

## Infinity Turbine Introduces Cluster Mesh Power Generation for Waste Heat to Energy Utilization Across Industries

The Cluster Mesh Power Generation turbine concept can enhance energy efficiency across various industries by utilizing waste heat to make power and cooling.

MADISON, WI, UNITED STATES, October 4, 2024 /EINPresswire.com/ -- Infinity <u>Turbine</u>, a leader in advanced energy recovery solutions, is excited to unveil its innovative Cluster Mesh Power Generation Turbine Concept, a powerful technology that leverages waste heat to generate electricity or provide high-efficiency cooling. Originally developed for data centers, this cutting-edge solution is now available for a wide range of industrial and commercial applications that generate waste heat, delivering significant energy savings and enhanced sustainability.

Revolutionizing Energy Efficiency with Waste Heat Recovery

The Cluster Mesh Power Generation concept is designed to maximize energy recovery from waste heat sources by employing multiple small turbines, configured in a mesh. These turbines work together to convert



Infinity Turbine Cluster Mesh Power Generation for waste heat to power



Biomass gasifier which has waste stack heat that can be used to make power

waste heat into usable electricity or cooling, achieving a high Coefficient of Performance (COP) of

up to 20. This advanced system makes it possible to reduce energy costs, improve efficiency, and decrease carbon footprints across industries.

This technology is a game-changer for industries seeking to harness the untapped potential of waste heat. The Cluster Mesh Power Generation turbine concept provides a sustainable and scalable solution that can be applied to multiple sectors, transforming what was once wasted energy into a valuable resource.

Beyond Data Centers: Broad Applications Across Industries

Initially focused on the energy-intensive cooling needs of data centers, the Cluster Mesh Power Generation turbine concept is now being implemented in a diverse range of industries. This <u>supercritical CO2 system</u> allows companies to utilize waste heat as low as 89 F (31 C) to generate power and cooling in a variety of settings, including:

• Industrial Manufacturing Facilities: Steel mills, cement plants, and glass production facilities can now convert high-temperature waste heat into electricity, improving operational efficiency and lowering energy costs.

• Oil Refineries and Petrochemical Plants: Refineries and chemical production units generate significant waste heat. The Cluster Mesh system can recover this energy, reducing operational costs and enhancing sustainability.

• Food Processing Plants: Drying, cooking, and pasteurizing processes produce substantial waste heat that can be captured to provide cooling or power plant operations.

• Geothermal and Biomass Power Plants: Geothermal plants and biomass power facilities can enhance energy yields using cluster turbines, providing an efficient way to convert low-enthalpy geothermal energy into electricity.

• District Heating Systems: Combined Heat and Power (CHP) systems that supply district heating can also utilize the Cluster Mesh system to generate additional electricity and offer cooling, optimizing energy efficiency.

• Marine Vessels: Large marine vessels, such as cargo ships and cruise liners, can recover waste heat from engines to produce onboard power and cooling, reducing fuel consumption and enhancing overall efficiency.

A Sustainable Solution for a Range of Industries

The versatility of the Cluster Mesh Power Generation turbine concept makes it ideal for diverse sectors, including mining, commercial complexes, paper mills, textile production, and even waste-to-energy plants. By utilizing waste heat, companies can reduce their reliance on primary

energy sources, cut costs, and lower their carbon emissions.

The system's Coefficient of Performance of up to 20, allows it to deliver substantial cooling output in addition to power generation, making it especially valuable for industries that require cooling, such as food storage, textile manufacturing, and commercial refrigeration.

Harnessing the Power of Waste Heat: Contact Infinity Turbine Today

Infinity Turbine's Cluster Mesh Power Generation system is a scalable, flexible solution designed to make the most out of waste heat energy. By tapping into the energy that would otherwise be wasted, industries can enhance efficiency, improve sustainability, and reduce operational costs.

## About Infinity Turbine

Infinity Turbine is a pioneering company dedicated to developing innovative energy solutions that harness waste heat and other renewable energy sources. With a focus on Organic Rankine Cycle technology, Infinity Turbine offers a range of customizable turbines and energy systems designed to improve efficiency and sustainability across various industries.

Contact: Greg Giese | CEO | Infinity Turbine LLC | greg@infinityturbine.com

Infinity Turbine Website: <u>https://www.infinityturbine.com</u> CO2 Closed Loop Turbine: <u>https://cavgenx.com</u>

Gregory Giese Infinity Turbine LLC +1 6082386001 greg@infinityturbine.com

This press release can be viewed online at: https://www.einpresswire.com/article/749184950

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire<sup>™</sup>, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information. © 1995-2024 Newsmatics Inc. All Right Reserved.