

Measuring Your Success

This tip sheet corresponds with Green Star Award Standard #7 – Provide Measures of Your Success. Another useful tool is “Becoming a Green Star: A Waste Prevention Guide for Anchorage Businesses.”

You can find the guide online in pdf and html format at www.greenstarinc.org/guideindex.php or request a hard copy from Green Star.

Why Measure Your Success?

Measurement is the exciting part of earning a Green Star Award. It is where you get to see how joining the Green Star program has really changed your organization’s resource use or waste generation. The numbers can be used to celebrate your successes, to justify your efforts, and to share your story with the community. Sometimes these measurements can even help you determine where to focus your next Green Star efforts.



For the Green Star Achievement Report, we request that you track two types of resource use or waste generation. These measurements can



include electricity use, water use, material use, and fuel use, as well as solid waste generation, recycling, hazardous waste generation or generated emissions. Your measurements can track behavior changes, cost savings, pollution reductions, or material use changes. We just want to see a positive change resulting from your efforts!

Get Results

Providence Alaska Medical Center saved \$65,841 in 2005 through changes in its recycling and trash disposal activities. Recycling accounted for almost 20% of the total waste stream by weight. By tracking recycling quantities as well as monitoring the trash compactor for proper use, the hospital’s waste management system has become much more efficient.

Measuring Electricity Use

Depending on what your organization does, electricity use can vary by season. For truly comparable results you may want to consider comparing bills from the same month in different years or compare a full year’s data with a previous full year’s data. This can be done in one of two ways -- your organization can compare the amount of money spent on electricity, or the actual kilowatt hours used.

We recommend tracking kilowatt hours simply because the cost of kilowatt hours can vary from year to year and comparing dollars spent can be misleading. However, if dollars spent is the only measurement available to you, it can give you an idea of the changes in electricity use, so please use it.

Electricity Facts

1 kw = 1000 watts 1kwh = 1000 watts x 1 hour

Anchorage Residential rate = 8¢ - 13¢/kwh

Anchorage Commercial (small) = 7¢ - 12¢/kwh

Anchorage Commercial (large) = 5¢ - 8¢/kwh

See Tip Sheet #4 for lighting and electricity use.

Green Star understands that some organizations do not own the building they occupy, so gathering information on electricity use can be difficult. Depending on the proportion of your organization’s rental space to the entire building, it may be possible to notice changes in electricity use for the entire building due to changes made within your rental space. In that case, it may be worth contacting the property manager to see if he/she will provide electricity use information.

Rate Your Building at www.energystar.gov

Portfolio Manager is a free tool to help you track and rate your building’s energy performance. The rating system accounts for weather, location, and size and allows you to compare your building with other similar buildings across the country. This energy data management system is available for a wide range of business types, including hospitals, offices, schools, hotels, supermarkets and more.

Measuring Recycling

To quantify your recycling efforts, consider tracking recyclables. Ask your recycling hauler, if you use one, if he/she can provide pick-up quantities. More likely you will need to record your own data. This can be done easily by volume.

Determine the volume of the containers you use to collect and then record how full the containers are just before the material is picked up or taken to the recycling center. If you have a dumpster service, base your tracking on the size of the dumpster. For example, if the dumpster is six cubic yards, track quantities based on a scale of 1 to 6. For a half full dumpster, record it as 3. A 3 would be equal to three cubic yards or 1350 pounds of office paper. Use the conversions below to convert volumes to weight.

Basic Conversions

1 cubic yard of whole aluminum cans = 75 lbs
1 cubic yard of whole plastic bottles = 35 lbs
1 cubic yard of white office paper = 450 lbs
1 cubic yard of mixed paper = 150-350 lbs
1 cubic yards of corrugated cardboard
(loose, flattened) = 100 lbs

32-gallon container = 0.1617 cubic yards
64-gallon container = 0.3234 cubic yards
90-gallon container = 0.455 cubic yards

Overall Waste Disposal

One way to determine waste reduction success is to look at overall waste disposal data. In theory, if you have successfully implemented recycling and waste prevention activities, your trash bill will be reduced. In reality, there are many factors that make this measure not so straight forward. However, you can still use this method if you consider some of the confounding factors. First, identify the number of employees in your workplace during your initial and subsequent measurements so you can determine a "per employee" rate. Then consider any anomalies, such as a full computer switch-out that only happens once. Comparing longer periods of time will help reduce the impact of these factors.



Measuring One Activity at a Time

Here is where you can get creative. As you reduce waste through a variety of activities, you are creating numerous tracking and measurement opportunities. When measuring, always be sure you have numbers that can show a baseline (what you were doing before you made a change), and the change over time. Below are a few examples to give you an idea of the variety of measurement opportunities you have:

- Replace disposable cups with reusables in your kitchen area and track the number of cups of coffee or other beverages consumed. Use this to calculate the number of disposable cups eliminated, the cost savings, and waste quantities reduced. We can look at the weight or the volume of the cups.
- Implement a duplex copying policy and track the number of copies made compared to how much paper is used. Look at paper purchasing records and the counter system in your copy machines.
- Measure a decrease in junk mail by cancelling all unwanted catalogs and other mailings. Each month, collect your junk mail in a box and note the changes in volume over time. Start measuring now, before you cancel anything, to develop a baseline measure.
- Replace C-fold (individual) towels with roll towels. Track before and after purchasing of towels to see if quantities and costs are reduced. Determine how many C-fold towels equal one roll of towels by looking at the measurements of the towels.
- Keep track of all purchases of recycled-content supplies. Record by quantity and dollar value.
- Switch to bulk sugar and creamer. Keep track of all packaging before and after the switch by setting up a collection area for specific periods of time and weighing the resulting wastes collected in a container of a known volume.
- Switch from cardboard boxes to reusable totes for receiving and/or moving supplies. Weigh a standard cardboard box and keep track of the movement of supplies to record the number of boxes avoided.



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