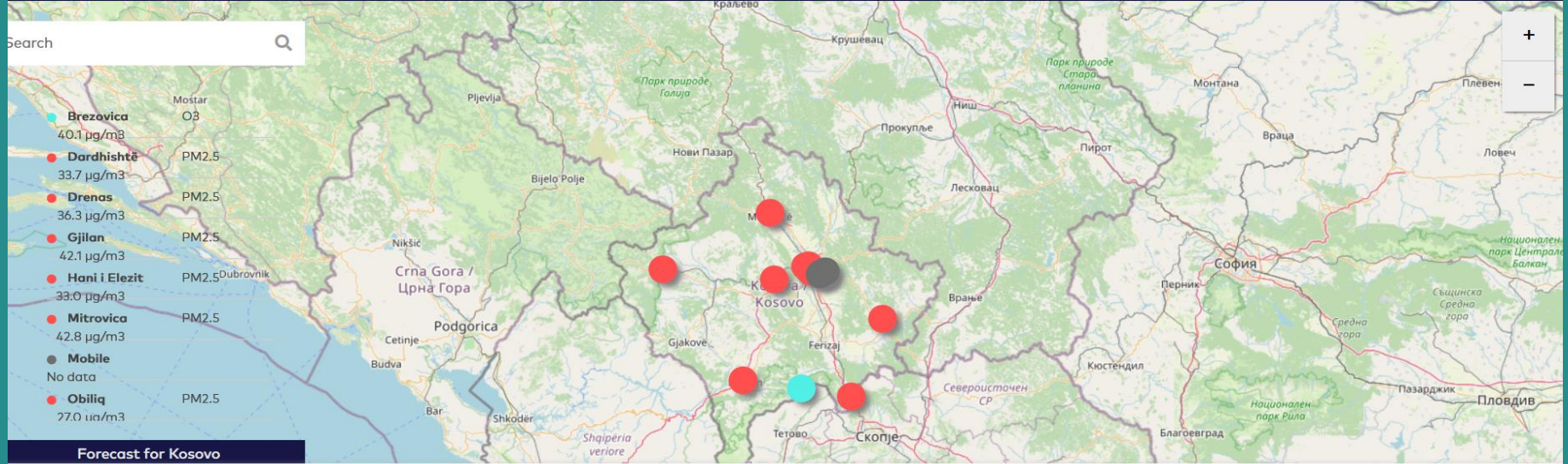
[Monitoring data](#) ▾ [Forecast data](#) ▾ [General information](#) ▾ [Contact](#) [English](#) ▾



**Republika e Kosovës**  
Ministria e Ekonomisë dhe Ambientit

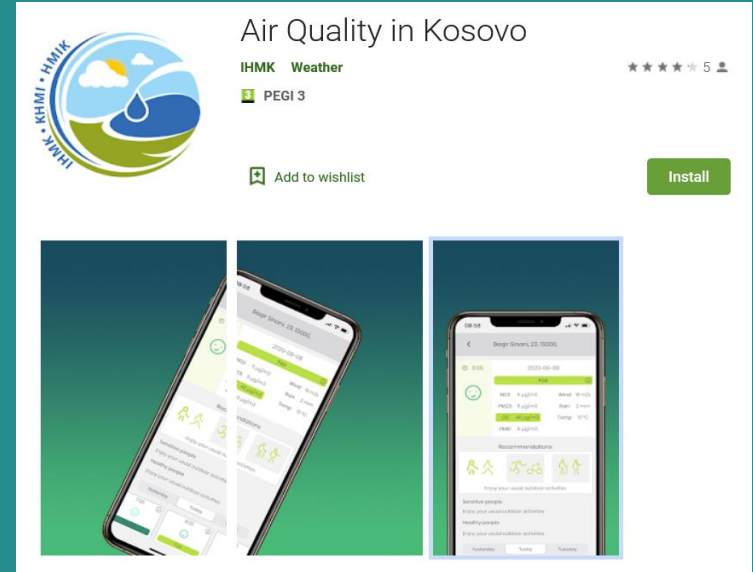
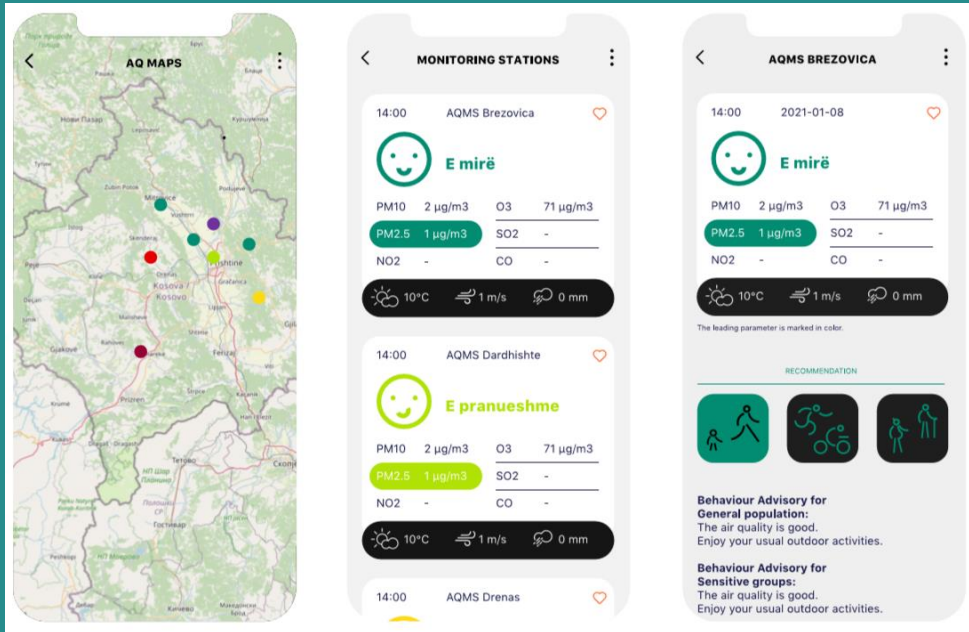
**Agjencioni për Mbrojtjen  
e Mjedisit të Kosovës**

## AirQuality IN Kosovo



# Air Quality Mobile Application

- ⇒ 13 AQ stations x 5 AQ parameters;
- ⇒ AQ quality maps;
- ⇒ Forecasting for AQ for 3 days;
- ⇒ Advisory for general population and sensitive groups.



<https://play.google.com/store/apps/details?id=com.atmoterm.kosovo>  
<https://apps.apple.com/pl/app/air-quality-in-kosovo/id1512241258>

# Air Quality Brochure

A brochure that has provided answers to these questions:

- ⇒ What air quality means?
- ⇒ What is air pollution?
- ⇒ Sources of air pollution?
- ⇒ How does air pollution affect our health?
- ⇒ Which groups of people are more sensitive to air pollution?
- ⇒ How can you protect your health from air pollution?
- ⇒ Where can you find information on the level of air pollution in your area?
- ⇒ How to read and understand AQ symbols?

**Cleaner  
air for safer  
health!**



Check on the level of air pollution  
by visiting [airqualitykosova.rks-gov.net](http://airqualitykosova.rks-gov.net)  
and [ihmk-rks.net/qjri](http://ihmk-rks.net/qjri) and for health related  
recommendations visit [ajri.niph-rks.org](http://ajri.niph-rks.org)

# Cleaner air for safer health

## Air pollution

Air pollution is a complex mix of particles and gases released in the atmosphere that are harmful to humans and living environment.

The main sources of air pollution in Kosovo are caused by human activities such as domestic heating, road transport, combustion of fuels in power generation, industrial processes and municipal and agricultural waste.

## Air pollution affects your health

Microscopic air pollutants enter your body, finding their way deep into the lungs and bloodstream, affecting your respiratory and cardiovascular systems increasing the risk of heart attacks and stroke.

## Sensitive groups to air pollution

Children, pregnant women, older people and people with existing respiratory and cardiovascular disease are more sensitive.

## Reduce air pollution

Try to avoid using coal or wood for heating, and if you use a wood stove make sure you are burning dry untreated wood.

Try to reduce the number of car trips and consider cycling and walking as alternatives for short trips, away from busy roads.

Dispose of waste through regulated waste collection services or at official disposal sites. Avoid burning waste.

Discuss air pollution with your friends and neighbours and share your knowledge and ideas on how to reduce air pollution in your daily activities.

## Protect your health from air pollution

Check regularly on the level of air pollution by visiting [airqualitykosovo.rks-gov.net](http://airqualitykosovo.rks-gov.net) and [rhmk-rks.net/agri](http://rhmk-rks.net/agri), and for health related recommendations visit [agri.mph-rks.org](http://agri.mph-rks.org)

The Air Quality Index (AQI) helps you to understand what the quality of the air around you means for your health, enabling you to change your behavior to reduce your exposure to poor air quality.

Install the free smartphone application **Air Quality in Kosovo** to find out the air quality in your area.

## Air Quality Poster

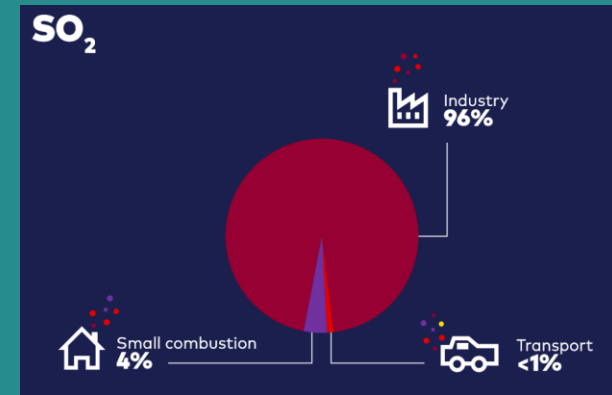
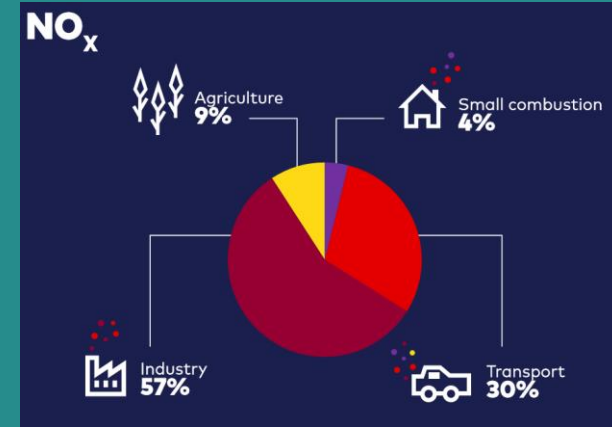
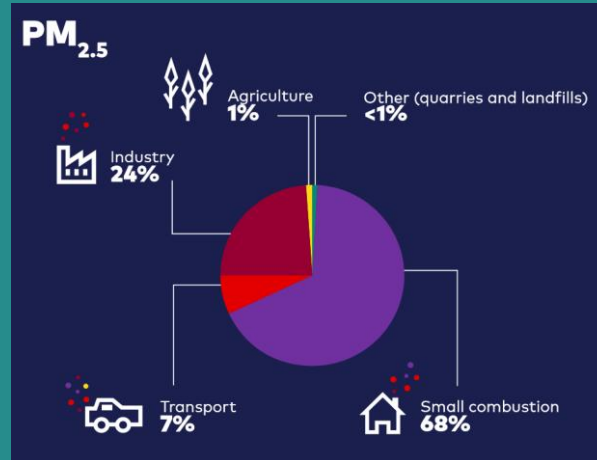
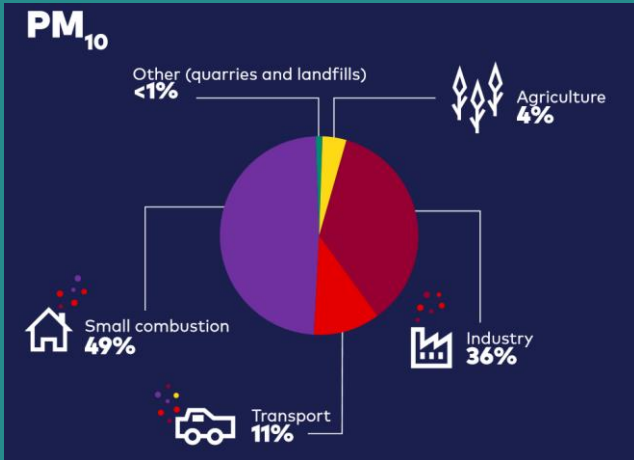
Another product of the project similar to the brochure in terms of content, but with more concise information about:

- ⇒ Air pollution;
- ⇒ Air pollution affects your health;
- ⇒ Sensitive groups to air pollution;
- ⇒ Reduce air pollution;
- ⇒ Protect your health from air pollution.



# Air Quality Infographics

What are the main sources of air pollution in Kosovo?



# Air Quality Factsheets for Sensitive Groups

Air Pollution and Health



## Fact Sheet for people with chronic diseases and the elderly

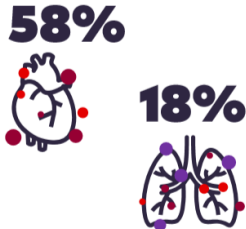
### Key Facts

Air pollution is the single largest environmental health risk in Europe. Every year, air pollution causes nearly 500,000 premature deaths. Approximately 290,000 of these deaths occur in high-income countries, and 190,000 in middle- and low-income countries<sup>1</sup>.

WHO estimates that in 2016, some 58% of outdoor air pollution-related premature deaths were due to ischemic heart disease and strokes, while 18% of deaths were due to chronic obstructive pulmonary disease and acute lower respiratory infections respectively, and 6% of deaths were due to lung cancer<sup>2</sup>.

### Health effects

Chronic exposure to particulate matters contributes to serious health effects such as: Accelerated aging of the lungs, with loss of lung capacity and decrease of lung function, development of diseases like asthma, emphysema, bronchitis, lung cancer and brain damage, as well as heart diseases and stroke as leading causes of death.



**Symptoms** like coughing, phlegm, wheezing, chest tightness, chest pain, palpitations, shortness of breath and unusual fatigue are the most common symptoms among the people affected by the air pollution.

**People with lung disease** (Chronic obstructive pulmonary disease—COPD, asthma, lung cancer) or **heart disease** (heart attack, congestive heart failure, coronary artery disease) and **diabetics** are more sensitive to air pollution.

### What can you do to protect your health?

- Reduce your outdoor activities on poor, very poor and extremely poor air quality days—check the daily AQI in your area on [airqualitykosovo.rks-gov.net](http://airqualitykosovo.rks-gov.net) and [ihmk-rks.net/qjri](http://ihmk-rks.net/qjri) or download **Air Quality in Kosovo** smartphone app by scanning the QR code below.
- Improve & maintain good health and strengthen immune system
- Maintain a healthy diet with lots of fruit and vegetables
- If you must go out when the AQI is poor, it is recommended that a suitable mask is used.
- Know the warning signs of asthma, heart attack and stroke—consult your health care provider.

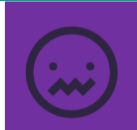
For more information go to [ajri.niph-rks.org](http://ajri.niph-rks.org)



Download the free smartphone app for real-time information on air pollution.

<sup>1</sup> [http://www.euro.who.int/\\_data/assets/pdf\\_file/0079/34113/Fact-Sheet-10-facts-for-better-health.pdf](http://www.euro.who.int/_data/assets/pdf_file/0079/34113/Fact-Sheet-10-facts-for-better-health.pdf)  
<sup>2</sup> <http://www.who.int/news-room/fact-sheets/detail/ambient-outdoor-air-quality-and-health>

Air Pollution and Health



## Fact Sheet for health risks to pregnant women

### Key Facts

When a pregnant woman breathes polluted air, the harmful particulate matter can reach the placenta and harm the fetus which is particularly susceptible to environmental pollutants.

Studies have shown that chronic exposure to high levels of PM 2.5 (particulate matter with a median diameter of less than 2.5 microns, approximately one thirtieth the width of average human hair) is associated with higher rates of early fetal loss, infant mortality, preterm delivery, intrauterine growth restriction, lower birth weight<sup>1</sup>, congenital anomalies and even childhood respiratory problems<sup>2</sup>.



Beside increasing the risk of miscarriage, premature birth and low birthweight, exposure to air pollution for a pregnant woman and her baby can lead to long-term consequences.

Studies have shown that exposure to high levels of air pollution can adversely affect children's brain development, cognitive development and IQ levels<sup>3,4</sup>.

### What can you do to protect your health and health of your baby?

- Pay attention to the quality of air around you—check the Air Quality Index (AQI) in your area on [airqualitykosovo.rks-gov.net](http://airqualitykosovo.rks-gov.net) and [ihmk-rks.net/qjri](http://ihmk-rks.net/qjri) or download the **Air Quality in Kosovo** smartphone app by scanning the QR code below.
- Stay away from smoke and avoid being outside when the air quality is poor, very poor or extremely poor. If you must go out when the AQI is poor, it is recommended that a suitable mask is used.
- Improve & maintain good health and strengthen your immune system. Maintain a healthy diet with lots of fruit and vegetables.
- Talk to your doctor if you are concerned or have continued or recurring symptoms on poor air quality days.

For health related recommendations visit [ajri.niph-rks.org](http://ajri.niph-rks.org)



Download the free smartphone app for real-time information on air pollution.

<sup>1</sup> [http://www.unicef.org/publications/files/AUNICEF\\_Clear\\_the\\_Air\\_for\\_Children\\_30\\_Oct\\_2016.pdf](http://www.unicef.org/publications/files/AUNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf)  
<sup>2</sup> <http://www.atschapes.com/bookshop/pollution-new-developments-air-pollution-exposure-during-pregnancy-and-reproductive-outcomes>  
 Le Prado-Barré P, Mercader E, Mui, J, et al. The Effects of Air Pollution on the Brain: A Review of Studies Involving Environmental Epidemiology and Neuroimaging. *Curr Envir Health Rep* 5, 351-364 (2018). <https://doi.org/10.1007/s40201-018-0029-9>  
<sup>3</sup> <http://www.who.int/news-room/fact-sheets/detail/ambient-outdoor-air-quality-and-health>  
<sup>4</sup> <http://www.who.int/news-room/fact-sheets/detail/ambient-outdoor-air-quality-and-health>

Air Pollution and Health



## Fact Sheet Air Pollution and Children's Health

The physiology of children makes them uniquely vulnerable to the type and degree of their exposure to air pollution.

### Key Facts

Clear air is of special importance for children, since they breathe a greater volume of air relative to their body than adults, putting them at a greater risk of accumulating higher concentrations of pollutants in their bodies.

Around 300 million children currently live in areas where outdoor air pollution exceeds international guidelines by at least six times.

In total, around 2 billion children live in areas that exceed the World Health Organization annual limit of 10 µg/m<sup>3</sup>. Almost one million children die from pneumonia each year, more than half of which are directly related to air pollution.

Millions more suffer from respiratory diseases that diminish their resilience and affect their physical and cognitive development.

### Effects to children health

Air pollution is known to cause breathing problems, lung and heart diseases, such as asthma. Studies have shown that children are up to four times more likely to have significantly reduced lung function in adulthood if they live in highly polluted areas<sup>1</sup>. Because of their size, children inhale more air per kilogram of body weight than adults. When air pollutants enter their body, they can:

- Have effects on various organs and systems.
- Make it harder to breathe, irritate lungs and airways.
- Make them cough, splutter, wheeze, sneeze, dizzy and can make eyes itch.
- Affect their immune system, so that they can catch infections more easily.
- Early life exposure to PM2.5 was associated with a reduction in fundamental cognitive abilities, including working memory and attention disorders.

### What can you and your children do to protect their health?

- Check the Air Quality Index (AQI) in your area on [airqualitykosovo.rks-gov.net](http://airqualitykosovo.rks-gov.net) and [ihmk-rks.net/qjri](http://ihmk-rks.net/qjri) or download the **Air Quality in Kosovo** smartphone app by scanning the QR code below.
- Parents can play an important role in protecting their children from exposure to air pollution.
- Encourage a reduction in car use, especially for short distances.
- Teachers can choose not to go outside for physical education classes on smoggy days.
- Select the route to and from school wisely to avoid polluted areas.
- When air quality is good, walk or cycle to school; it is good exercise and reduces exposure to air pollution.
- Use public transport when possible to do so.
- Stay at home when air quality outside is poor.
- Improve & maintain good health and strengthen your immune system. Maintain a healthy diet with lots of fruit and vegetables.

For health related recommendations visit [ajri.niph-rks.org](http://ajri.niph-rks.org)



Download the free smartphone app for real-time information on air pollution.

<sup>1</sup> [http://www.unicef.org/publications/files/AUNICEF\\_Clear\\_the\\_Air\\_for\\_Children\\_30\\_Oct\\_2016.pdf](http://www.unicef.org/publications/files/AUNICEF_Clear_the_Air_for_Children_30_Oct_2016.pdf)

Materials were distributed in all municipalities of Kosovo through Health Centers and Hospitals

# Air Quality Information Days



Eight Municipalities Hosted Air Quality Info Days for Raising Awareness on the Threats of Air Pollution. Information brochures were distributed and presentations were made to inform citizens on the following topics:

- ⇒ Introduction to air pollution;
- ⇒ Key sources of air pollution;
- ⇒ Health risks associated with air pollution;
- ⇒ Recommended behavior to protect health from poor air quality;
- ⇒ Recommended behavior to reduce air pollution;
- ⇒ How to use the data form AQ Portal & AQ Smartphone application.



# Real time information for AQ in public urban areas



- ⇒ Real time information for AQ in 7 locations in 2 urban areas;
- ⇒ Installation of 5 displays/monitors in Pristina (capital city) and 2 displays in Obiliq (industrial city).





# Air Quality Newsletters

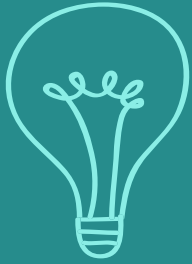
- ⇒ 4 editions of Newsletters distributed through email subscription, website and social media;
- ⇒ Information on project activities;
- ⇒ Information on project products;
- ⇒ Information on the work of the government and donors in the air sector;
- ⇒ Air quality information;



# Promotion of the project products



- ⇒ Video clips, interviews and press releases;
- ⇒ Promotion of project products on TV, Radio, Online Newspapers and National Portals;
- ⇒ Promotion of project products on social media (Facebook, Instagram & YouTube);
- ⇒ Promotion of project products by influencers (VIPs);
- ⇒ Lectures for primary school students;
- ⇒ Small grants to NGOs and Media for the promotion of CA data and project products;
- ⇒ Seminars, trainings, workshops & conferences.



Thank You!

Questions?



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