



Empowerment in practice — insights from CITI-SENSE project in Ljubljana

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We present specifics of the citizen empowerment and crowd sourced citizen science conducted in Ljubljana, Slovenia, as one of the case study cities within the ongoing EU-project CITI-SENSE. CITI-SENSE addresses urban air quality and rests on three pillars: technological platforms for distributed monitoring; novel information and communication technologies; and citizen participation. In the project, empowerment initiatives are conducted, enabling citizens to participate in various aspects of urban air quality, both outdoor and indoor at schools affecting everyday life of societal groups. Each participating country runs its own citizen empowerment campaign adapting to local circumstances. In addition to Ljubljana, local campaigns have been initiated in Barcelona, Belgrade, Edinburgh, Haifa, Ljubljana, Oslo, Ostrava, Vienna and in Vitoria.

Poor air quality has been recognized as an important factor affecting the quality of life, especially in urban environments. In Ljubljana specifically, the main air pollution sources are traffic-related emissions, individual house heating devices including increased use of coal and biomass in recent years, and to a limit extent industrial point sources and waste disposal sites. Air quality can be occasionally very poor due to specific climatic conditions owing partially to its location in a basin and on the marshes, resulting in a very complex circulation of air masses, temperature inversions and formation of urban heat island. By recognizing this, we established the main stakeholders in the city who are responsible for monitoring the quality of air in Ljubljana. Based on full stakeholder analysis we consider co-operation with local governmental- and non-governmental institutions with already established means of communications with citizens, as a tool for empowerment.

Since we spend over 90% of our time indoors, the indoor air quality is of great importance. It is why the CITI-SENSE project empowerment initiatives also cover this aspect. In Ljubljana we have identified and are involving three schools; differing by location, house type and age of students. The project also gives children a unique approach to learning about air quality issues - by being involved.

To evaluate the success of empowerment initiatives after a pilot phase, key performance indicators (KPI) were defined that will enable performance improvement for the full implementation phase of the project.

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