SUSTAINABLE MED CITIES

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TESTING PILOTS

Each Municipality has developed a testing pilot for the Sustainable Building Tool and the Neighbouorhood Tool, achieving their personalized tools that they will use from now on to assess the existing buildings and neighbourhoods and improve sustainability according to their compromises (Page 2).

REPOSITORY

MedUrbanTools is chosen as the repository of the tools, methodologies and deliverables of the project, as MedCities is Associated Partner of the project.

ABOUT

The Sustainable MED Cities has ended the implementation period although the tools and methodology will continue being improved. The last phase of the project was focused on the testig pilots as well as compilating all the information of the results in guides, policy papers and deliverables.

The national pilots also revealed some interesting information on the most popular sustainability Indicators that were selected by each national team, illustrating the emphasis and the priorities given by the participating municipalities.

The national tools include the same KPIs, but use a different number of Issues, Categories and Indicators that best fit in the national and local context and their sustainability priorities.

Following the SMC decision-making methodology, each municipality had to assess one urban area and two buildings at the existing condition and evaluate at least two renovation scenarios, so as to be able to rate the proposed scenarios and select the most suitable one.

ENI CBCMED Cooperating across borders in the Mediterranean

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Sustainable MED Cities

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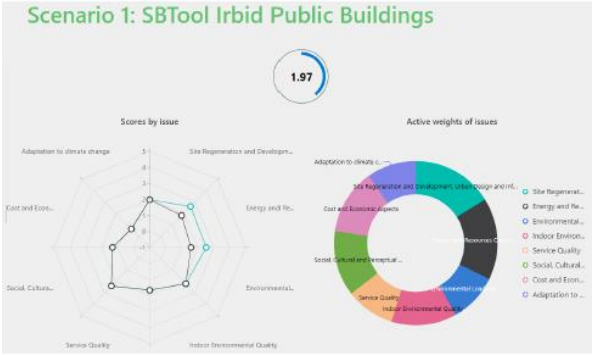
IRBID, JORDAN

In the SBTool-Irbid for the public building, 27% of the Indicators have different benchmarks compared to the Generic Framework SBTool. The existing condition of the building considered in this pilot reached a sustainability score of 1.19. The existing condition of the building considered in this pilot reached a sustainability score of 1.19 and it can be considered as above the minimum requirements that can be improved. The selected retrofit scenario is Scenario 1 that has the higher sustainability score and thus a higher potential for improvement. In the selected scenario, Issue C has the highest improvement of its sustainability score.

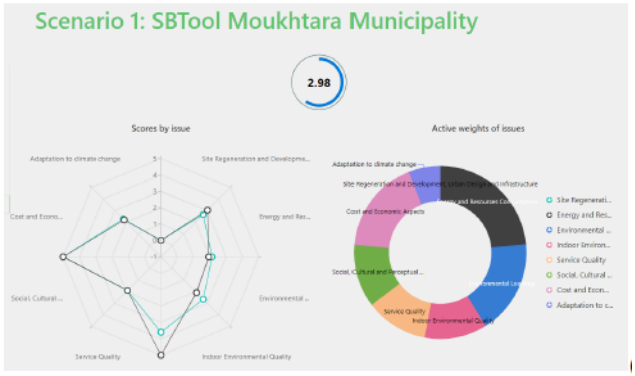
Name of the Building	*Irbid Chamber of Commerce*
Actual building use	Public building
Year of construction	*1998*
Level of degradation of the building	*Average*
Number of levels above earth	4
Number of levels underground	1
Heating system	*Inverter AC*
Cooling system	*Fans + natural cooling + Inverter AC units + Free air diffuser*
DHW system	*Electrical boilers + Instant electric heating water faucet and shower*
Ventilation system	*Natural ventilation*
Lighting system	*LED+* Fluorescent tube+ Halogen lamp
Average U value	*0.57 W/m² K for walls*
Number of occupants	*1000 visitors + 60 Workers*
Hours of occupation per year	*2016 hrs per year*



MOUKHTARA, LEBANON

The SBTool-Moukhtara was contextualized and used for two pilot studies, namely a public building and a school building. Seven Issues and fourteen categories are included in the national SBTool

Name of the Building	*Moukhtara Municipality*
Actual building use	*Municipality- Public services*
Year of construction	*1999*
Level of degradation of the building	*Low level of degradation: slightly damaged walls- medium damage in interiors such as doors and furniture*
Number of levels above earth	*3*
Number of levels underground	*0*
Heating system	*Central Heat Pumps*
Cooling system	*Central Air Conditioner*
DHW system	*Electrical Boiler System*
Ventilation system	*Natural ventilation (windows)*
Lighting system	*Electrical Generator – Governmental electricity*
Average U value	*Total: 1.44 W/m²K (Exterior stone Walls) + 2.99W/m²K (Brick roof)*
Number of occupants	*15*
Hours of occupation per year	*1872 hrs per year*



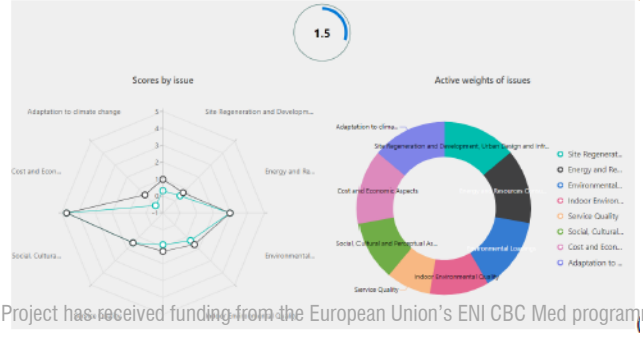
The existing condition of the municipality building considered in this pilot reached a sustainability score of 2.45 and it can be considered as significantly above the minimum requirements. Scenario 1 affected 4 Issues, 5 Categories and 9 Indicators. The sustainability score reached in Scenario 1 is 2.98, increased by 22%. The results for the sustainability assessment of the Moukhtara municipality building in the existing condition and under the scenario are presented in Figure at the left.

SOUSSE, TUNISIA

Eight Issues are included in the SBTool-Sousse. From the 25 Categories in the Generic Framework SBTool, 17 are active in the national SBTool.

The existing condition of the building considered in this pilot reached a sustainability score of 1.20 and it can be considered as above the minimum requirements that can be improved. Although Scenario 2 has the greater improvement of the building sustainability score, the selected scenario was Scenario 1, through the participatory approach. In the selected scenario five out of eight Issues have improved sustainability scores

Name of the Building	*Arrondissement Sahloul*
Actual building use	*Public building - Office*
Year of construction	*2022*
Number of levels above earth	*1*
Number of levels underground	*0*
Heating system	*Natural gas central heating*
Cooling system	*Split system air conditioners*
DHW system	
Ventilation system	*Natural*
Lighting system	*Lampes LED*
Average U value	*1.11 W/m²K*
Number of occupants	*20*
Hours of occupation per year	*3000* hrs per year



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