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INTEGRATED CLIMATE FORCING AND AIR POLLUTION REDUCTION IN URBAN SYSTEMS (ICARUS): PROJECT OVERVIEW AND OBJECTIVES

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ICARUS (Integrated Climate forcing and Air pollution Reduction in Urban Systems) is a four years project (2016-2020) funded in the frame of H2020, made up of 18 partner institutions from 9 European countries with multidisciplinary expertise in the environment, climate and public health.

The main objective of this project is to quantitatively assess the impact of current and alternative national and local policies on reducing greenhouse gas emissions and improving air quality through a full chain approach and to evaluate the future public health and well-being impacts of these policies in European cities.

To reach this goal, ICARUS will develop innovative tools for urban impact assessment leading to design and implement win-win strategies to improve the air quality and reduce the carbon footprint of European cities. An integrated approach will be used for air pollution monitoring, combining ground-based measurements, atmospheric transport and chemistry modelling as well as air pollution indicators, derived from satellite, airborne and agent based monitoring. The targeted parameters encompass variety of environmental pollutants. Furthermore, project deliverables will be developed based on existing statistical data. The ICARUS methodology will be applied in nine EU cities, including Brno, of variable size, socio-economic conditions and history. Technological and non-technological measures and policy options will be analyzed and proposed to the responsible authorities for air pollution and/or climate protection on the city level.

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