

**Leading Waste Heat to Power Business Leaders
weigh in on why the market for WHP is currently limited and
what can be done to accelerate the deployment of WHP projects
to deliver important environmental and economic benefits**

What is Waste Heat to Power? Waste Heat to Power (WHP) is the process of using recovered waste heat to generate electricity with no combustion and no emissions. Anywhere there is an industrial process that involves transforming raw materials into useful products – steel mills, paper plants, refineries, chemical plants, oil and gas pipelines, and general manufacturing -- heat is generated as a byproduct. This waste heat is produced whenever the operation is running, often 24 hours a day, seven days a week, 365 days a year. If not recovered for reuse as lower temperature process heat or to produce emission-free power, the heat will dissipate into the atmosphere, a wasted opportunity.

Why aren't Waste Heat to Power Systems More Widespread in the US? Waste heat is similar to renewable resources like wind and solar in that the resource (waste heat) is free, can be used to produce electricity with no emissions and no combustion, and is lost to the atmosphere if not captured to make power. Why don't more operations take advantage of this readily available, base load resource that is produced on site whenever the manufacturing operation is running, and use it to make emission-free combustion-free power, similar to the power made from renewable energy sources?

The Answer is Simple: Like renewable energy resources, the capital costs for waste heat to power projects are greater than for traditional fossil fuel based projects. But renewable energy resources receive incentives -- including ITC, PTC, low interest loans, and similar financial incentives -- in order to compete with traditional energy sources, while WHP projects do not receive any federal incentives. Since typical US industrial companies require a two to three year payback on the capital they invest in their operations, WHP cannot get its foot in the door, much less compete.

Is Waste Heat to Power Renewable? WHP is already considered renewable in many state Renewable Portfolio Standards (RPS) and other renewable policies (15 so far). Plus, WHP has been endorsed by the National Association of Regulatory Utility Commissioners (NARUC) in their 2013 "Resolution Supporting the Inclusion of Waste-Heat-to-Power Technologies in State and Federal Clean Energy Policies and Programs."

Hear what WHP business leaders have to say →

What can be done to accelerate the deployment of Waste Heat to Power (WHP) projects to deliver important environmental and economic benefits?

For the US to take advantage of this enormous resource to increase fuel-free emission-free power, WHP needs to be treated equal to the other renewable technologies. This will increase adoption rates, accelerate projects, and create US manufacturing jobs for projects here and for exports across the globe. **John Fox CEO, ElectraTherm**

Federal agencies claim WHP falls under the umbrella of CHP, yet WHP does not qualify under the 10% investment tax credit (ITC) that CHP receives. WHP needs to be clearly qualified in ITC language in order to give this energy source equal footing with CHP solutions, or, better yet, WHP needs to be qualified as a renewable resource to receive the 30% ITC that renewables receive. This change will go far to support the growth of this largely untapped and highly economical solution. **Phil Brennan, CEO, Echogen Power Systems**

As a manufacturer of WHP technology, we know there is an incredible opportunity for creating new jobs, generating more emission-free power, and expanding U.S. exports around the world. It is an economic form of clean energy. We look forward to seeing it recognized as an emission-free power resource along with traditional renewables. **J.T. Grumski, President & CEO, TAS Energy**

We own and operate one of the largest waste heat to power projects in the U.S. for the benefit of a large steel producer in the Midwest. The economic and environmental benefits of this project are undeniable and have helped position our customer as a low cost producer of steel in the region while helping them produce their product with a smaller environmental impact. The MLP Parity Act would lower the cost of capital so many more companies could benefit from waste heat to power projects at their plant sites which would in turn support jobs and the local economy. **John Prunkl, President and CEO, Primary Energy Recycling Corporation**

The ability of waste heat to power projects to qualify for MLPs will make those projects easier to finance, will be attractive to a broader range of energy investors, and will produce emission-free power from an otherwise wasted resource. We applaud your [sponsors of the MLP Parity Act] efforts to level the playing field for energy generation resources like ours that improve the competitiveness of our nation's industrial sector and generate power with no combustion and no emissions. **Tony Straquadine, Chairman, The Heat is Power Association; Manager of Government Affairs, Alliance Pipeline**

Turning waste heat to power would cut pollution and make industry more competitive, yet it is the only clean energy technology that the government does not encourage through tax incentives, putting it at a disadvantage in the marketplace. It's about time recycled energy was given a fair chance to compete. **Dick Munson Senior Vice President, Recycled Energy Development**