








FEB. 2021 TMAF WEBATHON AGENDA

Day 1: Tuesday, February 23, 2021

11:00 AM EST	 Opening Remarks Jerry O'Keeffe, Chair, Energy Solutions Center Board of Directors David Weiss, Executive Director, Energy Solutions Center
11:30 AM EST	 Renewable Gas and the Renewable Energy Landscape Eric Burgis, Energy Solutions Center <p>This presentation will be a primer on Renewable Natural Gas (RNG). Eric will discuss how RNG is generated and the role it plays in reducing greenhouse gas emissions. The webinar will examine various sources of biogas and its conversion into pipeline quality gas. Gas utility RNG strategies will also be presented.</p>
12:15 PM EST	 Gas Hybrid Systems – The Canadian Connection Philippe Verhas, Dettson <p>Philippe will speak about the latest improvements to their popular small duct system. This innovative heating and cooling system is the perfect solution for hard-to-heat structures with little room for standard duct work.</p>
1:00 PM EST	 Humidity Control to Slow the Spread of Viruses Dr. Stephanie Taylor, MD and Marlee Spiegelberg, P.Eng., Condair <p>There are several studies on the impact of humidity regarding virus transmissibility, infectivity, and mortality rates. Condair and Dr Taylor will discuss how viruses are transmitted and how proper humidity levels can slow the spread.</p>
1:45 PM EST	 Save Money and the Environment with mCHP and GHPs Mike Alfano, Yanmar <p>Yanmar offers small scale Combined Heat and Power (CHP) systems, Gas Heat Pumps (GHP), including Variable Refrigerant Flow (VRF) systems, and a new air-to-water heating and cooling system. The VRH systems work in conjunction with their GHP to provide chilled or hot water for all hydronic systems. Yanmar will give an overview of products and discuss best applications.</p>
2:30 PM EST	 The Future of Gas Heating in Industrial Applications Steven R. Mickey, WS Thermal <p>Steven Mickey will discuss how technology, economics, and environmental concerns will shape the future of industrial heating. He will cover burner and radiant tube types, payback vs. net present value, efficiency, green gas, and emissions.</p>
3:15 PM EST	 The Adsorbed Natural Gas (ANG) Solution: A Path for Fleets to utilize RNG Robert Friedman, Ingevity <p>The ANG vehicle solution uses proven proprietary technology, offering fleets an optimal economic and sustainability solution for the light and medium-duty truck segment. This low-pressure technology is in use by multiple fleets in the U.S. and enables the use of low-cost fuel with a low-cost fueling appliance achieving benefits of enhanced fleet productivity and optimal sustainability through the use of renewable natural gas.</p>
4:00 PM EST	 Virtual Mix and Mingle Hosted on the Rally Platform <p>Join fellow TMAF attendees for a 45-minute virtual mix and mingle in ESC's virtual bar on the Rally Platform. Grab your favorite drink and connect with industry professionals during this casual networking event. Capacity is limited to 50 people, so it's first come, first serve. Use this link to access the event: https://bit.ly/3ugu02Y</p>

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Day 2: Wednesday, February 24, 2021

11:00 AM EST	 Multi-zone Gas Fired Heat Pumps Tommis Young, Blue Mountain Energy <p>This presentation will introduce a Multi Zone VRF Gas Heat Pump and AWS heat pump heat exchangers for hydronic applications. Customer benefits when selecting gas heat pumps, as well as environmental impacts surrounding gas cooling, will be discussed.</p>
11:45 AM EST	 Learn How to Boost Your Customer Ratings in the Face of COVID-19 Michael Vigeant, Great Blue Research <p>Customer satisfaction does not have to be negatively affected by a pandemic, Michael will explain how to improve those ratings during these trying times.</p>
12:30 PM EST	 Thermally Driven Heat Pumps: The Future of Keeping Our Buildings Warm Scott Reed, Stone Mt Technologies <p>Stone Mountain Technologies' residential heat pumps offer space heating and water heating capabilities and even has a combi unit option. Learn more about their products and how they can benefit your customers and keep them using gas.</p>
1:15 PM EST	 Introducing IoT Into the Boiler Room Terry Conger, Clever Brooks <p>The Internet of Things (IoT) helps make companies smarter and more efficient, and the boiler room is no exception. Several parameters can be monitored in real-time on a boiler system to provide operational insights. The resulting data can help operators and facility managers make informed decisions to boost efficiency, prevent or reduce downtime, improve safety, and provide peace of mind. Learn the fundamental requirements for IoT in the boiler room and how to enable legacy boiler equipment to be connected.</p>
2:00 PM EST	 Steam as a Service Arne Irwin, Miura America Co. <p>Miura Boilers collaborated with Armstrong Services and Hartford Steam Boiler (HSB) to bring fully financed installations of the latest boiler technology to customers, including operation, maintenance, and administration, all wrapped up in one cost. This product primarily targets large steam boiler users with over 1500 HP of steam production in a local region.</p>
2:45 PM EST	 Delivering Power from Waste, Heat, and Biomass with Zero Emission Kam Mahdi, CEO, Clean Energy Technologies (CETY) <p>Billions of dollars' worth of heat is wasted every year at industrial facilities, high-rise buildings, and biomass plants. Three-fifths of the primary energy used in power plants becomes wasted heat. CETY designs, builds, and markets clean energy products and solutions focused on energy efficiency and environmental sustainability. We will discuss our primary product and technology, the Clean Cycle II 140 kW magnetic bearing turbine waste heat generator, purchased from General Electric in September 2015.</p>
3:30 PM EST	 Microgrid Survival Story: Lessons Learned During a Long Power Outage Alan Rubacha, Wesleyan University <p>Wesleyan University had to adapt to protect staff, students, and buildings through a long-term, weather-related power outage on the college campus using an existing 2.5MW CHP system. Alan will discuss some hard lessons learned and how these lessons shaped the future of the Wesleyan microgrid. He will provide a real-world case study on the best practices in the evolution of CHP and integration of renewables for continuous and sustainable microgrid operation of college campus operations.</p>

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Day 3: Thursday, February 25, 2021

11:00 AM EST	 <i>Green Hydrogen: A Way to Decarbonize Gas Networks</i> Nicolas Bombard, Natural Gas Technology Centre <p>Governments worldwide have set goals for GHG emission reduction and decarbonization of the natural gas networks. One pathway to achieve this goal is renewable hydrogen; another path is renewable natural gas (RNG). This presentation will broach upon the renewable hydrogen production technologies, the issues with the injection of hydrogen into the gas network, and the green hydrogen projects happening around the world.</p>
11:45 AM EST	 <i>Energy Management Through Condensate Recovery</i> Will Brozowski, Clayton <p>Will will discuss condensate return management principles for a cost-effective steam system. He will cover typical return systems, sizing condensate return lines, and many other condensate recovery systems components.</p>
12:30 PM EST	 <i>Hydrogen Decarbonization in Steel</i> Roman Grosman, Linde <p>Roman will discuss conventional and state-of-the-art methods to produce hydrogen and how to use it to decarbonize and reduce GHGs in several key industries such as steel.</p>
1:15 PM EST	 <i>Residential Regulators for AOC Applications</i> Rick Schneider, Equipment Controls <p>Equipment Controls is one of the largest distributors of gas measurement, control, and data acquisition products in North America. Learn about how their products secure the safe and accurate flow of natural gas to your customers.</p>
2:00 PM EST	 <i>Vertical Common Venting for Multifamily Structures</i> Jennifer Kaminski, Rinnai <p>Jennifer will speak about Rinnai's standard venting solution for multifamily structures. This innovative advancement can be a real game-changer for this hard-to-serve market.</p>
2:45 PM EST	 <i>CHP's Role in GHG Emissions Reductions</i> Dan Robb, Frontier Energy <p>This presentation will focus on CHP applications as interest in transitioning from fossil fuels to carbon-free alternatives continues to grow. Topics discussed include comparing GHG emissions from CHP systems to current grid electricity mix, performance targets necessary to be competitive to grid electricity on a GHG basis, ancillary benefits on-site CHP provides (demand reduction, resiliency), and how systems can take advantage of low carbon fuels as they become more widespread and available.</p>
3:30 PM EST	 <i>CHP + Boiler (CHP+) and Financial Viability of Micro CHP</i> Dan Burke, AEGIS Energy <p>AEGIS Energy, EDF Group has about 1,000 installations and over 35 years of experience manufacturing and installing combined heat and power systems from consultation and concept through construction and maintenance of CHP systems. In this session, Aegis will debut its newest product CHP+, which combines CHP and a boiler into a single seamless skidded mounted product.</p>