

Who we are

The iSCAPE team represents a vast range of disciplines, including engineering, climatology, physics, urban planning, sociology, cultural anthropology, human-centered design, hardware and software development, economy and policy-making.

iSCAPE partners are:

University College Dublin



University of Bologna



University of Surrey



Finnish Meteorological Institute



Hasselt University



Technical University Dortmund



JRC - Joint Research Centre - European Commission -
Institute for Environment & Sustainability



Institute for Advanced Architecture of Catalonia -
FabLab Barcelona



T6 Ecosystems S.r.l.



Nanoair Solutions S.r.l.



Future Cities Catapult Ltd.



Dublin City Council



Regional Agency for Prevention, Environment and Energy of
Emilia-Romagna



European Network of Living Labs



Trinity College Dublin



Find out more

If you are interested in getting updates on iSCAPE and participating in upcoming events, please visit our website or follow us on social media. You can also sign up for our regular newsletter or contact the project coordinator:

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[iSCAPE - Improving the Smart Control of Air Pollution in Europe](#)

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Improving the Smart Control of Air Pollution in Europe



What is iSCAPE?

Research and innovation action for improving air quality in European cities

iSCAPE is a three-year research and innovation project funded under the European Union's H2020 programme. To advance knowledge in the field of air quality, iSCAPE has brought together an interdisciplinary team of renowned and experienced researchers, public authorities, business professionals, committed NGO members and citizens.

What is iSCAPE aiming to achieve?

Advanced and integrated passive air pollution remediation strategies

The overall objective is to develop an integrated strategy for air pollution control in European cities that is grounded on evidence-based analysis. The iSCAPE project aims to reduce urban air pollution and the negative impacts of climate change by leveraging sustainable passive control systems, behavioural change initiatives and the living lab approach.



PASSIVE CONTROL SYSTEMS

Affect air pollution dispersion: trees, hedges, green walls & roofs, low boundary walls, photocatalytic coating



BEHAVIOURAL CHANGE

Reduce emissions

These interventions will be monitored and evaluated in terms of their environmental, social and economic implications.

Why now?

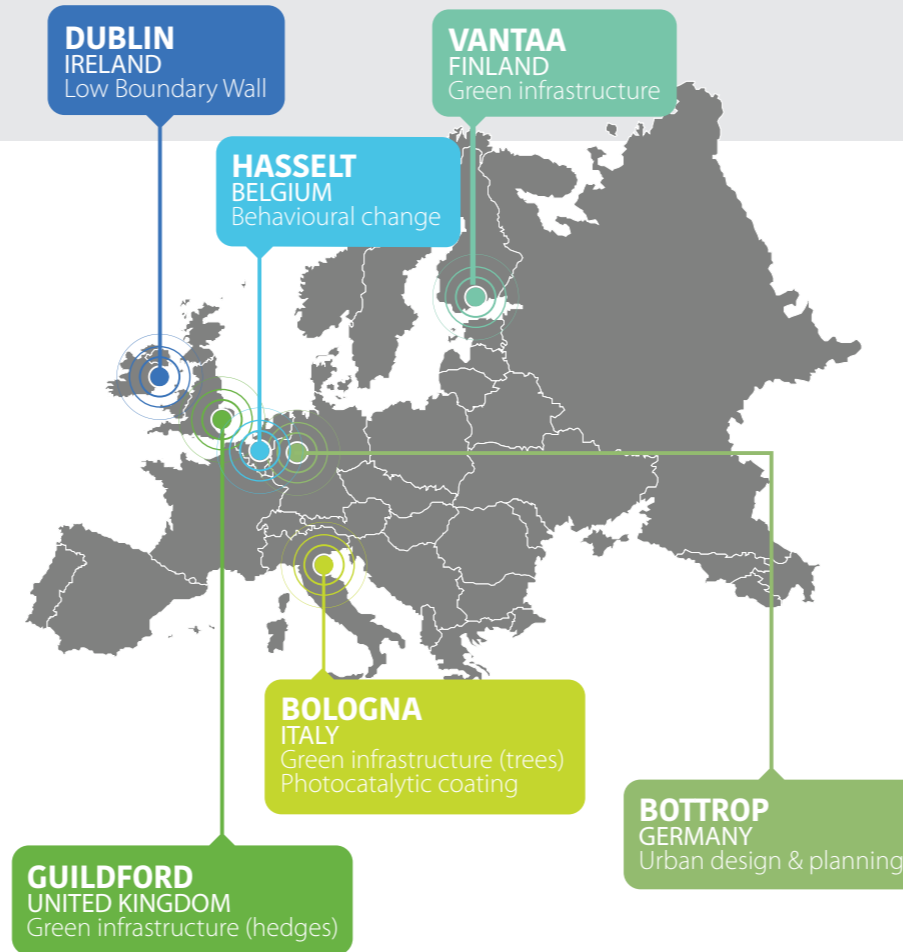
The importance of iSCAPE research and innovation activities

According to the World Health Organization (WHO), outdoor air pollution is one of the major challenges of the 21st century, and is attributed to around 3.7 million deaths globally (WHO, 2014). It is estimated that 92 % of the world's population still lives in regions where air pollutants levels are higher than the WHO specified limits (WHO, 2016). While remaining the main environmental health hazard, air pollution also causes a variety of environmental effects such as acid rain, haze, eutrophication, ozone depletion, crop, forest and wildlife damage, and even more so - global climate change. By advancing and integrating passive control remediation strategies, iSCAPE significantly contributes to tackling this global challenge.

References:

World Health Organization 2014. Burden of disease from Ambient Air Pollution for 2012. <http://www.who.int/>

World Health Organization. Ambient air pollution: A global assessment of exposure and burden of disease. <http://who.int/>.



iSCAPE living labs

Working together to improve the smart control of air pollution

To achieve iSCAPE's objectives, living labs in six European cities have been created: Bologna, Bottrop, Dublin, Guildford, Hasselt, and Vantaa. The iSCAPE living labs connect a great variety of stakeholders, facilitate collaboration and sharing of multidisciplinary knowledge and experience to advance air pollution remediation strategies and solutions. This includes the engagement of citizens that is fundamental in living lab activities to create value and increase the public awareness of air pollution control.

iSCAPE technology

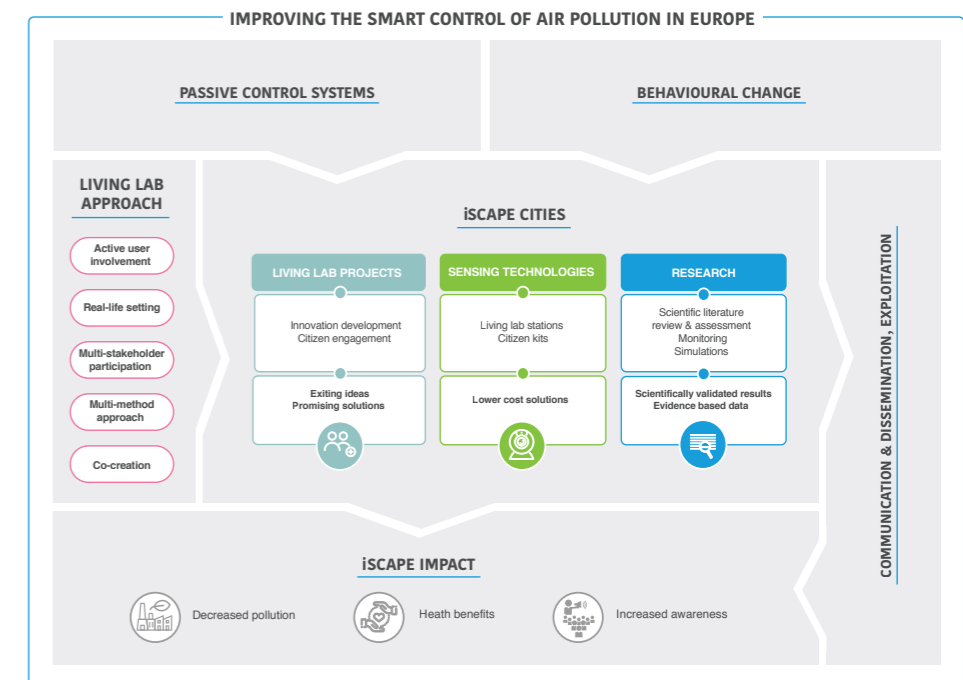
Developing low-cost sensors and encouraging citizen science

During the project, low-cost sensors will be developed to provide alternative solutions to measure air pollution and engage citizens in tackling environmental problems. Citizen kits and more advanced monitoring stations will be designed by following recent developments in the field of sensing technologies and using state-of-the-art open-source platforms. Citizens will be encouraged to take part in research activities to build a community around the global challenge of air pollution and drive community action.

How does iSCAPE work?

The iSCAPE concept brings together sustainable passive control systems, behavioural change initiatives and the living lab approach

iSCAPE provides means to achieve an air pollution free (low carbon) society through the application of new sustainable methods and approaches integrated into urban design and policy guidelines. To achieve this, the iSCAPE concept is based on the following:



What are the expected outcomes and results?

- Scientifically validated results and evidence-based data for urban planners, local policy makers, NGOs, and citizens
- Guidelines and policy recommendations for improving the control of the air pollution and mitigation of the negative impacts of climate change
- Advanced low-cost sensing technologies and the Virtual Living Lab platform facilitating citizen science initiatives (livinglabs.iscapeproject.eu/)
- New ideas and promising concepts to tackle air pollution, co-created with local citizens through the iSCAPE living labs
- Increased collective awareness and knowledge of air pollution and its impact for healthier cities.