REgeneration MOdel for smart URBAN transformation
REMOURBAN

“Regenerating existing cities into sustainable cities”
A turning point for smart cities

REMOURBAN is a lighthouse project whose ultimate goal is to design and validate a urban regeneration model in the cities of Nottingham (UK), Valladolid (Spain) and Tepebasi/Eskisehir (Turkey), while maximizing its replication potential in two follower cities, Seraing (Belgium) and Miskolc (Hungary).

The model leverages the convergence between energy, mobility and ICT to improve quality of life, ensure social acceptance and empower citizens. REMOURBAN will test a range of technical innovations and solutions as well as new business models for city renovation and strategies addressing non-technical barriers.

Reach a resource efficient and competitive future

Develop and demonstrate a holistic and highly replicable urban regeneration model to
• leverage the convergence of energy, mobility and ICT
• accelerate the development of innovative technologies, organisational and economic solutions
• increase resource and energy efficiency improve the sustainability of urban transport and drastically reduce greenhouse gases (GHG) emissions in urban areas
• facilitate replication across Europe
• empower citizens to be actors in their cities' transformation
Identification of principal non-technical barriers to improve urban sustainability and transition to smarter cities, optimized regulatory frameworks and engaged citizens.

Drive urban innovation
Interventions and expected impacts

**Low Energy Districts**
- Retrofitting, renewable heating and cooling, distributed energy generation, monitoring tools for energy efficiency, electricity distribution and advanced building energy management systems

**Current Districts**
- 4,500 kWh/person-yr
- 1,485 kg of CO$_2$/person-yr
- Energy reduction: 34%
- CO$_2$ emissions reduction: 50%

**Sustainable Mobility**
- Clean energy vehicles, renewed transport infrastructures and plans for reduced energy consumption and CO$_2$ emissions

**Current Mobility**
- 8,340 kWh/person-yr
- 2,752 kg of CO$_2$/person-yr
- Energy reduction: 5.1%
- CO$_2$ emissions reduction: 5%

**Integrated Infrastructures**
- Smart grid connectivity, city information platforms, optimized traffic flows, multi-modal transport solutions and collaborative information transfer

**Enabling factors for urban sustainability**
Identification of principal non-technical barriers to improve urban sustainability and transition to smarter cities, optimized regulatory frameworks and engaged citizens.
Lighthouse cities
Delivering urban transformation and renovation

Valladolid (Spain)
Administrative capital of Castilla y Leon
Population: 310,000
Impact:
50% energy savings
80% emissions avoided
5,700 citizens involved

Nottingham (UK)
One of the major cities in the Midlands
Population: 306,000
Impact:
50% energy savings
26% emissions avoided
8,100 citizens involved

Tepebasi/Eskisehir (Turkey)
The second biggest city in Middle-Anatolia
Population: 315,000
Impact:
53% energy savings
63% emissions avoided
6,000 citizens involved

Follower cities
Ensuring results and replicability

Miskolc (Hungary)
A national smart city flagship
Population: 163,000

Seraing (Belgium)
An industrial city with vast urban regeneration plans — Population: 61,000
Regenerate your city with REMOURBAN

www.remourban.eu

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This project has received funding from the European Union’s Horizon 2020 research and innovation programme under grant agreement No 646511