Energy Management and Smart Manufacturing Workshop

**When:** November 30, 2023 (Thursday)

**Where:** ORNL Manufacturing Demonstration Facility (MDF)
2350 Cherahala Blvd Knoxville, TN 37932

The East Tennessee Initiative for Smart Energy Management (ETISE) is hosting training and interactive discussion sessions on how to use smart manufacturing to better manage energy and reduce carbon emissions.

The goal of ETISE is to create a regional model for technical assistance and workforce training to effectively integrate smart manufacturing in energy management systems into energy-related business practices. The Department of Energy funds ETISE through its Industrial Efficiency & Decarbonization Office (IEDO). Most information about ETISE can be found at [ETISE.utk.edu](https://etise.utk.edu). The event is also supported by Oak Ridge National Lab and University of Tennessee Center for Industrial Services (CIS).

[Free Registration](https://etise.utk.edu/etise-industrial-workshop-training-registration/)
Agenda (November 30, 2023)

07:45 a.m. - 08:30 a.m.  Breakfast and Networking
08:30 a.m. - 08:40 a.m.  Opening Remarks  Dr. Mingzhou Jin
\hspace{1.3cm} Welcome and Overview for the Day
08:40 a.m. - 09:45 a.m.  Training Session #1: Energy Management  Dr. Lynn Reed
\hspace{1.3cm} Review of Energy Management; Charts & Graphs on Use; Explain Why of Energy Management; Review of DOE Estimates of Energy Projects with Return on Investment; Carbon Emissions Reduction
09:45 a.m. - 10:00 a.m.  Break
10:00 a.m. - 11:00 a.m.  Training Session #2: Smart Manufacturing for Energy Efficiency and Carbon Emissions Reduction  Dr. Lynn Reed
\hspace{1.3cm} Introduction to Smart Manufacturing; Levels of Smart Manufacturing Maturity; Dimensions of Smart Manufacturing; Smart Manufacturing for Energy Consumption Reduction and Carbon Emissions Reduction
11:00 a.m. - 12:00 p.m.  Training Session #3: ISO 50001 and 50001 Ready Pete Shack
\hspace{1.3cm} Introduction to ISO50001-2018; DOE 50001 Ready, Process Model; Overview of Standard Sections; Similarity / Differences to ISO14001, DOE Resources for Smart Energy Management and Decarbonization
12:00 p.m. - 01:00 p.m.  Lunch & Showcases
01:00 p.m. - 01:55 p.m.  Interactive Session #1: Aspiration  Dr. Mingzhou Jin
\hspace{1.3cm} Interactive Session #1: Status and Aspirations of Smart Manufacturing for Energy Efficiency and Decarbonization
01:55 p.m. - 02:50 p.m.  Interactive Session #2: Barriers Bill Hicks
\hspace{1.3cm} Barriers to Adoption of Smart Manufacturing to Improve Energy Efficiency and Reduce Carbon Emissions
02:50 p.m. - 03:00 p.m.  Break
03:00 p.m. - 03:55 p.m.  Interactive Session #3: Needs  Dr. Mingzhou Jin
\hspace{1.3cm} Needed Assistance of SMEs to Reduce Energy Consumption and Carbon Emissions through Smart Manufacturing
03:55 p.m. - 04:00 p.m.  Closeout and Wrap-up of Sessions
04:00 p.m. - 05:00 p.m.  Tour of ORNL Manufacturing Demonstration Facilities including Additive and Battery Manufacturing  David Vance
05:00 p.m.  Adjourn