



LAUNCH: BEYOND WASTE CHALLENGE
*Innovative Waste Technologies and Deployment Models
for Sustainable Development*

Challenge will go live April 1, 2012

RESPONSE DUE DATE: May 15, 2012



NASA, The US Agency for International Development (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.**

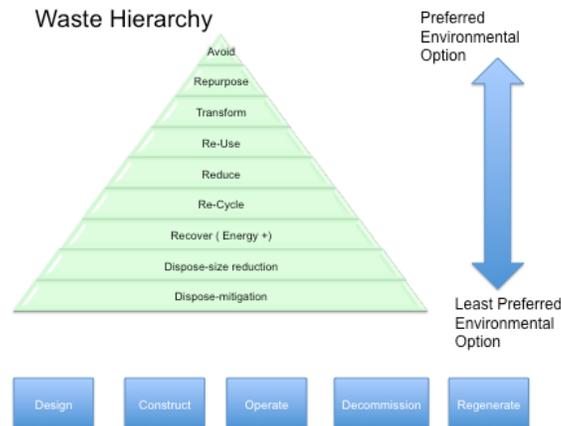
LAUNCH: BEYOND WASTE CHALLENGE

OVERVIEW

The goal of the LAUNCH: Beyond Waste Challenge is to identify ten “game changing” innovations that have the potential to transform the current waste management systems and practices to ones focused on minimizing waste and/or transforming waste into new products.

*LAUNCH invites proposals for innovative **design for zero waste solutions, waste elimination, waste transformation, and waste mitigation technologies, as well as waste reduction-focused education, business, and financial strategies that have the potential to reduce and/or eliminate waste at a household, community, office building, campus, or industrial level.***

The Waste Hierarchy establishes a ranking of management options in context of increasing environmental impact, and is based on the simple premise that it is better to avoid generating waste than to treat or dispose of waste.



The ultimate goal of LAUNCH is a sustainable future for planet Earth and its inhabitants. The LAUNCH: Beyond Waste Challenge seeks to identify entrepreneurial efforts focused on the development of innovative products, services, and programs that can benefit from collaborating and networking with influential government and business leaders to accelerate their deployment and adoption in both the developed and developing worlds. This Challenge, as noted above, spans the full hierarchy of waste, as well as systems and practices of various levels. LAUNCH: Beyond Waste seeks to transform “waste” from a by-product with a negative impact to a resource and asset for society. LAUNCH: Beyond Waste seeks transformational solutions to the problem of waste through disruptive innovation, behavioral change, systems design, policy, and stewardship.

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 LAUNCH Innovators to a collaborative and engaged group of thought leaders and experts. Most importantly, LAUNCH Innovators 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/forum/11/beyond-waste/>.

REQUEST FOR PROPOSAL: DESCRIPTION

With increasing global population growth and escalating demands on the planet's limited resources, the world needs to find ways to design for zero waste, and reduce and/or eliminate the waste left at the end of a product or a process's full life cycle. Current practices pertaining to waste are not sustainable from economic, societal, cultural, and environmental perspectives, damaging the planet and its populations. LAUNCH: Beyond Waste is designed to address this global challenge.

Can we design and implement new models across the waste hierarchy, value chains and life cycles of products and processes to dramatically reduce waste generated in both the developing and developed worlds? Can we develop and deploy data architectures to make waste and waste streams universally visible to public and private sector actors and citizens across the globe? Can we transform the concept of waste from one of resource abandonment to a model where all elements along the waste value chain create economic, societal, cultural and/or environmental value?

LAUNCH seeks submissions from innovators in the following categories:

- **Data and Analytic Models;** includes innovative approaches to data capture and collection, analysis, distribution, display, visualization, communication, knowledge collection, and distribution, intelligent systems, behavior disruption, linking pre-and post-market information systems, globally and/or other activities to make waste and its consequences visible and thus actionable, at every stage of the waste hierarchy, from zero waste to waste mitigation, transformation, and disposal.
- **Zero Waste:** planned optimization, design for zero waste, technologies and systems yielding minimal to zero waste, extreme waste reductions, extended life cycles, closed loop life cycles, "cradle to cradle" design.
- **Waste Transformation/Waste to Value:** create value from waste, including post retail markets, waste as an asset, repurposing, regeneration, downcycling, dematerialization, waste-to-energy, waste as a resource through creative chemistry, industrial alternatives, disruptive pricing, and/or education initiatives, as well as other approaches. (Note that post-consumer, industrial and/or agricultural process, and human waste related solutions all fit in this category and in the Distributed Infrastructure category below.)
- **Distributed Infrastructure:** community applications, localized service models, intelligent collection and/or delivery systems, self-sustaining waste removal systems, and/or global interdependency solutions (for settings from individual homes to small communities, including next generation recycling, repurposing, solutions, distributed infrastructure/in situ processing, and other solutions for both the developed and developing worlds)
- **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 waste practices, with the broad goal of end state waste elimination, includes behavior disruption, cultural change, conceptual reframing
- **Deployment:** Programs, tools and networks to enable adoption and use

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

APPROPRIATE RESPONSES TO THIS REQUEST (ELIGIBILITY)

Responses from companies (small to large), consultants, entrepreneurs, inventors, non-profit organizations with strong program implementation capacity, research institutions, social enterprises, and venture capitalists are welcome. Applicants poised to “go to market” and/or scale up their innovations will receive the most benefit from the LAUNCH experience. *A principal from your organization must be available to attend the LAUNCH: Beyond Waste Forum at the Jet Propulsion Laboratory in Pasadena, California from July 18 to July 22, 2012.*

EVALUATION CRITERIA

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

1. **Impact:** Applicant’s proposal should affect the maximum population for the least resources, with the scale-up goal in the “millions of people reached/affected” where appropriate. Innovations with exciting potential not measured in numbers will also be considered.
2. **Timeframe:** LAUNCH is most interested in reviewing proposals with ideas whose impact can be realized within 1–3 years (any time required for regulatory, patent, or other approvals is not included); however, proposals requiring longer term for impact will be considered as well.
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 scalable/replicable.
6. **Urgency and Scale:** Innovation submissions should clearly demonstrate the potential to positively impact one or more of the following outcomes:
 - Making waste visible at all levels and geographies (from elimination to disposal, at the regional, community, or household level)
 - Waste Elimination
 - Waste Transformation
 - Waste Reduction
 - Waste Disposal
 - Reduced costs for waste processing
 - Reduced toll on human health associated with waste
 - Reduced local environmental impacts
 - Creation or improvement of economic opportunity (positive impact on livelihoods for individuals or communities)

This Challenge supports the missions of the LAUNCH Founding Partners by seeking innovations that:

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- *Address developing world waste challenges, reaching base of the pyramid populations through scalable technologies and/or behavior change/communication program models. (USAID)*
- *Can accelerate efforts to deploy advanced systems and components in space and/orbiting outposts produced through green engineering practices (reduce, reuse, repurpose, recycle) to reduce mass, decrease power consumption, and design for zero waste. Humans living off the planet require waste solutions that mirror issues facing both the developing and developed worlds. In the hostile environment of space, waste must be eliminated and/or transformed by mitigation or repurposing in the most efficient and cost-effective manner possible. An additional goal is to eliminate or mitigate orbital debris. (NASA)*
- *Can contribute to more effective waste management practices, for the health and well-being of global citizens and the environment, 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 waste elimination, reduction and mitigation management systems across global supply chains. (NIKE)*

(Proposals do not necessarily need to reflect or align with the 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 five-day event hosted by NASA, USAID, The US Department of State and NIKE at the Jet Propulsion Laboratory in Pasadena, CA. Innovators will present to the LAUNCH Council: a group of 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 waste 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 through the LAUNCH Accelerator 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: Beyond Waste should please submit the following supporting materials through the www.launch.org submission site:

- 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 (approximately 1-2 pages);
- 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 past experience of individual team members,
 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 any senior advisors, board members, etc.;
- 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.

Please note that incomplete applications that do not include all of the categories specified above may not be considered by the review panel.

[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: Beyond Waste 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

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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 April 1, 2012 and will close May 15, 2012.

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