



Alternative Energy

Innovative expertise designing energy solutions.

We are helping clients discover the most advanced, environmentally friendly processes, products, and facilities while saving them money. Our alternative energy team is made up of production experts with backgrounds in the food, glass, and petroleum industries as well as specialists with strong résumés in research-driven fields like chemical and pharmaceutical. This experience ensures your processes and facility will incorporate the best technology available today and will have the flexibility to accommodate growth and change in this evolving industry.

SSOE's expertise includes comprehensive services for the fuel cell, solar, and wind energy supply chains, biofuels, and other emerging technologies. In fact, our alternative energy clients have seen the benefits of that experience with millions of dollars in documented savings.

TOP 15 ENGINEERING / ARCHITECTURE FIRM

Top 15 Engineering / Architecture Firm for the past 8 years (BD+C)



EXPERTS PUBLISHED & PROVEN

Our power experts have been published in *Product Design and Development*, *Food Engineering*, and *Plant Engineering*

\$48M COST SAVINGS

More than \$48 million in documented savings to power clients since 2009





CLIENTS

Ethanol and Biodiesel

American Biodiesel

Blue Earth Biofuels

Lakota Biofuels

Memphis Biofuels

Solscient Energy

Wind Energy
Corporation

Fuel Cell

GrafTech International

University of South
Carolina

The University of Toledo

LEED® Facility Design

Honda of America

University of South
Carolina

Volkswagen

Toyota

Solar

First Solar

Xunlight



"SSOE is an exceptional firm. In almost two decades of work involving construction of research facilities, I don't think I've met a better group. I am a USC faculty member who has served as liaison between our science and engineering researchers and the planners, engineers, architects, and contractors who design and build their facility. Although the phrase is badly overused, SSOE is 'user friendly.' They are willing to share their expertise and to engage the end users in the planning stages, a process that creates a far superior product. They are exceptionally knowledgeable, understand deadlines, and are clearly dedicated to providing the best possible facility."

Professor Scott Goode, Ph.D., Dept. of Chemistry and Biochemistry
University of South Carolina (USC)



PROJECT TYPES

- Battery
- Biomass
- Coal gasification
- Fuel cell
- Hydro
- Landfill gas
- LEED facilities
- System integration
- Waste to energy
- Biodiesel production
- Ethanol production
- Hydrogen
- Solar energy component production
- Wind energy



TECHNICAL SPECIALTIES

- Cleanroom technology
- Conservation of materials and resources
- Energy efficiency and renewable energy
- Ethanol balance of plant design
- Front end engineering and feasibility studies
- Hydrogen storage and fuel cell research
- Indoor environmental quality
- LEED certification
- Material handling
- Power generation and distribution, peak shaving, and cogeneration
- Process design for hydrogen production, distribution, and storage
- Project management
- Proprietary biodiesel process
- Recycling and chemical separation
- Safeguarding water and water efficiency
- Sustainable facility design and evaluation
- Sustainable site selection and planning