Agenda for IHP Workshop at 2023 ACEEE Industrial Summer Study

TUESDAY, 7/11/2023, 10 AM - 5 PM SALON 1, MGM GRAND HOTEL, DETROIT

Industrial decarbonization will require the electrification of process heating, which today is largely met by fossil fuels. ACEEE research has found that industrial heat pumps (IHPs) can cut the energy use associated with process heat in key industries by up to one third and reduce 30-43 million tons of greenhouse gas emissions per year. Capital investments for IHPs to achieve these savings are estimated at \$17 billion with associated energy cost savings of \$5.6 billion per year. At the 2023 Industrial Heat Pump (IHP) Workshop, hosted the day prior to ACEEE's 2023 Industrial Summer Study, experts will explore this critical technology. The Workshop will also include a presentation on the global IHP experience from international experts. Focuses will include demonstrations, market transformation initiatives, and available funding to accelerate domestic manufacturing of IHP, market technical support, and plant implementation.

The event will serve as an unprecedented networking opportunity for stakeholders across the IHP supply chain, including suppliers, end-users, utilities, implementers, engineers, government agencies, etc.

10:00–10:30 AM Pre-workshop Networking (tea and coffee severed)	
10:30–10:55 AM	Welcome and Introduction
10:30–10:35	Agenda overview (Dan Brown – Cascade Energy
10:35–10:55	ACEEE ongoing work on IHP market transformation (Andrew Hoffmeister, Neal Elliott, Paul Scheihing – ACEEE)
10:55–12:20 PM	Global IHP Experience
10:55–11:15	IHP technology readiness, economic conditions and sustainable refrigerants [VIRTUAL] (Cordin Arpagaus – Eastern Switzerland University of Applied Sciences)
11:15–11:35	EU High Temperature Heat Pump (HTHP) demonstrations [VIRTUAL] (Veronika Wilk – Austrian Institute of Technology)
11:35–11:45	Q&A for Cordin and Veronika and discussion
11:45–12:10	IEA Annex 58, HTHP applications (Benjamin Zühlsdorf – Danish Technological Institute)
12:10–12:20	Q&A for Benjamin and discussion
	12:20–1:00 PM Lunch (Buffet style)

1:00–1:35 PM	Global IHP Experience (continued)
1:00–1:25 PM	Policy learnings from Denmark on IHP support, REPowerEU Initiative (Fabian Bühler – Danish Energy Agency)
1:25–1:35 PM	Q&A for Fabian and discussion
1:35–1:45 PM	Announcement of U.S. Industrial Heat Pump Initiative and Partnerships (Nora Esram – ACEEE)
1:45–2:35 PM	Supply Chain Efforts (Initiative Partners)
1:45–2:00	Renewable Thermal Collaborative (RTC) and IHP user perspectives (Blaine Collison – David Gardiner & Associates)
2:00–2:15	National Electrical Manufacturers Association (NEMA), and IHP manufacturer perspectives (Steve Griffith – NEMA)
2:15–2:35	Q&A for Blaine and Steve and discussion
	2:35–3:00 PM Networking Break (coffee and cookies served)
3:00-3:40 PM	Utility Perspectives
3:00–3:15	Electric Power Research Institute perspective: challenges, district heating, drying applications. (Ammi Amarnath – EPRI)
3:15–3:30	Utility perspective: ongoing work, learnings from customers (Chase Cortner – Southern Company)
3:30–3:40	Q&A for Ammi and Chase and discussion
3:40-4:20 PM	Policy Support and Federal Investment
3:40–4:10	Department of Energy's ongoing effort: IHP R&D, upcoming funding opportunities, <u>Industrial Heat Shot, Electrified Processes for Industry without</u> <u>Carbon</u> (EPIXC) Institute (Yaroslav Chudnovsky – DOE)
4:10-4:20	Q&A for DOE and discussion
4:20-4:50 PM	Energy Engineering perspectives
4:20-4:40	Need for implementers, engineering, regionality, early pathways (Steve Koski— Cascade Energy)
4:40-4:50	Q&A for Steve and discussion
4:50–5:00 PM	Wrap up: summary, next steps, upcoming work products and events (Andrew Hoffmeister, Neal Elliott – ACEEE)
	5:00 PM Adjourn
5:00-7:0	0 PM ACEEE Summer Study Welcome Reception for conference attendees

