



## **Guidelines for FLoW DOE Cleantech UP Applicants – 2016 - 2017**

**Prizes:** FLoW DOE Cleantech UP prize: \$50,000; FLoW Prizes: \$125,000; Transformational Idea Award: \$5,000.

**Scope:** The competition's scope ranges from "Transformational Ideas" with potentially disruptive technologies to established "Ready to Commercialize" start-ups with potential customers.

**Ideas with Transformational Potential:** This group includes student teams or graduate researchers with promising technology and (preferably) validated lab prototypes, but at the start of developing a business model for commercialization. These can be your own ideas or grant-supported research projects that may have little or no established IP and are not incorporated as companies. Note that the "Transformational Idea" teams selected for the semi-finals should show evidence in their submission that they have worked with advisors to identify potential commercialization opportunities. TIA candidates also include companies in the early stages of field testing their technology and working with customers but further away from the marketplace than the Ready to Commercialize. Mentoring support will be provided to help qualifying "Transformational Idea" submissions define business models and strategies.

(See: [Sample TIA presentation template](#))

[http://www.flow.caltech.edu/resources/documents/2016/2016\\_TIA\\_Presentation\\_Template.pdf](http://www.flow.caltech.edu/resources/documents/2016/2016_TIA_Presentation_Template.pdf)

**Ready to Commercialize:** This group includes student teams or graduate researchers in the early seed or start-up phase, with some corporate development done, IP processing underway and where incorporation has been started or completed and needing mentoring support to develop the business. Judges will look for evidence of customer discovery and a strong understanding of the potential market for the product. In order to win the Regional FLoW prizes, you should use the FLoW resources to become as close to investor-ready as possible. Mentoring is regarded as essential and will be provided if needed.

**Stage of Business Development:** Applicants do not need to have a company to enter the competition. However team ventures must be incorporated and have an Employer Identification Number (EIN) or be in process in order to receive the DOE prize or FLoW 2<sup>nd</sup> and 3<sup>rd</sup> prizes.

**Ownership: For the DOE Prize:** All formal team members must demonstrate ownership by owning equity in the incorporated entity. Student members of the formal team must have a combined minimum equity of 20% of the company. **For the FLoW Prizes:** teams should have a significant percentage as students and/or new graduates but there are no equity requirements.

**Intellectual Property:** You do not need IP in order to enter the competition. However, all teams intending to compete must sign and submit [IP Declaration](#) and [IP Disclosure](#) forms at the time of final entry, and e-mail them to the FLoW Office, [stephanie.yanchinski@caltech.edu](mailto:stephanie.yanchinski@caltech.edu). If you have applied for patents it is vitally important that the origin, ownership and status of IP be clarified at the time of submission. FLoW requires that you notify your faculty advisor, PI and the university technology transfer offices of your intention to apply if your technology is university-derived.

**Mentoring:** All teams must show they are working with mentors (check [Mentoring Guidelines](#)). FLoW applicants must submit a [Mentor Request Form](#) at the time of submission and indicate whether you need mentorship or already have a strong set of advisors.

**IN-LA I-Corps Blitz Webinar Series:** All FLoW semi-finalists will be considered for the IN-LA I-Corps Blitz Series, a four part intensive deep dive into customer discovery and your business, guided by skilled facilitators with strong entrepreneurial backgrounds. FLoW teams successfully completing the educational program will qualify to apply for an additional \$50,000 in NSF I-Corps Team grants. The IN-LA leadership will evaluate and sponsor selected teams.

**Money invested:** Ventures may not have equity capital totaling more than \$200,000 in equity capital prior to the selection of the regional winners, in order to win the DOE prize and \$750,000 in equity capital prior to entering the competition to be eligible for the FLoW 2<sup>nd</sup>, 3<sup>rd</sup>, and TIA prizes and Rocket Fund Awards. Note that grant support can be unlimited. A venture attracting more than \$200,000 but still formalizing financial commitments after submission and prior to the FLoW Finals, May still compete. But in the cases of investment greater than \$1 million, the competition reserves the right to award the top prize to second place winners.

**Leadership:** The Company may have non-students on the team, but the Team Leader performing the role of “CEO” should be a student or graduate researcher and should drive participation and presenting at FLoW events.

**Team Formation:** Students from business schools and the science and engineering disciplines are strongly encouraged to form cross disciplinary teams. This partnership often brings synergistic ideas, knowledge and expertise that form strong contenders. The makeup and ability of the team to move an innovative idea from concept to a viable business will be a major factor in the final judging.

**Competing in other competitions:**

Contestants are encouraged to participate in other business plan competitions, hosted by the DOE through the [Cleantech UP](#) program or on their own campus. This helps hone skills and gain valuable knowledge and connections. However you are required to inform the FLoW Administration of these competitions on submission. Important note: contestants can win only one DOE Regional Cleantech UP Prize.

**Fulfilling the EERE's Mission:** The FLoW competition gives our applicants an opportunity to test their business vision against fulfilling the EERE mission <http://energy.gov/eere/office-energy-efficiency-renewable-energy> and having a demonstrable impact in these areas: **Energy Efficiency, Renewables and Transportation**. The following lists EERE Programs and Research Areas with a fuller descriptor:

Advanced Manufacturing Office:

<http://energy.gov/eere/efficiency/advanced-manufacturing>

Bioenergy Technologies Program:

<http://energy.gov/eere/bioenergy/bioenergy-technologies-office>

Building Technologies Program:

<http://energy.gov/eere/buildings/building-technologies-office>

Geothermal Technologies Program:

<http://energy.gov/eere/geothermal/geothermal-energy-us-department-energy>

Homes:

<http://energy.gov/eere/efficiency/homes>

Government Energy Management

<http://energy.gov/eere/efficiency/government-energy-management>

Fuel Cell Technologies Program:

<http://energy.gov/eere/fuelcells/fuel-cell-technologies-office> SunShot Initiative

Solar/SunShot

<http://energy.gov/eere/sunshot/sunshot-initiative>

Vehicle Technologies Office:

<http://energy.gov/eere/vehicles/vehicle-technologies-office>

Wind Program:

<http://www1.eere.energy.gov/wind/>

Water Power Program:

<http://energy.gov/eere/renewables/water>

### **The Process and Expectations:**

Contestants will progress through three rounds of judging by experts whose feedback, along with mentoring, will help you define your business. Regional winners of the FLoW DOE Cleantech UP prize will compete with the other seven Cleantech UP Regional winners at the DOE national competition in June, 2017. FLoW's mission is to encourage entrepreneurial leadership and innovation, so all projects are welcome. However prize winners will effectively use the FLoW process to identify a promising market

opportunity, and begin creating a viable business, with the goal of attracting additional financing and gaining product revenues over the next five years. The bigger the impact and the closer you are to being investor-ready, the stronger the likelihood you will win either the Regional or National awards.

### **Pre-submission: the Statement of Intent:**

Student Teams who are considering applying will be asked to sign a Statement of Intent by February 1, 2017. The Statement is not required prior to submission and you can change the topic and focus at any time up to the submission deadline. However, an SOI signals that your team is serious in fulfilling the requirements for submission and helps the competition's organizers identify resources that might help you, including appropriate mentors. This will be particularly important for the Transformational Idea type of project that will depend on such support to reach the semifinal round.

### **Judging of FLOW Tracks:**

The "Ready to Commercialize" group will be expected to show a solid team with the beginnings of a business where IP has been identified, and with a validated lab prototype; the strategy for incorporation is apparent or has been implemented; and evidence of an understanding of the target market for the potential product and direct contact with prospective customers as part of your market investigation. In the "Transformational Idea Award" track which includes advanced research projects, Round 1 judges will be looking for validated technologies with transformational potential, and business ideas which will have a major impact on the energy industry and economy.

### **Round 1: Screening submissions:**

All applications must be made online on the [YouNoodle](#) platform. You can choose one of two tracks: either the Ready to Commercialize or the Transformational Idea Award track. (See descriptors above). For the Ready to Commercialize track: teams will be required to provide a pitch presentation with a two minute video that provides highlights of the business opportunity and your company. Judges will be looking for evidence of a strong initial market and early interaction with customers.

Teams may create an account and submit and rework drafts of their entries up to the submission deadline. Your application is secure: only the website administrator and your assigned judges will see it. IP Declarations and IP Disclosure forms are due from both Ready to Commercialize and Transformational Idea Award applicants at the time of submission.

### **Round 2: The Regional Semi-Finals**

The selected teams will begin work on their business plan and presentation. The presentation should summarize the strategic and tactical thinking about how to create a business, based on your draft business plan and close work with mentors. The top 15 Ready to Commercialize and top 10 Transformational Idea Award contenders will proceed to the Round 3 Finals in Los Angeles. By this round RTC teams should be well along in preparing their business plans and presentations should be well reasoned, energetic and

professional. Rehearsals before friendly investors are strongly encouraged. All contestants From Round 2 will receive judging feedback to help you focus and refine your business thinking. Teams are expected to take the initiative in seeking out and working with their mentors (See [Mentoring Guidelines](#)) throughout the Round 2 process.

### **Round 3: The Regional Finals**

Teams will be required to submit the final version of the ten-slide, presentation deck online in advance of the Regional Awards Judging Event in Los Angeles in May, 2017. Business Plan preparation is optional but recommended. The FLoW 2.0 winner will go on to compete in the DOE's Cleantech UP national competition in June, and will be expected to work closely with legal, technical and product development experts, and investors to solidify your business model. Particularly important will be working with individuals skilled in presentation delivery to hone the pitch to investor-ready standard.



**FLoW Office 09.23.16**