

Alternative Energy Systems Consulting, Inc.

Company Summary





Energy Solutions for a Changing World

Our Company

Founded in 1994, Alternative Energy Systems Consulting, Inc. (AESC) is an energy engineering and consulting firm that drives solutions in energy efficiency, renewable energy, distributed energy resources, and software for utilities, governments, and the private sector.

Flexible and Creative Problem Solvers

We bring flexible, creative problem solving and a nimble operational approach to solve and deliver on our clients' most complex energy and climate challenges.

Industry Veterans and Innovators

We are proven thought leaders in energy engineering, program design, software development, and emerging technologies.

Trusted By Clients

Trusted by a diverse set of utility and government clients based on decades of quality service delivery and integrity.

Our mission is to develop innovative engineering, software, and management solutions to promote a clean energy future. Our dedication to our employees empowers them to deliver superior technical services to our clients and partners.

Addressing Today's Energy Challenges

Our Team

100%

Dedicated to Efficiency and Resiliency

80%

Engineers of Various Disciplines

51%

Hold Energy Industry Credentials

45%

Hold Advanced/Graduate Degrees

35%

Licensed Professional Engineers

Select Credentials

Licensed Professional Engineers and Engineers-in-Training in multiple states.

Other Technical Certifications: LEED Accredited Professional, Certified Practitioner of Energy Management Systems, Certified Measurement & Verification Professional, Certified Building Commissioning Professional, Existing Building Commissioning Professional, Certified Energy Manager, Certified Energy Auditor, Renewable Energy Professional, Building Energy Simulation Analyst



Our Core Services

Engineering

We provide energy engineering, consulting, and program implementation services to utilities and their customers.

Energy Efficiency Engineering

Our team of engineers have degrees, credentials, and applied experience in mechanical, energy systems, chemical, electrical, and civil engineering disciplines.

Measurement and Verification (M&V)

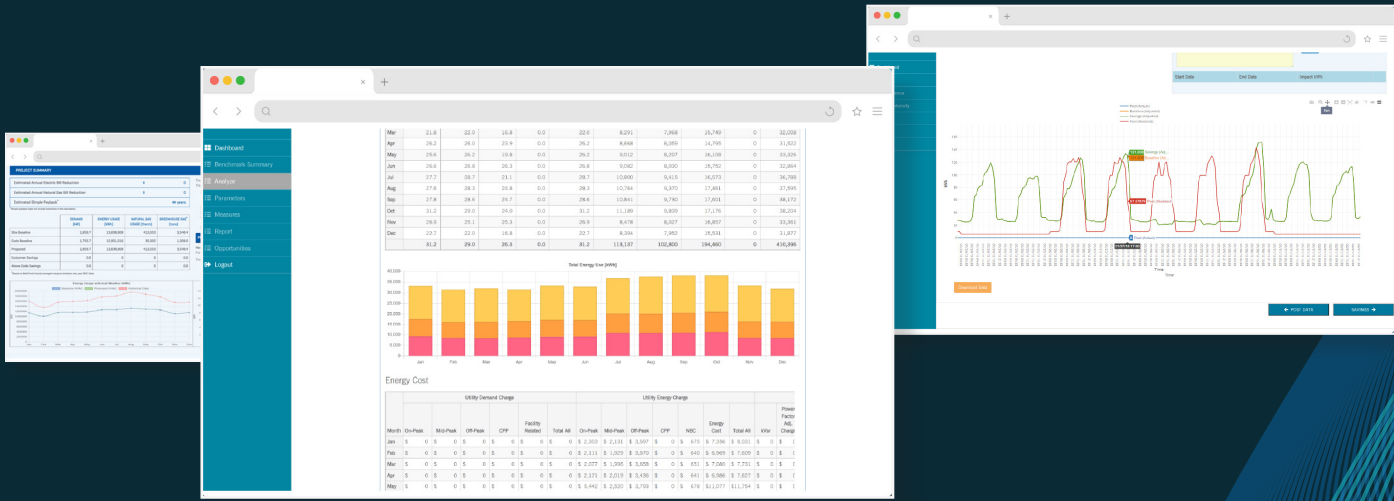
We are experts in applying industry standards such as ASHRAE Guideline 14, International Performance Measurement and Verification Protocol (IPMVP), and Normalized Metered Energy Consumption (NMEC).

Water and Wastewater Optimization

From intricate systems to interdependent processes, we can optimize the operations of pumping, collection, treatment, and distribution systems.

Energy Modeling, Portfolio Benchmarking and Analysis

In addition to expertise with common industry tools (e.g., EnergyPlus, eQUEST), AESC engineers bring in-house software tools to create whole-building models, benchmarks, track changes, and visualize energy improvement over time.



Our Core Services

Software

AESC’s dedicated software team develops software, tools, and calculators to support efficiency, renewable, and transportation programs and projects.

Praxis Cloud-Based Platform

Praxis is a comprehensive customer engagement platform taking the user through the complete lifecycle of an energy project, from project scoping to modeling, reporting, and performance verification. Praxis helps utilities, energy consultants, trade allies and customers simply and cost effectively navigate and analyze energy management opportunities for a site or portfolio of buildings.

Custom Software Development

AESC’s software practice delivers custom tools for utility incentive programs and to fulfill the need for quick yet robust and defensible energy engineering calculations.



Our Core Services

Programs

We help utilities and program implementers achieve their goals through engineering services, trade ally coordination, quality assurance, measurement and verification (M&V), and policy support.

State of California Energy Strategy and Support (SOC ESS) Program

AESC designed and currently implements this statewide program for more than 50 of California's state agencies on behalf of PG&E, SCE, SDG&E and SoCalGas. Through strategy, engineering and project implementation support, AESC delivers efficiency, electrification, and resiliency to support utility and California energy, environmental and reliability goals.

Strategic Energy Management (SEM) Programs

AESC designs and implements commercial, industrial, and multi-family SEM programs. Through energy coaching, engineering support, training cohorts, and energy savings modeling and M&V, AESC has helped instill energy management and continuous energy improvement capabilities at more than 200 sites. AESC also has CP EnMS credentialed staff to drive implementation of energy management systems and 50001 Ready certification.

PG&E RAPIDS Wastewater Optimization Program

AESC designed and currently implements this innovative program to deliver energy and process optimization for PG&E's wastewater treatment plants through risk assessment, process improvement and decision support services. The program delivers energy efficiency, demand response and load optimization.

Energy Resiliency Services

AESC leverages our innovative software solutions to offer building portfolio managers, utilities and local governments cost effective energy resiliency services including remote portfolio analysis and site targeting, onsite site assessments, system design and cost estimating, and implementation support.

California Statewide Energy Efficiency Emerging Technologies Program (SWEETP)

AESC has decades of experience conducting emerging technology studies and now supports the SWEETP team on multiple levels.

Self-Generation Incentive Program (SGIP)

Since 2001, AESC has been the leading technical consultant supporting the California Investor-Owned Utilities with SGIP which offers incentives for self-generation, storage and electrification technologies. AESC is also the primary consultant to the SGIP Working Group, providing technical comment CPUC legislation, developing and revising the SGIP handbook, and reviewing new technologies.

Staff Augmentation

For decades, AESC's combination of energy engineering, program and policy expertise has made us a natural choice to provide trusted staff augmentation services to our utility customers implementing programs and key initiatives.

Our Core Services

Technology

AESC offers technology expertise and thought leadership across energy efficiency, load flexibility, energy resiliency, and transportation electrification.

Emerging Technology Studies

We execute emerging energy efficiency technology studies for all major California investor-owned utilities, including HVAC, motor designs, plug controls, new refrigeration applications, lighting upgrades, pumping systems, wastewater treatment, grid-integrated efficient building (GEB) technologies and controls, and smart electric meters.

Microgrid and Virtual Power Plant (VPP) Studies

AESC helps assess, plan, and recommend technology solutions for microgrids and VPPs, allowing power supply to shift to alternate energy sources for cost savings and resiliency purposes. AESC manages the coordination of DERs in concert with microgrid energy needs.

Distributed Energy Resources (DERs)

We are the DER system integrators, experts in interconnection and the distributed grid, that enable transactive energy. AESC brings specific technology expertise with Photo Voltaic (PV), battery storage, thermal energy storage (TES), combined heat and power (CHP), as well as the management systems (DERMs) that optimize building loads, utility tariffs and grid needs.

Transportation Electrification

For more than a decade, AESC has been helping governments and utilities plan for and develop infrastructure for electric vehicles and implement EV programs. We develop EV assessments and road maps, online program portals, charging infrastructure studies, and site assessments.



Diverse Clientele

Who We Work With

Investor-Owned Utilities and Program Administrators

Arizona Public Service
Center for Sustainable Energy
DC Sustainable Energy Utility
Duke Energy (NC, SC, IN, OH, FL)
Energy Trust of Oregon
Pacific Gas and Electric Company
San Diego Gas and Electric
Southern California Edison
Southern California Gas Company
Arizona PoCenter for Sustainable Energy

Corporations

Ally Energy
Glumac / Tetra Tech
Enviser / Southland Industries
TRC Environmental
Energy Solutions
Vermont Energy Investment Corporation
Dr. Bronner's

Federal, State, and Local Government

California Dept. of Corrections
California Energy Commission
City of Los Angeles
City of Phoenix
City of San Diego
County of San Diego
Department of Energy
General Services Administration
Los Angeles Department of Water and Power
Pasadena Water and Power
Moreno Valley Utility
Orlando Utilities Commission
Redding Electric Utility
Silicon Valley Power
Silicon Valley Clean Energy (SVCE) CCA
State of California
Southern CA Public Power Authority
U.C. San Diego



Values-Driven Energy Consulting

Our Core Values



**Work
Safely**



**Act with
Integrity**



**Deliver
Excellence**



**Be
Accountable**



**Inspire
Change**



**Play
as a Team**



**Pursue Growth and
Learning**

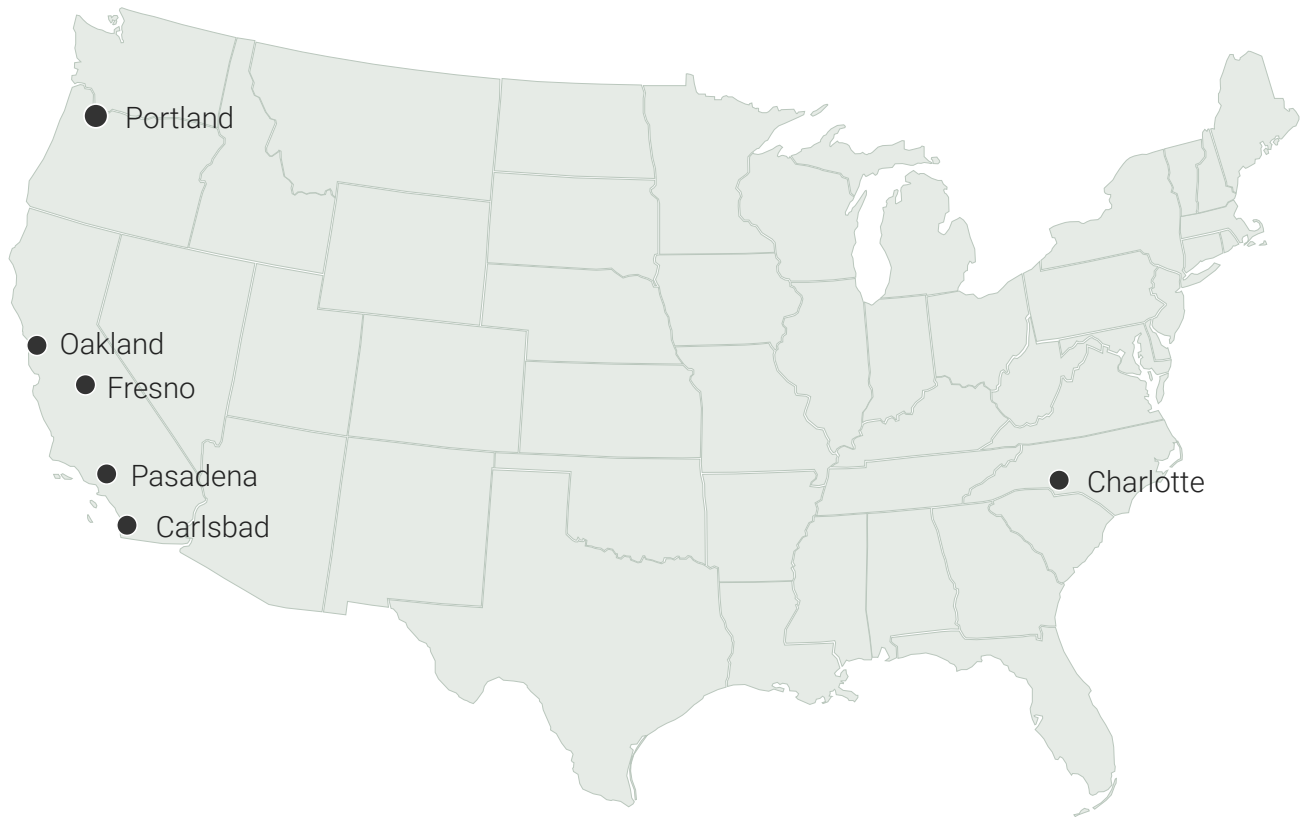


**Live a
Balanced Life**



We Look Forward to Hearing from You

Contact Us



Carlsbad, CA

503.481.2450

abially@aesc-inc.com

Fresno, CA

503.928.9804

ssturdy@aesc-inc.com

Pasadena, CA

626.792.9490

brogers@aesc-inc.com

Charlotte, NC

704.654.6633

mminerich@aesc-inc.com

Oakland, CA

415.987.6553

pdugger@aesc-inc.com

Portland, OR

503.442.0000

blynch@aesc-inc.com