

Patrick Osborne



PE, CEM, BESA Senior Energy Engineer

Patrick is a Senior Energy **Engineer at Harris Energy** Solutions with 15 years of experience in mechanical engineering, energy efficiency, building energy modeling, energy auditing, HVAC, and solar design. He holds a Bachelor's of Science in Mechanical Engineering from West Virginia University and multi-state licensure as a Professional Engineer. Patrick has extensive knowledge of ECMs, incentive programs, energy savings analysis, and various computer programs, including AutoCAD, Excel, eQuest, and DOE2 energy coding.

Education

West Virginia University

Graduated 2008

B.S. Mechanical Engineering

Licenses and Certifications

- Professional Engineer (PE)
 - West Virginia, License No. 22718
 - New Jersey, License No. 24GE05635500
 - New York, License No. 103406
- Certified Energy Manager (CEM)
 - Association of Energy Engineers, Certificate No. 26460
- Building Energy Simulation Analyst (BESA)
 - Association of Energy Engineers, Certificate No. 36

Prior Experience

2009 – Present

Senior Energy Engineer, Harris Energy Solutions (2023 –) Senior Energy Engineer, BlocPower (2020 – 2022) Energy Analyst, SOCOTEC (2018 – 2020) Energy Engineer, Edison Energy (2014 – 2017) Mechanical Engineer, New Era Converting Machinery (2012 – 2013) Energy Engineer, Birdsall Services Group (2009 – 2012)

- Developed energy efficiency projects for public and private sector customers, reducing energy costs and lowering emissions for buildings of all sizes and types, including high-rise commercial, multifamily residential, K-12, higher education, museums, ballparks, theaters, houses of worship, refrigerated warehouses, and laboratories.
- Assessed compliance and eligibility for utility, state, and local laws and incentive programs in New Jersey, New York, and elsewhere.
- Performed on-site data collection, utility analysis, energy savings calculations, financial cost-benefit analysis, and generated technical reports for ASHRAE Level I, II, and III energy audits.
- Conducted ASHRAE Level II and III energy audits, both campuswide and focused, system-specific studies, for Lincoln Center/Juilliard and Princeton University.
- Analyzed Energy Efficiency Measures (ECMs) for energy audits and energy models, including HVAC, lighting, controls, plumbing, and envelope measures.
- Generated eQuest/DOE2 energy models for schools, multifamily residences, a refrigerated warehouse, and buildings in the Hudson Yards and Manhattan West developments.
- Analyzed the feasibility of heat pump retrofits for decarbonization projects in houses of worship and multifamily residential buildings.