

# **Urban and Industrial Air Quality Assessment and Management: a real-time web based approach.**

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## **ABSTRACT**

Urban and industrial air quality management faces new and continuing challenges, driven by new legislation and public awareness on the one hand, industrialization and the growth of urban conglomerates and increases in power consumption and traffic on the other. While dispersion modeling for air quality studies is a well established field, the challenge is to integrate scientific tools of analysis with the environmental planning and management process, to involve a large and diverse audience and participants in the policy and decision making processes, and to support new functions such as the information of the public. This requires to integrate air quality models in a conceptual framework that includes and explicitly addresses policy relevant elements such as the control of emission sources including economic criteria, monitoring of ambient air quality and the compliance with standards, and impacts on human health and the environment.

AirWare is an integrated environmental information system for air quality assessment and management (<http://www.ess.co.at/AIRWARE>). In a sequence of international research projects and numerous application in cities all around the world, AirWare has been developed from a dedicated engineering system implemented on special hardware in the technical division of a users institution, for a few trained specialists, to an Internet based distributed client-server system for a much broader user group with support for public information systems.

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