What is the Water Savings Network?

Through the Better Buildings, Better Plants Water Savings Network, DOE brings partners together to discuss and demonstrate successful approaches to conserving water in buildings, plants, and multifamily housing. The Water Savings Network helps partners set water savings goals, track progress, and showcase solutions to become leaders in sustainable manufacturing.

Water resource management is a growing interest for many manufacturers as a way to reduce costs, manage risk, and reduce their environmental impact. Many manufacturing subsectors may face production-altering water shortages in the future as the population grows, demand for water increases, and climate change worsens droughts and alters watersheds (see map on page 2). Furthermore, the nexus between energy and water is profound for manufacturers. Saving water means saving the energy required to transport, heat, cool, and treat it. Effectively managing water resources can lower operating costs, increase resiliency, and improve water quality.

Why Should Partners Join?

- **Expert technical assistance**
  - Receive guidance from technical experts from DOE and National Lab engineers
- **Access to tools and resources**
  - Plant Water Profiler Tool (*right*)
  - Water Info Card for an introduction to water savings opportunities
  - Water Management Strategy for Manufacturers primer
  - In-Plant Trainings
- **Peer to peer learning**
  - Learn from a network of peers about innovative, replicable water solutions and best practices implemented by partners
  - Join periodic meetings with peers to share challenges and successes
- **Recognition**
  - DOE will profile successful and innovative efforts on the Better Buildings Solution Center, in the annual Better Plants Progress Report, and during the annual Better Buildings, Better Plants Summit

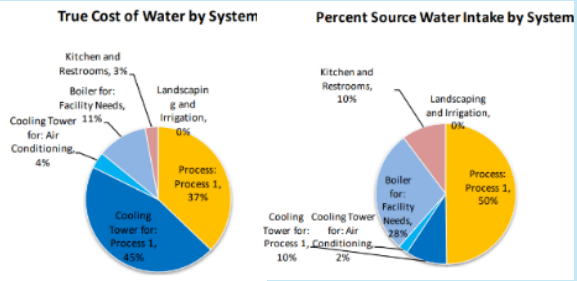
How Do Partners Participate?

Participants are encouraged to set water use intensity goals for all or a part of their portfolio (e.g., in water-stressed regions), and contribute in one or more of the following ways:

- Track and share water savings progress
- Publish a case study on the Better Buildings Solution Center
- Share best practices and lessons learned through peer exchanges
- Document the ways water efficiency impacts other priority areas such as energy reduction, resilience, equity, and workforce development

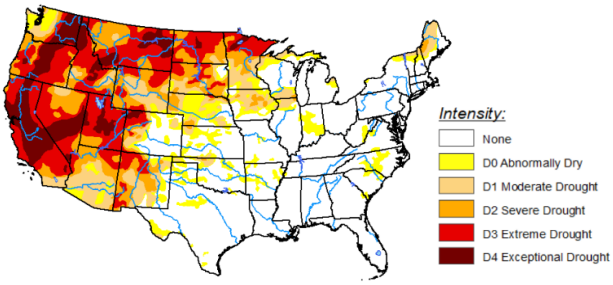
Plant Water Profiler (PWPEx) Tool

DOE's PWPEx Tool breaks down total plant water intake, wastewater disposal, and the "true cost" of water by individual systems in the plant. It identifies systems that contribute the most toward source water intake versus "true cost" and enables efforts to prioritize water efficiency measures. Results can also be used to establish a baseline and track future water use.



How Can My Organization Join?

To join, interested Better Plants partners can email their program contact(s), or betterplants@ee.doe.gov. To learn more, please visit our website.



US Drought Monitor Map for the week of September 7, 2021. University of Nebraska-Lincoln.

Partner Success

United Technologies Corporation (UTC, now a part of Raytheon Technologies) developed a comprehensive internal guidance document to assess best practices for managing water at all sites, detail water scarcity, and showcase water-saving case studies. UTC has achieved a **33% reduction** in global water use from a 2006 baseline, equating to about **2 billion gallons saved per year**.

10+ partners currently engaged

10 **billion gallons** of reduced water use by the Better Buildings Water Savings Network since 2015

3 partners have achieved their water goals

Meet the Experts

Dr. Prakash Rao – Dr. Rao is a Principal Scientific Engineering Associate within the Energy Technologies Area at Lawrence Berkeley National Laboratory (LBNL) in Berkeley, California. He conducts research and analysis into the potential for reducing the energy consumption and water use impacts of the U.S. manufacturing sector while maintaining its productivity. Dr. Rao received his doctorate in Mechanical and Aerospace Engineering from Rutgers University and his bachelor's in Mechanical Engineering from Carnegie Mellon University.

Kiran Thirumaran – Mr. Thirumaran is a research staffer at Oak Ridge National Laboratory (ORNL) with a focus on industrial energy and water efficiency, thermal process intensification, industrial decarbonization, and statistical analysis. In his role as a Technical Account Manager, he assists partnering manufacturers achieve their energy, water, and carbon reduction targets. As the engineering lead for the Better Plants program's water efficiency efforts, he conducts water efficiency workshops at industrial facilities. Mr. Thirumaran received his master's in Mechanical Engineering from North Carolina State University and his bachelor's in Aeronautical Engineering from Anna University, Chennai, India.