Better Plants Online Learning Series

We’ll be starting in just a few minutes….

Visit our Online Learning Series page on the Solution Center to see our full series lineup, RSVP, and access previously recorded webinars.
Thomas Wenning
Oak Ridge National Lab
<table>
<thead>
<tr>
<th>Webinar Topic</th>
<th>Speaker</th>
<th>Date</th>
<th>Time</th>
<th>Link</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Energy Treasure Hunts with EPA</td>
<td>Alex Floyd (Tyson)</td>
<td>08/20/20</td>
<td>1:00 - 2:00pm EST</td>
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<tr>
<td></td>
<td>Walt Brockway (ORNL)</td>
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<td></td>
<td>Walt Tunnessen (EPA)</td>
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<tr>
<td>8. Pumps and Fans</td>
<td>Thomas Wenning (ORNL)</td>
<td>08/27/20</td>
<td>1:00 - 2:30pm EST</td>
<td></td>
</tr>
<tr>
<td>9. Process Heating and Waste Heat Reduction</td>
<td>Sachin Nimbalkar (ORNL)</td>
<td>09/03/20</td>
<td>1:00 - 2:30pm EST</td>
<td></td>
</tr>
<tr>
<td>10. Field Validation</td>
<td>Eli Levine (DOE)</td>
<td>CANCELED</td>
<td>Rescheduled Date</td>
<td>TBD</td>
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<td></td>
<td>Paul Sheaffer (LBNL)</td>
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<tr>
<td>11. Energy Management During a Pandemic</td>
<td>TBD</td>
<td>09/17/20</td>
<td>1:00 - 2:30pm EST</td>
<td></td>
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<tr>
<td>12. MEASUR Tool Suite</td>
<td>Kristina Armstrong (ORNL)</td>
<td>09/24/20</td>
<td>1:00 - 2:00pm EST</td>
<td>Register</td>
</tr>
<tr>
<td>13. Process Cooling</td>
<td>Wei Guo (ORNL)</td>
<td>10/01/20</td>
<td>1:00 - 2:30pm EST</td>
<td>Register</td>
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Please go to www.slido.com using your mobile device, or by opening a new window

Enter Event Code

#DOE
Agenda for Today

1. Report Findings
2. Fireside Chat
3. Q&A using Slido
New Report: Industrial Energy Management During a Pandemic: What We Have Learned from DOE Better Plants Program Partners

- Summarizes feedback from participants of the 2020 BBBP Summit
- Provides potential solutions to several of the current-day challenges partners are facing
- Includes references to relevant tools, resources, and case studies

Report Findings: Challenges in Industrial Energy Management

1. **Strained Budget** for Energy Projects

2. **Increased Energy Intensity** Caused by Low Production Rate and Some Safety Practices

3. **Limited Access** to Energy Systems

4. **Lost Knowledge** and **Experience** of Senior Staff
Solutions: Strained Budget for Energy Projects

- Implement **No- and Low-Cost** Energy Conservation Measures
- Adopt **Alternative Financing Options**
Solutions: Increased Energy Intensity Caused by Low Production Rate and Some Safety Practices

- Improve **Shutdown Procedures**

- **Reduce Baseload Energy**

**Compressed air Flow vs. Power vs. Time**

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**Power (kW) & Flow (CFM) vs Time**

**Baseload**

**Production**

**Energy Consumption**

**Baseload Energy**

Sunday
Solutions: Limited Access to Energy Systems

- Create an **Effective Online Energy Monitoring System**
- Deploy **Automatic Predictive Maintenance Technologies**
- Perform **Virtual Energy Assessments**

Credit: Schneider

![Energy Dashboard](Image)

**Advanced Air-to-Fuel Ratio Controls**

Credit: Schneider
Solutions: Lost Knowledge and Experience of Senior Staff

- Build a Robust Energy Management System

**Energy Management System Model for ISO50001**

- Continual improvement
  - Energy Policy
  - Energy Planning
  - Implementation and Operation
  - Checking
  - Monitoring, measurement and analysis
  - Internal audit of the EnMS
  - Nonconformities, correction, corrective and preventive action

Credit: ISO 50001

### Attend Training Events

**Better Plants In-Plants Trainings and Online Learning Series**

<table>
<thead>
<tr>
<th>Host Plant Name / City, State</th>
<th>Energy System Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Armstrong Flooring / Lancaster, PA</td>
<td>Treasure Hunt Exchange</td>
</tr>
<tr>
<td>General Motors / Roanoke, IN</td>
<td>Treasure Hunt Exchange</td>
</tr>
<tr>
<td>Whirlpool Corporation / Clyde, OH</td>
<td>Compressed Air</td>
</tr>
<tr>
<td>Ingevity Corporate / Wickliffe, KY</td>
<td>Multi-System (Fans &amp; Pumps)</td>
</tr>
<tr>
<td>Flowers Foods / San Antonio, TX</td>
<td>Multisystem - Pumps, Steam &amp; Water</td>
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<tr>
<td>Mitsubishi Electric Automotive America / Mason, OH</td>
<td>Compressed Air</td>
</tr>
<tr>
<td>Philadelphia Water Department / Philadelphia, PA</td>
<td>Wastewater</td>
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<tr>
<td>1. Better Plants Town Hall</td>
<td>Eli Levine (DOE), feat. Al Hildreith (General Motors)</td>
<td>04/16/20</td>
<td>RECORDED</td>
<td>Watch Recording</td>
</tr>
<tr>
<td>2. Basics of Energy</td>
<td>Thomas Wenning (ORNL)</td>
<td>04/23/20</td>
<td>RECORDED</td>
<td>Watch Recording</td>
</tr>
<tr>
<td>3. Lighting, HVAC, and Building Envelope</td>
<td>Thomas Wenning (ORNL)</td>
<td>04/29/20</td>
<td>RECORDED</td>
<td>Watch Recording</td>
</tr>
<tr>
<td>4. Resources You Should Know- USDA Rural Development Programs and the Department of Commerce Manufacturing Extension Partnership</td>
<td>Venus Welsh-White (USDA)</td>
<td>05/07/20</td>
<td>RECORDED</td>
<td>Watch Recording</td>
</tr>
<tr>
<td>5. Compressed Air Systems</td>
<td>Thomas Wenning (ORNL)</td>
<td>05/14/20</td>
<td>RECORDED</td>
<td>Watch Recording</td>
</tr>
</tbody>
</table>
Today’s Panelists:

- David Turkes
  - Bentley Mills

- Helder Silva
  - ArcelorMittal

- Wade Willatt
  - Nissan

- Andrew Maude
  - Bristol-Myers Squibb Company
BETTER BUILDINGS

Better Buildings is an initiative of the U.S. Department of Energy (DOE) designed to improve the lives of the American people by driving leadership in energy innovation. Through Better Buildings, DOE partners with leaders in the public and private sectors to make the nation's homes, commercial buildings and industrial plants more energy efficient by accelerating investment and sharing of successful best practices.
ENERGY MANAGEMENT DURING A PANDEMIC
Thr, Sep 17, 2020 | 1:00 - 2:00 PM ET

MEASUR TOOL SUITE
Thr, Sep 24, 2020 | 1:00 - 2:00 PM ET
REGISTER TODAY

PROCESS COOLING
Thr, Oct 1, 2020 | 1:00 - 2:00 PM ET
REGISTER TODAY

FIELD VALIDATION
Thr, Sep 10, 2020 | 1:00 - 2:00 PM ET

PUMPS AND FANS
Thr, Aug 27, 2020 | 1:00 - 2:30 PM ET

PROCESS HEATING & WASTE HEAT REDUCTION
Thr, Sep 3, 2020 | 1:00 - 2:30 PM ET

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Additional Questions?

Please Contact Us

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Better Buildings Solution Center
https://betterbuildingssolutioncenter.energy.gov/better-plants

Better Plants Inquiries
BetterPlants@ee.doe.gov

Program Support
ksanderson@retechadvisors.com

David Turkes
Bentley Mills
David.Turkes@bentleymills.com

Wade Willatt
Nissan
Wade.Willatt@Nissan-USA.com

Helder Silva
ArcelorMittal
Helder.Silva@arcelormittal.com

Andrew Maude
Bristol-Myers Squibb Company
andrew.maude@bms.com

Tom Wenning
Oak Ridge National Laboratory
wenningtj@ornl.com