



## **Energy supply for buildings with focus on solar power in the urban context – an interactive WebGIS implementation for citizens**

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Many European cities nowadays offer their citizens Web-GIS applications to access data about solar potentials for specific buildings. However, the actual benefit of such solar systems can only be investigated, if their generation is not considered singularly, but in combination with information about temporal appearance of energy demand (heat, electricity), type of primary heating system, hourly internal consumption of photovoltaic power, feed-in power and other important financial and ecological aspects. Hence, the presented application addresses citizens, who are interested in the integration of solar power in buildings and would like to have an extended view on related impacts. Based on user inputs on building parameters and energy use, as well as high spatial and temporal resolved solar data for individual roof areas, financial and ecological effects of solar thermal installations and PV are estimated. Also interactions between heat and power generation are considered in the implemented approach. The tool was developed within the Central Europe project „Cities on Power" and is being realized for the cities Torino, Warsaw, Dresden, Klagenfurt and Ravenna.