

Mod4GrIn - self-sustainable, smart module for city green infrastructure in climate change adaptation

dr hab. Wojciech Bąba, prof. IETU

NCBiR kick-off meeting, June, 16th 2021



Project promoter

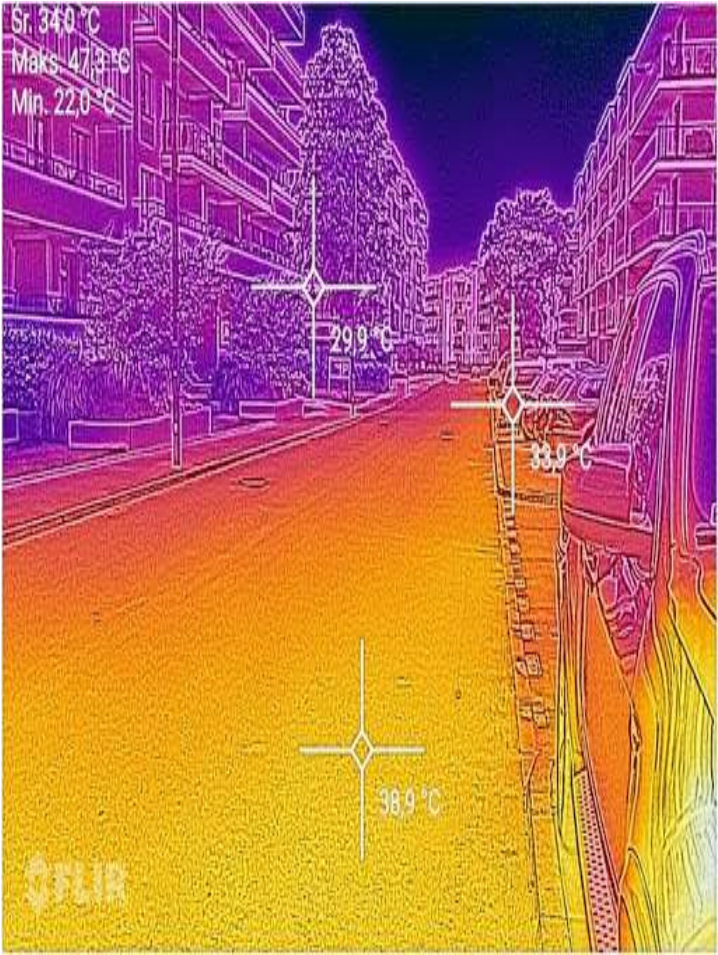
Project partners



Why MOD4GrIN ?



Mitigating and preventing the effects of climate change is one of the most important challenges for humanity today



The Paris Agreement, which adopted action to console the Earth's temperature by 1.5 degrees Celsius



... in the light of current research, it may not be enough to stop the negative impact of climate change



Why MOD4GrIN ?



In the near future about 75% of Europe's population will live in cities



Cities are responsible for 80% of CO₂ emissions and two-thirds of the world's energy consumption.



Buildings account for 36% of global energy use and 39% of energy-related CO₂ emissions annually

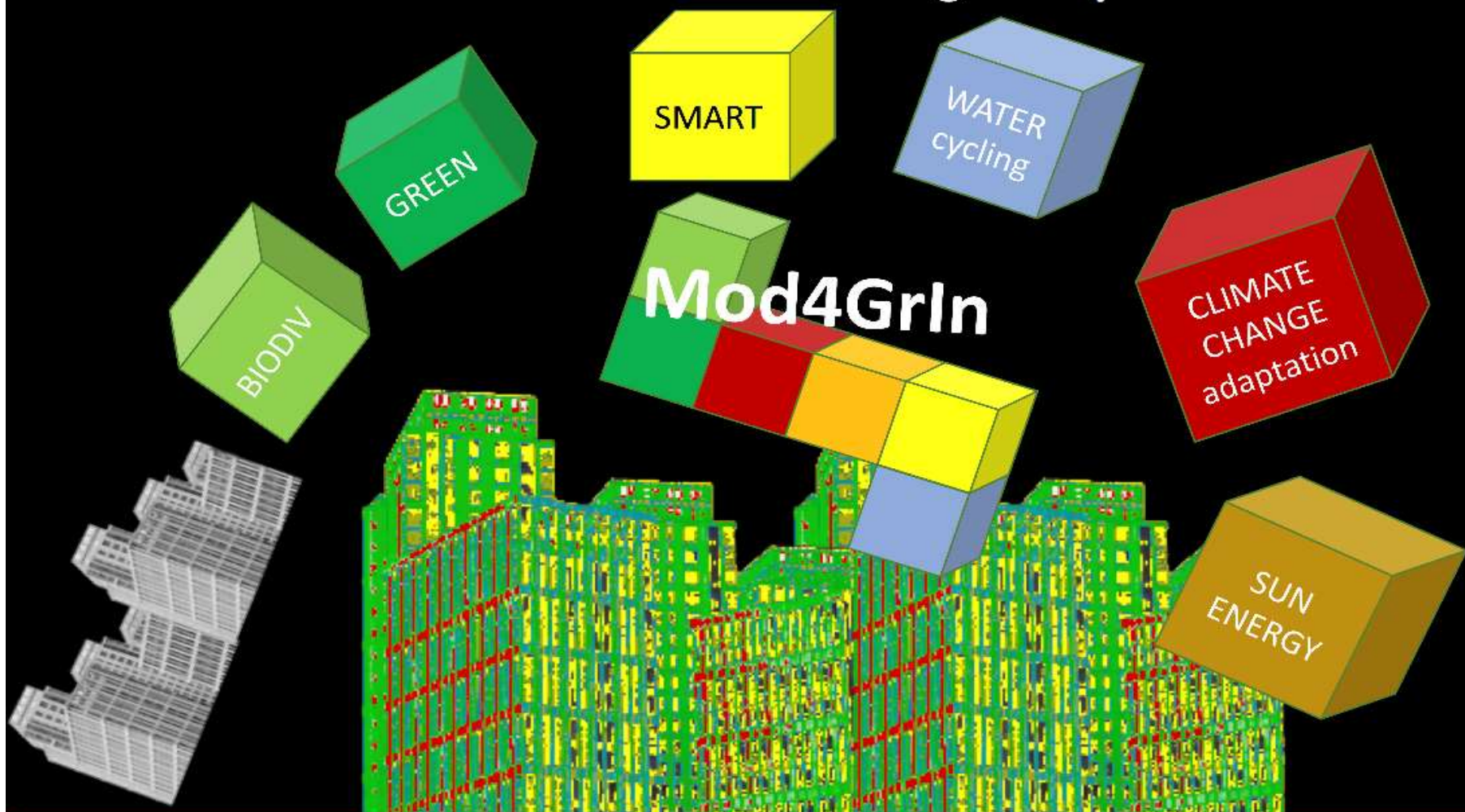
MOD4GrIN – bringing wilderness back to the city



MOD4GrIN – innovative approach



Mod4GrIn - self-sustainable, smart module for city green infrastructure in climate change adaptation



MOD4GrIN – Work packages

WP1

SELECTION OF PLANT SPECIES
STUDIES ON THEIR OPTIMAL GROWTH CONDITIONS

WP2

INTERACTIONS BETWEEN PLANT-PLANT
PLANT-SOIL RESISTANCE OF SPECIES TO ABIOTIC STRESSES
IN URBAN ENVIRONMENT

WP3

PREPARING AND INVESTIGATION OF ARTIFICIAL
SUBSTRATES FOR PLANT GROWTH

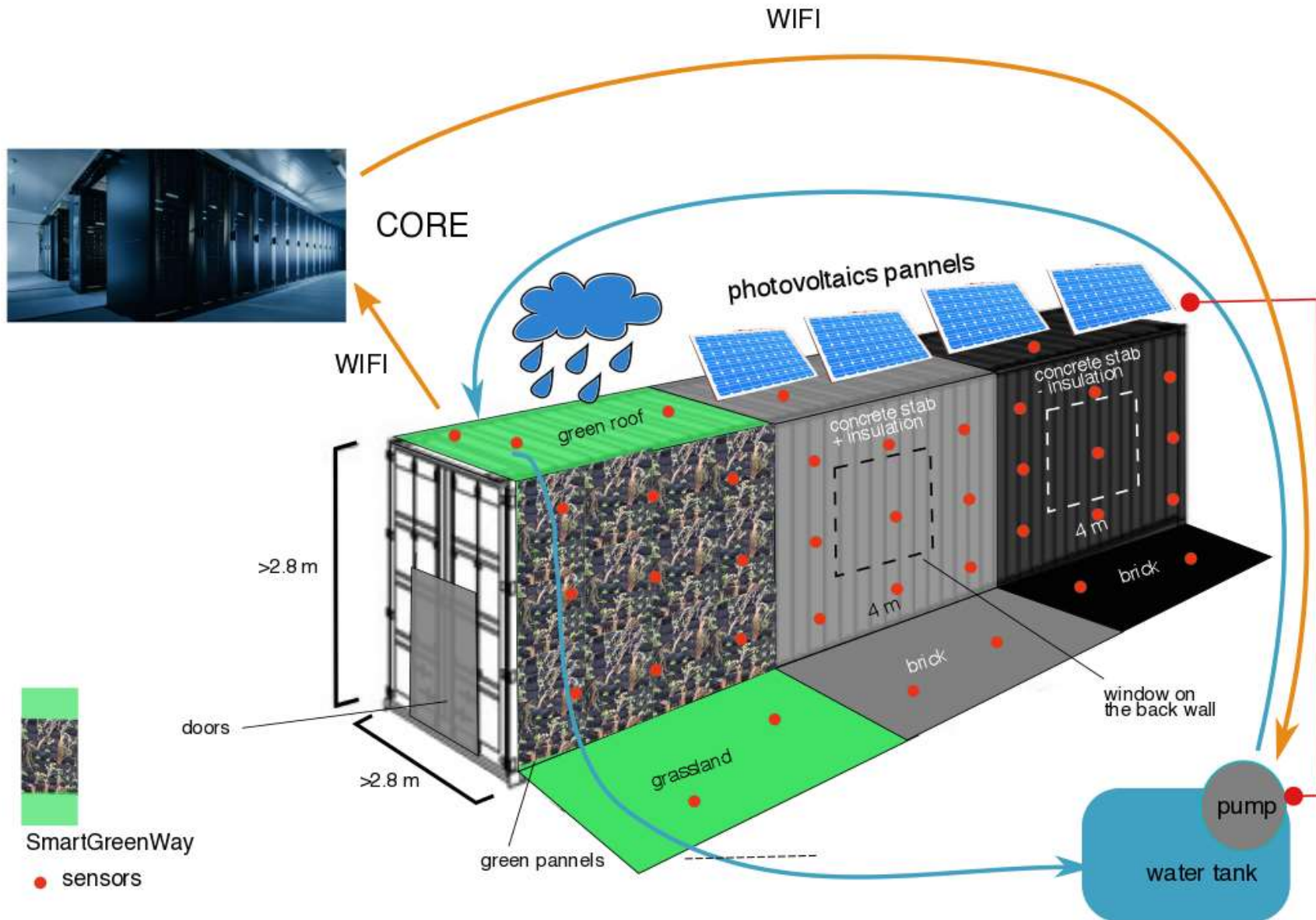
WP4

SELF-SUSTAINABLE INTELLIGENT MODULE
FOR CITY GREEN INFRASTRUCTURE

WP5

VALIDATION OF MOD4GRIN IN URBAN CONDITIONS

MOD4GrIN - Green LAB



MOD4GrIN: benefits to people and nature



- Urban Heat Island mitigation
- Improved water retention
- Biodiversity conservation
- Human well-being

Photo credits:
Habitat: Dale Gribble, NPS
Rare ecosystems: Jessica Jahn, EPA contractor
Connectivity: Paul Harris, NPS



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Thank you for your attention

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