



LAUNCH: ENERGY CHALLENGE
*Innovative Energy Technologies and Deployment
Models for Sustainable Development*

RESPONSE DUE DATE: September 9, 2011



NASA, USAID, The Department of State, and NIKE joined together to form LAUNCH in an effort to identify, showcase and support innovative approaches to global sustainability challenges. LAUNCH searches for visionaries whose world-class ideas, technologies or programs show great promise for making tangible impacts on society in the developed and/or developing worlds. A **portfolio of up to 10 innovations will be selected for support, networking and mentoring from influential business and government leaders.**

OVERVIEW

The goal of the LAUNCH: Energy Challenge is to identify 10 “game changing” innovations that have the potential to transform current energy systems, and help support a more sustainable future. This Challenge seeks to identify entrepreneurial efforts focused on the development of innovative products, services, and programs that can benefit from an association with influential government and business leaders to accelerate their deployment and adoption in both the developed and developing worlds.

LAUNCH was formed to address large, sustainability-related challenges that no single government or commercial entity can solve alone. LAUNCH searches for, showcases and supports transformative innovations and connects the 10 LAUNCH: Energy Challenge finalists to a collaborative and engaged group of thought leaders and experts.

Most importantly, finalists have the unique opportunity to accelerate their innovations for greater impact and scale by leveraging the advice, networks, and resources of this esteemed group and the global stage LAUNCH provides.

For more information and background on LAUNCH and on this Challenge, please visit <http://launch.org/challenge/energy>.

REQUEST FOR PROPOSAL DESCRIPTION

With increasing global population growth and increasing energy demand, the world needs more energy. Energy systems in the developed world are designed to deliver cheap, reliable and accessible energy, but fulfilling increasing demand through current practices risks serious environmental sustainability consequences over the long term. In the developing world, over 1.4 billion people lack access to electricity and nearly 3 billion individuals rely on traditional solid fuels, especially biomass, for heating and cooking, while the combustion of these fuels leads to nearly 2 million deaths each year.

Can we leverage renewable and distributed sources of energy that utilize small, local and intelligent technology to generate and store energy? Can we provide equitable and affordable access to energy resources across the developed and developing worlds?

LAUNCH invites proposals for innovative **energy technologies, as well as energy-focused education, business, and financial strategies** that have the potential to provide energy at a household, community, commercial, or industrial levels. These Distributed Generation and MicroGrid systems and/or stand-alone technologies should have the potential to transform energy generation and delivery but **require new technologies, business models, and deployment programs to scale effectively.**

LAUNCH seeks submissions from innovators in the following categories:

- **Energy Generation:** Renewable energy sources and technologies
- **Energy Harvesting and Storage:** Innovative methods and processes to collect and store energy
- **Industrial Applications:** Self-sufficient industrial facilities and/or hubs (such as energy management systems and self-powered wireless sensors)
- **Community Applications:** Self-contained generation systems (for settings from individual homes to small communities, including next generation cookstoves for

the developing world, MicroGrid solutions, and other solutions for the developing world)

- **Financing:** New business models or financial strategies that promote creation of or access to innovative systems or technology
- **Education** to inform, align and encourage best energy practices by consumers, utilities, and policy makers
- **Deployment:** Programs, tools and networks to enable adoption and use

Please note that parenthetical examples of technologies and solutions provided in the categories above are not intended to be exclusive.

APPROPRIATE RESPONSES TO THIS REQUEST (ELIGIBILITY)

Responses from companies (small to large), entrepreneurs, inventors, social enterprises, non-profit organizations (with strong program implementation capacity), research institutions (with viable “spin-out” technology and venture capitalists (on behalf of their portfolio companies) are welcome to apply. Applicants in all categories should be poised to pilot-test, “go to market” and/or scale up their innovations. *A principal from your organization must be available to attend the LAUNCH: Energy Forum at the Kennedy Space Center in Florida from November 10 - 13, 2011.*

EVALUATION CRITERIA

LAUNCH will assess innovations using the following **Technical Requirements:**

1. **Impact:** Applicant’s proposal should demonstrate how the innovation will affect the maximum population for the least resources, with the scale-up goal in the “millions of people reached/affected” range
2. **Timeframe:** LAUNCH is most interested in reviewing proposals in which scale up and impact can be realized within 1–3 years (any time required for regulatory, patent, or other approvals is not included).
3. **Affordability:** Low-cost, especially for developing markets.
4. **Appropriate Technology:** Requires an efficient use of resources to implement and maintain. Resources required must be obtainable in the region of interest.
5. **Strong business or program model:** Economically viable and replicable.
6. **Urgency and Scale:** Innovation submissions should clearly demonstrate the potential to positively impact one or more of the following outcomes at a large scale:
 - Energy efficiency
 - Broader access to energy (at the regional, community, or household level)
 - The reduction of greenhouse gas emissions
 - Increased reliability of power
 - Reduced unit cost of energy
 - Reduced toll on human health associated with energy use
 - Reduced local environmental impacts (such as deforestation)
 - Improved implications for livelihoods

This Challenge serves the missions of the LAUNCH Founding Partners by seeking a portfolio of innovations that:

- *Address developing world energy access challenges, reaching base of the pyramid populations through scalable technologies and/or behavior change/communication program models. (USAID)*
- *Can accelerate efforts to deploy advanced energy systems in space and orbiting outposts. Humans living off the planet require energy solutions that mirror issues facing both the developing and developed worlds. In the hostile environment of space, energy must be generated, collected, stored and conserved in the most efficient and cost-effective manner possible. (NASA)*
- *Can contribute to greater energy access and security and health for global citizens, thereby helping to alleviate conflicts that stem from resource inequality and poverty. (US Department of State)*
- *Can contribute to the greater efficiency, sustainability and stability of energy and resource management systems across global supply chains. (NIKE, Inc.)*

(Note that proposals do not necessarily need to align with all of the above Founding Partner interests.)

THE AWARD

The best proposals (approximately 10) will be chosen by a panel of experts.

The Innovators chosen will be invited to a three-day event hosted by NASA, USAID, The US Department of State and NIKE at the Kennedy Space Center in Florida. Innovators will present to 40 thought leaders in business, government, science, technology and communications.

Each innovator will receive:

- All expense paid travel to attend the event;
- Individual access for two days to energy experts, business and governmental leaders, and investors;
- Specific, honest, face-to-face critiques of presentations, business/program model, etc., and recommendations to help accelerate their innovation;
- Assistance with creating a concise, high-impact presentation, which will be streamed live during the forum and recorded on DVD for future use;
- A professional video of their innovation story which will be featured on Launch.org;
- Post-Forum help to integrate LAUNCH Forum recommendations that will move each innovation closer to successful implementation.

No cash prize will be awarded.

PROPOSAL FORMAT

Candidates for LAUNCH: Energy should please submit the following supporting materials through <http://launch.org/challenge/energy>.

- a. A Candidate Statement that clearly articulates what is transformative and “game changing” about your company or organization and specifically how you believe LAUNCH could accelerate your efforts;
- b. An Executive Summary or Business Plan that includes:
 1. A clear description of your company/organization, its unique and compelling technology and/or service offering,
 2. operating and development history of company and/or innovation,
 3. product or service offering,
 4. context on addressable market and competitive landscape,
 5. insight into existing/potential customer base,
 6. introduction of leadership team, emphasizing experience of individuals,
 7. funding history,
 8. historical and pro-forma financial model, and
 9. future execution plan and limitations for successful product/service deployment and commercialization;
- c. Background on senior advisors;
- d. Images of prototypes, products, and/or in-field/market deployment;
- e. Evidence that your ideas are viable solutions now, or on a pathway to becoming viable in the future. If possible, include data and results from initial pilot tests, field data and/or press clippings.

[Note for non-profit or social enterprise applicants: LAUNCH recognizes that b4, b8, and b9 above apply mostly in traditional business contexts. *Social enterprises* should provide this information to the best of their ability, augmented by any necessary explanation of the special features of their financials and program/service delivery model. *Non-profit organizations* should instead provide information regarding their overhead to program budget ratio, funding sources and sustainability strategy, and a basic, multi-year program budget.]

[For all Innovator Candidates, by submitting your innovation you acknowledge that : (i) you are submitting to LAUNCH only non-confidential and public domain materials; (ii) any submission marked "Confidential" will be ineligible and rejected by LAUNCH; (iii) you are authorized to submit this response to the LAUNCH: Energy Challenge and indemnify all LAUNCH participants, partners and organizers from any and all claims related to your intellectual property; (iv) you retain full rights over respective intellectual property; and (v) you grant LAUNCH participants, partners and organizers the right to share and distribute your submission materials for review purposes and for the marketing and promotion of LAUNCH.]

Deadline: This Challenge will be posted and open for submissions beginning July 21, 2011 and will close on September 9th, 2011.

Please visit www.launch.org to view former Innovators' presentations and comments about their experiences at LAUNCH.