

Participatory Exploration for Inspiration and Education (12)  
Engaging Citizens: Results and Future Concepts (1)

Author: Ms. Beth Beck

National Aeronautics and Space Administration (NASA), United States, beth.beck@nasa.gov

LAUNCH SUSTAINABILITY FORUMS CARVE NICHE AUDIENCES

**Abstract**

Sparks fly when innovative thinkers join together to address critical issues — like solving the world’s sustainability problems.

LAUNCH is a unique initiative formed with founding partners are NASA, USAID, Department of State, and NIKE to identify solutions to the world’s most urgent sustainability challenges. For the sustainability forums, we identify innovations poised to create transformational change in critical sustainability issues, and connect innovators to 30-40 thought leaders and advisors. After the forum, we work with the innovators to take recommendations compiled during the 2+ days at the Forum, and implement the recommendations to help propel the innovations toward success.

LAUNCH: Energy, our third sustainability forum, follows LAUNCH: Water and LAUNCH: Health. Issues of sustainable energy are part of every human and robotic mission off of the planet. We have NO natural energy sources off the planet; therefore, the creation, storage, conservation and replenishing of energy is one of our challenges in exploring the unknowns of space.

NASA’s problem-solving expertise and the convening power of the NASA brand enables us to host a crucial conversation about transformative technologies that may solve problems we share as global citizens of this planet – which may well solve corresponding issues of long-duration human missions in the extremes of space.

LAUNCH offers NASA an opportunity to create a niche audience within the sustainability circles where none existed before. This non-traditional participatory engagement approach lets us share the sustainability story of space exploration while allowing participants to make personal connections between human existence in the extreme environment of space and gravity-bound realities of citizens living on this planet. As thought leaders in their fields, LAUNCH participants create unique space-inspired innovation stories to share with their communities.

The ten LAUNCH: Energy innovators offer a variety of solutions to address energy sustainability challenges. The innovations include an economical fuel cell that can be recharged in a cooking fire, a thin flexible electrochromic film that can be applied to windows or surfaces to manage energy use, a low temperature heat activated fluid motion pump, a hydrokinetic turbine, a 96 percent efficient wood combustion cookstove process, a thermal energy battery for economical refrigeration in remote locations, a next generation fast-charging, long-lasting ultracapacitor battery, an integrated smart microgrid, a lightweight energy management system, and a solar-powered lantern/charger.

Special thanks to the innovators for caring enough about the future of our human race to create transformative solutions.