



FastPowerSM & BrightLoopTM

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A 160-year foundation for energy security

Single-source support for the most demanding power applications.
From modern power systems to next-generation solutions.

160 years

Operating heritage and field-proven power technology

1953

Since forming Babcock-Hitachi in 1953, B&W has helped shape Japan's energy infrastructure

400+ GW

Installed across 450 locations globally

B&W combines long-term local partnership, global installed base and field engineering depth to help maintain reliable power through the energy transition.





Powering AI-scale growth now

B&W experience and FastPowerSM platforms can support BASE Electron data-center demand while setting up the transition to BrightLoopTM.

Base Electron

Data-center power demand is the immediate growth driver.

FastPower

Build 50 MW unit blocks quickly using available gas-generation packages.

Scale to 100 MW

Expand blocks as gas turbines are available, with improved efficiency.

BrightLoop Future

Add low-carbon hydrogen and CO₂ isolation as the next technology chapter.

50 MW

repeatable unit blocks



100 MW

expanded blocks +
efficiency gains

**Near-term power for AI/data centers;
long-term sustainability through BrightLoop**

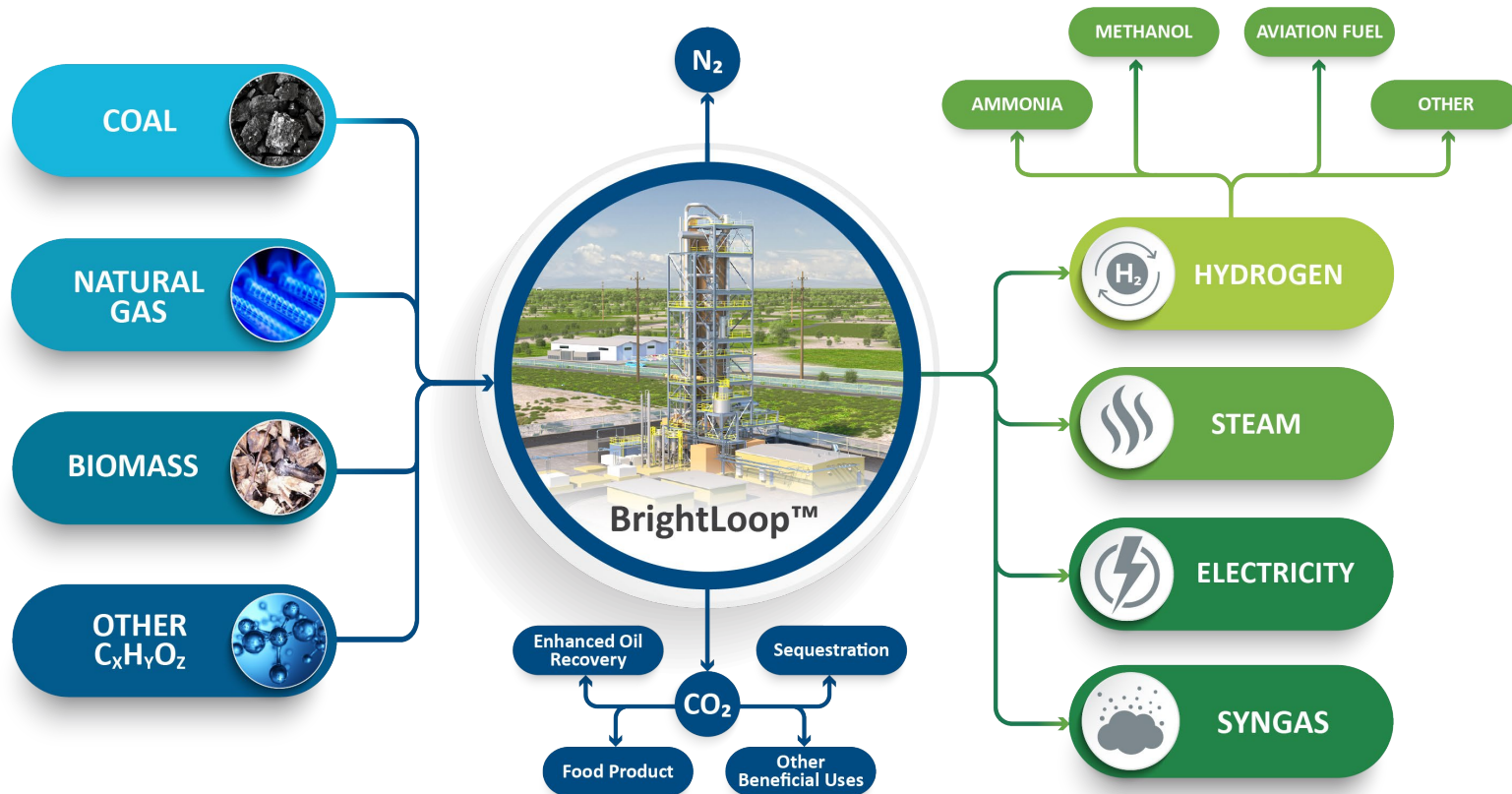




BRIGHTLOOP™

COAL'S ROLE IN THE AGE OF AI

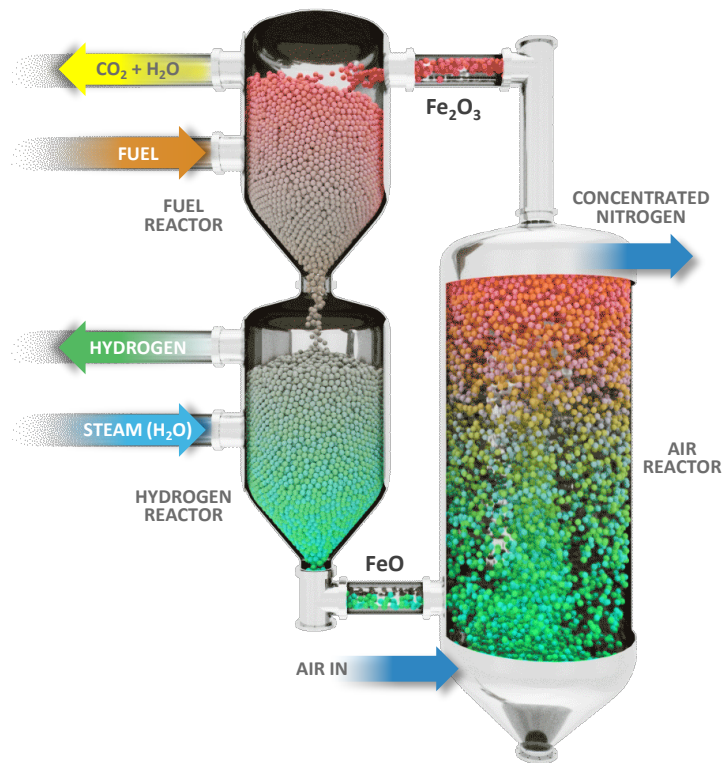
BrightLoop™ Chemical Looping for Energy Production



BrightLoop™ Chemical Looping Overview

Fuel reactor – patented moving bed design that allows full reaction of particle before the particle is used to make hydrogen

Hydrogen is created from the **steam** reacting with the hot particle and is not dependent on fuel



TranspO₂rt patented iron oxide particle – key to the success – particle either “gives” or “takes” oxygen during reactions in each vessel

Depleted air and CO₂ streams – capture all of the heat in these streams to produce all of the steam needed for hydrogen production

BrightLoop Projects

LA COREY, ALBERTA

Natural Gas to Hydrogen

OUTPUT

- › 60 tonnes H₂ /day
- › H₂ or steam production use:
**Co-fire compressed air expanders
for zero carbon power generation**



GILLETTE, WYOMING

Coal to Hydrogen

OUTPUT

- › 100 Mwe Power Generation
- › H₂ Production
- › H₂ or steam production use:
Power Generation



Four Corners

Coal to low carbon fuels

OUTPUT

- › 200 H₂ tonnes/day
- › H₂, CO₂ and N₂ production for fuels



MASSILLON, OHIO

Natural Gas to Hydrogen

OUTPUT

- › 5 tonnes H₂ /day
- › H₂ production use:
Industrial, Transportation



WEST VIRGINIA

Coal / Biomass to Low Carbon Hydrogen

OUTPUT

- › 200 tonnes H₂ /day
- › H₂ or steam production use:
Data Centers or other hub users



BATON ROUGE, LOUISIANA

Biomass to Carbon Negative Hydrogen

OUTPUT

- › 10-15 H₂ tonnes/day
- › H₂ production use:
Industrial



Where Are We Today! Project – Massillon, Ohio

REVENUE OUTPUTS

H₂ from Natural Gas

5-7 tonnes/day

H₂ production use

Industrial and/or
transportation

PROJECT DEVELOPMENT PLAN – APPROXIMATE TIMELINE

Off-take agreement finalized

3Q 2024

Funding Commitment

3Q 2024

Permits issued

2Q 2025

Target first H₂ production

4Q 2027



BrightLoop™ Project: Gillette, Wyoming, USA

Coal to Steam and Hydrogen

OUTPUT

Steam and H ₂ from Powder River Basin Coal	100 MWeI 10 tonnes/day
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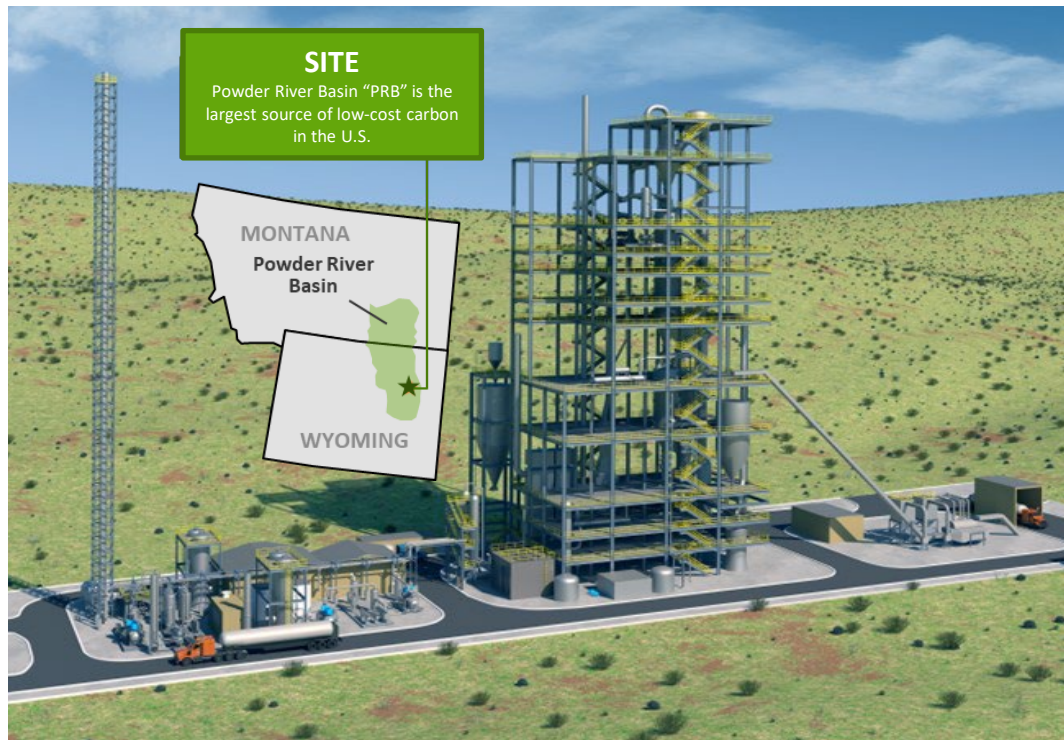
Steam and H ₂ production use	Power Generation
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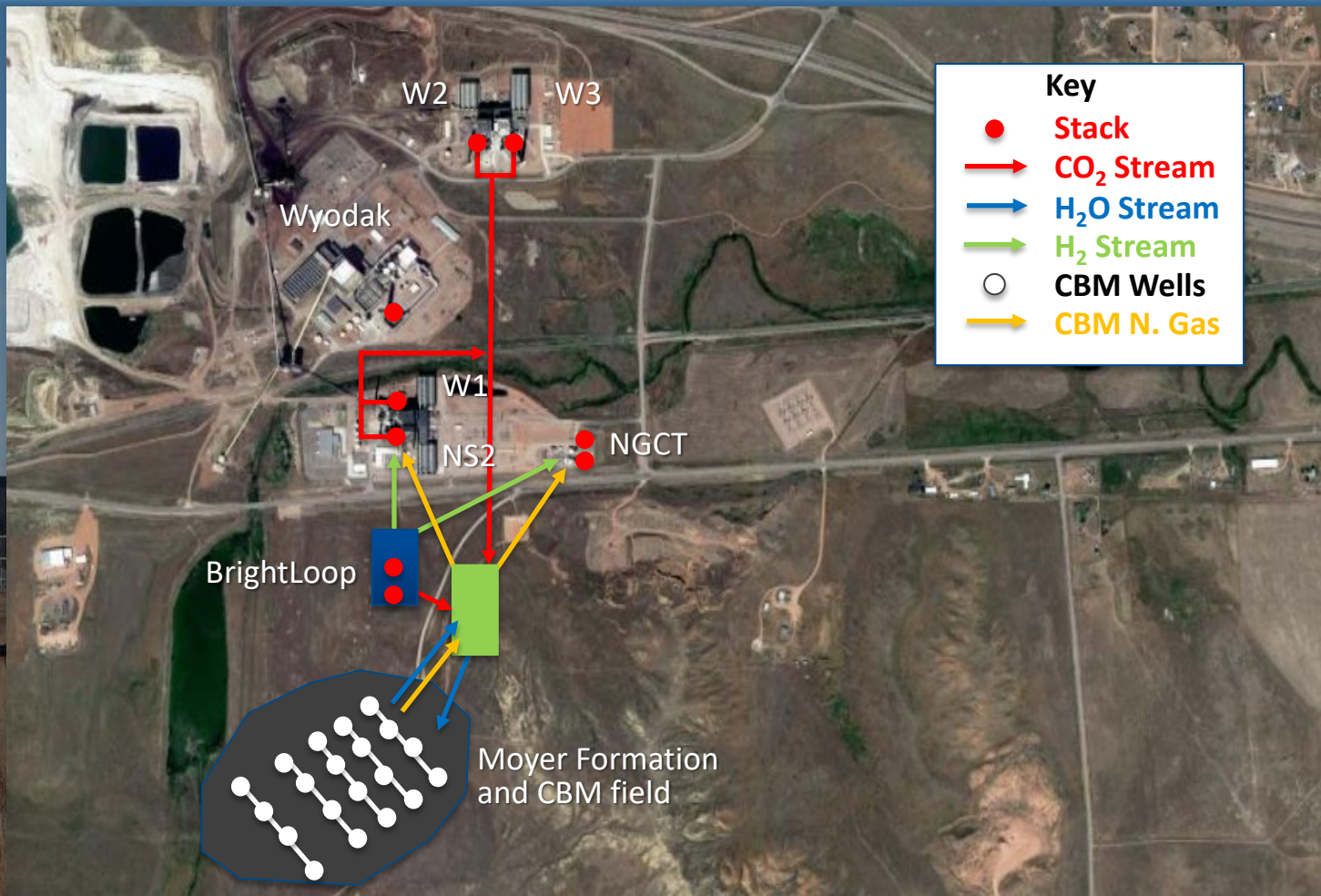
PROJECT DEVELOPMENT PLAN – Approximate Timeline

WEA Contract Finalized	Feb 2026
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Permits	2027
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Target first Steam and H ₂ production	2030
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Thank you

Will Latta

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