

INNOVATION TRANSFER PROGRAM

The Energy Innovation Transfer Program helps inventors bridge the gap between sponsored research and technology commercialization through targeted funding to help facilitate development of prototypes, conduct market research and refine business plans. The latter will heavily leverage the many on-campus entrepreneurship resources. The Energy Innovation Transfer Program advisors, mentors and affiliates will provide input as part of the proposal evaluation process and provide mentorship and guidance to individual projects.

ABOUT

The Energy Innovation Transfer Program provides pivotal resources to sustainable energy research and innovation undertaken at Stanford. Toward this end, the program assists Stanford University faculty, staff and students commercialize breakthrough technologies and inventions in sustainable energy by transforming promising concepts into prototypes which can be developed into innovative products and impactful spinout companies.

Our Innovation Transfer Grants allow researchers to bridge the gap between government support for basic science and private-sector and venture funding for emerging innovations. We additionally offer pre-funding Ideation where the commercialization potential of sustainable energy ideas and technologies, often at a very nascent stage, are confidentially evaluated to provide market-oriented feedback.

In addition to funding research and prototype development, we will assist participants to develop a more business-centric approach to the potential markets and applications of their concepts through close linkages with relevant Stanford University resources and the Stanford Entrepreneurship Network. We will also provide access to domain experts including successful entrepreneurs and innovators, executives with experience in startups, and venture investors. A Mentor is assigned to each funded project to provide the research team with ongoing guidance as they assess market opportunities, plan the commercialization of their inventions and prepare to launch startup companies.

SUSTAINABLE ENERGY TECHNOLOGIES

The Energy Innovation Transfer Program will fund high-impact programs in the sustainable energy segment commensurate with the overall mission and goals of the TomKat Center for Sustainable Energy.

The scope broadly includes:

- energy generation, conversion, transmission, distribution, management & storage
- sustainable transportation

In addition, proposals pertaining to waste energy recovery, energy efficiency, and novel energy utilization may also be considered. The intersection of energy and water is of particular interest.

SPIN OUT COMPANIES

A partial list of diverse sustainable energy related companies that originated at or have strong linkages to Stanford:

- Sunpower
- Solar Junction
- Tesla
- Amprius
- Qbotix
- Motiv Power Systems
- Carbon Lighthouse
- Flame Stower
- Verdigris Technologies
- Etagen
- Autogrid
- Mango Materials

IDEATION

This program provides an opportunity for members of the Stanford community to obtain confidential commercial and market-oriented feedback regarding conceptual or very nascent ideas they may have for an energy venture or product based on technology being developed at Stanford. In many instances it is not the most obvious applications of a technology or invention that end up being the most successful and we will strive to collaboratively explore the potential of new concepts through that lens.

INNOVATION GRANTS

The TomKat Center awards Grants to initiate the commercialization process for inventions with a potentially large market impact. The grant provides the support needed to refine and enhance an innovation, systematically explore potential markets, create advanced prototypes and assess the commercial viability of specific applications. The ultimate goal is to get to the point where they can attract sufficient investment to commercialize a product and launch a spinout company and/or to license the technology to an existing company.

- The award amount will be based on the maturity of the project, a detailed budget, and clearly defined goals and deliverables.
- Proposals that are more exploratory in nature or address the preliminary feasibility of a concept will generally be limited to grants under \$50,000. The grant allows the team to conduct exploratory experiments, gather data to validate a concept, and/or develop a working prototype of an invention.
- Grantees who have made significant progress toward validating the commercial viability of their invention can apply for funding at a higher level, typically around \$125,000 for project durations of preferably less than 12 months.

- In exceptional cases and with strong budgetary justification higher amounts may be considered.

GRANT SELECTION CRITERIA

A multidisciplinary committee selected from the Energy Innovation Transfer Program advisors, mentors and affiliates provides input in the evaluation of all applications. These individuals are participating under our Conflict of Interest and Confidentiality Guidelines.

Please note:

- Funding must be for projects undertaken at or originating at Stanford University
- Proposals must be submitted by an active faculty member (PI) at Stanford. In certain exceptional cases proposals may be submitted by research staff or students (with support from a faculty sponsor).
- Outside and cross-disciplinary collaborations are welcome
- This is a competitive selection process and only the top ranked proposals will be funded

Selection Criteria for Innovation Grants

Some of the criteria for selection include:

- Is this a totally novel, unique, and potentially disruptive sustainable energy technology?
- Would this technology have broad, fundamental implications? Cross-disciplinary applications are especially desirable.
- Is there a proof of concept already?
- Is there a likely, clear path to success - for example IP, device, code, etc. within a reasonable time-frame?
- Is this technology likely to be spun-out within 12 months?
- Is there a strong market need or potential impact?
- Does this technology have a high likelihood of being licensed?
- Is there a business model that makes sense?
- Will the award greatly help move the technology towards commercialization?
- What is the likelihood of technological success?
- Is the proposed budget realistic in the context of the project scope?
- Is TomKat Center support most appropriate and critical to the success of this idea?

TERMS AND CONDITIONS

Funding from the TomKat Center carries with it certain expectations and obligations, as outlined below:

Expectation / Use of Funds

We expect that individuals funded by the TomKat Innovation Program are committed to seeing their research make an impact in the marketplace; through a start-up or some

other mechanism. Funding shall be used for the specific activities described in the submitted proposal. Grantees understand that, if funded by the Center, they and their team may be asked to participate as appropriate at various Center publicity and outreach functions.

Communication

The Grantees shall communicate the project's progress through various means, including the following:

- Regular meetings with Mentor – preferably monthly
- Prompt notification of all significant milestones achieved
- A quarterly review meeting
- Final written report or presentation
- Patent disclosures – as described elsewhere
- Publications –TomKat Center support acknowledged in publications pertaining to the sponsored work.

Conflict of Interest

All Grantees should follow Stanford University guidelines in Policy and Procedures and be diligent to avoid conflict of interest related to the funding, research, or collaborators on the project.

GUIDELINES ON IP

IP created by Grantees at Stanford shall be submitted to the Office of Technology Licensing as per normal Stanford University practice, with an indication that TomKat Center funding has been used to support the work. Copies of such communications should be submitted to the Center. Ownership of intellectual property is governed by Stanford University policy: See Research Policy Handbook 9.1. If Stanford University licenses a patent or copyright (except for institutional works) on which you are an inventor/author, you are entitled to receive a portion of the royalty Stanford University receives from the licensee in accordance with Stanford University's royalty distribution policy. As a condition of their involvement in a center funded project, advisors and mentors must agree to assign their rights in any center funded invention to Stanford.

CONFLICT OF INTEREST & CONFIDENTIALITY GUIDELINES

Meetings and activities identified as privileged are by invitation only, are not public, and are conducted with the understanding that volunteer participants are specially invited by the TomKat Center staff for the review of new ideas and mentoring of Grantees on a privileged basis. By agreeing to take part, participants in these activities agree to:

- Maintain privileged information in the strictest confidence;
- Not use the information for personal gain at the expense of the Grantees, Stanford University or the TomKat Center; and
- Withdrawing from any activity where there might be a conflict of interest.

Advisors and Mentors must avoid positions of conflict of interest wherever possible and notify TomKat Center staff any time there is a potential conflict. Examples of such situations include, but are not limited to:

- Receiving privileged information or giving advice on a project when the advisor has a financial stake in a potential competitor.
- Giving advice on a project when the advisor has a potential financial stake in a spinout from the research. If he/she wants to be involved with the project on a professional level, he/she must notify the researcher and the TomKat Center staff immediately and step back from advising the project.
- Reviewing a proposal when the advisor has a financial stake in the success of the proposal (such as an interest to invest or a financial stake in a competitor), has a proposal under consideration in the same grant round, or if he/she has a relationship with the team that would make an objective review difficult.
- Any time a potential conflict of interest arises, the individual must step away from his/her role causing the conflict, TomKat Center staff must be notified right away, and we will together determine the next steps.

HOW TO APPLY

Please first submit a completed pre-proposal application found here:

https://stanforduniversity.qualtrics.com/SE/?SID=SV_a99zbTe1Tvl66qJ

It will automatically be forwarded to the Innovation Transfer Grant Administrator. If the pre-proposal is compatible with the scope and goals of the program and conforms to University Policy in terms of funding eligibility you will be invited to submit a full proposal within 2 weeks. Application materials and additional instructions will be provided at that time. Applicants will also be required to make a short presentation to the selection committee as part of the process. Following this, the proposals will be evaluated by the selection committee and the grantees will be announced within 4 weeks of the date of submission of their full proposals.

CONTACT INFORMATION

For questions about the Innovation Transfer Program including scope and eligibility please contact:

Brian Bartholomeusz

Executive Director, Innovation Transfer Program

brianjb@stanford.edu

(650)-723-3870

For questions about the application process and ongoing grant administration please contact:

Danica Sarlya

Administrator, Innovation Transfer Program

dsarlya@stanford.edu

(650) 724-1524