

Geographic distribution of project partners (green) and the locations of the COs (red). Additional partners are from South Korea and Australia.

CITI-SENSE: 24 Citizens' Observatories (COs) across nine cities:

- 8 COs for outdoor air quality
- 12 COs for indoor air quality in schools
- 4 COs for personal comfort in public spaces

#### Added values:

- User management for Citizens' Observatories
- GEOSS compatible data with open access
- Improving urban eco-planning and environmental management with 'social capital' from the public
- Increased environmental awareness and user participation in societal environmental decisions

## Project Partners



### Project Contact:

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[www.citi-sense.eu](http://www.citi-sense.eu)

<http://co.citi-sense.eu>

[www.citizen-obs.eu](http://www.citizen-obs.eu)

### CITI-SENSE and GEOSS

CITI-SENSE is operating within an open e-collaboration framework with the other projects funded under the same FP7-ENV-2012 call. Common methodologies and standards for data archiving, discovery and access within the GEOSS framework will be deployed so that they may be directly useful for the users of GEOSS. CITI-SENSE will make Citizens' Observatory data available through the GEOSS infrastructure, and plan to create a joint GEOSS portal for Citizens' Observatories together with the other four projects.



## CITI-SENSE

Development of sensor-based  
Citizens' Observatory Community for  
improving quality of life  
in cities



Developing Citizens' Observatories with a variety of micro sensors

Integrating data analysis across data types and cities

Empowering citizens to influence community policy & decision making

Contributing to GEOSS

<http://citi-sense.eu>

<http://co.citi-sense.eu>

This project has received funding from the European Union's Seventh Programme for research, technological development and demonstration under grant agreement No 308524, with a duration of four years, beginning in October 2012.

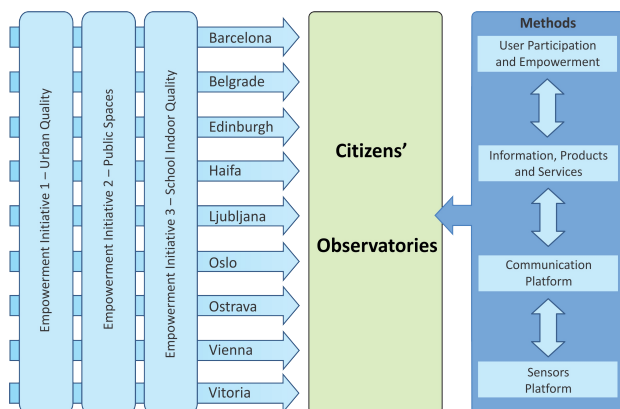


## CITI-SENSE: Development of sensor based Citizens' Observatory Community for improving quality of life in cities

Air quality, environmental quality of public spaces in cities and indoor air quality in schools are areas that benefit from direct engagement of citizens. CITI-SENSE is developing "Citizens' Observatories" in these areas to empower citizens to contribute to and participate in environmental governance, to support and influence community and societal priorities and associated decision making. In the Citizens' Observatories citizens will access real-time data about the environment locally and globally, report their own observations and influence policy and decision making.

### Concept

The concept of CITI-SENSE rests on realising the chain "**sensors-platform-products-users**": technologies for distributed monitoring (**sensors**); information and communication technologies (**platform**); information products and services (**products**); and citizen involvement in both monitoring and societal decisions through participation and empowerment (**users**).



### What is new about CITI-SENSE?

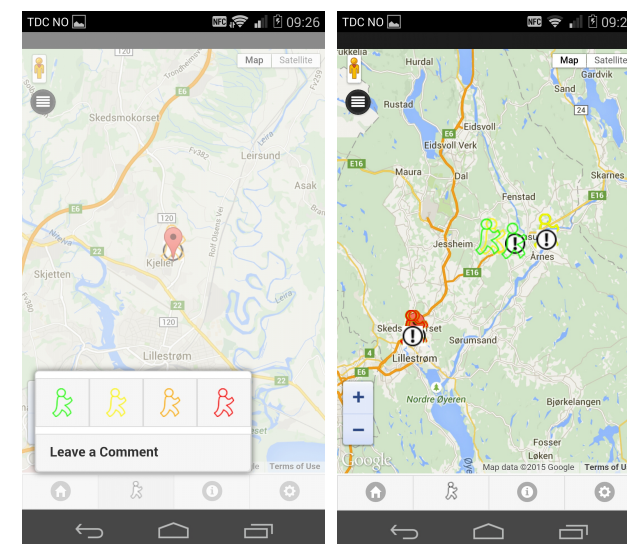
- High technology environmental sensors, innovative data fusion methods and communication paired with scientific analysis and efficient communications with users and the public
- Deployment of static (fixed) and mobile (personal) sensors to monitor various environmental components
- Combination of new sensing technology, ICT Cloud platform with IoT, Big Data and App/Portal services and participatory methods, to create useful products and services.



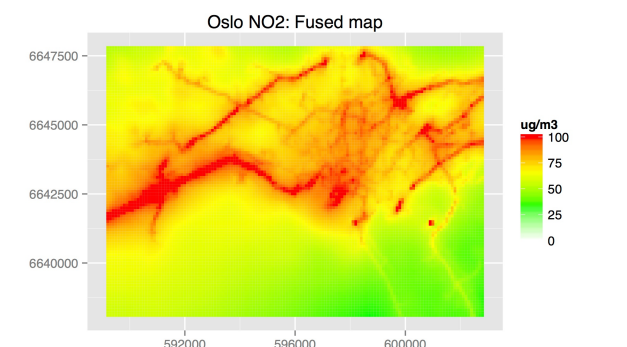
Static sensor pod by Geotech (left) and mobile sensor unit LEO (Little Environment Observatory; right), developed by ATEKNEA.

### Products and services:

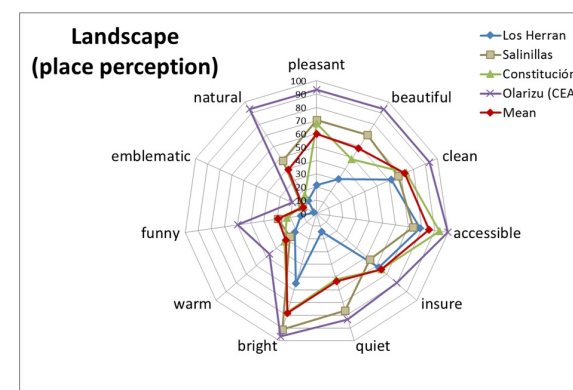
- AQ maps by applying new methods for spatial interpolation and visualisation of environmental data
- AQ perception mobile applications and questionnaires
- Novel static and mobile AQ sensor platforms
- Real-time environmental information with alert services for timely knowledge of pollution hot-spots
- Local CO web portals to facilitate and promote public participation and engagement
- Common CO web portal to access, upload and exchange data and information



CITI-SENSE Air Quality Perception mobile application CityAir



Example of data fusion map of model data and synthetic observations over Oslo.



Visualisation of monitoring personal comfort in Vitoria, Spain