



SECURING AMERICA’S ENERGY FUTURE

A Project Success: Wabash Valley Resources in West Terre Haute, Indiana

The U.S. Department of Energy’s Office of Fossil Energy and Carbon Management (FECM) is securing America’s energy future through breakthrough efforts like the **Gasification Systems Program** and the **Carbon Storage Assurance Enterprise Initiative**. These programs focus on converting fossil fuels like coal into synthesis gas—a versatile feedstock that can be used to produce hydrogen, transportation fuels, chemicals, and electricity—and on identifying locations to store carbon dioxide.



Hydrogen



Fuels



Chemicals



Electricity

Through collaboration with industry, several FECM-funded projects have demonstrated promising advancements in these critical technologies.

A STANDOUT EXAMPLE

The Wabash Valley Resources (WVR) project in West Terre Haute, Indiana is transforming a coal gasification site into a world-class, low carbon hydrogen and ammonia facility. This project’s research and development efforts will support future uses of coal that:



Source: Wabash Valley Resources in West Terre Haute, Indiana



Take advantage of coal’s flexibility as a feedstock



Use cutting-edge components that improve efficiency and reduce emissions



Provide resilient power and hydrogen

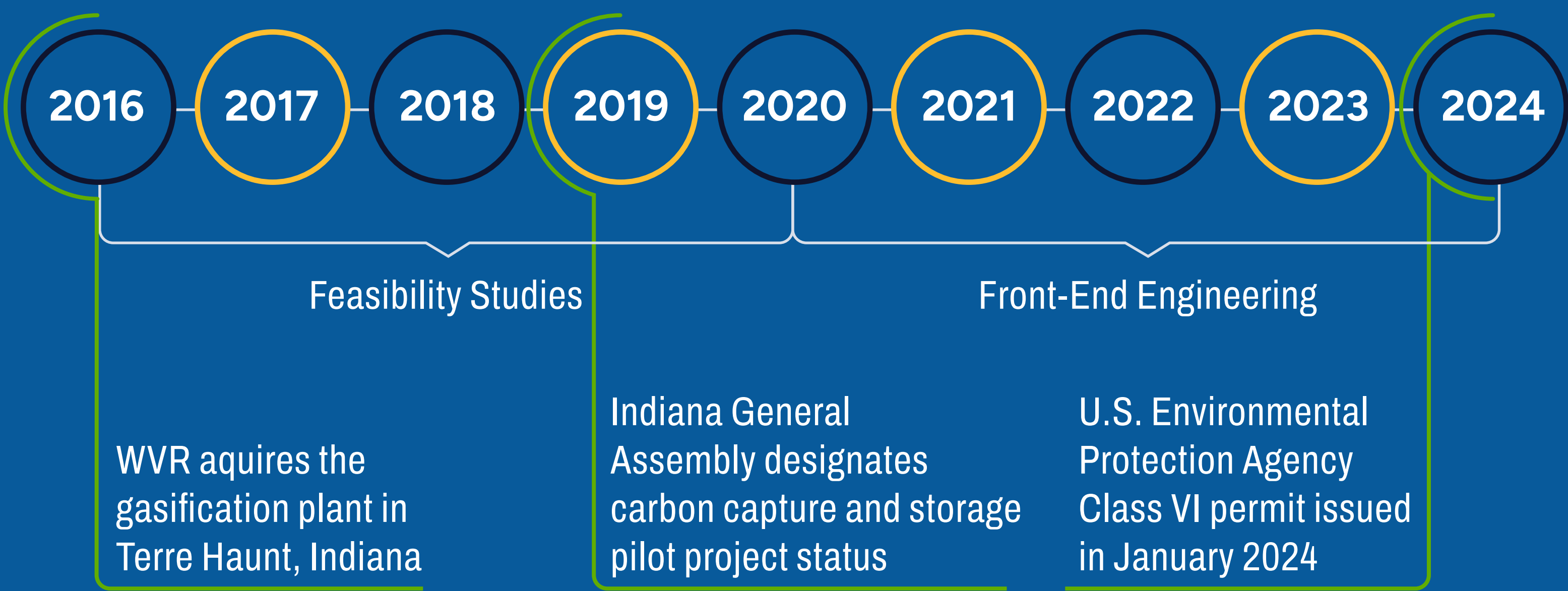


Transform how future coal facilities and power plant technologies are designed and manufactured

FROM CONCEPT TO REALITY

Development for the WVR project began in 2016. The company completed front-end engineering design (FEED) deliverables to produce carbon-negative power and hydrogen. “Carbon negative” means that the process captures more carbon dioxide than it releases, effectively removing greenhouse gases from the atmosphere.

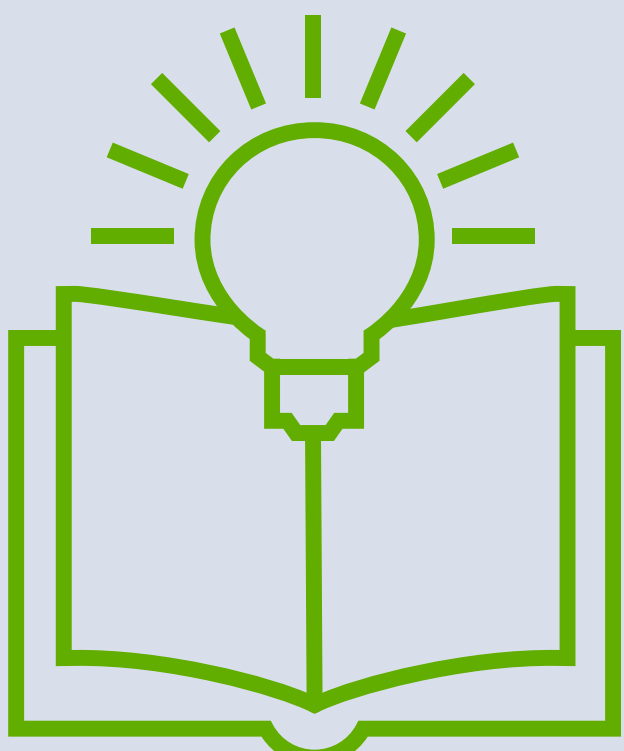
After eight years of development and FECM funding, the WVR project reached a major milestone in 2024, securing key regulatory permits—including Underground Injection Control (UIC) Class VI well permits—by forming industry partnerships and completing extensive due diligence for project financing.



BOOSTING INDIANA’S ENERGY AND ECONOMIC LEADERSHIP

Once construction is complete, the project will provide a low cost, clean ammonia solution for fertilizer, meeting a critical need of low-cost, locally sourced fertilizer demand in the Corn Belt.

This project has the potential to position Indiana as a leader in ammonia fertilizer production and industrial-scale carbon storage technology. It will create jobs, lower costs for farmers, increase food security by reducing fertilizer supply chain risks, and attract investment.



LEARN MORE

To learn more about the WVR project, visit DOE’s [National Energy Technology Laboratory website](#). To keep up to date with FECM’s research, development, and demonstration portfolio, visit [FECM’s website](#) and [sign up for news alerts](#).

Please note: Future developments or changes by WVR may render some details outdated. This infographic is for informational purposes only.

