

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. DOE is working with existing 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.

Why Should Partners Join?

Concern about the availability of water supplies in parts of the country and world is growing. Businesses, cities, and states are responding to this concern by establishing water management strategies and reducing water use across their buildings and operations. Wasting water can also be costly and resource intensive. The Better Buildings Challenge Water Savings expansion gives partners the opportunity to:

- ▶ Formalize their commitment to water efficiency by setting a public goal in partnership with DOE.
- ▶ Earn recognition for the progress they make in reducing water use.
- ▶ Share water saving solutions with their peers.
- ▶ Receive technical guidance from DOE and supporting organizations on issues such as water data tracking and water management best practices.

More than 30 partners from across the industrial, commercial, public, and multifamily housing sectors are working with DOE to set water savings goals. Participating organizations, which included General Motors, the City of Atlanta, and Tower Companies, recorded water use improvements ranging from 10% to 20% measured against their baseline years. Through 2015 partners reported cumulative water savings of 2.3 billion gallons, or the equivalent of over 3,400 Olympic-size swimming pools. These partners are also sharing solutions, including how they make the business case for water savings in light of water's typically low cost.

What Do Partners Commit To?

Participating 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 establish water savings goals, track progress, identify and overcome barriers to saving water, and document best practices.

Portfolio Commitment and Goal

Partners should commit their entire portfolio of properties in their water savings goal. Generally, the portfolio of properties covered under a partner's water goal should match what is covered under its energy goal. Partners should discuss any discrepancies with their Better Buildings Challenge contact. Data for all water sources should be provided. This includes municipally supplied potable water, municipally supplied reclaimed water, and freshwater sources (onsite well water, lakes, and streams). Partners are encouraged to provide data for all indoor and outdoor uses.

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. Goals should ideally be based on water use intensity, but absolute goals may be acceptable under certain circumstances. Partners should 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 its water goal as its energy goal, it is acceptable to select a baseline year prior to the three most recent

calendar years. Partners should discuss the specifics of baseline selection and water savings goals with their Better Buildings Challenge contact.

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. More information on water data tracking is available in the Better Buildings Challenge Data Tracking Manual.

Better Buildings Challenge partners who provide complete data to track progress toward goals will be recognized for these achievements, and organizations that achieve their goals will receive additional recognition. Progress toward water savings goals will be displayed alongside partners' energy performance data displays within the Better Buildings Solution Center.

Commercial, Public Sector, and Multifamily Partners

For typical properties, water use intensity will be measured in terms of water use per square foot (kgal/ft²). Partners who would rather use other metrics to track water use intensity should discuss options with their Better Buildings Challenge contact.

The use of Portfolio Manager for water use tracking is strongly encouraged. Portfolio Manager enables 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 of output, use per employee hour, use per square foot, etc. 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 metric may better represent water use. Partners will report water data using a customized version of the Better Buildings, Better Plants annual reporting form.

How Can My Organization Join?

DOE welcomes any existing Better Buildings Challenge partner that has completed an energy data display for the most recent calendar year and an energy-focused showcase project or implementation model to set a water savings goal. To join, partners can email their Better Buildings Challenge contact with details on their goal, baseline year, and square footage or number of plants committed. For more information, please contact your Better Buildings Challenge contact.