



**Wind and Solar Integrated Hybrid
Solutions
DWEA 2026**

Small & Medium Government Enterprises

Plaza Plácido Acevedo, Aguadilla PR

The first Off Grid Island Mode configuration for a municipality in Puerto Rico. 15 kW system combining Solar, Wind, and battery storage.

This configuration ensures that municipal visitors can enjoy the park during both daylight and nighttime hours, powered by a fully renewable energy system. Located near the beachline coast, the average winds in the area are extremely strong, and our wind turbines meet all the requirements and certificates that guarantee they will withstand these winds and continue to operate correctly at such high wind speeds.

This system withstands the hurricane wind forces of 155mph of Hurricane Maria in 2017



Sector	Government
Location	Aguadilla, Puerto Rico
Type	Off Grid
Installation	E-5 Turbines, PV Modules, Batteries
Total Power	15 kW



➤ Plaza Placido Acevedo

System Challenges & Operating Conditions

Located in a high pedestrian-traffic area, Adjacent to an educational facility, requiring heightened safety and reliability.

Continuous exposure to marine conditions, including salt air and corrosion risk.

Operational Status:

The system was installed in 2014 and remains fully operational, demonstrating strong durability and reliability with minimal maintenance requirements despite the challenging environment.



➤ Plaza Placido Acevedo



<https://youtu.be/qYLduKehBNU>



Small & Medium Enterprises

Euro design Homes, Guaynabo, PR

The first rooftop installation in the Puerto Rico Metropolitan area for a net-metering 10 kW system combining Solar and Wind technologies.

This configuration meets the Customer's expectation of reducing their energy demand from the utility grid by up to 40%. Due to limitations of space, DAKI accepted the challenge and was able to combine different technologies in a limited footprint, taking into consideration that the average winds in the area are extremely strong, and our wind turbines meet all the requirements and certificates, which guarantee they will withstand these winds and continue to operate correctly at such high wind speeds.

This system withstands the hurricane wind forces of 155mph of Hurricane Maria in 2017

Sector	SME
Location	Guaynabo Puerto Rico
Type	Grid
Installation	E-5 Turbines, PV Modules
Total Power	10 kW





➤ *Eurodesign Homes, Guaynabo, P.R.*

The system was installed on the roof of a four-story building located in a dense metropolitan area, requiring careful consideration of traffic conditions and limited clearance to nearby structures. Despite these constraints, the system was successfully commissioned in 2015 and continues to operate reliably with minimal maintenance.

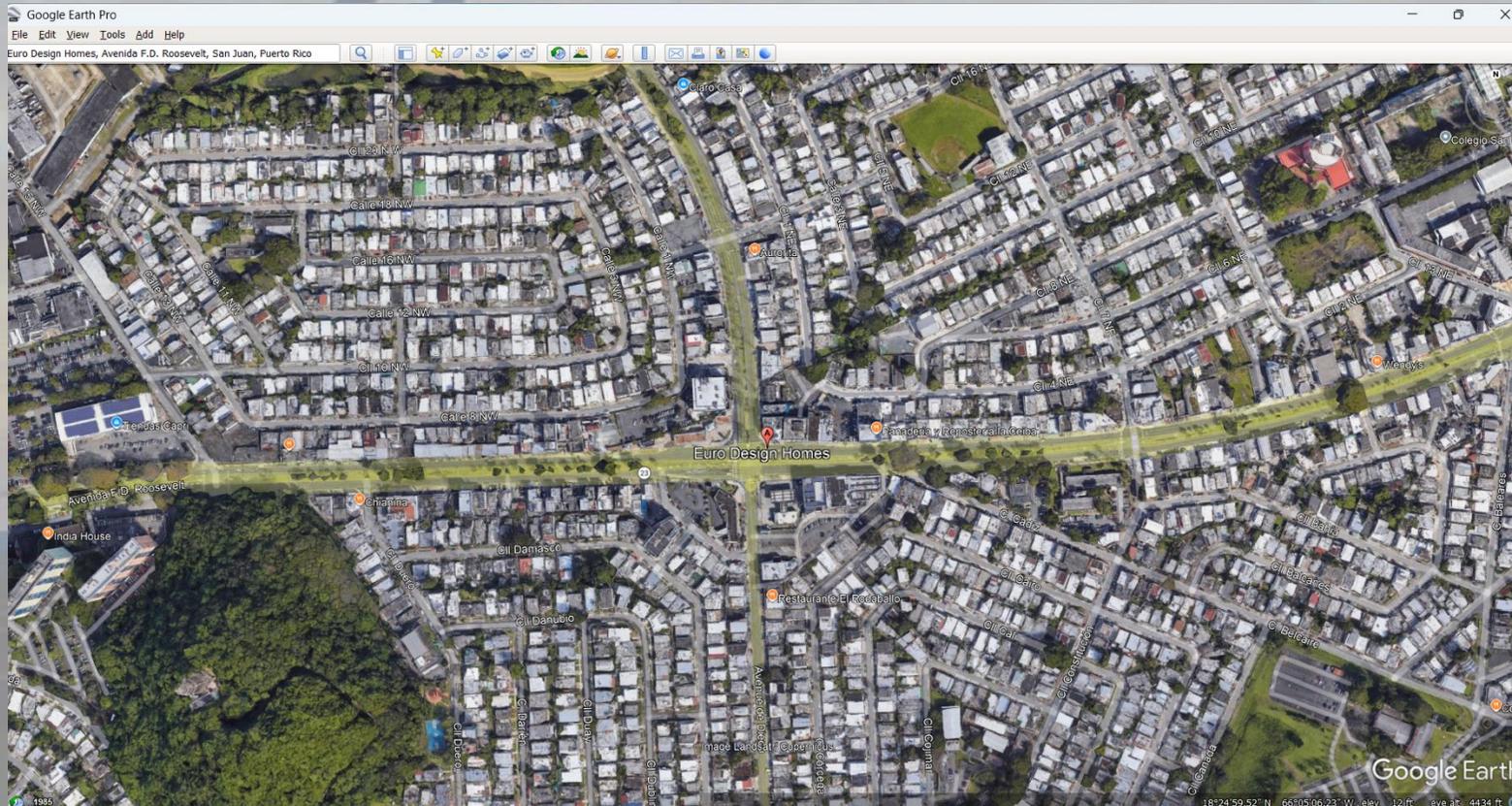
<https://youtu.be/t1Odx-BNRbQ>



➤ Eurodesign Homes, Guaynabo, P.R.



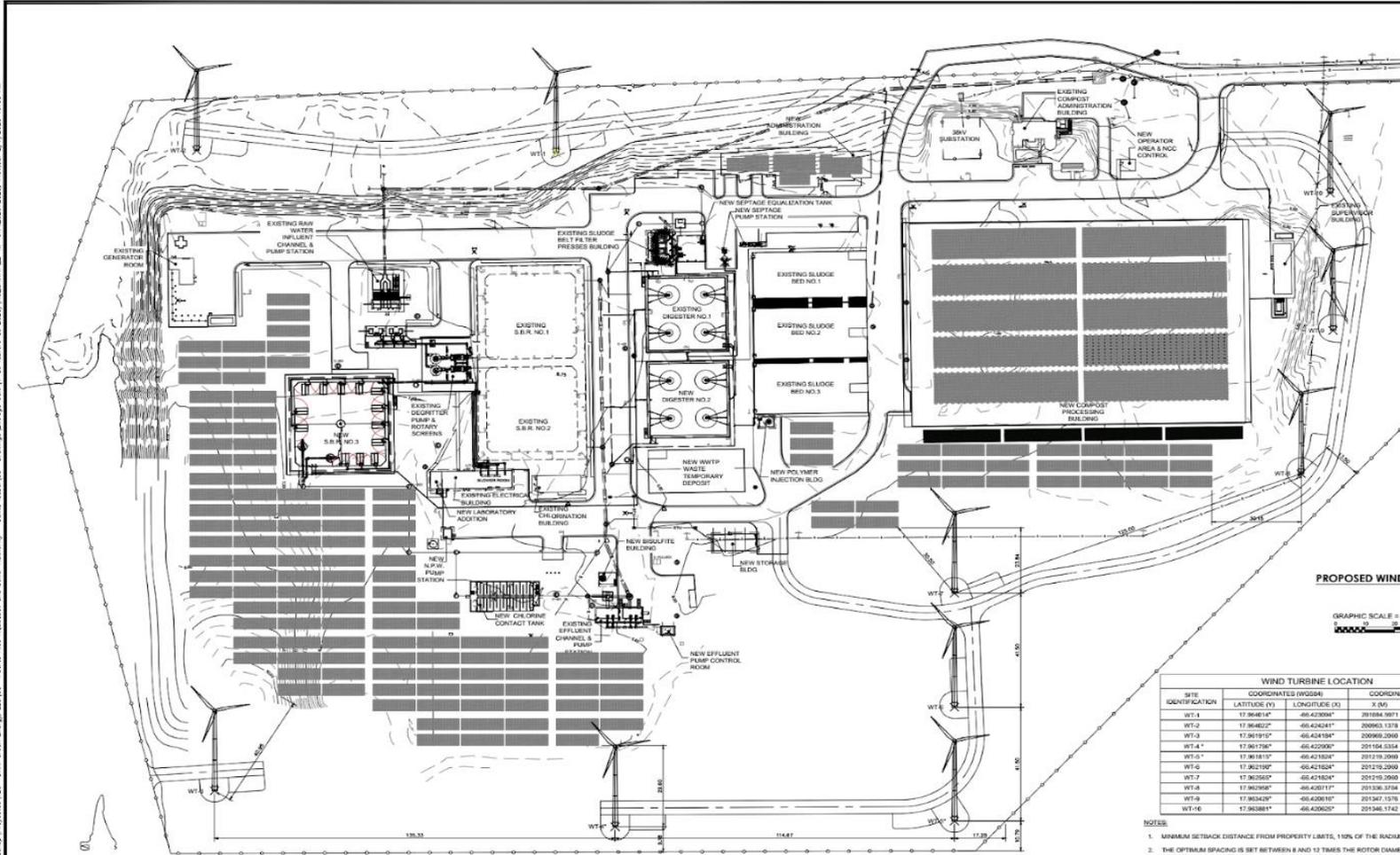
Although located in the center of a metropolitan neighborhood, the system proves that with appropriate planning and engineering, this approach is a technically feasible and practical alternative for a wide range of commercial sectors.



Waste Water Treatment Plant - Santa Isabel, P.R



Proposed Wind Turbine Site Plan



Microgrid of 3.293 MW (AC) Grid Tied PV and 1 MW (AC) WT Energy System NPS 100-24

BESS TESLA Megapacks 2 XL (6)



WIND TURBINE LOCATION			
SITE IDENTIFICATION	COORDINATES (WGS84)		COORDINATE X (M)
	LATITUDE (Y)	LONGITUDE (X)	
WT-1	17.9648147°	-66.420094°	291884.9671
WT-2	17.9648227°	-66.424241°	290953.1378
WT-3	17.9619117°	-66.424784°	290965.2969
WT-4*	17.9617267°	-66.422900°	291154.5334
WT-5*	17.9618157°	-66.421824°	291219.2090
WT-6	17.9621200°	-66.421624°	291219.2090
WT-7	17.9626562°	-66.421424°	291219.2090
WT-8	17.9629582°	-66.420517°	291336.3754
WT-9	17.9634287°	-66.420616°	291347.1576
WT-10	17.9638817°	-66.420625°	291348.1742

- NOTES:
- MINIMUM SETBACK DISTANCE FROM PROPERTY LIMITS, 10% OF THE RADIUS OF THE WIND TURBINE.
 - THE OPTIMUM SPACING IS SET BETWEEN 8 AND 13 TIMES THE ROTOR DIAMETER OF THE WIND, AND BETWEEN 2 AND 4 TIMES IN THE DIRECTION PERPENDICULAR TO THE WIND.
 - ASTERISK DENOTES THAT IT IS NOT COMPLIED WITH MINIMUM SETBACK DISTANCE FROM PROPERTY LIMITS.

NO.	REVISIONS	DATE	BY	APPROV.

INTEGRA
INTEGRA DESIGN GROUP PSC
(809) 761-2111

90% CONSTRUCTION DOCUMENTS REHABILITATION OF THE SANTA ISABEL WWTP
BOCA VELAZQUEZ WARD
SANTA ISABEL, PUERTO RICO
CIP: 4-69-5042

Autoridad de Acueductos y Alcantarillados
GOBIERNO DE PUERTO RICO

GOVERNMENT OF PUERTO RICO
AQUEDUCT AND SEWER AUTHORITY

PROPOSED WIND TURBINE
R. GONZALEZ
R. GONZALEZ

DATE: 11/20/24
REVISION NO.

File: F:\Proyectos\Community Based Projects\126 - Solar Green Energy - Santa Isabel (126 - Solar Green Energy - Santa Isabel) - 2024\126_SolGreen_Plan_01_14_2024.dwg, Revision: 2/2/2025 10:08 AM

Microgrids Solutions



Strategy

A critical component for successful technology integration is early-stage project influence. This is achieved by proactively engaging developers, architects, and design professionals during the initial phases of project planning and concept development.

Daki will execute this strategy through active participation in trade shows, industry conventions, and professional organizations, as well as through strategic memberships in key industrial and commercial associations. These engagements position Daki to shape project specifications, introduce innovative solutions, and establish the technology as a preferred option from the outset.

Benefits

1. Specification Influence

Positions Daki to define project requirements early, ensuring hybrid renewable solutions are incorporated as part of the base design.

2. Increased Project Capture Rate

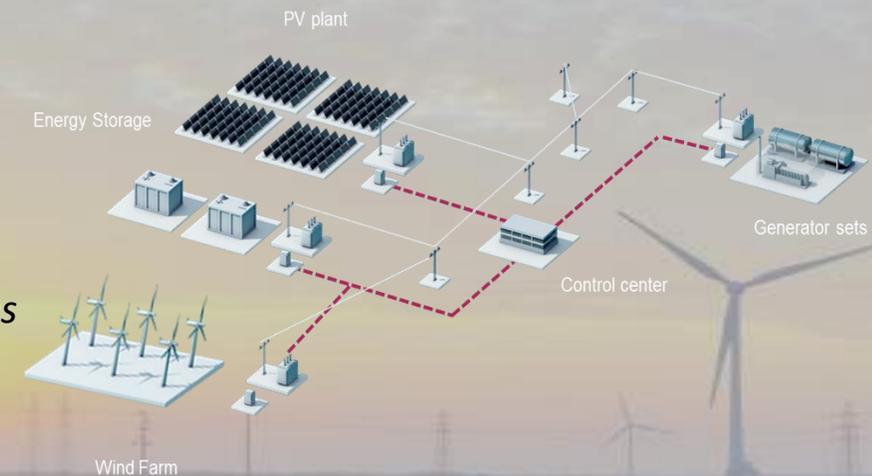
Direct engagement with developers, architects, and engineers improves visibility and increases the probability of selection.

3. Optimized System Design

Enables seamless integration of PV, BESS, and wind technologies, minimizing redesign and maximizing system performance.

4. Cost Efficiency & Value Engineering

Early-stage design optimization reduces CAPEX inefficiencies and improves lifecycle cost performance (LCOE).



Microgrids Solutions



In light of recent federal policy changes that reduce incentives for renewable energy technologies and eliminate funding under the USDA REAP program—particularly impacting the agricultural sector—Daki Green Energy identifies hybrid renewable energy systems as a strategic and viable solution for Puerto Rico’s small business and agricultural markets.

Distributed wind energy, specifically small wind turbine technology, presents a distinct advantage in these environments. Unlike photovoltaic systems, wind turbines can be deployed with minimal land-use impact, preserving valuable agricultural space while contributing to on-site energy generation.

Daki will continue advancing hybrid configurations integrating wind, solar PV, and battery energy storage systems (BESS) to deliver cost-effective, resilient, and sustainable energy solutions. Proven local installations—including the E5 systems deployed at Euro Design Homes and at Placido Acevedo’s site—demonstrate the robustness of this technology, having successfully withstood extreme conditions, including Hurricane Maria.

To accelerate market adoption and stakeholder engagement, Daki will host a one-day Puerto Rico Wind Symposium focused on hybrid energy solutions. This event will bring together industry partners, technology providers, and key stakeholders to showcase the technical, economic, and operational benefits of distributed wind within hybrid microgrid configurations



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