Advancing Waste Heat to Power

Why incent some technologies over others when all produce the same emission-free power and all are made in the USA?

Thoughts from The Heat is Power Association
for the House Ways & Means Energy Tax Reform Working Group

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The Heat is Power Association

Mission

To serve as the voice of the waste heat to power (WHP) industry to advance the market through education and advocacy

Vision

To see waste heat to power recognized as an emission-free power resource and developed into a robust market

Who we are and what we do

- Members include equipment suppliers, installers, and end users
- Conduct analyses to demonstrate the potential for heat to power
- Develop consistent messaging and talking points for the industry
- Convene stakeholders to educate the public and decision makers

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Waste Heat to Power (WHP)

- Energy intensive industries require high temperatures to process their product
- While industries recover some heat for useful thermal needs onsite, often residual heat is vented through exhaust stacks or other means
- Additionally, natural gas pipelines typically use compressors to transport their products - which create significant heat that is typically untapped
- **These heat streams can be captured and turned into emission-free power**, using the same technology used to produce geothermal power

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U.S. Market Potential for WHP

Industry	Potential MWs
Gas Compression	2,636
Refining	2,211
Chemical	1,650
Paper	924
Marcellus Shale	300
Boilers	371.5
Landfill Gas	365
Steel	330
Lime	271
Cement	240
Metal Casting	166
Glass	154
Aluminum	47.5
Total	**9,666**

Source: TAS Energy

- **10GW**: Enough emission-free power for approximately 10 million American homes
- Easy to find: Exhaust stacks, gas flares, & heavy energy consumers

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Locations and Applications of WHP

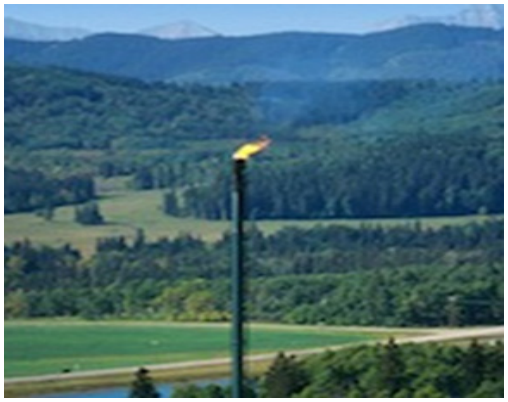
Waste heat is located country-wide and especially prevalent in the Southeast and Midwest regions of the United States

- Oil and Gas Processing

  Natural Gas Transmission Compressor Stations, Refineries

- Industrial Manufacturing

  Steel, Chemicals, Paper, Cement, Glass, Food Processing



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Advancing Waste Heat to Power

- Why incent some technologies over others when all produce the same emission-free power and all are made in the USA?
  - Waste heat to power and renewable energy provide the same environmental and energy security benefits – emission-free, distributed, base-load power
  - Renewables receive significant federal tax benefits; WHP projects receive none
  - The slightly higher capital costs for WHP than conventional generation are more difficult to overcome, especially when competing in the marketplace with incentivized renewables
  - In other countries where WHP is treated like other renewables the rates of deployment are significantly higher
  - *Provide the same incentives for all technologies that produce emission-free power*
- If technology neutrality is not an option, add waste heat to power as a qualified technology
  - Tax Codes – Add WHP to the 30% ITC and PTC, comparable to renewables
  - Future Master Limited Partnerships – add WHP as an eligible technology

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