

WILLDAN INDUSTRIAL ENERGY SOLUTIONS

EnMS Industrial Energy Management

Solutions for Rising Utility Costs and Predictive Maintenance
Monitoring, Analytics , and Automated Reporting



Agenda

01

About Willdan

02

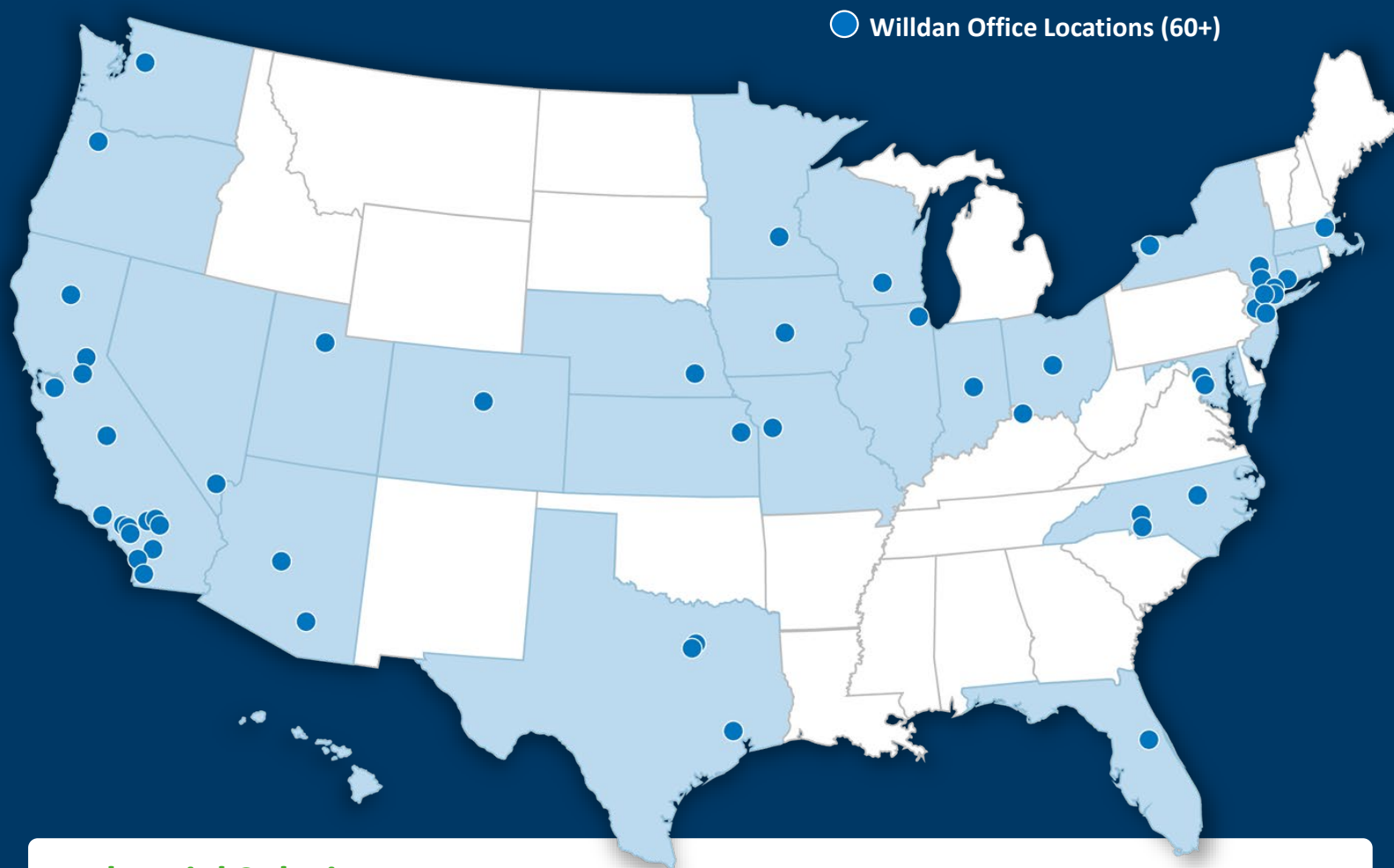
Energy Assessments and Predominant Utility Studies

03

Utility Incentives kWh, kW, Peak kW, Therms

04

Energy Management System EnMS



Industrial Solutions:

- Cement/Minerals/Aggregates
- Paper
- Aerospace
- Large Pharma
- Printing
- Injection Molding
- Food & Beverage
- Plastics
- Metals/Machining
- Fabrication & Extrusion
- Data Centers
- Distribution Centers
- Refrigerated Warehouses
- Telcom

Willdan's team knows the industrial sector, and we understand industrial processes

- **Founded in 1964**
- **35+ Years Energy & Industrial Experience**
- **150+ Industrial projects NAESCO Accredited**
- **Saved 1,400 MW and 6,800 GWh**
- **Saved 100M Therms**
- **5,400,000 MT GHG Avoided**
- **1,280 Staff in 60 Offices**

Energy Assessments provide a path to cost effective Energy and GHG Solutions

Identify a minimum of 5% Energy Savings

- Retrofit Invertors on existing varying load and torque applications
- Inter-connect controls to eliminate unnecessary stand by operation

Provides an Actionable Plan to Cost effective Solutions

- Most projects have a ROI of 25% or better
- Includes an EMS plan and cost estimate
- Includes Utility incentives to offset capital costs

Predominant Energy Use Tax Study

- Energy Assessments and Tax Studies are looking at the same information. Combine efforts to reduce cost
- Most States have Utility Tax abatement programs

Utility Incentives are an under- utilized resource. EMS Utility Incentives can cover up to 80% of the project cost

Beyond Lighting

- Most Incentive Programs include retrofit VFDs
- Controls upgrades are eligible in most programs
- Energy Management Systems are included in many programs under the custom incentive

Most Utility Programs have kW and kWh incentives

- Monitoring is required to maximize the incentives
- kWh incentive based on one year of kWh savings
- kW based on average kW savings

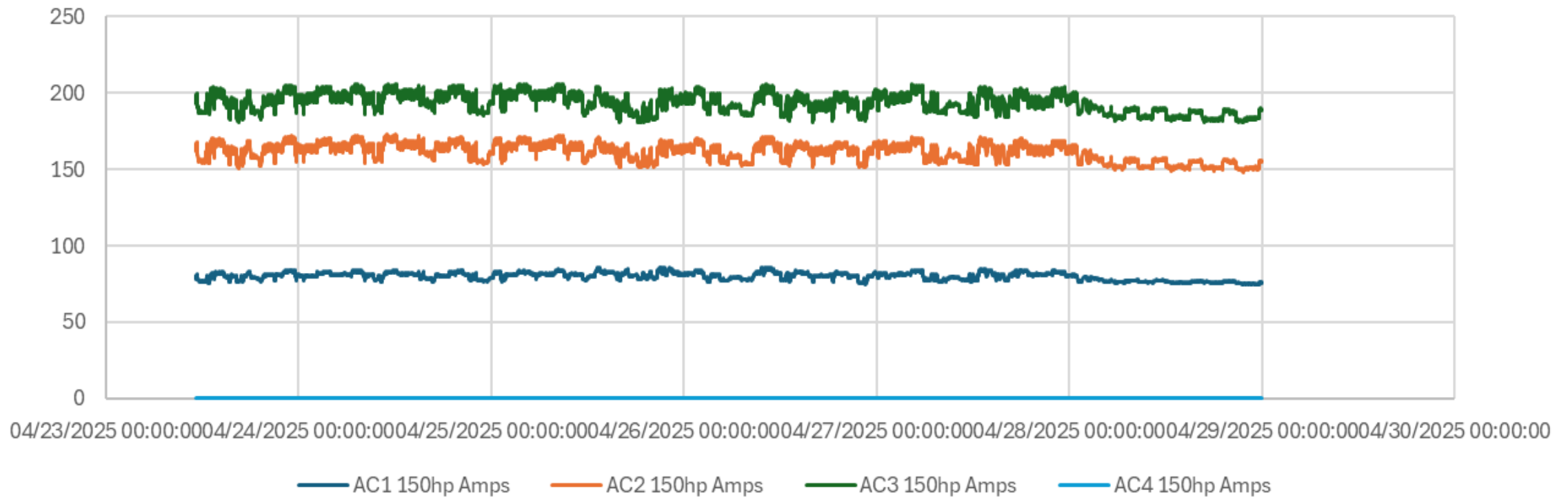
Peak kW or Time of Use kW

- Typically, in summer afternoon months 2PM to 6PM. Many Utilities are increasing the PKW charges and incentives to help manage Grid Load
- The value and cost of Peak KW will continue to rise.

Why Monitor

Graph of 3 air compressors with one unloaded with an annual energy waste of 200,000 kWh = \$17,000

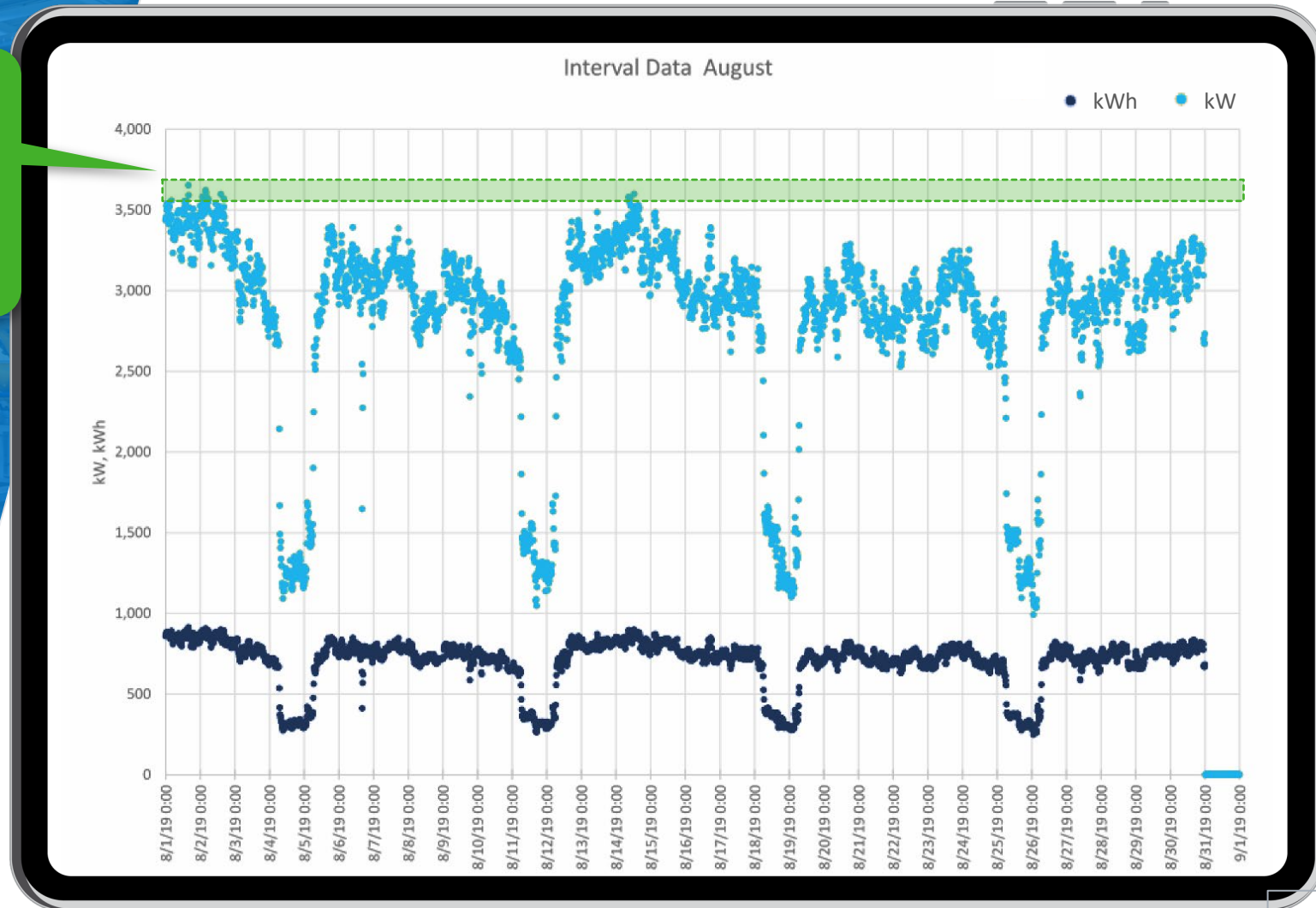
3 150hp Air Comp System



Demand/Peak Management

Example of peak reduction opportunity where 2-3 instances present set the monthly charge

Lowering the demand peak on the grid can reduce total electric costs by 20%. Peak kW Utility incentives can cover up to 80% of the EMS cost



Incentives can help your Company meet Regulatory and Financial Goals



Customer Offer Letter covering 80% of the EnMS Project Cost



Met-Ed • Penelec • Penn Power • West Penn Power

OFFER ACCEPTANCE

RETRO-COMMISSIONING PROGRAM

Report Date:	2025
Owner Name:	
Organization Name:	
Address:	
Project Name:	
Project Number:	

Dear CUSTOMER REPRESENTATIVE :

Thank you for your application for an Energy Solutions for Business incentive for your project. Completed applications are reviewed in the order received, and you will be notified if further information is needed. Please call 1-878-295-4498 if you have any questions about documentation requirements.

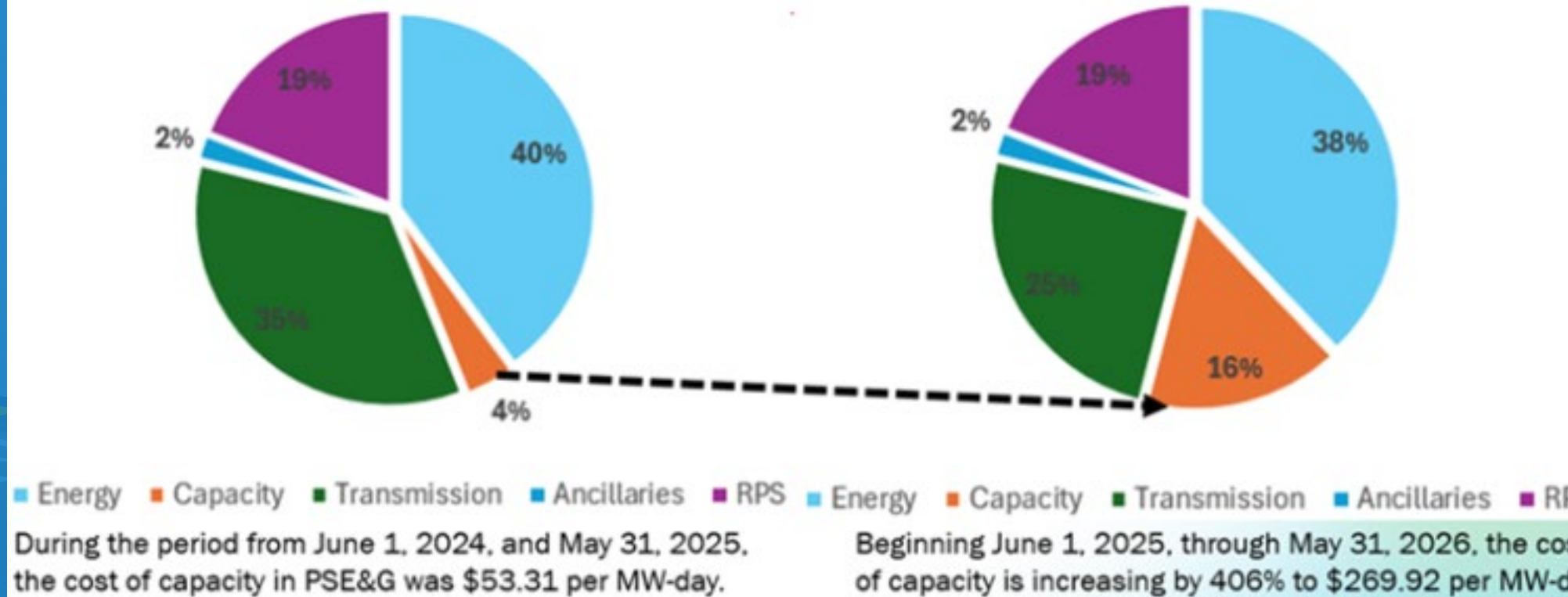
A total incentive of \$ 240,592.00 has been preapproved for your project based on your submitted application and scope of work. Incentives are contingent on the completion of the scope of work as described in your application and will be adjusted to reflect changes to the scope of the project that may occur during implementation. This incentive reservation is valid for 90 days after the date of this letter or until May 31, 2026, whichever is later. You must notify program representatives if your project implementation takes longer than 90 days from the date on this letter to complete.

The Utility increased the incentive rate to capture the Peak kW

Capacity Charges continue to Rise

PSEG, EMAAC and Peco \$55 per MWH to \$270 per MWH

CAPACITY PRICE IMPACT – PSEG – NEW JERSEY



The Industrial EnMS provides competitive advantage

Increase reliability

- Extend equipment life, decrease down time
- Prevent equipment failure (find underperforming, energy-hogging equipment)
- Avoid cost of equipment failures

Improve maintenance

- Data and operating costs drive proactive maintenance, repair, and replacement
- Historical and real time data will reduce downtime saving money and increasing production

Track emissions reduction

- Real-time monitoring and historical data
- Easy reporting (GHG + carbon reductions) for national leadership

EnMS Helps Business Succeed per Berkeley Lab avg. Savings 4%



Increase Profits

- Lower energy bill
- Reduce unit cost of production (increased profitability)
- Use real time reporting to validate GHG reductions



Increase Performance

- Continuous monitoring
- Evaluate system performance
- Identify potential improvements
- Validate upgraded performance

Industrial Energy Management System (EnMS) Platform

- Designed and built by industrial experts
- User-friendly dashboard
- Cloud-based
- Typical ROI 30%

Powered by





Questions/Contacts

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