

Better Plants Program

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Eli Levine/ORNL/LBNL/ICF
FY 2018

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Overview

Timeline

- Better Plants began as Save Energy Now Leader in 2009
- Program was reconstituted to become part of the Better Buildings Initiative in 2011

Barriers

- Lack of knowledge
- Corporate leadership buy-in
- Low cost of energy
- Competing programs

Budget

	FY 16 Costs	FY 17 Costs	FY 18 Costs	Total Planned Funding (FY 19- Project End Date)
DOE Funded	2.7M	3.5M	4M	4M

Partners

Better Plants has nearly 200 partners, representing 3,000 facilities.

Better Plants partners represent 12% of the U.S. manufacturing energy footprint

42 Challenge Level Partners, committing to share data and solutions

50 Better Plants partners have already achieved their goal, and 15 have doubled-down on success by re-pledging in the program with a new, ambitious goal.

Better Buildings, Better Plants

Objective: Drive leadership in energy innovation in the industrial sector through setting and meeting ambitious energy efficiency targets, and facilitating field validation and adoption of energy-saving technologies.



Better Plants partners join for 5 reasons:

1. Technical Assistance
2. National Recognition
3. Peer-to-Peer Networking Opportunities
4. Connections to National Labs and early-stage R&D.
5. Workforce development

This fulfills AMO's vision of U.S. global leadership in sustainable and efficient manufacturing for a growing and competitive economy,

This also fulfills AMO's mission to catalyze adoption of energy-related advanced manufacturing technologies and practices to drive U.S. economic competitiveness and energy productivity.

- Through Better Plants, companies **set long-term efficiency goals** (25% energy intensity over 10 years). Organizations with publicly stated energy reduction goals:
 - Implemented 50% more efficiency and renewable energy measures than organizations without goals.
 - Are 2.7 times more likely to increase investments, and have indicated they see brand value and other co-benefits beyond energy savings
- Each Partner receives a dedicated **Technical Account Manager**, an engineer based through Oak Ridge National Lab, to help navigating the program, collecting data/reporting, and tapping into energy savings resources

Better Buildings, Better Plants

In-Plant Trainings

- Better Plants offers in-plant training workshops led by Better Plants experts that **train participants on how to identify, implement, and replicate energy-saving projects.**
- Over 80 INPLTs for 1,500 participants
- Identified > 3TBTU and \$36M in energy savings

Field Validation & Diagnostic Equipment Program

- Provides partners with access to borrow various instruments to **measure energy consumption.**
- Free of charge
- Technical assistance to help w/ selection and use of tools

Sharing solutions and strategies

- Better Plants invites its partners to participate in the Better Buildings Summit, the World Energy Engineering Congress to **share successful strategies to overcome challenges**
- Better Buildings Solutions Center website hosts nearly 200 industrial solutions tested and proven by partners.

Water Savings Program

- The efficient use of water resources results in lower operating costs, more reliable water supply, and improved water quality. Additionally, since energy is required to transport and treat water, **saving water saves energy.**
- Nine partners have joined to track water use and two have already met their goals
- Better Plants has created a slew of technical resources to help manufacturers of all sizes save energy.

Supply Chain Initiative

- Around 40-60% of a manufacturing company's energy and carbon footprint can reside upstream in its supply chain. Better Plants is providing guidance and technical assistance to partners to help them improve energy efficiency throughout their supply chains.
- 4 partners have sponsored a cohort of their suppliers, adding 30 partners to the program
- This partners have leveraged IAC assessments, energy treasure hunts, and supply chain cohort webinars to identify opportunities to save energy

Field Validation

- Better Plants serves as a gateway to inform our R&D efforts
- Partners have a entry to our National Labs through their Technical Account Manager
 - Some partners, like Volvo North America and Toyota, have hosted their corporate energy meetings at a National Lab, networking with lab experts and exploring possibilities for collaboration
- Better Plants facilitates partners working with Manufacturing USA Institutes and other AMO R&D programs.

Advanced Technology Partnerships

Better Plants hosts events at National Laboratories to:

Tour World-Class Facilities

View Demonstrations of innovative technologies

Hear from experts and Industry peers

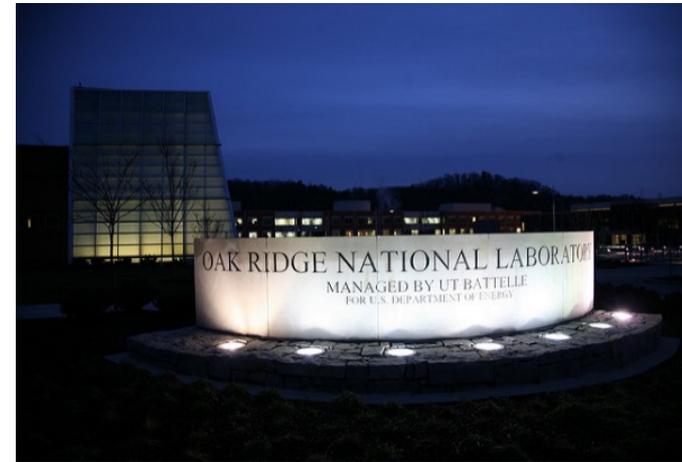
Learn about research partnerships

Network with BP partners and researchers



All of this also serves to provide field validation and inform AMO R&D efforts

ORNL in 2017



NREL in 2018



National Recognition



Better Plants Challenge



Electrolux

NISSAN



EASTMAN



BENTLEY



TOYOTA



SAINT-GOBAIN



Questions?

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