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AECOM leverages its unique SSIM™ methodologies to drive a high collaborative and interactive strategic energy and water planning process.

Our Process and Tools

SSIMde, our district energy analysis process, allows us to better understand existing and proposed energy profiles of campuses or communities and assess generation strategies.

AECOM's SSIMvision approach creates a robust long-term roadmap that optimizes the cost effectiveness of energy project deployment over time. AECOM's process is driven by the idea of allowing smarter decisions to be made faster.

Bridging the gap between strategy and technical viability, our process is unparalleled in the industry.

Relevant AECOM Capabilities

- Energy planning and visioning
- Community energy profiling & optioneering
- Central plant and infrastructure design
- Climate change impact and resiliency analysis
- Cyber security
- Energy performance contracting

Over 500
million ft²
evaluated

1GW of
peak demand
reductions
identified

1,000 GWh
of identified
annual energy
savings

20+ district
energy
solutions

Strategic Energy and Water Planning

Energy projects are commonly assessed as stand alone tactical efforts to reduce operational costs, often resulting in sub-optimal solutions that miss the opportunity to provide broader benefit to your organization.

Implementing AECOM's strategic energy and water planning process will provide a greater understanding of your energy and water needs and the optimal strategies to enhance the resiliency of infrastructure needed to support your mission.

Integrated Planning

Aligning energy efforts with the broader master planning and capital planning efforts can unlock enhanced synergies that are often missed in a traditional, siloed approach. This process includes:

- Right sizing of equipment
- Optimized phasing
- Energy, water, and cyber security

Enhanced Security and Resiliency

Stepping beyond the building footprint allows the inherent synergies between resources to target cost effective, secure and resilient solutions.

Other Recent Projects

- Blue Silicon Valley, Qingdao, China
- Ft McMurray Heat Network, Canada
- JEB Little Creek, Norfolk, Virginia
- Pier 70 Eco District, San Francisco, California
- Port of San Diego Energy Master Plan, California
- Samsung Smart Cities, China
- University of California, Merced, California
- USACE Comprehensive Energy and Water Master Plans (31 Installations)
- USAF Sustainable Infrastructure Assessments (12 installations)
- Sicozon Island Master Plan, Philippines

AECOM

Built to deliver a better world

Reaching Your Resilient Future

Strategic Energy and Resource Planning



Los Angeles Community College District

In order to maximize the potential for Prop 39 funding along with other sources, LACCD engaged AECOM to assess the energy performance at both a portfolio level and at each of the 9 campuses, incorporating over 6.5M ft² of campus facilities.



NAVFAC MidWest Regional Energy Vision

To assess the optimal approach to achieving Federal Energy Mandate compliance and enhanced mission resiliency, NAVFAC engaged AECOM to develop a phased roadmap to achieve the Navy's energy goals by 2035.

Covering over 20M ft² at three regional installations, the regionally optimized solution demonstrated a path to achieve a 65% energy reduction while maintaining an overall program payback of less than 10 years.

In recognition of the interconnection between energy security and performance, the AECOM team also developed a robust DD1391 for the cyber strategy that would facilitate the secure monitoring and optimization of the regional energy infrastructure.



Energy Execution / Implementation Plans Guam

AECOM is assisting NAVFAC in developing a long term roadmap to enhanced energy security and mission resiliency.

Spanning three installations and over 10M ft² of facilities, the team is evaluating innovative strategies from distributed solar + battery storage to sea water cooling, along with the viability of achieving Net Zero Energy.



San Diego Airport

Through AECOM's energy master planning process, a robust energy roadmap for San Diego Airport was developed, and over \$15M in capital cost savings and \$1M in annual energy cost saving opportunities were identified.