

Energy Bootcamp Details

Workshop: Monday, Sep 28 – Thursday, Oct 1, 2026

Optional ORNL Science Tours: Friday, Oct 2, 2026

Oak Ridge National Laboratory at 2350 Cherahala Blvd,
 Knoxville, TN 37932



Monday, Sep 28, 2026 (held at Embassy Suites Knoxville West hotel)		
2:30pm – 3:00pm	Registration at Hotel (Embassy Suites Knoxville West - 9621 Parkside Drive, Knoxville, TN 37922)	
3:00pm – 3:30pm	Opening Remarks & Round-Room Introductions	
3:30pm – 4:30pm	Where to Start on Energy Management	This session discusses a systematic approach to industrial energy efficiency. Attendees will learn how to develop an energy management system from scratch, the key components of ISO 50001, and DOE's 50001 Ready program.
4:30pm – 5:30pm	Software Tools	This session will introduce some popular software tools: MEASUR, VERIFI, Plant Water Profiler, Waste to Energy, Scoping Tools.
5:30pm – 6:30pm	Energy Management Gallery Walk	Award-winning energy management practices and energy efficiency projects will be showcased in the conference room. Attendees will learn more about them and participate in an engaging activity.
Tuesday, Sep 29, 2026		
7:45am	Buses Depart from Embassy Suites Hotel to ORNL's Hardin Valley Campus	
8:00am – 8:15am	Arriving at MDF and Badging	ORNL's Manufacturing Demonstration Facility Address: 2350 Cherahala Blvd., Knoxville, TN 37932; Coffee and snacks will be provided.
8:15am – 8:30am	ORNL Welcoming	
8:30am – 10:00am	Energy Basics and Understanding Your Utility Bills	This session covers all the basics about energy. Attendees will learn about energy unit conversions, utility bill analysis, energy benchmarking, and energy assessments.
10:00am – 10:30am	Break & People Bingo Game	
10:30am – 12:00pm	Motors, Pumps and Fans	This session will discuss both motor and motor-driven systems (pumps and fans) efficiency. Techniques to quantify energy-saving opportunities will be also discussed (including the use of the DOE MEASUR software tool).
12:00pm – 1:00pm	Lunch and Learn	

1:00pm – 3:00pm	Pump and Fan System Demo and Tour for NTRC (2 Groups Rotations)	
3:00pm – 3:15pm	Break	
3:15pm – 4:45pm	Steam Systems	This session provides an overview of DOE software tools on steam systems (MEASUR, steam system modeler tool, steam system scoping tool, etc.), training, and other resources to optimize steam system performance and save energy.
5:00pm	Adjourn for the Day	
Wednesday, Sep 30, 2026		
7:45am	Buses Depart from Embassy Suites Hotel to ORNL's Hardin Valley Campus	
8:00am – 8:15am	Arriving at MDF and Sign-in	ORNL's Manufacturing Demonstration Facility Address: 2350 Cherahala Blvd., Knoxville, TN 37932
8:15am – 8:30am	Morning Spark and Coffee Power-up	
8:30am – 10:00am	Compressed Air Systems	This session will discuss the pros and cons of different compressor configurations and control systems (with examples from the field) and common energy conservation measures.
10:00am – 10:30am	Break & People Bingo Game & Group Picture	
10:30am – 12:00pm	Process Heating Systems	During this session, the audience will learn practical tips on process heating systems maintenance, how to improve the energy efficiency of furnaces, and how to use DOE's MEASUR tool.
12:00pm – 1:00pm	Lunch and Learn	
1:00pm – 3:00pm	Compressed Air and Thermal System Demo and Tour for MDF (2 Groups Rotations)	
3:00pm – 3:15pm	Break	
3:15pm – 4:45pm	Building Envelope, HVAC, and Lighting	Building envelope, space heating, cooling and lighting systems are essential for manufacturing plants. This presentation includes how to measure their energy performance, identify energy conservation opportunities, and quantify energy savings.
5:00pm	Adjourn for the Day	

Thursday, Oct 1, 2026

7:45am	Buses Depart from Embassy Suites hotel to ORNL's Hardin Valley Campus	
8:00am – 8:15am	Arriving at MDF and Sign-in	ORNL's Manufacturing Demonstration Facility Address: 2350 Cherahala Blvd., Knoxville, TN 37932
8:15am – 8:30am	Morning Spark and Coffee Power-up	
8:30am – 10:00am	Process Cooling Systems	This session discusses the key equipment of process cooling systems, the latest technologies for energy efficiency, best practices, and some important technical resources.
10:00am – 10:30am	Break & People Bingo Game & Logistics for Friday Tours	
10:30am – 12:00pm	Water Savings	This session will discuss how to determine the true cost of water and identify water savings opportunities.
12:00pm – 1:00pm	Lunch and Learn	
1:00pm – 1:30pm	Scavenger Hunt Review	This interactive session will review the scavenger hunt data collection form, identify savings opportunities and use MEASUR to quantify savings.
1:30pm – 2:30pm	Renewable Energy	Adopting renewable energy resources is a very effective way to generate onsite energy. Attendees will learn how to evaluate various renewable energy options.
2:30pm – 2:35pm	Short Break (5 mins)	
2:35pm – 3:25pm	Employee Engagement and Making the Business Case	This session will discuss the strategies for engaging employees in energy management initiatives and obtaining the support and commitment of executives for energy efficiency projects.
3:25pm – 3:55pm	Roadmap Planning	This session shares tips on how to expand your current energy management program to develop a roadmap for success.
3:55pm – 4:00pm	Short Break (5 mins)	
4:00pm – 4:45pm	Choose Your Own Solution Game	Put your skills and knowledge to the test by playing our Choose Your Own Solution game where you will try to help a company meet its corporation goals.
4:45pm – 5:00pm	Feedback Collection & Adjourn	

Friday, Oct 2, 2026 (Optional)

7:45am	Buses Depart from Hotel to ORNL
7:45am – 8:30am	Bus Transfer to ORNL's Main Campus
8:30am – 9:00am	Tour of Manhattan Project Graphite (Nuclear) Reactor Museum
9:00am – 9:15am	Bus Transfer to Supercomputers
9:15am – 10:15am	Tour of ORNL's Leadership Computing Facility - Supercomputers and EVEREST
10:15am – 10:30am	Bus Transfer to HFIR
10:30am – 11:30am	Tour of HFIR (85 MW Nuclear Reactor research facility)
11:30am	Workshop Adjourns; Buses Depart to Hotel and Airport

Event Contacts:

 Jennifer Travis, ORNL, travisjm@ornl.gov, (865) 574-4506

 Wei Guo, ORNL, guow@ornl.gov

 Thomas Wenning, ORNL, wenningtj@ornl.gov
