

Educational Workshops

The following workshops were developed by Island Institute staff to provide hands-on, experience-driven educational experiences to accompany energy efficiency programming or as stand-alone learning. The lesson plans described below can be adjusted for all ages (including adults). Island Institute staff will offer the following trainings and workshops for Community Energy Action Teams, Spark! Fund recipients, and others. Please contact Harry Podolsky at hpodolsky@islandinstitute.org ; 594-9209 x 127 to schedule a training in your community.

- **Energy 101:** Island Institute staff will lead an overview of the basics of heating, lighting, appliances, and renewable energy. This includes training with energy action tools such as a thermal leak detector and Kill-a-Watt meter. The workshop can be structured with a focus on a specific subject, such as renewable energy or climate change, or as a general orientation for students. The lesson plan is adaptable for use with K-12 students and adults, and satisfies several Next Generation Science Standards. This workshop involves 1-2 staff for 2-3 hours of class time, depending on classroom priorities. It has led to [successful projects](#) on several islands.
- **Weatherization Lesson Plan:** For communities that are hosting [Weatherization Weeks](#), this activity provides students with an opportunity to shadow energy professionals and learn what they can do to save energy in their homes. Students will use energy measurement tools including a hand-held infrared camera, and participate in a home energy walkthrough with Island Institute staff and a licensed energy auditor. The lesson plan is adaptable for use with K-12 students and adults and satisfies several Next Generation Science Standards. This lesson plan involves hands-on components and incorporates in-class activity with a site visit to a home that is being weatherized. This workshop involves 1-2 staff and 1-3 hours of total class time.
- **Storm Window Workshop Lesson Plan:** This lesson plan teaches basic principles of home energy efficiency and climate change reductions using a [Storm Window Workshop](#) as a



Cliff Island residents with finished window inserts.

model. Students work to measure windows, then work with staff to construct interior storm window inserts. The activity provides basic knowledge of heat efficiency and air leakage, and covers climate change and different energy sources as well. The lesson plan is adaptable for use with K-12 students and adults, and satisfies several Next Generation Science Standards. This lesson plan involves hands-on components and can be delivered in-class or out. It involves 1-2 staff and 3-5 hours of total class time, depending on the number of windows.

Learn more about our energy efficiency programing [here](#).

Next Generation Science Standards that can be satisfied in these activities include:

MS-PS3-3: Apply scientific principles to design, construct, and test a device that either minimizes or maximizes thermal energy transfer. This would fall under testing a device that minimizes thermal energy transfer.

MS-ESS3-3: Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.

MS-ESS3-4: Construct an argument supported by evidence for how increases in human population and per-capita consumption of natural resources impact Earth's systems.