

## **Introduction to Facilitator Kits**

In order to help make your workshop run smoothly we have developed facilitator kits specific to the type of workshop you will be facilitating. Depending on the size of your workshop and the agenda you may be shipped multiple kits. Below is a brief description of each kit, please refer to the checklists for a complete list of materials.

**Energy Management (1 Box):** This kit contains all of the tools you need to have participants conduct energy audits of the space you are in, and light fixtures and incandescent and CFL bulbs to compare. Also included are one teacher and student guide of Saving Energy, Monitoring and Mentoring, and Learning and Conserving. These are meant as sample guides so teachers can see differences in the materials should you choose to share them. These guides should be returned in the Facilitator Kit.

**Facilitator Toolbox (1 Box):** The toolbox is automatically included in the boxes shipped for Hydropower, Wind, Nuclear, and Hydrogen Facilitator kits. The toolbox will allow you to make quick repairs in the field. Some materials in the toolbox are fairly expensive. Please do not allow participants to dig through the toolbox themselves, and be sure that you get all of the materials back. Double check that the materials that came in the toolbox get put back into the toolbox and are not mixed in with the other facilitator kits.

**Fossil Fuels to Products/Oil and Gas (1 Box):** This kit includes all of the materials needed to conduct most of the activities from FF2P and/or the Oil and Gas guides. In most FF2P workshops you will not be conducting the Distillation activity. If you plan to use the distillation activity need to let Wendi know. If the workshop is meant to include some of the fracking activities, please consult the list of materials. You will need to decide, based on the number of participants, which activities you will conduct. You will then need to request the exact items and numbers of each item you will require from Wendi. There are some items facilitators will need to purchase upon arrival for these activities.

**Hydrogen (2 Boxes, total):** The facilitator kit for hydrogen includes all of the materials in the H<sub>2</sub> Educate kit. It also includes extra test tubes, batteries, matches, pre-made hang tags, and extra sodium sulfate. Facilitators still need to purchase distilled water once they get to the workshop location. Also shipped to Hydrogen workshops is the Facilitator Toolbox. See below for more information on the toolbox.

**Hydropower (2 Boxes, total):** Included in this kit are materials to make both the Intermediate and Secondary models of the hydropower turbines. If you have a shorter amount of time it is recommended that you only have participants make the Intermediate Model. Many of the materials in this kit can be re-used! The turbine models can be dismantled so we can use the rubber stoppers, generator/motors, and magnets again. Please gather any of these unclaimed items after participants leave, and return these items in the kit. The Facilitator Toolbox will also be shipped to Hydropower workshops.

**Nuclear (2 Boxes):** The nuclear facilitator kit allows small groups to make the Science of Electricity Model, and conduct the candy chemistry activities found in the guides. Facilitators need to purchase candies on site. At most nuclear workshops the milling simulation is not used. Materials for the Milling Simulation must be requested ahead of time through Wendi. The Facilitator Toolbox will also be shipped to nuclear workshops.

**Science of Energy (1 Box):** In addition to the individual station boxes, the SOE Facilitator kit includes a bag of consumables, a hot pot, pitchers, extension cords, and the other tools needed for specific stations. Please remember to dump the vinegar out and do not return it to the distribution center. Facilitators will need to purchase or procure fruit on site for station 5.

**Solar (1 Box):** The solar facilitator kit includes a secondary PV kit, Multimeters, lamps, as well as materials that will cover activities in each of the other levels. One solar oven is also included for show. In most instances, there will not be enough time to cook anything using the solar oven. However, if your workshop allows for this, you will need to purchase food on site to cook in the oven.

**Wind (4 Boxes):** You will receive one large, heavy, black box containing all of the materials for the turbine investigations. There are also extra materials and repair supplies, should you need to repair any components during the workshop. You will receive a second box to make anemometers and windmills, and a third box containing the Facilitator Toolbox. The fourth box contains the box fans. It is important to note any broken turbine parts when returning the facilitator kit to Roanoke so that turbines can be replaced as needed, and the broken ones fixed. If doing a Wind workshop in a location where you will need to transport the boxes in a vehicle, please make sure you have a large enough vehicle, as these are large boxes that may not fit easily in the standard car.

### **Climate (1 box):**

This kit includes the materials you need to complete several activities. These materials include a molecule kit for demonstration of greenhouse gas molecular structure, as well as enough for 5 set-ups each of the *Properties of CO<sub>2</sub>* activity and *Greenhouse in a Beaker* activity. The kit will also include the Carbon Cycle Posters and playing cards for the *Carbon Cycle Simulation*. Facilitators will need to purchase bubbles and dry ice on site for the CO<sub>2</sub> activity. If the workshop allows for time and ability to complete the Land and Sea Ice activity, those materials are included as well.

### **Facilitator Kit Process**

When you are assigned a workshop the Training Coordinator will let you know what the agenda is and what facilitator kits to expect. Please review your agenda and specify if there are any changes to the shipment for the workshop.

After the workshop, it is expected that you return the Facilitator Kits with materials carefully packed. The carefully packed boxes should include a completed checklist to let the distribution center know of any missing or broken parts for replenishment or replacement. Sometimes there is a quick turnaround of Facilitator Kits; it is greatly appreciated if they are packed with care when they are returned. The Training Coordinator will let you know if the facilitator kits need to be shipped somewhere else besides the Distribution Center.