# LIFEINDEXAIR

**NEWSLETTER 01** 



THIS PROJECT IS FUNDED BY THE LIFE PROGRAMME FROM THE EUROPEAN UNION













# WELCOME TO LIFE INDEX-AIR



In 2015, five partners across five European cities proposed the LIFE Index-Air project to the European LIFE programme for the Environment and Climate Action. We were responding to the EU priority "to safeguard the Union's citizens from environment-related pressures and risk to health and well-being".

In the last decade, there was a great improvement with respect to emission control strategies of anthropogenic emissions to the atmosphere. However, a substantial proportion of EU's population living in urban areas remains exposed to high levels of air pollution. Prompt action through efficient air quality management, considering outdoor and indoor sources, is required not only to ensure that the legal limits are not exceeded but principally to guarantee that the consequences of poor air quality are controlled and minimized.

Our project is developing a Management Tool that concerns the deterioration of health and well-being of EU citizens associated to the Air Pollution integrated exposure and will allow the assessment of burden disease reduction associated with different actions to be implement in EU cities.

The LIFE Index-Air team has been working since October 2016. We invite you to follow us through our website **www.lifeindexair.net** and facebook **www.facebook.com/LIFEIndexAir**.

#### WHAT IS LIFE INDEX-AIR?

The main objective of LIFE Index-Air is to incorporate a database of outdoor and indoor air quality and a package of models to develop an innovative and versatile decision support tool for policy makers that will help them identify measures to improve air quality and quantitatively assess their impact on the health and well-being of the population.

The implementation of the tool in European cities will demonstrate its suitableness to calculate population exposure and dose to Air Particulate Matter chemical compounds, to quantify the health impacts related to this exposure and to identify actions to improve air quality that have an impact in the health and well-being of the population. In the next 3 years the LIFE Index-Air tool will be implemented in Lisbon, Porto, Athens, Kuopio and Treviso.

This will be a cost effectiveness management tool for local, regional and national policy makers that will be used to quantitatively evaluate the impacts of policies on specific human exposure levels as well as plan new ones.

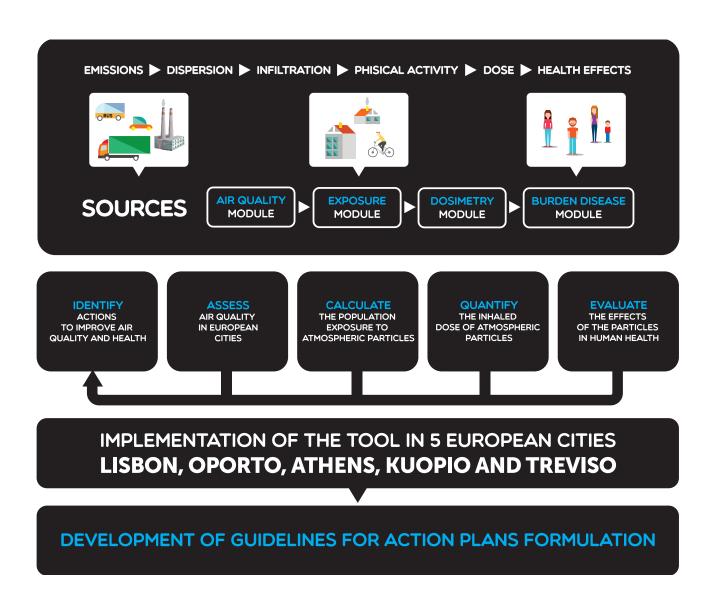
### Check the introductory video about LIFE Index-Air project:



#### LIFE INDEX-AIR TOOL

LIFE Index-Air management tool will consider a chain of events, from emissions to the atmosphere until health impacts, passing through exposure and inhaled dose. Therefore, the tool will incorporate four modules - database, exposure, dosimetry and burden of disease.

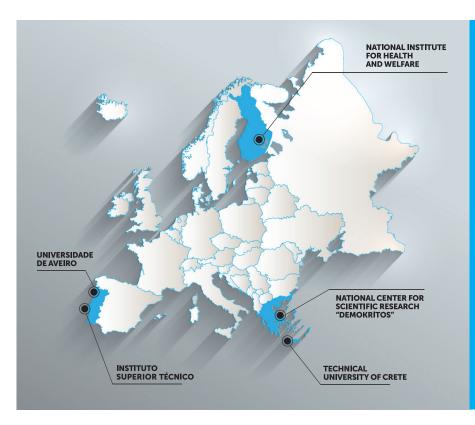
The tool will provide a user-friendly interface suitable for policy makers and other relevant stakeholders who do not have the scientific expertise necessary to analyze the data collected by national or international programs and to apply specialized models needed for the calculation of exposure, dosimetry and burden disease associated with different scenarios.



### WHO'S PART OF LIFE INDEX-AIR?

## The LIFE Index-Air consortium consists of five partners from three European countries:

- Instituto Superior Técnico (Project Coordinator, Portugal)
- National Centre for Scientific Research "Demokritos" (Greece)
- National Institute for Health and Welfare (Finland)
- Technical University of Crete (Greece)
- University of Aveiro (Portugal)



#### **PARTNERS**

LIFE Index-Air project is a collaboration between five institutions, being coordinated by IST.





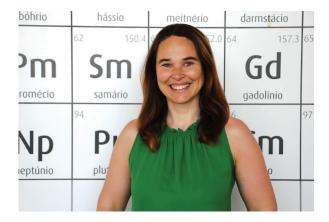






#### MEET THE TEAM

## Each newsletter will feature profiles of collaborators from our five partner organizations.





#### MARTA ALMEIDA

## LIFE Index-Air coordinator. Portugal

Marta Almeida is researcher at C2TN, Instituto Superior Técnico, Universidade de Lisboa, Portugal. Over the last 18 years, she has dedicated her research to the atmospheric chemistry. At the moment, the complete characterization of the particles at the receptor is used by the researcher to elucidate the sources of the pollutants and the processes associated with their formation, to assess local, regional and long-range transport and to identify mitigation options focusing on the improvement of the air quality.

"Air pollution has moved from being seen as an environmental problem to a health concern. Consequently people are more worried about the quality of air they breathe. Coordinate LIFE Index-Air project creates an opportunity to act and improve the air quality for everyone. This project is more than a research project, is a living lab where people get involved in the monitoring of their homes, cars, schools and neighborhoods. I believe that by involving all the community we will have more informed population to support actions that will improve their air quality. Collectively, we will make a difference."

#### **KONSTANTINOS ELEFTHERIADIS**

## Director of Research at the NCSR-D, Athens. Greece

Konstantinos Eleftheriadis is head of the Aerosol Group at the Institute of Nuclear & Radiological Sciences & Technology, Energy & Safety. He has extensive research expertise on physicochemical aerosol characterization with respect to climatic active aerosol species, nano-particle metrology, development of novel sampling and measurement techniques for aerosol particles, exposure of humans to aerosol contaminants such as heavy metals and radioactive pollutants, and retrieval of emission source impact, source apportionment and receptor modelling.

"Aerosol Research and innovation regarding the current challenges of climate change, air pollution and environmental hazards for the public in the urban environment is what motivates me in my work. Air pollution is one of the biggest environmental problems with serious implications for the health of citizens. I am happy to be part of the research community aiming to establish new knowledge and technologies for combating these problems. Another aspect of my work is to find ways to communicate our results to the public and those involved in decision making at local National and International level."

## WHAT IS HAPPENING IN LISBON LIFE INDEX-AIR SCHOOLS?

Check the video about the initiative "The air belongs to everyone"





https://www.youtube.com/watch?v=J2CWJG6SP6U

#### LISBON ENGAGEMENT IN NUMBERS

NUMBER OF SCHOOLS 26
NUMBER OF AWARENESS SESSIONS 60
TOTAL NUMBER OF STUDENTS 3796

TOTAL NUMBER OF TEACHERS 165
STREET EVENT DAYS 5



Lisbon was the first pilot city to launch the LIFE Index-Air activities. In March 2017, LIFE Index-Air put into action the awareness campaign "The air belongs to everyone" in 26 schools from Lisbon. This campaign was designed for students (5-9 years) and aimed to aware them to the problem of air quality.

Around 4000 people (3800 students and 165 teachers) were reached in 60 awareness sessions and were invited to participate in the challenge "The air belongs to everyone", in which the students identified a set of behaviours that lead to an improvement of air quality at school, home and their region. Each school communicated the results of the challenge to the community in a



different way, resulting in theatre plays, mannequin challenges, plastic arts, newspapers; there was even a school that created a political party! Students presented the works developed within the challenge at Loures Inss, a fair on environment and sustainability organized by the Municipality of Loures.

In this initial engagement round with children from the city of Lisbon, LIFE Index-Air was also present in Sustentabilis, a fair about entrepreneurship and sustainability organised by the Parish of Olivais. More than 200 students participated in environment education games promoted by the project and realized that we can all play an active role in improving air quality.



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#### **KEEP IN TOUCH**

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