



# Contractors | Engineers

## CAPABILITIES STATEMENT

### About Consolidated Energy Design, Inc. (CED)

Our FADRS<sup>®</sup> system is designed to deliver significant monetary savings, maximized demand response revenues, fully automate demand response participation, major reduction in energy use, maintain occupant comfort levels, help with power grid reliability and stability, reduce carbon footprint, and provide global environmental benefits.

### Awards

- 2013 - Patent Award for FADRS<sup>®</sup> Smart Grid Technology (US 8,412,654 B2)
- 2015 - Patent Award for FADRS<sup>®</sup> Smart Micro Grid Technology (US 9,002,761 B2)
- 2015 - "Most Novel Demand Response & Advanced Building Automation System" from Maryland Energy Admin)
- 2017 - "Electric Innovation Challenge Winner" by the New York City Housing Authority (NYCHA).
- 2017 - "Most Disruptive Energy Technology" by the prestigious NJ Tech Council... Now TechUnited
- 2019 - Patent Award for FADRS<sup>®</sup> for IoT "Mini BAS" Edge Technology (US 10,523,449 B2)
- 2019 - Awarded \$400,000 from Maryland Energy Administration towards a FADRS<sup>®</sup> Smart Micro Grid Technology Near Net Zero Project
- 2020 - Awarded a \$3.7 million contract for FADRS<sup>®</sup> Smart Micro Grid Technology Near Net Zero Project (Office complex in Hanover, MD) Largest PACE award for Near Net Zero project by Maryland C-PACE.
- 2022 - Awarded FADRS<sup>®</sup> Smart Micro Grid Technology Demonstration Pilot for Port Authority of New York and New Jersey (Building 14: Administration Building; JFK International Airport) Partnering with New York Power Authority.
- 2022 - Obtained MBE certifications from NY State, NJ State, NMSDC, PANYNJ, NYC SBS, and Delaware.
- 2022 - Obtained DBE certifications from PANYNJ and Delaware and SBE certification from NJ State.
- 2023 - Awarded the New Jersey Commission on Science, Innovation and Technology Pilot Clean Tech Demonstration Grant of \$250,000 for FADRS<sup>®</sup> Gizmo IoT "Mini BAS" Edge Control System
- 2023 - Received the 2023 **Thomas Edison Patent Award in Energy** from the Research & Development Council of New Jersey for Method and System for Automatically Adapting End User Power Usage, U.S. Patent (US 9,002,761 B2)



## CORE COMPETENCIES

- **Battery Energy Storage Systems (BESS)**
- **HVAC Design & PM Services**
- **Solar PV & Thermal**
- **Smart Microgrid Technology**
- **ESG (Environmental, Social & Corporate Governance)**
- **Developer of Net Zero Energy Buildings**

### DIFFERENTIATOR



- ✓ **FADRS<sup>®</sup>** can save 15% - 30% of a facility's annual energy usage wherever installed. Typical control systems only reduce 5%.
- ✓ **FADRS<sup>®</sup>** reduces 30% - 50% of Peak KW Demand while keeping building occupants comfortable. Typical controls only reduce 10% and make building occupants uncomfortable.
- ✓ **BOTTOM LINE:** Because FADRS<sup>®</sup> AI based technology is "disruptive", we are able to achieve up to **40% energy savings with just FADRS<sup>®</sup> controls and a deep LED lighting retrofit.** This allows us to only have to achieve an additional 30% energy savings using much smaller capacity solar PV, advanced energy storage batteries, distributed generation, and/or tri-generation. This leaves a balance due by the client for utilities of just 20%. We offset that 20% with the significant arbitrage we collect on behalf of our client from the power grid. *The result is a Net Zero Building.*

NAI Emory Hill - Hanover, MD



NAI Emory Hill - Annapolis Junction, MD



Office Building in Central NJ



PANYNJ - JFK Administration Building #14, NY

