



Industrial Heating Decarbonization **SUMMIT**

FORGING A SUSTAINABLE
PATH FOR THE INDUSTRIAL
HEATING INDUSTRY

OCTOBER 28 - 30, 2024

Conrad Indianapolis
Indianapolis, IN



The industrial heating industry is searching for pathways to become more sustainable and lower carbon emissions. The IHEA Industrial Heating Decarbonization SUMMIT is ready to lead the industry down this path. The SUMMIT is designed to be your gateway to the future of manufacturing heating processes, leveraging the energy and carbon connection, and sustainable environmental stewardship. Join us as we convene business leaders, innovators, and policymakers to chart a path towards a carbon-neutral industrial sector.

GENERAL INFORMATION

DATES

October 28 – 30, 2024

LOCATION

Conrad Indianapolis | 50 W. Washington St. | Indianapolis, IN 46204

HOTEL

All SUMMIT events will take place at the Conrad Indianapolis. We have secured a discounted group rate of \$219/night + tax for SUMMIT attendees and exhibitors.

[CLICK HERE](#) to book your hotel reservation at the Conrad Indianapolis.

The hotel cutoff date for reservations at our discounted rate is **Monday, October 7, 2024**, or until our hotel block is full. Please make your hotel reservations early as we expect our room block to sell out!

PARKING

Only valet parking is available at the Conrad Indianapolis. The hotel is providing a discounted rate of \$54/night for valet parking.

TRAVEL

If you are flying to the SUMMIT, you will want to fly into the Indianapolis International Airport (IND).

WHY ATTEND?

- 1. Network with Leaders:** Connect with industry pioneers, government officials, and sustainability experts to forge partnerships and collaborations.
- 2. Stay Informed:** Gain insights into the latest technologies, trends, and best practices driving decarbonization efforts across industries.
- 3. Access Expertise:** Learn from keynote speakers, panel discussions, and workshops led by experts in decarbonization, renewable energy, and sustainable manufacturing.
- 4. Be Inspired:** Success stories and case studies will showcase real-world examples of decarbonization initiatives making a positive impact.
- 5. Shape the Future:** Be at the forefront of shaping policies and strategies that will drive the transition to a low-carbon economy.

WHO SHOULD ATTEND?

- CEOs and Executives from Industrial Companies
- Sustainability Officers, Analysts and Project Managers
- Environmental Managers
- Government Officials and Policymakers
- Researchers and Academics in Clean Technology
- Plant Managers

AGENDA HIGHLIGHTS

- Keynote Addresses by Industry Visionaries
- Panel Discussions on Decarbonization Strategies
- Networking Sessions with Industry Leaders
- Exhibition Showcasing Cutting-edge Technologies

THE SUMMIT FOCUS

- Low Carbon Fuels in Industrial Processes
- Carbon Capture and Storage Technologies
- Global Benchmarking
- Economics and Business Concerns
- Innovations in Clean Technologies
- DOE Programs and Tools
- Policy Frameworks for Decarbonization
-and more

SCHEDULE OF EVENTS

MONDAY, October 28, 2024

5:00 PM Welcome Reception

TUESDAY, October 29, 2024

7:30 AM Continental Breakfast

8:00 AM - Noon Morning Session
Introduction/Welcome Remarks
Jeff Rafter, Selas Heat Tehcnolgoy Co. LLC

KEYNOTE ADDRESS

Understanding the US DOE Industrial Decarbonization Initiatives
Dr. Avi Shultz, US DOE IEDO

The Energy-Carbon Connection
Energy Consumption and the Resulting Carbon Emissions
Michael Stowe, Advanced Energy

The Scopes of Greenhouse Gas Emissions
Michael Stowe, Advanced Energy

Pathways to Decarbonization
Combustion Processes
Jason Safarz, Karl Dungs, Inc.

Electrical Processes
Michael Stowe, Advanced Energy

Carbon Capture & Sequestration (CCS)
John Carroll, Southern Company

12:00 - 1:30 PM Lunch and Visit with Exhibitors

1:30 - 4:30 PM Afternoon Session
Improving Efficiency in Thermal Processes
Possibilities to Reduce Fuel Consumption
Brian Kelly, Honeywell Thermal Solutions
Keenan Cokain, Bloom Engineering Co., Inc.

The Impact of Automation, Controls and Ancillary Equipment
Jeff Rafter, Selas Heat Technology Co. LLC
Bob Fincken, Super Systems, Inc.

Alternatives to Fossil Fuel Combustion
Low Carbon Fuels & Hydrogen
Brian Kelly, Honeywell Thermal Solutions

An Overview of Direct Versus Indirect Electrification
Perry Stephens, EPRI

4:30 PM Reception and Visit with Exhibitors

WEDNESDAY, October 30, 2024

7:30 AM Continental Breakfast

8:30 AM - Noon Morning Session
Introduction/Welcome Remarks
Jeff Rafter, Selas Heat Tehcnolgoy Co. LLC

Resources & Programs
DOE Programs and Tools
Paulomi Nandy, ORNL

ISO 50001 & 50001 Ready Program
Michael Stowe, Advanced Energy

Reaching Net-Zero
Reducing, Converting, and Trading to get to ZERO Carbon
Speaker TBD

Benchmarking: A Global Perspective
The State of Decarbonization in Europe
Dr. Joachim Wünnig, WS Thermal Process Technology Inc.
Dr. Christian Schwotzer, RWTH Aachen University

Efforts Towards Decarbonization of Industrial Furnaces in Japan
Hiroyuki Akita, Daido Steel Co., Ltd.

Industry Adoption
Economic & Business Concerns
Bryan Stern, Gasbarre Thermal Processing Systems

Codes and Standards
Jason Safarz, Karl Dungs, Inc.

Grants and Funding Sources
Micki Vandeloo, Lakeview Consulting

The Risk of Doing Nothing
Speaker TBD

12:00 PM Lunch and Visit with Exhibitors

1:30 - 4:30 PM Afternoon Session
Decarbonization Implementation Panel
Jeff Kaman, John Deere
Tim Hill, Nucor
B.J. Bernard, Surface Combustion, Inc.

Closing Remarks
Jeff Rafter, Selas Heat Tehcnolgoy Co. LLC

4:30 PM SUMMIT Concludes

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KEYNOTE PRESENTATION

Understanding the US DOE Industrial Decarbonization Initiatives

Dr. Avi Shultz, Director, US DOE IEDO

Before undertaking change, it's critically important to understand why change is necessary and learn about ways companies can strategically work to engage the change to benefit their business. The US Department of Energy, through its new Industrial Efficiency and Decarbonization Office (IEDO), is committed to assisting companies to both understand and begin to implement changes that will help industrial processes to decarbonize. Dr. Avi Shultz will open our Industrial Heating Decarbonization SUMMIT with a keynote address that will lay the groundwork for embracing ways to start the decarbonization process. Dr. Avi Shultz is the director of the U.S. Department of Energy (DOE) Industrial Efficiency and Decarbonization Office and leads IEDO's strategy to accelerate the innovation and adoption of cost-effective technologies that eliminate industrial greenhouse gas emissions. Dr. Shultz also works with DOE leadership and interagency partners to position IEDO and the department for the greatest impact across America's industrial sector.



The Energy-Carbon Connection

Energy Consumption and the Resulting Carbon Emissions

Michael Stowe, Senior Energy Engineer, Advanced Energy

If you consume energy at your site, then you have carbon related greenhouse gas (GHG) emissions. This session will show the connection between energy consumption and its related GHG emissions.

The Scopes of Greenhouse Gas Emissions

Michael Stowe, Senior Energy Engineer, Advanced Energy

The GHG Protocol provides definitions for key "scopes" of GHG emissions. This session will focus on the definitions and the direct applicability of Scope 1, 2, and 3 GHG emissions to the industrial heating market segment.

Pathways to Decarbonization

Combustion Processes

Jason Safarz, Regional Sales Manager, Karl Dungs, Inc.

Electrical Processes

Michael Stowe, Senior Energy Engineer, Advanced Energy

These two presentations will both focus on the FOUR R's of carbon emission reduction: REDUCE, REUSE, REFUEL, and REDESIGN. With a look, first at natural gas combustion processes, and then a focus on electrical processes, these two sessions will explore pathways to remove carbon emissions from your industrial heating processes.

Carbon Capture & Sequestration (CCS)

John Carroll, Principal Engineer - Net Zero Technologies, Southern Company

If all of the efforts covered in the above two topics still leave you with some carbon emissions to deal with, this session will explore methods to capture that remaining and hard to get rid of carbon.

Improving Efficiency in Thermal Processes

Possibilities to Reduce Fuel Consumption

Brian Kelly, Applications Engineer Manager, Honeywell Thermal Solutions

Keenan Cokain, Corporate Sales & Applications Manager, Bloom Engineering Co., Inc.

The Impact of Automation, Controls and Ancillary Equipment

Jeff Rafter, VP Sales & Marketing, Selas Heat Technology Co. LLC

Bob Fincken, VP Sales, Super Systems, Inc.

Taking a deeper dive into combustion process efficiency, these two presentations will take a look at the latest technologies and applications for combustion burners, combustion control systems, and other associated equipment. This session will provide you with information to wring every drop of waste out of your combustion processes, which will optimize your efficiency and reduce your related carbon emissions.

Alternatives to Fossil Fuel Combustion

Low Carbon Fuels & Hydrogen

Brian Kelly, Applications Engineer Manager, Honeywell Thermal Solutions

Another alternative to using process efficiency improvements to help reduce carbon emissions is to use low carbon or zero carbon fuels. This session will explore the advancements of these technologies with a focus on the current and future possibilities.

An Overview of Direct vs. Indirect Electrification

Perry Stephens, Principal Technical Leader, EPRI

Electrification can provide reduced carbon alternatives to fossil fuel combustion. This session will explore the definitions, advantages, and considerations for both direct and indirect electrification approaches.

Resources & Programs

DOE Programs and Tools

Paulomi Nandy, *Technical Account Manager*,
Oak Ridge National Laboratory

ISO 50001 & 50001 Ready Program

Michael Stowe, *Senior Energy Engineer*, Advanced Energy

There are many resources, programs, and documents to support energy management and the associated decarbonization of industrial processes. This session will highlight some of the available tools and programs that you can use to help you on your decarbonization journey.

Reaching Net-Zero

Speaker TBA

“Net-zero” refers to a state in which the total amount of GHGs emitted into the atmosphere is balanced by the amount removed from the atmosphere or offset through various measures. Achieving net-zero emissions is a critical component of decarbonization. This session will explore options to trade, convert, and reduce the carbon footprint in process heating.

Benchmarking: A Global Perspective

The State of Decarbonization in Europe

Dr. Joachim Wünnig, *President*,
WS Thermal Process Technology Inc.

Dr. Christian Schwotzer, *Group Mgr. Renewable Energy*,
RWTH Aachen University

Efforts Towards Decarbonization of Industrial Furnaces in Japan

Hiroyuki Akita, *Daido Steel Co., Ltd.*

This session will provide insights and updates with a global perspective on carbon reduction pathways and policies related to the industrial heating markets from two areas outside the United States.

Industry Adoption

Economic & Business Concerns

Bryan Stern, *Product Development Manager*,
Gasbarre Thermal Processing Systems

With a growing awareness of the environmental impact of thermal processing, environmental considerations are becoming more critical in operations and facilities planning. While financial planning information is often readily available, it can be difficult to compare equipment from a standpoint of environmental impact. This presentation will review a case study comparing energy consumption, operating cost, and emissions between a gas-fired atmosphere integral oil quench furnace and an electric batch vacuum oil quenching furnace performing metal heat treating.

Codes and Standards

Jason Safarz, *Regional Sales Manager*, Karl Dungs, Inc.

The current state of codes and standards for carbon and sustainability will be discussed.

Grants and Funding Sources

Micki Vandeloo, *President*, Lakeview Consulting

There is funding available to help you lower carbon emissions. Learn where and how to find help in funding change.

The Risk of Doing Nothing

Speaker TBA

Can we really afford to do nothing? This session will explore the risk of delaying or ignoring addressing decarbonization of our processes.

Decarbonization Implementation Panel

Jeff Kaman, *Manager, Energy Procurement & Sustainability*,
John Deere

Tim Hill, *General Manager, Sustainability Solutions*, Nucor

B.J. Bernard, *President*, Surface Combustion, Inc.

Two industrial organizations will share their corporate journeys for reducing their manufacturing carbon footprint. Case studies will be followed with a panel discussion on how to overcome objections and barriers to sustainability efforts.

REGISTER AT [SUMMIT.IHEA.ORG](https://summit.ihea.org)

REGISTRATION FEES

Early Registration Discount if registering by September 20

IHEA Member	\$ 875
Non-member	\$1,275

Regular Registration Fee if registering after September 20

IHEA Member	\$ 975
Non-member	\$1,425

On-Site Registration Fee (if space is available)

IHEA Member	\$1,100
Non-member	\$1,550

Fees Include:

- Welcome Reception on Monday
- Breakfast on Tuesday & Wednesday
- Tabletop Exhibits throughout the SUMMIT
- Access to Presentations Following the SUMMIT
- Admission to All SUMMIT Presentations
- Lunch on Tuesday & Wednesday
- Tuesday Happy Hour with Tabletop Exhibits

GROUP DISCOUNT

Group discount available! Register two or more people at the same time and receive a discount. The first registration pays the full price and each additional registration receives a 10% discount off the full price. Registrations must be entered together to receive the discount. Just click "Save & Add Another Attendee" before proceeding to check-out after completing the first attendee's registration details.

To register for the 2024 Industrial Heating Decarbonization SUMMIT, visit summit.ihea.org and click on the green REGISTER NOW button on the homepage.