

Unique partnership + innovative technology that will reduce the University of Dayton's carbon footprint by **more than 70%**

About

The University of Dayton, AES Ohio, and Tallgrass entered into a long-term agreement that fosters the University of Dayton's efforts to reduce their carbon footprint. The new waste heat to power facility will capture waste heat produced by an existing process and generate decarbonized power, which will be sold to AES Ohio solely for the University of Dayton. No additional costs or charges will be assessed to other customers. The benefits derived from this project will be shared with the broader community and customers.

Benefits

This will supply 100% of the university's electricity needs and reduce its carbon footprint by 71%, matching the University of Dayton's energy consumption.

This project will provide new teaching, research, and hands-on learning opportunities to equip students with the knowledge and skills needed for a career in clean energy.

Timing

Construction will begin in 2024 and the project is expected to be in-service by the fourth quarter of 2025.

Location

The project will be located in Fayette County, Ohio near Washington Court House. Tallgrass will construct, own, and operate the waste heat to power facility and connect it to an existing compressor station.







Waste Heat to Power

First waste heat application of this scale to produce decarbonized energy at an hourly match in the U.S. for nearly a decade.

First —

Waste heat application of this scale.

Project to Deliver hourly power that closely matches the university's needs with 24/7 carbon free power.

Operations

Many industrial processes vent exhaust flue gas containing a significant amount of wasted energy in the form of heat that can be converted into carbon-free electricity.

Organic Rankine Cycle turbines are closed loop systems using an organic fluid that heats up to drive a turbine.

Ideal heat sources greater than 150°C/300°F.

The project uses commercial technologies with proven deployments across the world.

The electricity generated is carbon-free because no additional combustion is required.

Highlights

Location	40 miles southeast from UD
Clean power	10.5 MW (~90,900 MWh/yr)
RECs	90,900 OH renewable credits
CO2 avoided	+50,900 tonnes per year

Proposed Site Layout



How It Works



