

Advanced Carbon Products Innovation Center (ACPIC)

Gillette, Wyoming

Business Plan Analysis
Executive Summary

The ACPIC will be located strategically in the heart of the PRB.

- The site is a repurposed coal mine;
- Within 3 miles of the Integrated Test Center;
- Less than 3 miles from the Wyodak Power Plant;
- Close to operating coal mines;
- With access to BNSF rail and;
- Less than 5 miles from industrial support services in Gillette.
- The site will offer an 8 to 10,000 sq ft building with offices, labs and a high-bay shop;
- Building pads sized to fit small industrial development needs;
- Full utility services to each pad and;
- A centralized coal handling and processing system and pollution control.

ACPIC Vicinity Map

Legend

- ACPIC Location
- Airport
- Fort Union Industrial Park

Campbell

ACPIC Location

Gillette

Skyline-Dr

S Douglas Hwy

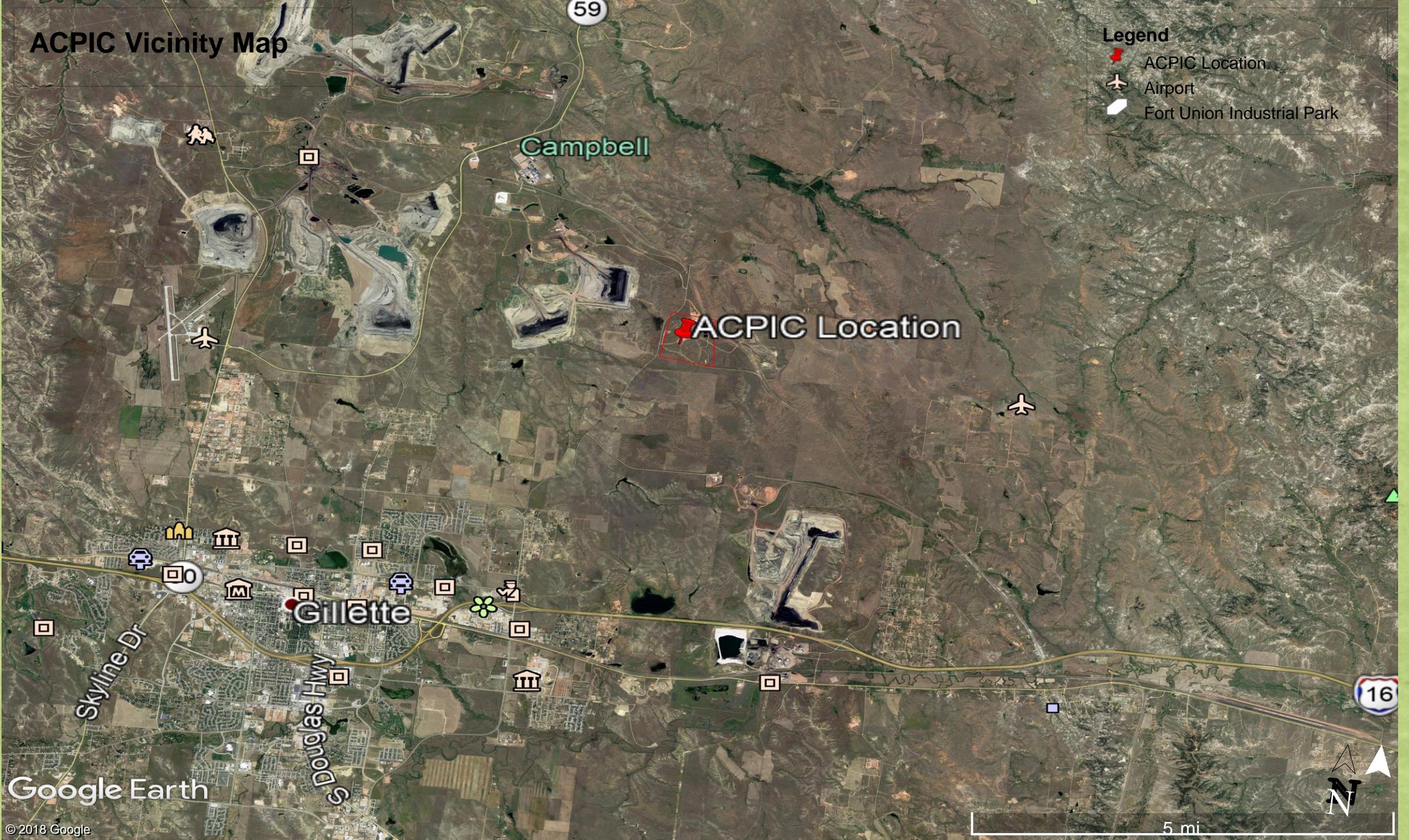
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Google Earth

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5 mi



ACPIC Background and History

- The ACPIC was originally conceived by local economic development leaders and the U W – School of Energy Resources, as a response to decline in the demand for Wyoming coal.
- The project was envisioned to provide a location, in the PRB, where bench scale research can be advanced to pilot plant and precommercial projects.
- Utilization of PRB coal for new products and processes is the fundamental strategic goal of the ACPIC facility.
- In 2017 the Wyoming Business Council awarded a \$1.5 million dollar grant for site acquisition and Phase I construction at the Fort Union Industrial Park.

ACPIC Operating Principals

- Provide a location where companies can build pilot and precommercial plants creating new products from coal;
- Provide sites with support services, access to coal, industrial utility services and shovel ready real estate as the value proposition.
- The ACPIC will be operated to break even over its operating life and provide residual recapture value for local economic development and;
- Advance strategic goals related to PRB coal, as defined by the principals and sponsors of the project.

The ACPIC Value Proposition

- ACPIC will be the first facility in Wyoming that permits 24/7 coal conversion technology development.
- Key success attributes in a single location will include:
 - Consistent coal preparation to suit customer needs.
 - Access to laboratories, offices and a high bay/shop at below market cost.
 - Site pads that permit extended pilot plant and technology demonstration.
 - Convenient and ready access to PRB power plants and coal mines.
 - University of Wyoming- School of Energy Resources as an integral partner.
 - Gillette College students may provide low cost design capabilities, fabrication and operational workforce.
 - Facilitated relationships with local engineering and laboratory services.
 - Rapid, “blanket” environmental permitting.

The Overall ACPIC Financial Framework

- **A public / private partnership** which seeks to **leverage State and local funding** to foster the evolution of **'new' manufacturing business and advanced technology**.
- **Financial strategies will include:**
 - Capitol grants for development.
 - Operational subsidies from key partners.
 - Revenue generation from provision of key services to tenants.
 - A non-profit basis for operation and institutional support from the **??????- Coal Development Foundation**.
 - Technical support from strategic partners.

Current ACPIC Funding Status and Needs

Projected Facility Cost – Phase I

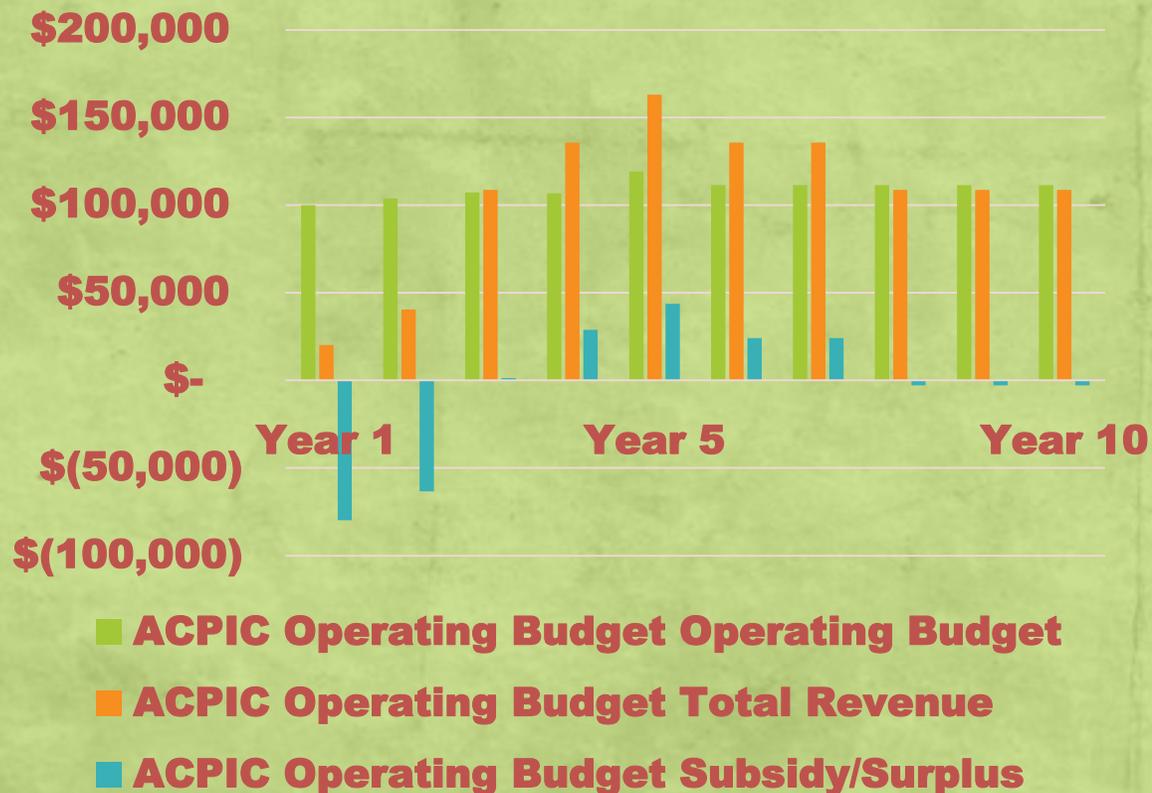
ACPIC Current Funding Status



ACPIC Projected Revenue vs Operating Budget

Operating subsidy and operating reserves

ACPIC Operating Surplus/Deficit



- When operating budget and projected revenue are compared it defines the gap financing needed at start-up. Based on these projections there will be an minimum upfront subsidy of around \$150,000 needed in the first two years.
- Conversely a substantial surplus develops in years 4 through 7 of approximately \$125,000. This becomes a substantial operating reserve for the balance of the project life and beyond.

ACPIC – A Robust Investment Potential

- When complete ACPIC will offer capacity for 24/7 technology testing with up to 7 tenant/units concurrently and more over time.
- Could include other related energy, advanced manufacturing and technology development focuses that will require 24/7 testing capacity.
- When the facility reaches the end of its useful life it may be repurposed and leased or sold for commercial use.
- The final phase has been modeled as an orderly Exit Strategy which will provide recapture benefits to local economic development.

Potential and Existing Funding Sources

- Campbell County (operational subsidy pending)
- City of Gillette (operational subsidy pending)
- University of Wyoming (operational subsidy share committed)
- Wyoming Business Council (BRC grant committed)
- ENDOW
- Coal companies
- Other private industry sources (Greenbridge Holdings BRC match)
- U.S. Economic Development Administration (application pending)
- Other Federal Sources (DOE ?)

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