

Membership Participation

Stanford Energy 3.0 helps industry and faculty to engage with each other in energy research. The program provides a single point-of-contact and gateway for organizations interested in research at Stanford in energy and sustainability.

Stanford Energy 3.0 facilitates interactions between companies and other organizations and Stanford's faculty and graduate students across the full range of energy-related topics. The program works closely with companies and takes a customized approach. The scope is broad and encompasses basic physics, chemistry, and materials science; natural resources; complex engineered systems such as sustainable buildings and the electric power grid; and societal aspects such as human behavior, regulatory aspects, and public policy.

In addressing these topics Stanford Energy 3.0 balances broad coverage of interdisciplinary topics with in-depth treatment of specific focus areas. The list of focus areas evolves over time in response to the interests of program members and Stanford faculty. Current focus areas include advanced materials, batteries and energy storage, renewable energy including solar photovoltaic, smart grid, data analytics, energy efficiency, sensors and sensor networks, and sustainability. Such focus areas enable particularly productive relationships between companies, faculty, and graduate students sharing those interests. Stanford Energy 3.0 is the affiliates program of the Precourt Institute for Energy, the umbrella organization for energy research at Stanford University.

Stanford Energy 3.0 is primarily about establishing relationships and the exchange of ideas. Companies benefit from access to emerging technology, out-of-the-box thinking, and innovative problem solving. Stanford benefits from exposure to practical real-world problems, constraints, and opportunities.

Program members receive numerous benefits including invitations to symposia and workshops, unlimited access to videos of program conference presentations, access to research papers and computer models, use of directories of Stanford research activities in energy, support for PhD student research through the Fellow-Mentor-Advisor Program or Focus Group, facilitated graduate student recruiting opportunities, in-depth interactions with faculty and graduate students, hosted Stanford visits by member companies, and opportunities to establish a visiting scientist at Stanford. Visiting scientists have special rights and obligations. Program members provide valuable support to Stanford and receive recognition for their contribution.

Members are invited to annual conferences and New Faculty Seminars. Recent events focused on big data, advanced materials, smart grid, sensors and sensing, and batteries.

The program also hosts custom meetings on topics of interest to members and faculty. Recent examples include low-cost wearable sensors, energy efficiency, water and aquifers, batteries and energy storage, leadership of innovation, and global mega trends and corporate strategy.

Member companies come from a wide range of industries including buildings and construction, communications, computer, consumer electronics, food and beverage, instrument, legal, engineered materials, oil and gas, semiconductor, semiconductor equipment, solar, utilities, and venture capital.

Membership is US\$250,000 per year. Up to three funding allocations are distributed through this membership fee. The most productive relationships are long-term and companies are encouraged to continue their membership for many years. Stanford will provide invoices for charges. Membership is considered renewed on an annual basis upon receipt of the annual membership fee. Members are entitled to the full range of benefits including:

- Invitations to all Stanford Energy 3.0 and Precourt Institute for Energy events
- Support for PhD student research through participation in the Fellow-Mentor-Advisor Program, Focus Group, or the opportunity to establish a visiting scholar at Stanford
- Custom meetings arranged to meet each company's needs
- Personalized access to Stanford University, tailored to each organization's unique needs
- Faculty and student visits to member companies to present latest research results

The majority of each company's membership fee is allocated to a professor of the company's choice through the Fellow-Mentor-Advisor Program (FMA Program), a group of professors in a Focus Group, or to support a visiting scholar. In the FMA Program, a relationship is established between a PhD student (the "fellow"), a member company employee (the "mentor"), and the student's thesis advisor (the "advisor"). A Focus Group is an opportunity to interact with a group of professors and their students working in a specific area such as batteries, smart grid, or solar energy. Visiting scholars are hosted through Stanford academic departments and are governed by Stanford University policy, details can be found at <https://doresearch.stanford.edu/policies/research-policy-handbook/non-faculty-research-appointments/visiting-scholars>. The FMA Program and Focus Groups are not sponsored research. There is no statement of work and no deliverables. These programs are about establishing relationships and the exchange of ideas. Allocations are to be made by company members within three months of receipt of membership funds. Unallocated funds will be allocated by Stanford Energy 3.0 leadership using their best understanding of the member interest areas.

Stanford Energy 3.0 revenue is used to support energy research, symposia and workshops, seed projects, equipment purchases, faculty and graduate student travel, and program operations. Stanford University is a 501(c)(3) nonprofit institution, but Stanford does not consider affiliates

program membership fees to be gifts because the member company receives facilitated access to research programs and to faculty and students as a benefit of membership.

Separate from their membership, companies may elect to sponsor research projects. Sponsored research projects are negotiated with the Stanford Industrial Contracts Office. In such cases, the sponsoring company pays the full direct and indirect costs of the project.

Visiting Scholars are selected by the mutual agreement of the member company and the host professor. The Visiting Scholar must sign Stanford's Visitor's Patent and Copyright Agreement (Form SU-18A) as a condition of this appointment. The form is available at <http://otlportal.stanford.edu/su18a>.

All Stanford industrial affiliates programs including the Stanford Energy 3.0 are governed by Section 13.4 of Stanford's Research Policy Handbook available online at the following link: <http://doresearch.stanford.edu/policies/research-policy-handbook/definitions-and-types-agreements/establishment-industrial>.

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