



Sustainability
Assessment of
Nabta Smart Town (NST)
and Actions for
Improvement:
an Overview

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Nabta Smart Town Project_ACTORS

Funders





Partners

Implementation partner supported by international Egyptian experts



Technology expert partner





Nabta Smart Town Project_VISION

Nabta Smart Town (NST), in New Borg el Arab, close to Alexandria, is an ambitious project under planning that includes residential and commercial facilities, in combination with high quality "Educational Magnets" capable of creating a dynamic community and generating all sorts of interesting activities. Therefore, the uniqueness of NST is building a fully integrated and inclusive neighbourhood (Educational Magnet, Residential, Commercial (shopping, leisure and entertainment), with Administrative Offices (including high-end security).



KFHSD-VTT Collaboration

- The collaboration of VTT has been sought to ensure that the Master Plan and the buildings of the University, as well as the Residential and Commercial facilities of NST comply with the standards of a modern smart EcoCity adapted to the local conditions of Egypt.
- Capitalize on the recommendations and findings of "EcoNBC Feasibility Study. Transforming New Borg El Arab into an EcoCity".
- Special focus on energy. Attention to be paid to energy and resource efficiency when assessing the MP (including passive features, use of indigenous vegetation and local materials, comprehensive sustainable mobility, user behaviour and participation, etc.). Specific methodologies developed by VTT to be used and adapted to the local conditions.



Links to relevant international frameworks

- Directly linked to the UN Climate Change Conference, 21COP held in Paris 30.11-11.12.2015, and the international campaign of decreasing CO2 emissions and increasing the use of renewable energy.
- Also linked to the 2030 Agenda for Sustainable Development, the project will significantly contribute to the following Sustainable Development Goals (SDGs):













Some quick thoughts on the results...

- Since it has become clear that creating an adequate baseline using the most accurate possible local data and the correct assumptions is of crucial importance, to complete the study it would be necessary to cover also other aspects apart from energy like water, waste, material resources, etc., taking the same approach.
- The energy study should be completed by an in-depth cost analysis.
- There is also potential for scalability, and for increasing the efficiency and decreasing CO2 emissions when moving from building scale to district scale while considering the impact of features like vegetation to reduce the heat island effect, or street shading, etc.



Thanks for your attention!

