







COST-EFFECTIVE REHABILITATION OF PUBLIC BUILDINGS INTO SMART AND RESILIENT NANO-GRIDS USING STORAGE

Tools Developed to Enhance Energy Efficiency of Public Buildings

1. INFORMATION MANAGEMENT TOOL

Three dashboards were developed serving as multifunctional information terminals for various groups of people in the two schools in Israel.

Principals' Dashboard

It provides the Principal of school the supportive information for promoting a healthy working and studying environment, cost-effective energy solutions, etc.

Main features: location, availability and operational status of the installed monitoring devices



Teachers' Dashboard

It provides the teachers information concerning energy efficiency of the school buildings.

Main features:

- Live data and historical information regarding electricity consumption and indoor air quality.
- Live data and historical information about outdoor weather conditions.
- Real time data and daily PV generation and storage capacity information.
- Cost of electricity per classroom.



Children's Dashboard

An educational dashboard promoting sophisticated climate and energyconsuming behaviors amongst the young generation.



Main Feature: Live data regarding the electricity consumption and indoor air quality at the school building

2. SMART ONLINE TOOL

The tool promotes **self-sufficiency** in buildings with flexible loads, by properly sizing the Photovoltaics and Battery Storage System to be installed in a building, and by providing an efficient schedule for

1	e flexible loads. 🔮 🔤 🖤 A tool for building integrated energy systems design
	A tool for building integrated energy systems design Sizing and peration of PV and battery systems in buildings with flexible loads The tool calculates the proper size of a hybrid PV+storage system to achieve: maximum self-sufficiency, maximum net present Ystem Consumption Charges Policy Financial Analysis Results
	enhanced self-sufficiency.
	Parametric PV size analysis * Yes No













