

Results of the Assessments

Moukhtara, Lebanon

The results of the SMC sustainability assessment for Moukhtara confirmed the great issue related to energy. The weaknesses identified in the Moukhtara pilot are related to the unavailability of reliable source of power to meet the electrical and thermal demand of the citizens of Moukhtara. On the other hand, another issue, associated with the GHG emissions, was identified during the assessment since the thermal energy usage and the back-up electricity generators rely on heavy fuel oil instead of clean sources or renewable sources of energy.

Assessment Results Sousse at the neighbourhood scale

Sahloul 3 Urban Area

Final Score

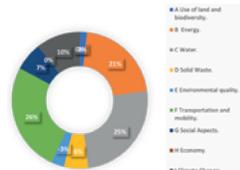


0.82
Overall Score

Spider Chart



Pie Chart



Number of Active Indicators:

Total number of indicators available in the SNTool and number of indicators selected (Including KPIs) in the assessment.

of available criteria 92 # of active criteria 33

Description of the KPIs

KPIs at neighbourhood scale	Value	Unit of measure
B2.1 Total final thermal energy consumption for building operations.	19,42	kWh/m ² /yr
B2.4 Total final electrical energy consumption for building operations.	13,86	kWh/m ² /yr
B2.7 Total primary energy demand for building operations.	53,24	kWh/m ² /yr
B3.1 Share of renewable energy generated on-site, relative to final thermal energy consumption for building operations.	4,30	%
B3.4 Share of renewable energy generated on-site, relative to final electric energy consumption for building operations.	5,90	%
B3.7 Share of renewable energy generated on-site, relative to the total primary energy consumption for building operations.	0,00	%
C2.3 Consumption of potable water in residential buildings.	169,84	l/occupant/yr
D2.2 Access to solid waste and recycling collection points.	0,00	%
E1.2 Particulate matter (PM ₁₀) concentration.	42,00	days/yr
F1.1 Performance of the public transport system.	80,00	%
F2.3 Bicycle network.	0,02	m ² /inhabitant
G3.1 Availability and Proximity of Key Services.	25,00	%
I1.1 Greenhouse Gas emissions.	1,06	t CO ₂ eq./inhabitant /yr
I3.1 Permeability of land.	7,86	%

Irbid, Jordan

The SMC Irbid team through the development of the sustainability assessment identified several weaknesses for the Al Nozak urban area. The assessment showed a very low availability and accessibility of green urban areas as well as a low green zones density and green areas ratio to neighborhood population. Regarding the issue of energy, some issues in relation to the total final electrical energy consumption as well as the total primary energy demand for the operation of buildings were identified. Moreover, the share of renewable energy on-site, relative to total final thermal energy, electric energy, and energy consumption for building operations also showed a low sustainability score during the assessment.

Assessment Results Moukhtara at the neighbourhood scale

Moukhtara's Central District

Final Score

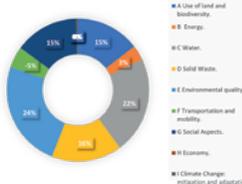


2.6
Overall Score

Spider Chart



Pie Chart



Number of Active Indicators:

Total number of indicators available in the SNTool and number of indicators selected (Including KPIs) in the assessment.

of available criteria 92 # of active criteria 35

Description of the KPIs

KPIs at neighbourhood scale	Value	Unit of measure
B2.1 Total final thermal energy consumption for building operations.	19,00	kWh/m ² /yr
B2.4 Total final electrical energy consumption for building operations.	20,64	kWh/m ² /yr
B2.7 Total primary energy demand for building operations.	27,64	kWh/m ² /yr
B3.1 Share of renewable energy generated on-site, relative to final thermal energy consumption for building operations.	29,00	%
B3.4 Share of renewable energy generated on-site, relative to final electric energy consumption for building operations.	36,00	%
B3.7 Share of renewable energy generated on-site, relative to the total primary energy consumption for building operations.	79,00	%
C2.3 Consumption of potable water in residential buildings.	180,00	l/occupant/yr
D2.2 Access to solid waste and recycling collection points.	22,00	%
E1.2 Particulate matter (PM ₁₀) concentration.	1,00	days/yr
F1.1 Performance of the public transport system.	0,00	%
F2.3 Bicycle network.	1,00	m ² /inhabitant
G3.1 Availability and Proximity of Key Services.	80,00	%
I1.1 Greenhouse Gas emissions.	2,49	t CO ₂ eq./inhabitant /yr
I3.1 Permeability of land.	63,00	%

SMC Passport

Sousse, Tunisia

The current state analysis of the Sahloul 3 urban area in Sousse, shows a not very well performing situation in terms of sustainability level. The neighbourhood is characterized by giving priority to individual housing, to private cars with an uneffective parking system, that does not take into consideration the issues of sustainability, and that remains insensitive to new technologies and renewable energies. Moreover, there is almost no use of renewable energy despite the high potential. On the other hand, in regard of the solid waste management, there is no selective sorting and therefore no recycling of any type of waste. Referring to how people mobilize inside the urban area, there are no facilities adapted to gentle mobility (cyclist and pedestrian) jeopardizing the safety and viability of all types of transportation.

SMC Passport

Assessment Results Irbid at the neighbourhood scale

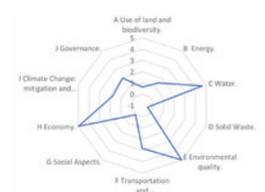
Al Nozak Urban Area

Final Score

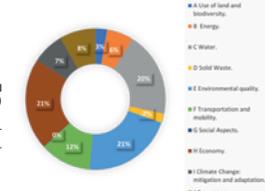


2.26
Overall Score

Spider Chart



Pie Chart



Number of Active Indicators:

Total number of indicators available in the SNTool and number of indicators selected (Including KPIs) in the assessment.

of available criteria 92 # of active criteria 73

Description of the KPIs

KPIs at neighbourhood scale	Value	Unit of measure
B2.1 Total final thermal energy consumption for building operations.	100,00	kWh/m ² /yr
B2.4 Total final electrical energy consumption for building operations.	32,84	kWh/m ² /yr
B2.7 Total primary energy demand for building operations.	85,00	kWh/m ² /yr
B3.1 Share of renewable energy generated on-site, relative to final thermal energy consumption for building operations.	0,00	%
B3.4 Share of renewable energy generated on-site, relative to final electric energy consumption for building operations.	8,00	%
B3.7 Share of renewable energy generated on-site, relative to the total primary energy consumption for building operations.	3,00	%
C2.3 Consumption of potable water in residential buildings.	70,00	l/occupant/yr
D2.2 Access to solid waste and recycling collection points.	0,00	%
E1.2 Particulate matter (PM ₁₀) concentration.	0,00	days/yr
F1.1 Performance of the public transport system.	93,30	%
F2.3 Bicycle network.	0,00	m ² /inhabitant
G3.1 Availability and Proximity of Key Services.	100,00	%
I1.1 Greenhouse Gas emissions.	2,80	t CO ₂ eq./inhabitant /yr
I3.1 Permeability of land.	37,40	%

SMC Passport

Participatory Approach

The Sustainable MED Cities project aims at enhancing and motivating decision-makers to focus on the implementation of social participation strategies and tools into the decision-making processes. This, to involve all stakeholders in all phases of the project to gather their insights and opinions and consequently guarantee the ideation of successful and effective solutions that actually solve the needs of the territory and therefore the community. The SMC project developed the following participation strategies and tools:

Co-Creation Labs

Co-creation is the practice of collaborating with different stakeholders to guide the decision-making process while promoting a bottom-up approach. During a facilitated in presence workshop, participants with different roles align and offer diverse insights.

Therefore decision-makers can obtain a more interconnected perspective of what a retrofit scenario should include.

Through structured discussion, brainstorming, and ideation, co-creation workshops help to draw out ideas, risks, approaches, and clarity that can lead to better scenario designs and better outcomes during implementation.

The Collaborative Platform

The Sustainable MED Cities Collaborative Platform is the open-source online tool to engage with stakeholders in every phase of the decision-making process. It is powered by Adhocracy+, a non-profit association that has been developing concepts and software for digital democracy as a non-profit association since 2009 with the aim to contribute to a modern, transparent, and a democratic culture. A collaborative platform is an online digital tool to involve different types of stakeholders in every process where decisions need to be made. It serves governments, social groups, and other institutions to involve different types of stakeholders in all types and stages of participative processes.

Info

Implemented by



Government of Catalonia (Spain)
<https://territori.gencat.cat/es/inici/>



iiSBE ITALIA R&D (Italy)
<http://iisbe-rd.it>



Municipality of Sousse (Tunisia)
<http://www.commune-sousse.gov.tn>



Municipality of Moukhtara (Lebanon)
<https://moukhtara.gov.lb/>



Greater Irbid Municipality (Jordan)
www.irbid.gov.jo



National Observatory of Athens (Greece)
www.noa.gr

Associated Partners



United Nations Environment Programme - Mediterranean Action Plan
<https://www.unep.org/uneppmap/>



MedCités Association
<https://medcities.org/>



Sustainable MED Cities

SMC Sustainability Assessment Results

Results of the assessments at the neighbourhood level for the pilot cities and implementation of the Participatory Approach



<https://enicbmed.eu/projects/sustainable-med-cities>