

## AIR pollution

- ◆ Develop new air sensing technologies
- ◆ Monitor air emissions
- ◆ Assess the impact
- ◆ Evaluate the risk
- ◆ Raise awareness

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[aqserve-project.com](http://aqserve-project.com)

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# AIR QUALITY SERVICES FOR A CLEANER AIR IN CYPRUS

AQ-SERVE will combine innovative technical developments with new scientific knowledge on the characterization and prediction of air quality in order to provide the first-ever evaluation of the health impact and risk assessment of air pollution in Cyprus.



# AQ-SERVE



## AQ-SERVE Insights

Cyprus is centrally located in the Eastern Mediterranean and Middle East (EMME), a region with a population of about 400 million, affected by dust storms, dryness, heat extremes and unparalleled air pollution. The EMME has been identified as one of the few climate change “hot spots”, with adverse impacts by extreme weather events and poor air quality, which are expected to exacerbate in the coming decades. Air pollution, especially particulate matter (PM), plays a crucial role in regional climate (temperature, precipitation) and has major adverse health effects and economic consequences.

A better evaluation through fundamental research of the underlying mechanisms induced by exposure to poor air quality (stroke, heart disease, lung cancer, chronic and acute respiratory diseases, etc.) associated with epidemiological studies will better quantify the health impact of air pollution and help justify mitigation measures. On the other hand, they will be missing the capacity to select the most efficient mitigation measures and provide a quantitative evaluation of their effectiveness and benefits. This evaluation (currently missing) is a critical need for the public authorities before updating the National Air Quality Action with new abatement measures. The AQ-SERVE project has been designed to fill this gap and to provide the best scientific/technological resources to select the most efficient abatement measures to improve Air Quality in Cyprus with immediate benefits on public health and the economy and the environment.

## Core Objectives

The primary objectives of the AQ-SERVE project are the following:

- Develop, optimize and test novel mobile platforms with great innovation potential (e.g. Unmanned Aerial Vehicles, UAVs) overcoming current limitations in the monitoring/control of air quality.
- Develop, optimize and test new cost-effective miniaturized atmospheric sensors
- Create a spatially-resolved up-to-date national emission inventory with new information on PM sources and their geographic distribution that will support the first national Air Quality (AQ) model platform with forecasting capacities.
- Create a Cyprus Central Air Quality Database that will gather all atmospheric observations available in Cyprus.
- Perform a comprehensive health risk assessment/health impact evaluation



## Project outcomes

The expected project outcomes are:

- The creation of a Cyprus Central Air Quality Database.
- The development of new novel mobile platforms and cost-effective miniaturized atmospheric sensors.
- The first the first-ever evaluation of the health impact and risk assessment of air pollution in Cyprus
- Based on the above the objective to define efficient mitigation measures which can be translated to the public authorities



The work of AQ-SERVE can be relevant to many different stakeholders

- Concerned Citizen
- Public authority
- Environmental agency or organization
- Environmental specialist

## Contact Us

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