

What is the Better Buildings Challenge and why is it important?

The Better Buildings Challenge is a voluntary leadership initiative that asks leading CEOs and executives of U.S. commercial and manufacturing companies, universities, school districts, multifamily residential organizations, data centers, and state and local governments to make a public commitment to energy efficiency. More efficient commercial, institutional, multifamily, and industrial buildings reduce the nation's dependence on foreign oil, protect the environment, and save billions of dollars in energy costs that can be spent growing businesses, investing in new technologies, and creating American jobs.

Through the Better Buildings Challenge, the U.S. Department of Energy (DOE) highlights leaders that have committed to upgrading buildings and plants across their portfolios, and provide their energy savings data and strategies as models for others to follow. The goal of the Better Buildings Challenge is to make American commercial and public buildings, industrial plants, data centers and multifamily housing at least 20% more energy efficient over 10 years. More than 360 leaders from diverse sectors have stepped up to the Challenge, representing over 760 trillion Btus in energy savings, more than \$6 billion in cost savings, and \$26 billion in capital extended to financing.

View the [2021 Progress Report](#) to read about partner solutions and program accomplishments.

What kind of organizations can join?

The Better Buildings Challenge involves a network of partners and allies that demonstrate national leadership in energy efficiency:

- ▶ Partners are commercial businesses, industrial corporations, data centers, universities, states, municipalities, and other building owners that make a public commitment to reduce energy consumption across their U.S. portfolios. Some cities also work local businesses to assess opportunities and take action.

- ▶ Multifamily residential partners are multifamily housing owners and managers who commit to reducing energy use across their U.S. portfolios by 20% in 10 years. Multifamily partners are leaders in market rate (unsubsidized) multifamily housing, Public Housing Authorities, Low-Income Housing Tax Credit properties, and HUD-assisted multifamily properties.
- ▶ Financial Allies are financial institutions and utilities that commit to supporting the energy efficiency marketplace with specific, commercially available products and programs.

What does an organization commit to?

Partners commit to:

- ▶ Publicly pledge to improve energy intensity of the entire U.S. portfolio by at least 20% within 10 years announce, initiate, and complete at least one showcase project and one implementation model.
- ▶ Publicly announce an initial showcase project (e.g., retrofit, retro commissioning) within 6 months and initiate the project within 12 months.
- ▶ Announce the use of one or more energy efficiency implementation models within 6 months.
- ▶ Make available portfolio-wide, building level energy performance information within 12 months and track progress on an annual basis.

How does an organization become a partner in the Challenge?

Commercial and industrial organizations sign a Partnership Agreement with DOE. Multifamily residential organizations sign an Agreement with both DOE and the U.S. Department of Housing and Urban Development (HUD). If your organization is interested in joining, please send an email to betterbuildingschallenge@ee.doe.gov.

What does the government offer Better Buildings Challenge partners?

DOE and HUD provides national recognition to partners for achieving program milestones and energy efficiency results, and also recognizes partners who leverage, develop, and share innovative energy efficiency implementation models and showcase projects. DOE works with partners to identify and overcome barriers to tracking energy data, and water data for those that participate in the water program. DOE offers assistance in the creation of energy efficiency implementation models.

How does the Better Buildings Challenge fit into the larger Better Buildings Initiative?

The Better Buildings Initiative is a broad, multi-strategy effort to improve the energy use of our nation's commercial, industrial, residential, and public buildings by 20% over 10 years. Better Buildings harnesses public and private sector leadership, state and local policies, financing mechanisms, workforce development, and efforts to improve building energy information to meet that ambitious goal. Over 950 organizations are currently partnering with the Energy Department and furthering four key strategic areas to accelerate investments in energy efficiency:

- ▶ Developing innovative replicable solutions with market leaders,
- ▶ Developing a skilled clean energy workforce,
- ▶ Making energy efficiency investment easier, and
- ▶ Leading by example in the federal government.

How is the Better Buildings Challenge working with multifamily organizations?

In 2013, HUD and DOE partnered to expand the Better Buildings Challenge to the multifamily residential building sector. Multifamily buildings and operations can be made much more efficient using a variety of cost-effective energy improvements and operational changes, while simultaneously creating jobs and building a stronger economy. Participating residential building owners and managers commit to reducing energy consumption by at least 20% over 10 years.

What is the Better Buildings, Better Plants Program and how does it fit with the Better Buildings Challenge?

The Better Buildings, Better Plants Challenge is the industrial component of the Better Buildings Challenge. Participating manufacturing partners make largely the same set of commitments as the commercial building, education, and community organizations participating in the Better Buildings Challenge. These manufacturing firms are recognized by DOE at the highest level for their willingness to provide solutions to the marketplace and help other industrial organizations benefit from their efforts.

DOE also provides recognition to manufacturers through the Better Buildings, Better Plants Program. Through this program, manufacturers pledge a 10-year, 25% energy intensity improvement target, or similarly ambitious target for their sectors, and agree to report their progress annually to DOE. Manufacturers participating in the Program tier do not face the same requirements regarding showcase projects, energy efficiency implementation models, and public disclosure as the companies in the Challenge. As a result, Challenge partners receive higher-level recognition for their efforts. DOE is also now working with water and wastewater treatment agencies through both the Better Buildings, Better Plants Challenge and Program.

DOE is working with Better Plants and Better Buildings partners to extend the benefits of energy efficiency to their suppliers. Partners leverage existing Better Plants and Better Buildings program resources and encourage key suppliers to collectively set, track, and meet energy savings goals. View the [Supply Chain overview](#) for more information.

What is the Better Buildings Alliance and how is it related to the Better Buildings Challenge?

The [Better Buildings Alliance](#) is a collaborative effort to develop high-impact technical and market solutions for improved energy efficiency in commercial buildings. More than 165 organizations representing 11 billion square feet across various markets have joined this initiative and work with DOE's network of research and technical experts to develop and deploy innovative, cost-effective, energy-saving solutions.

What are energy efficiency implementation models?

An implementation model is a replicable pathway for the deployment of energy efficiency in an organization. Implementation models identify solutions that address key barriers to energy or water efficiency within the partner's organization, and details the approach the partner took to create a sustainable solution.

These models might be business processes, implementation approaches or financing strategies. Partners agree to identify at least one implementation model, share the process they followed, and articulate the specific tools, documents and steps used to meet energy savings targets. Partners are encouraged to highlight more than one model to show how they achieved significant savings. Partners that choose to track and report water data as part of their Better Buildings Challenge commitment are invited to develop an implementation model highlighting water savings strategies.

What are the requirements regarding data reporting and transparency?

The Better Buildings Challenge is interested in working with sector leaders to develop unique and applicable data tracking reporting methods for energy and water use. All partners commit to report publicly on energy consumption across their organizations and at the individual building level annually. In addition:

- ▶ Better Buildings Challenge portfolio partners provide square feet of floor space, site energy use, source energy use, weather-normalized energy intensity, energy intensity adjusted for space attributes/operating characteristics (where available), total energy cost, and energy cost per square foot.
- ▶ Manufacturing partners provide corporate-wide data on energy consumption, energy savings, and level of investment in energy efficiency and financial returns will be collected on an annual basis. Facility-level data will also be collected from manufacturers, but steps will be taken to mask and aggregate the data to protect confidential business information.
- ▶ Multifamily residential partners provide energy usage across their entire portfolio, including common-area and tenants space for each of their properties. Obtaining this data can present challenges, depending on the metering and

billing configurations at a given property. In some cases, owners and managers can access whole-property energy consumption data through the utility company or by obtaining data authorization agreements from tenants. In other cases, Better Buildings Challenge has developed a protocol for partners to sample tenant energy use.

- ▶ Data center partners provide Power Usage Effectiveness (PUE), a measure of total data center energy use divided by IT energy use.

How do partners track water savings?

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. Qualifying partners may choose to track and report water data as part of their Better Buildings Challenge commitment. Partners sharing water data will establish a goal across their portfolio and share baseline data and performance data on an annual basis. View the [Better Buildings Challenge Water Savings overview](#).

What is the Waste Pilot?

The Better Buildings Waste Reduction Pilot was launched in the summer of 2019 to help partners reduce waste and improve energy performance. Through the pilot, DOE is working with interested partners to collectively set, track, and meet waste reduction goals. View the [Waste Pilot overview](#), and for more information, please contact Bruce Lung (robert.lung@ee.doe.gov) or your Better Buildings account manager.

What is a showcase project?

Showcase projects demonstrate that partners are taking immediate, concrete actions resulting in significant and real savings. They are an opportunity to highlight the development, implementation and results of projects that share strategies, solutions, and results for significant energy, water, and cost reductions. Partners are encouraged to have multiple showcases, but are asked to identify at least one showcase within three months of joining the program and begin implementation within nine months.

Showcase projects are expected to show savings of 20% or more (10% for manufacturing partners), over either an established baseline period (for retrofits) or relative to similar plants (for new construction).

The baseline period should be the 12 months of usage prior to the start of construction, and actual savings are reported 12 months following project completion. Showcase projects can be posted with estimated savings figures and should be updated once actual data is available. Partners that have both energy and water reduction goals may submit a showcase project reflecting work in both or either areas.

Showcase project requirements differ slightly for Better Buildings, Better Plants Challenge partners. For Industrial partners, showcase projects should be:

- ▶ A whole building retrofit,
- ▶ A project over \$1 million, or
- ▶ A project that improves energy efficiency by 10% or more in a single facility.

Industrial showcase projects must be completed within two years from when they are announced.

How does the Energy Department work to amplify partner solutions?

Showcase projects, implementation models, and other energy efficiency solutions that are tested and proven by partners are featured in the [Better Buildings Solutions Center](#). There are now more than 3,000 solutions available on this online tool, which is designed to help organizations easily find energy efficiency solutions by topic, building type, solution type, building size, sector, technology, location, and more.

In addition, the annual Better Buildings Summit is a national meeting where leading organizations across key sectors showcase solutions to cut energy intensity in their buildings portfolio-wide. The Summit is designed for partners and stakeholders to exchange best practices and highlight demonstrated market solutions with an equal emphasis on discussing future opportunities for greater energy efficiency in America's homes and buildings. At the May 2021 Summit, participants convened virtually to engage in dialogue focused on sharing proven approaches.

The first Better Buildings Challenge SWAP was released in 2016. Hilton Worldwide and Whole Foods Market engaged in a new and highly accessible form of inter-industry collaboration, as energy experts from each organization worked

together on camera to unveil energy saving opportunities in each other's buildings. Since then, the U.S. Air Force and Naval Academies traded insider tips on their campuses, the cities of Atlanta and Boston opened up their streets, airports, and libraries, for a fresh perspective on saving energy, and manufacturing operations and facilities were explored by teams from General Motors and L'Oréal. SWAP has proven to be a great way to raise the profile of energy efficiency, and the solutions offered through Better Buildings.

What are Better Buildings Accelerators?

[Better Buildings Accelerators](#) are designed to demonstrate specific innovative policies and approaches, which will accelerate investment in energy efficiency upon successful demonstration. Each Accelerator is a targeted, short-term, partner-focused activity designed to address persistent barriers that stand in the way of greater efficiency. There are 18 different Accelerators:

- ▶ Building Energy Data Analysis **COMPLETED**
- ▶ Clean Energy for Low Income Communities **COMPLETED**
- ▶ Combined Heat and Power (CHP) for Resiliency **COMPLETED**
- ▶ Data Centers **COMPLETED**
- ▶ Energy Data **COMPLETED**
- ▶ Energy Savings Performance Contracting **COMPLETED**
- ▶ Home Energy Information **COMPLETED**
- ▶ Home Upgrade Program **COMPLETED**
- ▶ Industrial Superior Energy Performance **COMPLETED**
- ▶ Outdoor Lighting **COMPLETED**
- ▶ Packaged Combined Heat and Power
- ▶ Smart Labs **COMPLETED**
- ▶ Sustainable Corrections Infrastructure Partnership
- ▶ Sustainable Wastewater Infrastructure of the Future **COMPLETED**
- ▶ Sustainable Wastewater Infrastructure 2.0 **NEW**
- ▶ Workforce
- ▶ Zero Energy Districts **COMPLETED**
- ▶ Zero Energy Schools **COMPLETED**

What are the commitments for Financial Allies?

Financial Allies provide innovative financial products to help partners and other organizations fund energy efficiency projects, demonstrate transparency in their approaches for others to follow, and promote energy efficiency financing opportunities.

Financial Allies commit to invest in or lend at least \$25 million for commercial or multifamily building energy efficiency projects within 12 months, or collaborate with industry leaders and stakeholders to create at least a \$25 million market for each financial product within 18 months. They also agree to assign a senior-level liaison who is committed to allocating the necessary resources to pursue all potential projects resulting from the Better Buildings Challenge. Financial Allies also commit to provide information on financial products, share financial performance and information, and to publicly promote energy efficiency financing opportunities.

What type of information are financial allies asked to share?

Financial Allies are asked to share information about their projects semi-annually in order to showcase their progress and drive more market participants to upgrade energy performance. This includes the particulars of what energy efficiency measures were installed, how much the project cost, where the capital came from, how agreements were structured to maximize benefit to each of the stakeholders, and how the projects have performed, both in energy and financial terms.

As the Allies record projects and transactions, they will mark off progress toward their individual goal, which at a minimum is investing or lending \$25 million in the next 12 months, or creating a \$25 million market for a portfolio of financial productions within 18 months. Financial Allies are also asked to provide information on new program developments or innovative financing services in the form of implementation models that may serve as a resource for Better Buildings Challenge partners looking for financing solutions.