Urban Battery

Site: Vicalvaro, Madrid

Project Summary ***URBAN BATTERY*** **is designed to become a productive economic, social and environmental engine.**

The *economic engine* reindustrializes the site by relocating a 4.0 factory, creating over 100 qualified green jobs. The factory will develop cutting-edge technologies in manufacturing biodegradable zinc-air batteries to assist in overcoming future urban challenges related to electric mobility, technology and intelligent devices.

The *social engine* includes a socially co-managed large photovoltaic plant. The innovation laboratory, the BatteryLab fosters R&D around the production, storage and use of clean energies.

The *environmental engine* is destined to fertilize soils through progressive rehabilitation programs based on regenerative agriculture concepts. The production of high-quality compost from local organic waste collections is realized in the on-site Compostlab.

Urban Battery will be a project of global significance demonstrating innovation through a large urban prototype laboratory favouring processes of environmental, social and economic self-organization.



Key Components & Solutions

→ Urban Battery is a pioneering project aiming for **carbon neutrality through on-site** energy production and storage solutions.

→ The key element of this project is to build a 4.0 battery plant, disconnected from the grid by developing a combination of battery storage and solar energy production.

→ This approach is consistent with an ambitious objective to reduce energy demand by 50% compared to a Business-As-Usual situation. This will enable the project to gain in self-sufficiency.

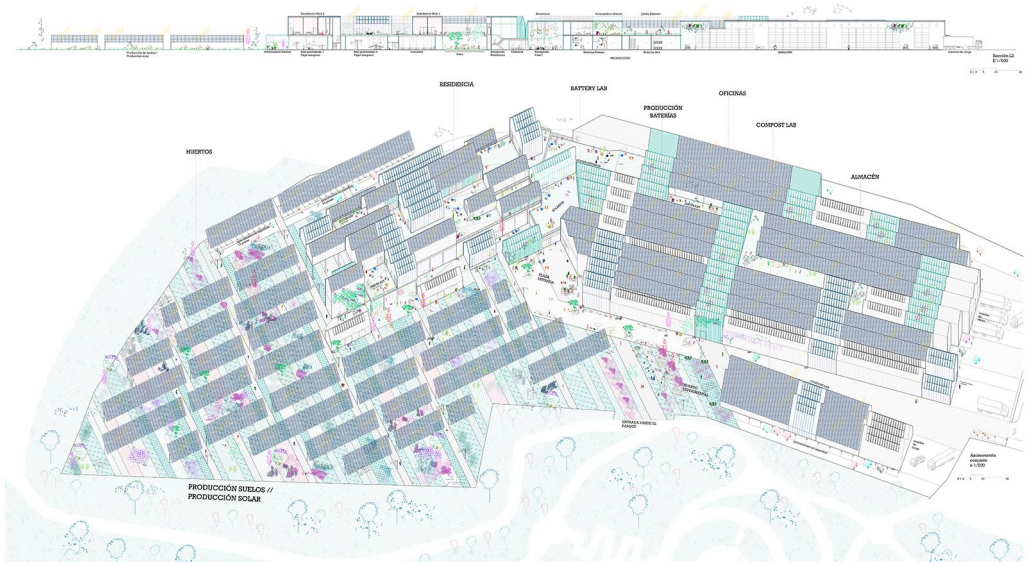
→ Urban Battery has an ambitious water management plan: reduce non-potable water demand by 50%, reuse 80% of grey water and reduce the demand for sanitary appliances by 20%.

Main members of the team

Team leader / Architect: SIC ARQUITECTURA Y URBANISMO
Investor: MASTER BATTERY
Environmental expert: GREEN BUILDING COUNCIL ESPAÑA

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