

SURECITY PROJECT

Holistic simulation and optimization for smart cities

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SUSTAINABLE AND RESOURCE EFFICIENT CITIES HOLISTIC SIMULATION AND OPTIMIZATION FOR SMART CITIES

ERA-NET Co-fund SCC

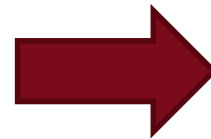
8 Partners + 1 Support organization

Total budget 1,7 M€

April 2016 – March 2019



CONTEXT



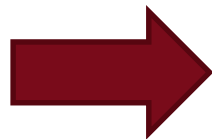
- SEAP (2020)
- SECAP (2030)

Targets

Decisions?

Implementation

**Small/Medium
Cities**

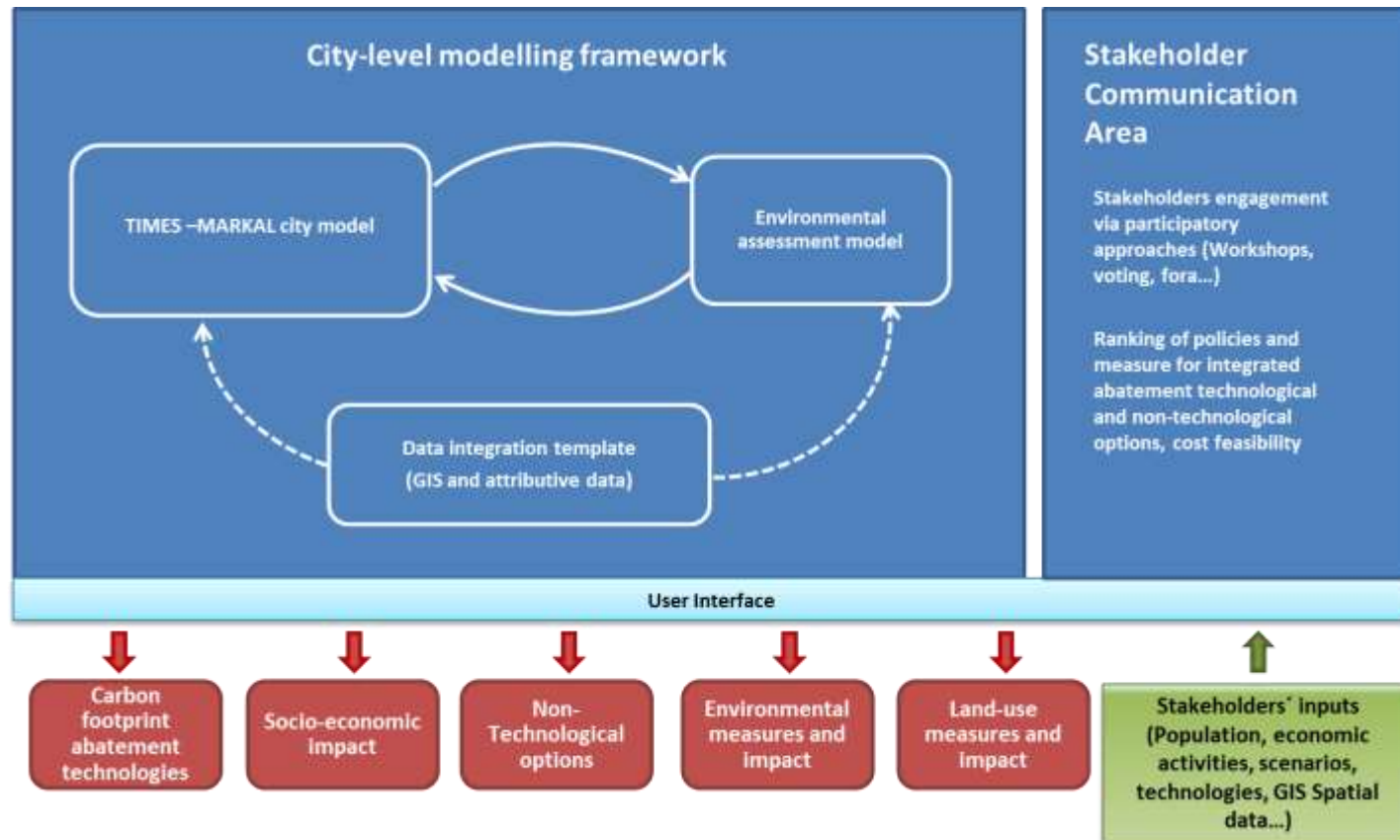


- Knowledge
- Resources
- Local conditions

MAIN GOALS

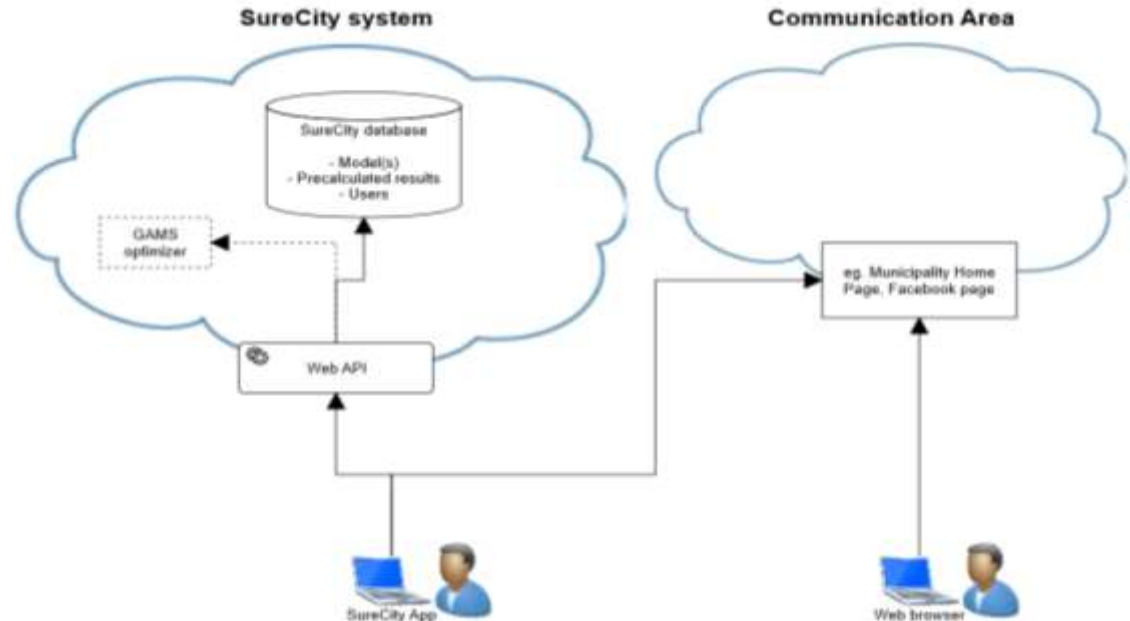
- i. Support integration of policies and measures for decarbonization
- ii. Keep sustainability goals on air-quality, land-use and water use
- iii. Improve the governance
- iv. Support the integration of city actors (authorities, companies and citizens) in the decision making process

VALUE PROPOSITION



TECHNOLOGY


- The project will use TIMES-MARKAL city model in combination with EAM
- The user will be able to install the application in their local machine
- The central database containing the information will be located in the Cloud



TECHNOLOGY

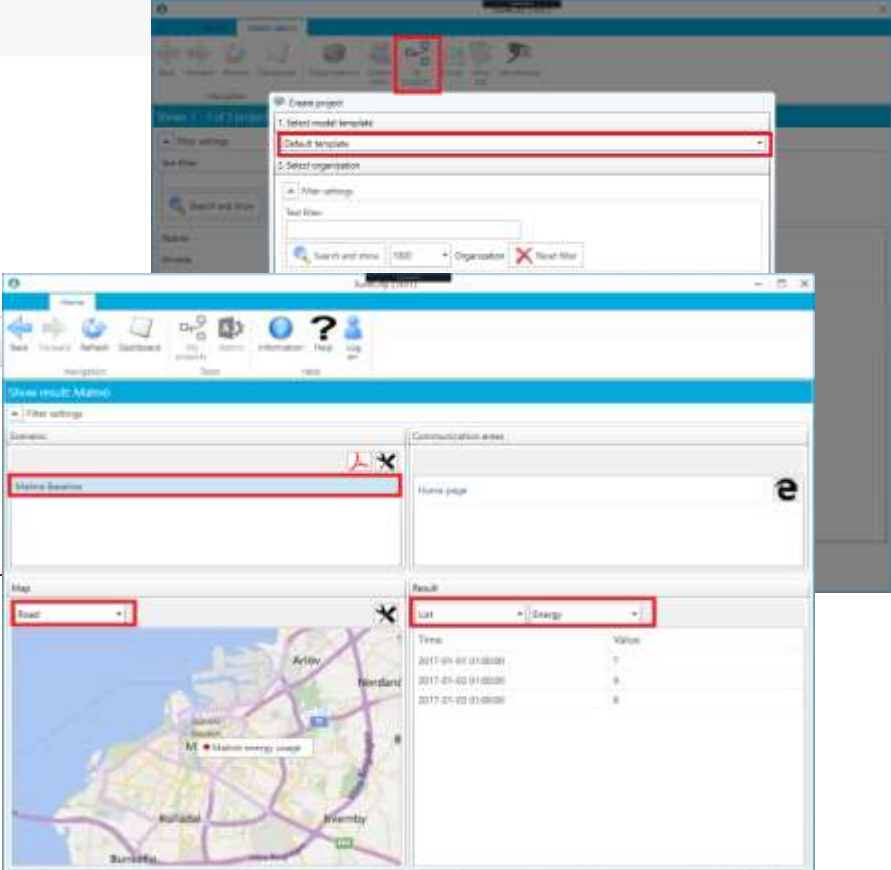
HOME INSTALL TOOL NEWS WEB API

The SureCity tool



The tool requires .NET Framework 4.6.

Install the SureCity tool



The screenshot shows the 'Create project' dialog box with the following steps:

1. Select model template: Default template
2. Select organisation: [Search and view] [100] [Organisation] [Test filter]

The main dashboard displays the following information:

- Navigation:** Back, Forward, Refresh, Dashboard, City projects, Access, Information, Help, Log out.
- Filter settings:** [Map] [Road] [Energy]
- Map:** A map of the Barcelona area with a red box highlighting the 'Road' filter.
- Result:** A table showing data for the 'Road' filter.

Time	Value
2017-01-01 01:00:00	7
2017-01-02 01:00:00	9
2017-01-03 01:00:00	8

<https://ivl-surecity.azurewebsites.net/InstallTool>

STUDY CASES SUPPORT REPLICATION

Malmö



- 3rd largest city in Sweden
- Area 158.36 Km²
- 322 600 inhabitants
- Commercial centre of southern Sweden
- 5 spatial zones to be use energy consuming sectors

Almada



- Located on the south bank of the Tagus River
- 1 municipalities within the Lisbon Metropolitan Area
- 169 914 inhabitants
- Preserve 25% as a natural protected area of
- 11 spatial zones to be use energy consuming sectors

Judenburg



- It is a historic town in the federal state of Styria
- It is regional centre together with Knittelfeld
- 10 072 inhabitants
- Industrial and commercial Center
- 8 spatial zones to be use energy consuming sectors

SUMMARY

- SURECITY Platform covers the gaps in terms of knowledge, resources and local conditions for the small/medium cities for the development of their energy and environmental policy
- SURECITY Platform is a flexible and user-friendly platform which support the small/medium cities in integration of policies and measures for decarbonization
- Support the integration of the city actors in the decision making process in the development of the energy and environmental strategy at city level.
- SURECITY Platform is tested for different size of cities and geographical conditions

THANK YOU!

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