

The Department of Energy (DOE) is expanding the Better Buildings Challenge to help partners demonstrate successful approaches to saving water and decrease their utility bills. The commercial and industrial sectors account for more than 25 percent of the withdrawals from public water supplies and many organizations in these sectors may have savings opportunities of 20 to 40%. The efficient use of water resources results in lower operating costs, a more reliable water supply, and improved water quality. Additionally, because energy is required to transport and treat water, saving water also saves energy. Through this pilot, DOE will work with a small, diverse group of Better Buildings Challenge Partners to expand their resource management strategies to include water in addition to energy, set water savings goals, track progress and showcase solutions.

What Does an Organization Commit To?

Partners will establish a water savings goal across a portfolio of facilities and share their baseline water data within 6 months of joining. Partners also commit to develop a showcase project or an implementation model highlighting water savings accomplishments. DOE will work with these Partners to identify and overcome the barriers to establishing water savings goals and tracking progress and to document best practices.

Defining the Portfolio

Partners are encouraged to include their entire portfolio of properties in their water savings goal. Tracking water use across an entire portfolio provides a full understanding of how resources are used across an organization. If a partial portfolio commitment is desired, such as exclusively focusing on properties in water-stressed areas, please contact your Better Buildings Account Manager.

Data for all water sources should be provided, as applicable for the properties covered. This includes municipally supplied potable water, municipally supplied reclaimed water, and freshwater sources (on-site well water, lakes, and streams). Many organizations utilize water that has been recycled on-site. While it is considered a best practice to separately meter recycled water, it is not necessary for Partners to report recycled water use to DOE, since the savings associated with this practice are reflected in reduced water consumption from other sources. Partners are encouraged to provide data for all indoor and outdoor uses. Partners may choose to limit their goal and reported data to include indoor use only, but may not participate with outdoor use only.

Goal Setting

Partners are encouraged to set a water savings goal of at least 20% improvement over 10 years, relative to a baseline year, similar to their energy goal. In some situations a shorter term water goal is acceptable, for instance, if a Partner already has an existing water goal. In this case, Partners should strive to achieve a goal of at least 2% per year. Goals should ideally be based on water use intensity, but absolute goals may be acceptable under certain circumstances. See the section on water tracking below for additional details.

Water savings progress will be tracked against a baseline year. Partners are encouraged to select one of the three most recent calendar years prior to committing to a water goal as the baseline year. If a Partner prefers to use the same baseline year for their water goal that is used for their energy goal, it is acceptable to select a baseline year prior to the three most recent calendar years. Partners should contact their Better Buildings Account Manager to discuss the specifics of baseline selection and water savings goals.

How Will Water Efficiency Be Tracked?

Water use metrics will be expressed in terms of water use intensity, where feasible. In some cases, it may be acceptable to track absolute water use instead of water use intensity. This may be appropriate if a Partner is focused on reductions in outdoor water use, or if a Partner previously had a goal based on absolute savings.

Commercial, Community, and Multifamily Partners

For typical properties, water use intensity will be measured in terms of water use per square foot (kgal/ft²). The normalization metric of square feet is the same metric used for tracking energy data. It may be appropriate to consider alternative normalization metrics in some cases, such as energy use per hotel room, energy use per worker, or energy use per hospital bed. Partners who are utilizing other metrics to track water use intensity should discuss options with their Better Buildings Account Manager.

The use of Portfolio Manager for water use tracking is strongly encouraged. Portfolio Manager allows Partners to track both energy and water consumption within the same tool, and easily share data with DOE. Partners who are not currently using Portfolio Manager may submit water data using the Better Buildings Challenge Data Collection Template, a Microsoft Excel file available on request.

Industrial Partners

Water intensity metrics can vary by organization or even for different plants within an organization. Water intensity metrics may be expressed in terms of use per unit output, use per employee hour, use per square foot, etc. DOE generally discourages the use of use per unit revenue, but recognizes that this metric may be appropriate if multiple products are produced at a single plant. In most cases, the normalization metric for water should be the same as the normalization metric used for energy. However, there may be instances where a different normalization metric may better represent water use.

Partners will report water data using a customized version of the Better Buildings, Better Plants annual reporting form. Technical Account Managers (TAMs) will transmit this data to DOE.

Water Performance Results

During this pilot, Better Buildings Challenge Partners who provide complete data to track progress towards goals will be recognized for these achievements. The pilot will be assessed in early 2015 and recommendations made for next steps. In future years, water savings recognition will depend upon partners demonstrating progress toward reaching their stated goal. Partner progress towards achieving water savings goals will be displayed in a similar format as the Energy Performance section of the Better Buildings Challenge website.

How Can My Organization Join?

We welcome any Partners that are interested in participating in this pilot. Please let us know if you would like to participate by April 1. Previous experience with water tracking is helpful; we also encourage Partners who have fully reported their portfolio wide, energy data to strongly consider joining. If you are interested in setting a water goal and tracking savings, please inform your Better Buildings Account Manager or key contact.