



## **2023 HOT AIR FORUM**

MARCH 7-8, 2023

# **TUESDAY MORNING (3/7/2023)**

Tuesday, March 7 – Hot Air Forum				
7:00 am – 7:00 pm	REGISTRATION South Foy			
8:00 – 9:00 am	BREAKFAST Great Room IV-V			
9:00 – 10:30 am	WELCOME, INTRODUCTIONS AND PLENARY SESSION Great Room IV-VIII			
10:30 – 11:00 am	NETWORKING BREAK	West Deck		
Concurrent Sessions				
	Great Room I-III	Shutters East I-II	Shutters West I-II	
11:00 am – 12:00 pm	1A. Decarbonizing Commercial and Industrial	1B. Cold Climate Heat Pumps	1C. Design Strategies for Energy Efficiency and Decarbonization	
12:00 – 1:00 pm	NETWORKING LUNCH		Great Rooms IV-VIII	





# **2023 HOT AIR FORUM**

# **TUESDAY AFTERNOON (3/7/23)**

Concurrent Sessions				
	Great Room I-III	Shutters East I-II	Shutters West I-II	
1:00 – 2:00 pm	2A. Commercial Boiler Solutions	2B. Cold Climate Heat Pump Technology Challenge U.S. DOE	2C. Workforce Tools and Programs	
2:15 – 3:15 pm	3A. Solutions for Roof-Top Units (RTUs) – Small and Medium Commercial	s) – Small and Medium Pumps (VSHP) Equipment		
3:15 – 3:45 pm	NETWORKING BREAK		West Deck	
3:45 – 4:45 pm	4A. Heat Pumps in Single Family Homes (Residential Case Studies)	4B. Equipment Sizing	4C. Landscape of Current Collaborations and What's Needed?	
5:30 – 7:00 pm	RECEPTION		The Gallery	





## **2023 HOT AIR & HOT WATER FORUM**

March 8, 2023

## WEDNESDAY MORNING (3/8/2023)

Wednesday, March 8 – Hot Air and Hot Water Forum (combo day)				
7:30 am – 6:00 pm	REGISTRATION South Foyd			South Foyer
8:00 – 9:00 am	BREAKFAST Great Room IV-VIII			Great Room IV-VIII
9:00 – 10:30 am	PLENARY SESSION Great Room IV-VIII			
10:30 – 11:00 am	NETWORKING BREAK West Dec			West Deck
Concurrent Sessions				
	Great Room I-III	Shutters East I-II	Shutters West I-II	Brickstones
11:00 am – 12:00 pm	5A. Flexibility and Demand Response State Water Heating Perspective	5B. Utility Programs in the Midwest	5C. Energy Equity & Environmental Justice in Decarbonization	5D. Program – Decarbonization Considerations
12:00 – 1:00 pm	LUNCH			Great Room IV-VIII

PLEASE TAKE SOME TIME TO VISIT THE DISPLAY TABLES THROUGHOUT THE FOYERS!





#### 2023 HOT AIR & HOT WATER FORUM

March 8, 2023

### WEDNESDAY AFTERNOON (3/8/2023)

#### Wednesday, March 8 – Hot Air and Hot Water Forum (combo day) **Concurrent Sessions Great Room I-III** Shutters East I-II **Brickstones** Shutters West I-II 6C. Legislation and 6D. Residential: Heat and 6A. Reducing Emissions through **6B. State Utility** 1:00 - 2:00 pm **Funding Water Heating Multi-Use** Policy **Programs Implications Heat Pumps** 7B. Air-to-Water Heat 7C. Policies: Codes, 7A. High Efficiency Gas Water Pumps (AWHP) and 7D. Decarbonizing 2:15 - 3:15 pm Standards, and Heating **Water-Source Heat Residential Water Heating Testing** Pumps (WSHP) 3:15 - 3:45 pm **NETWORKING BREAK** West Deck **Concurrent Sessions 8A. Low Global Warming** 8B. Landscape of Current 8D. Equipment – Thermal **Potential Refrigerants and** Collaboration and 8C. Workforce 3:45 - 4:45 pm **Heat Pumps** What's Needed - Part II **Green House Gas Reductions** 5:00 - 6:00 pm SHAMELESS COMMERCE **Great Room IV-VIII** 6:15 - 7:30 pm **RECEPTION** The Gallery





## **2023 HOT WATER FORUM**

March 9, 2023

## **THURSDAY MORNING (3/9/2023)**

Thursday, March 9 – Hot Water Forum				
7:00 am – 4:00 pm	REGISTRATION			South Foyer
8:00 – 9:00 am	BREAKFAST Great Room IV-VIII			
9:00 – 10:30 am	PLENARY SESSION			Great Room IV-VIII
10:30 – 11:00 am	NETWORKING BREAK			West Deck
Concurrent Sessions				
	Great Room I-III	Shutters East I-II	Shutters West I-II	Brickstones
11:00 am – 12:00 pm	9A. Market Transformation: Heat Pump Water Heater Decarbonization	9B. Piping Design	9C. 120 Volt Heat Pump Water Heaters: A Game Changing Technology Gets to Market	9D. Commercial and Public Building Innovations
12:00 – 1:00 pm	LUNCH			Great Room IV-VIII

PLEASE TAKE SOME TIME TO VISIT THE DISPLAY TABLES THROUGHOUT THE FOYERS!



3:30 - 4:30 pm

**Water Design Strategies** 



& Installation Heat Pump

**Water Heaters** 

#### 2023 HOT WATER FORUM

March 9, 2023

### THURSDAY AFTERNOON (3/9/2023)

#### Thursday, March 9 – Hot Water Forum **Concurrent Sessions** Shutters East I-II **Great Room I-III Shutters West I-II Brickstones** 10C. Causes of (and 10B. Innovative **Solutions to) Poor Heat** 10D. Commercial and 10A. Program Design – Heat 1:00 - 2:00 pm **Hot Water Pump Water Heater Industrial Hot Water Pump Water Heaters Performance in Small** Research **Enclosures** 11A. Flexibility and Demand 11B. Hot Water 11D. Multifamily -**Response: Heat Pump** 11C. Solar Water Heating **Design: Water Equitable and Affordable** 2:15 - 3:15 pm **Water Heater Controls and** Quality, Design, **Strategies Water Heating** and Innovations Costs **NETWORKING BREAK** West Deck 3:15 - 3:30 pm 12D. Multifamily - Design 12C. Innovative 12A. Multifamily -Hot 12B. Hot Water

End of Forum - Thank you for attending!

**Strategies** 

**System Design**