EFCOG Best Practice #93

**Best Practice Title:** Student Sustainability Challenge

**Facility:** Los Alamos National Laboratory

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**Brief Description of Best Practice:**

LANL is host to more than 1,000 student interns during the summer months. LANL believes that students are America’s future and regards their education a high priority. The Student Sustainability Challenge (for short “the Challenge”) was developed to raise awareness of critical environmental issues, while inspiring innovation and ingenuity for better and more sustainable science and technology.

Since its inauguration in 2008, the Challenge has provided LANL students with the opportunity to participate in a variety of events focused on sustainability. In previous years, events have included trips to the Valles Caldera, to illustrate natural resource management; visits to community gardens to better understand the art and science of agriculture and the importance of supporting local and sustainable food production. Other events included seminars and presentations regarding energy, waste reduction, recycling, eating locally and the British Petroleum oil spill. Students have also visited LANL projects including the Chemistry and Metallurgy Research Replacement Radiological Laboratory, Utility & Office Building to demonstrate green building design, specifically its LEED certification and the Materials Recycling Facility to understand LANL's waste and recycling process. Students implemented the first on-site garden and all of the produce was donated to the on-site cafeteria and prepared for lunch. This initiative was awarded a 2011 NNSA Pollution Prevention Award. The theme for 2011 is Sustainability is National Security. As times are progressively changing it is imperative that our nation institutes measures that will ensure the security of our nation. This summer the Challenge will support efforts to achieve the goals identified in LANL’s Site Sustainability Plan (SSP), specifically – greenhouse gas reduction, energy and water conservation, and waste reduction.

**Why the best practice was used:**

LANL has established the SSP in alignment with the DOE Strategic Sustainability Performance Plan (SSPP) and the Laboratory’s environmental governing policy that is a key driver in improving sustainability efforts. As a prelude to these initiatives, the Student Sustainability Challenge was organized to encourage students to take an active role in contributing to LANL’s environmental responsibility.

**What are the benefits of the best practice:**

LANL’s students are the future of the Laboratory. The ingenuity and vibrancy of the student population brings new ideas and new solutions to on-going problems. The sustainability challenge seeks to increase awareness of current and future environmental issues. Providing students with opportunities to collaborate, innovate, and create solutions that contribute to continued sustainability at LANL. The development of break-through science and technology will give LANL a competitive edge in the global market and strengthen our ability to contribute to our nation’s security. It is LANL’s commitment to continue expanding opportunities by strengthening our science and technology for the security of our future.

As employees it is our responsibility to be stewards of the environment and thus the research and developmental work done at LANL is accomplished with high regards for the
environment and our impact on the local economy. The Challenge promotes the need to work environmentally consciously, in support of the requirements outlined in DOE 450.1, EO 13423, and DOE 430.2B, DOE SSPP, LANL SSP and institutional EMS objectives and targets.

What problems/issues were associated with the best practice:

There is currently not a line item in the budget for the Challenge; however, this has not proven to be problematic. Strong collaboration efforts with other groups at LANL and within the community have proven to be beneficial to the success of the Challenge. For example, funds to purchase give-aways, such as reusable cups or bags to promote waste minimization were subsidized by other organizations. Another example of a collaborative effort is LANL’s working relationship with the local movie theatre. For the past few years, Reel Deal movie theatre, has donated popcorn for the premiere of the selected environmental documentary. Also, the majority of events hosted are free events and when there is a cost associated with the event it is minimal and the student incurs the cost. For example, one field trip to the Valles Caldera cost a mandatory five-dollar entrance fee and students were more than willing to pay this minimal fee to enter the pristine reserve. Other costs incurred are typically covered indirectly by LANL’s overhead budget, such as using Laboratory authorized vehicles to transport students to and from events, inviting LANL employees to participate as guest speakers for forums and seminars, and utilizing on-site conference rooms to avoid additional expenses. In summary, the Challenge utilizes every free and available resource to coordinate the Challenge events.

How the success of the Best Practice was measured:

Essentially the success of the Challenge has been measured by the number of activities coordinated and the associated attendance at each event. Typically, our goal is to host at least one event each week for eight weeks. On average our participation at each event is about 80%. Attendance at each event can vary with the number of students on-site at LANL. By the end of June, most students have arrived at LANL and most of our events are 100% successful.

Description of process experience using the Best Practice:

As one would find with any project, the Student Sustainability Challenge requires a large amount of time spent planning, coordinating and implementing events, seminars, and site-visits. Since most of our activities focus on LANL initiatives it is relatively simple to coordinate these activities. The Laboratory also has an excellent rapport with neighboring communities and organizations thus allowing the execution of these events to be successful. The overarching theme seems to exemplify organizations or individuals that are enthusiastic and eager to participate in the Challenge.