



Measuring ecosystem services by urban species: the LIFE Urbangreen project

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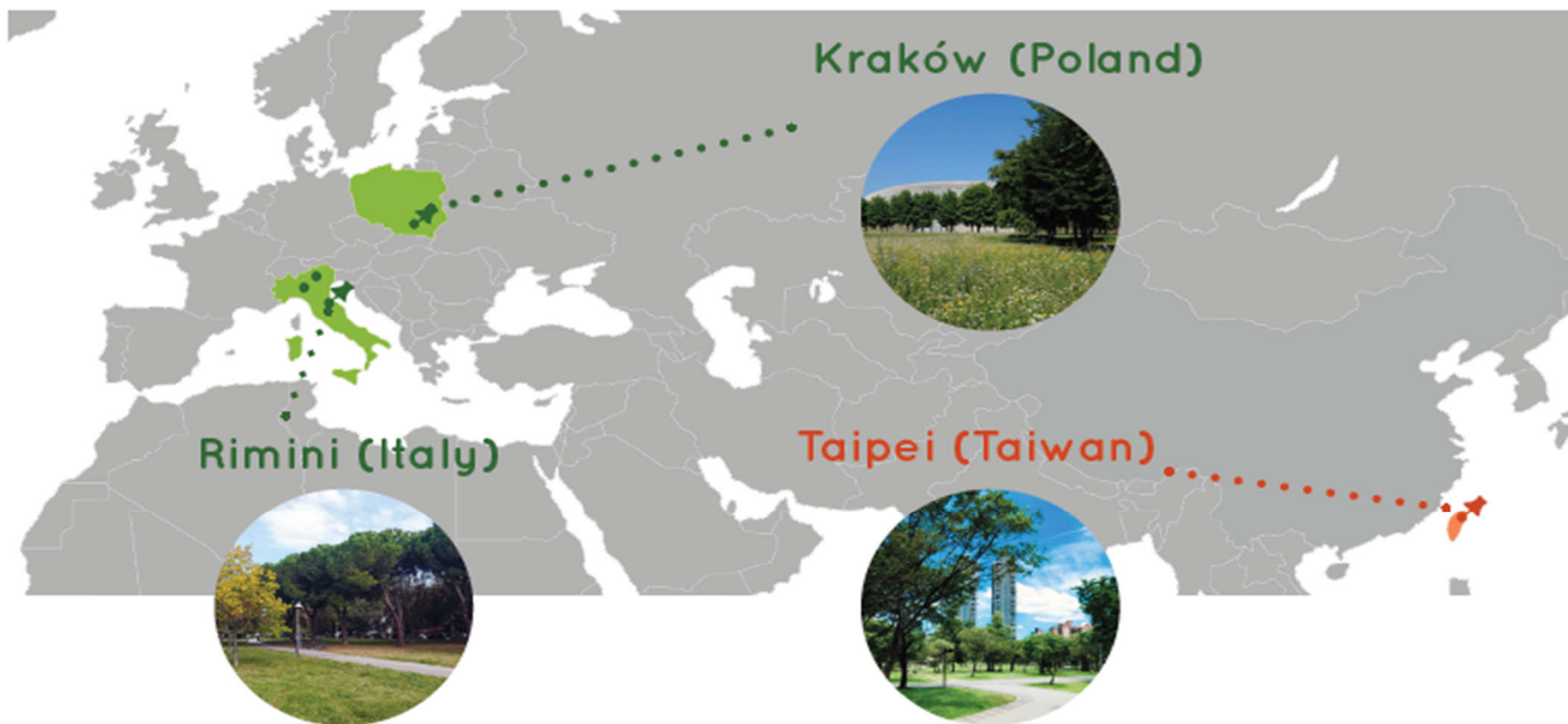
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XI Workshop of the SILVA MEDITERRANEA WORKING GROUP ON UPF



Project timeframe 01.07.2018 - 30.06.2021
Total budget 2,513,784.00 €
EU contribution 1,310,335.00 €





XI Workshop of the
SILVA MEDITERRANEA WORKING GROUP ON UPF



- 1- Smart irrigation** (KL for urban species)
- 2- Efficient programming of jobs and control activities** (reduce their carbon footprint)
- 3- Monitoring through IOT, meteo and RS data** (use weather, remote sensing and sensors data to improve green area management)
- 4- Public engagement** (solicit social involvement of citizens in urban green area management)
- 5- Measure ecosystem services** (regulation)



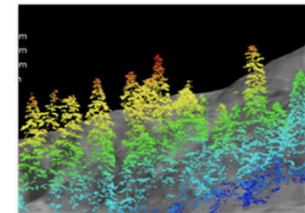
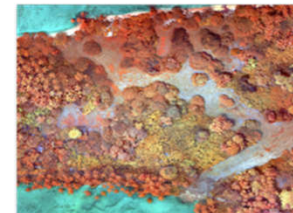


Measuring ecosystem services



Two-week measurement campaigns have been conducted in the two cities to assess some ecosystem services by leaf gas exchange measurements and collection of leaves for pollution trapping efficiency determination. Lidar scanning is ongoing for determining biometrics

- Storage of CO₂
- Assimilation CO₂
- Adsorption of PM
- Microclimate improvement by transpiration



- ❑ CO₂ assimilation largely exceeds sequestration
- ❑ CO₂ assimilation depends on plant physiology and environment
- ❑ Need to assess on more species, in more climates

