



BETTER PLANTS 2015 LOOK AHEAD

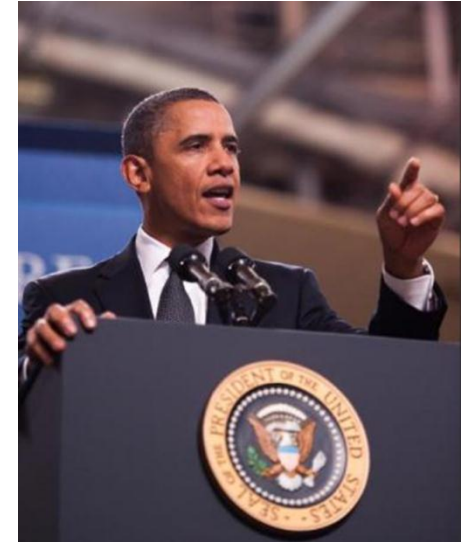
Andre de Fontaine, Better Plants Lead, U.S. DOE
January 22, 2015

Today

- Better Plants Overview & Benefits
- Last Year's Highlights
- Looking Ahead to 2015

Better Buildings, Better Plants

- Better Plants is a key component of the President's Better Buildings Initiative, which seeks to improve the energy efficiency of commercial and industrial buildings by 20% by 2020.
- Through Better Plants:
 - Companies set long-term efficiency goals
 - Receive technical assistance and national recognition for their leadership
- Manufacturers have two opportunities to engage in Better Plants:
 1. Broader-based *Program* level
 2. Higher-level *Challenge*



Better Plants Overview

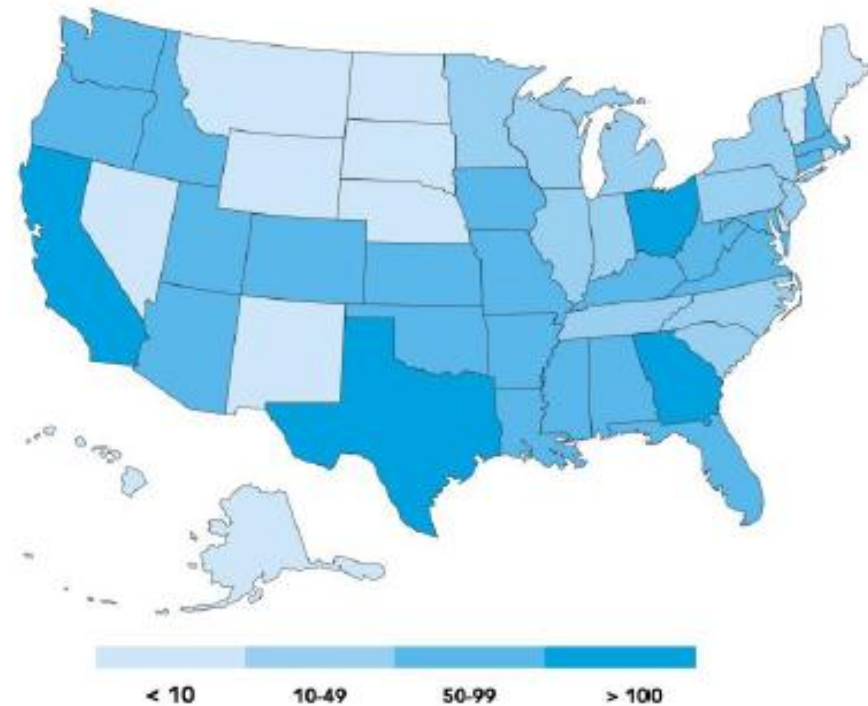
Better Plants consists of:

- 150 companies and 2,300 facilities
- 13 members of the Fortune 100
- Almost 11% of the U.S. manufacturing energy footprint

Partners benefit from:

- National recognition
- In-Plant Trainings
- Networking opportunities
- Access to an expert Technical Account Manager
- Enhanced access to other DOE energy efficiency resources and opportunities

Regional Distribution of Better Plants Facilities



Better Buildings Challenge

Launched December 2011

Goals:

- Make commercial, industrial buildings, multifamily housing 20%+ more efficient in 10 years
- Save more than \$80B+ for US organizations
- Create American jobs; improve energy security
- Mitigate impacts of climate change

How:

- ✓ Leadership
- ✓ Results
- ✓ Transparency
- ✓ Best Practice Models
- ✓ Recognition
- ✓ Catalyzing Action



(Official White House Photo by Lawrence Jackson)

Now 250 Partners

Commercial, Industrial, Public, Private

Represent:

3.5+ Billion Square Feet

\$2 Billion Private Financing

600+ Manufacturing plants

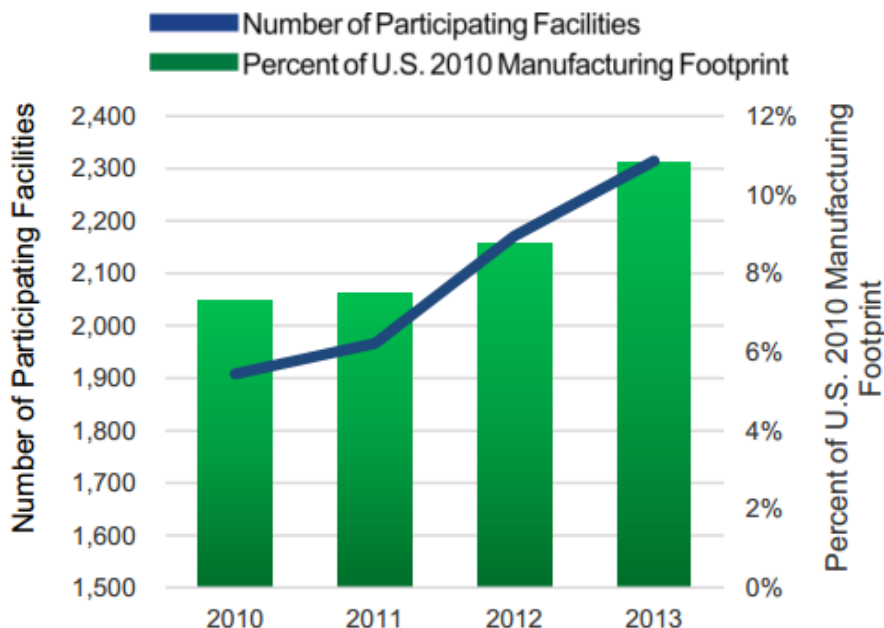
Better Plants Challenge Partners



2014 Highlights

Program Continues to Grow!

Program Growth Over Time



- 23 partners added in 2014, from sectors including primary metals, food, paper, and computers and electronics
- 6 new Better Plants Challenge Partners

Partners Continue to Save Energy!

Average energy intensity improvement rate of 2.4% per year; cumulative savings roughly 320 Tbtus and \$1.7 billion

Estimated Cumulative Avoided CO₂ Emissions are Equivalent to Annual Emissions from:



4.9 coal-fired power plants

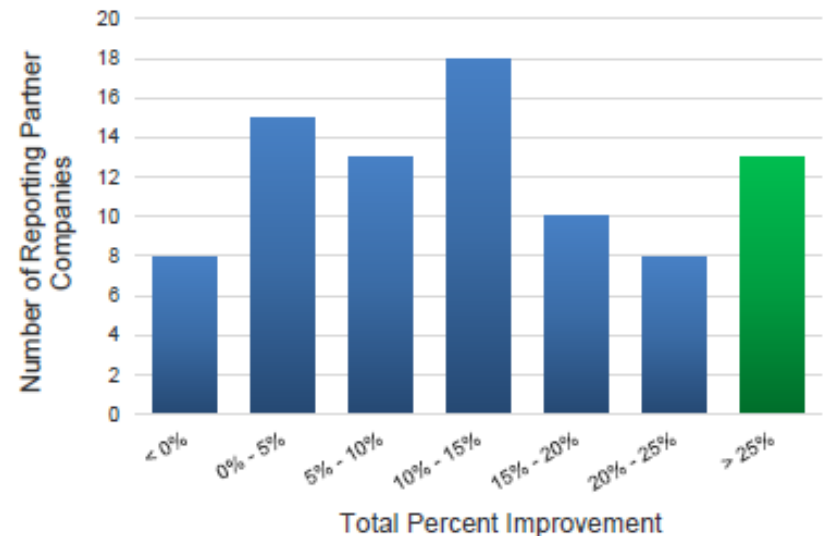


1.7 million U.S. homes' energy use



3.9 million passenger vehicles

2013 Total Energy Intensity Improvement



2014 Goal Achievers

Company	Improvement Level	Baseline Year
BPM Inc.	30%	2006
Celanese International Corp.	25%	2007
Holcim (US) Inc.	29%	2008
Legrand North America	32%	2009
Lennox International Inc.	27%	2009
Patriot Foundry & Castings	34%	2009
Procter & Gamble	30%	2005
Texas Instruments	32%	2010
ThyssenKrupp Elevator	38%	2010
Toyota	28%	2008
Verso Paper Corp.	26%	2009

Looking Ahead to 2015

2015 Expanding the Program

- New or Expanded Value to Partners
 - Supply Chain Pilot (engage your suppliers)
 - Water Savings Pilot (track your water usage)
 - Expanded In Plant Trainings
 - Welcoming Water Facilities
- Better Plant Partners Receive Priority Access to DOE TA
 - Free assessments for small/medium facilities
 - Free CHP screening and technical support
 - Achieve SEP/ISO50001 certification

New Solutions

Success Stories

- Heat recovery
- Radiant heating
- Compressed air leaks
- Rainwater harvesting

Corporate Solutions

- Supply chain engagement
- Freeing up capital for EE
- Water saving best practices
- Performance contracting

These solutions and more will be shared online, through Better Buildings Webinar series, and at conferences such as Better Buildings Summit, ACEEE Summer Study, IETC, and WEEC

National Recognition



DOE Secretary Moniz at May 2014 Better Buildings Summit

Cummins' green initiative takes root

Nov 5, 2014, 12:26pm EST



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Buffalo Business First

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The U.S. Department of Energy is recognizing the Cummins Inc. Jamestown engine plant as a showcase project for its Better Buildings Better Plants Challenge.



Enlarge Photo

A Cummins engine at the Jamestown plant. (file photo)

According to the Department of Energy's

NOVEMBER 4, 2014

W. Hartford firm's marathon reduces energy use 15%



West Hartford manufacturing firm Legrand reduced its total North American energy use 15.4 percent over a 26.2 day competition in October called the Energy Marathon.

Legrand held the competition at its 22 North American locations as a fun way to have employees find creative ways to reduce the company's energy usage, including installing sensors and changing personal habits. Daily updates and communications



EERE Deputy Assistant Secretary Kathleen Hogan poses with Better Plants Partners at October 2013 WEEC

Supply Chain Pilot

- Existing Partners are enrolling key suppliers into Better Plants
- Performance data to be collected later in the year
- New pilot participants coming on board in 2015

Supply Chain Pilot Partner	Better Plants Suppliers
 <p>Engaged 9 suppliers</p>	       
 <p>Engaged 7 suppliers</p>	     

Water Pilot

- Partners are setting goals and tracking progress
- Cross-sector effort with representation from commercial, public and multifamily housing sectors
- Water saving solutions will be shared with the market

Water Pilot Partners and Savings Goals

Company	Water Intensity Reduction Goal	Baseline Year
Cummins	40% by 2020	2010
Ford	30% by 2015	2009
General Motors	20% by 2020	2010
HARBEC	Water Neutral by 2015	2013
Nissan	2% by 2016	2013
Saint-Gobain	6% by 2016	2012
United Technologies	40% by 2015*	2006

* United Technologies has set an absolute water intensity reduction target.

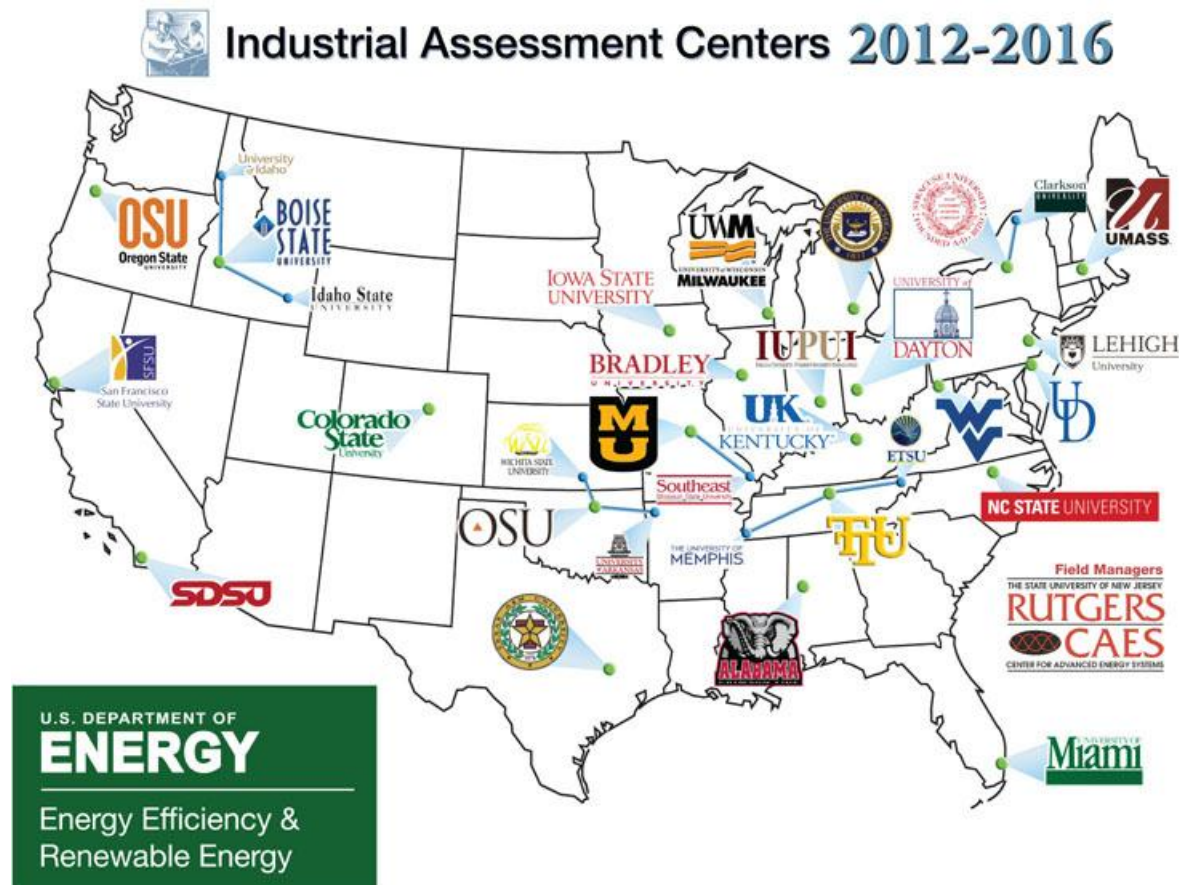
Water/Wastewater Treatment Sector

- Better Plants is expanding to cover water and wastewater treatment plants
- Six organizations have already joined
- DOE will work with this sector to understand key challenges, refine metrics, and share solutions



Access to IACs

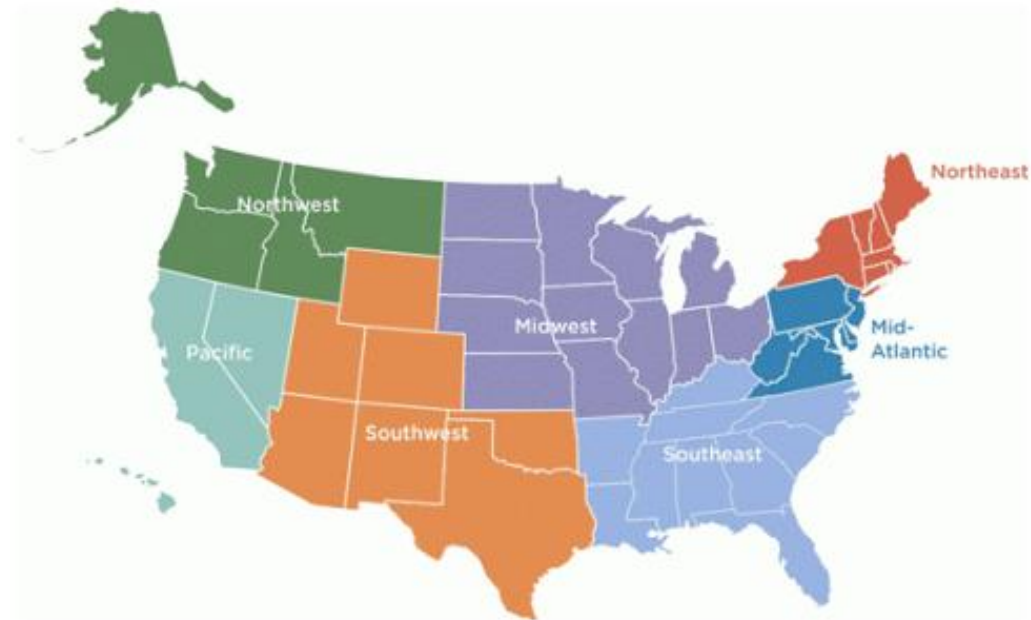
- Qualifying Better Plants Partners receive free energy audits from DOE's IACs.
- IACs are university-based centers, led by professors and staffed by engineering students.
- Typical audit uncovers savings equal to about 8% of plant-wide energy consumption



CHP Deployment

CHP Technical Assistance Partnerships provide

- Market Opportunity Analysis
- Education and Outreach
- Technical Assistance



Better Plants Partners receive free CHP screenings

SEP™ & ISO 50001

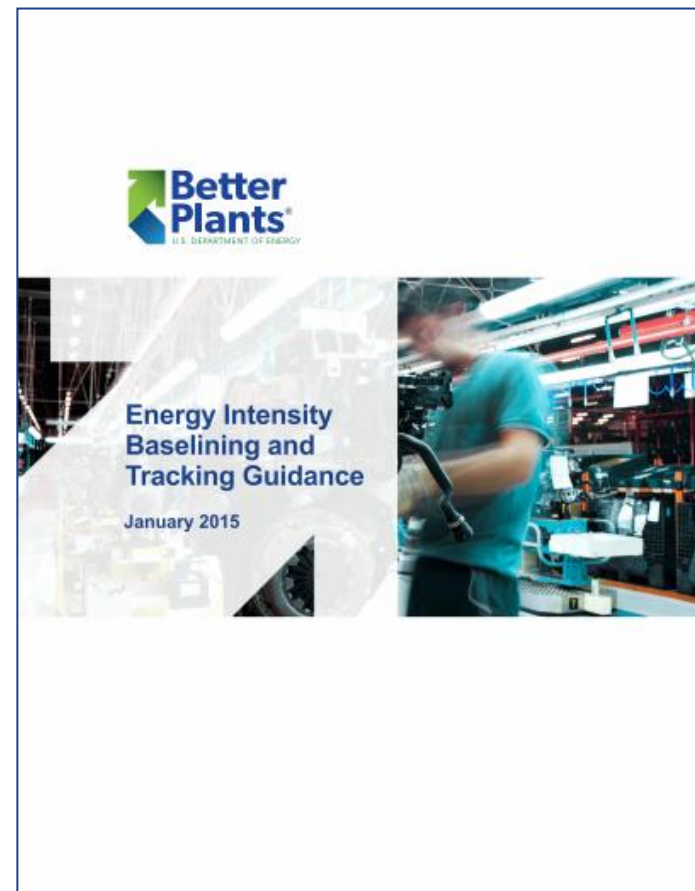
- SEP is a certification program that requires individual plants to meet the ISO 50001 energy management standard and verify savings they achieve
- 27 plants have been certified. 9 improved energy performance by an average of 10% and saved over \$500,000 per year
- DOE is expanding its INPLT opportunities in 2015 with an initial focus on SEP/ISO 50001
 - Aim is to provide 2-day training to introduce advanced energy management practices
 - Plant setting will allow participants to walk through steps of implementing an energy management system



Photo courtesy ArcelorMittal and ORNL.

Improved Resources for Data Analysis

- Updated guidance on energy performance data tracking and reporting for Better Plants now available
- Data protocols remain same, but new document provides deeper details and more examples
- Document works hand-in-hand with DOE's EnPI 4.0 tool, updated recently to include GHG and cost savings calculations
- Focused webinars on updated guidance will be available to Better Plants Partners this year



2015 Better Buildings Summit

Registration is now open for partners!

WHO: 800+ Better Buildings partners and stakeholders and nearly 200 speakers will share demonstrated and proven solutions.

WHAT: 2 ½ days of sessions and meetings focused on the sharing of the most successful energy efficiency strategies. There will be plenty of time for attendees to ask questions, network, and exchange new ideas.

WHERE: Washington D.C.

WHEN: May 27-29, 2015

Quick links:

- [Agenda at-a-glance](#)
- [Register today](#)
- [Reserve your hotel room](#)

It only happens once a year, so don't miss it!

Joining is Easy!

- Simple 2-page partnership agreement form
- Should be signed by CEO or a senior executive
- Lists Partner and DOE roles; explains voluntary nature of agreement
- For more information contact BetterPlants@ee.doe.gov



Partnership Agreement

Form

The Better Buildings, Better Plants Program is a national initiative to significantly improve energy efficiency across U.S. industry. Leading manufacturers in the program work to reduce the energy intensity of their business operations by 25% over ten years. The Energy Department helps these industrial partners develop energy management plans and performance metrics, evaluate energy-saving opportunities, train the workforce, and assess annual progress.

Better Plants Partners agree to:

- ▶ Adopt a goal to significantly reduce energy intensity over a 10-year period
- ▶ Report energy intensity, energy use data, and achievements annually to DOE

Additionally, within 12 months partners agree to:

- ▶ Establish an energy use and energy intensity baseline
- ▶ Develop an energy management plan
- ▶ Designate an energy leader or energy manager

DOE agrees to provide:

- ▶ National recognition including a feature on DOE's website, recognition letters from DOE leadership, and invitations to special events.
- ▶ Technical support to assist the company in developing energy management plans, identifying energy-saving opportunities, tracking energy performance metrics and reaching its energy goal.
- ▶ Additional resources, including access to DOE energy analysis software tools, training webinars, technical guidance documents, and peer-to-peer networking opportunities

Agreement:

My organization is committed to continuous improvement in energy efficiency and agrees to the General Terms of the Better Buildings, Better Plants Program.

Senior Executive Officer (Signature)

Date

Printed Name

Title

Company

Address

Note: DOE will send an official Better Plants Welcome letter to the contact and address listed above

Learn more at http://www1.eere.energy.gov/manufacturing/tech_assistance/betterplants/partners.html

U.S. DEPARTMENT OF
ENERGY

For more Information

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Better Buildings, Better Plants:

<http://eere.energy.gov/betterplants>

Better Buildings Challenge:

<http://www4.eere.energy.gov/challenge/>