Air quality dispersion modeling

Smart cities / municipalities / authorities

BOSCH
Invented for life

Check

User access to data is the quality criterion for the Smart City System. Stable and high-performance air quality dispersion modeling and the underlying high quality of data used, help to enhance the attractiveness of the offer.

Capture

From digitalization of city administration to the citizens' information services – depending on the system goals – there are various lines of focus available for recording data. The air quality data of a city is an indicator of the quality of life it offers. Apart from microscopic traffic emissions and highly-accurate ambient air data, air quality dispersion modeling also processes (wind and) weather data.

Analyze

By modeling the dispersion of emissions or further reduction thereof (due to the impacts of wind and weather) along real urban development, it is possible to depict a very detailed image of the respective air quality in an urban area. By linking with other geodata (parking lot usage at public transport hubs), advanced analyses can be made by the system.

Develop

Fulfilling the highest standards with regard to visualization and proven data quality generates maximum added value for user groups. Depending on the target group, various items of information can be derived from the same data source (air quality dispersion modeling): from an analysis function for urban administration areas through to a web application for citizens' information with "gamification" elements.

Implement

Depending on the respective application or assignment, implementation can be in the form of a free web portal or a server-based solution. The graphic and fast-reacting user interface is decisive here. The cloud-based solution offered by Bosch makes all air quality data available in a straightforward and inexpensive manner, which relieves the computing performance to be provided by the Smart City System.