Climate change is a serious and cross-cutting issue: urban areas are particularly sensitive to climate impacts, especially to heatwaves, floods and droughts. Typically, urban phenomena (such as the ‘urban heat island effect’ – where the urban area is significantly warmer than the surrounding rural areas) and the impacts of extreme weather events demonstrate the high vulnerability of cities.

Specific urban adaptation strategies are therefore needed to make cities more resilient. In this context, green areas and green infrastructures are seen among the most widely applicable, economically viable and effective tools to combat the impacts of climate change and help people adapt to or mitigate adverse effects of this change.

LIFE URBANGREEN is a European Funded project dealing with climate adaptation through the maximisation of ecosystem services provided by urban green areas maintained in an innovative way. The main expected result is a smart, integrated, geospatial management system, to monitor and govern all activities related to urban green areas, maximizing ecological benefits.

Five innovative modules are being developed within the project, aimed at:

- providing irrigation to trees only when and where actually needed
- reducing the carbon footprint of maintenance activities through a more efficient job planning
- quantifying ecosystem services provided by green areas
- monitoring health conditions of trees using remote sensing data
- increasing citizen participation in urban green management

The project involves 5 Italian and Polish partners:

- R3 GIS (GIS software company and project coordinator, Bolzano, Italy)
- University of Milano (scientific coordinator, Milano, Italy)
- ProGea 4D (remote sensing company, Krakow, Poland)
- ZZM (manager of urban green areas in Krakow, Poland)
- Anthea (manager of urban green areas in Rimini, Italy)
Also, the National Central University (NCU) in Taiwan, under the coordination of Prof Yuei-An Liou, supports the project and participates as external partner and will test some innovations of the LIFE URBANGREEN Project in Taiwan.

During the EGU conference, results obtained during the first two years of the project will be presented. More information on the project is available at www.lifeurbangreen.eu