We Help Bring CCS Projects to Life







What We Do

We provide independent, expert advisory services for CCS projects across heavy-emitting industries based on our team's unique experience developing the world's first large-scale commercial CCS project.

Using the latest knowledge and lessons learned from major projects across the globe, we have a proven track record of helping our clients **lower costs, reduce risk and improve the performance** of CCS projects across industries and technology platforms.

We provide input to policy development and promote broad collaboration between stakeholders to enhance understanding of the critical role CCS plays in global decarbonization efforts and accelerate the deployment of new CCS projects around the world.

How We Do It

Our focus is on understanding and protecting the owner's interest in large-scale investment. Working with executives, designers, engineers and project managers, we offer practical guidance in all aspects of CCS project development.

We are neutral and trustworthy advisors who can help you successfully navigate the myriad technical, economic, policy and stakeholder issues that accompany the development of major CCS projects.



We Protect the Owner's Interests Through the Entire Project Lifecycle



Site tours, technical workshops, business case and stakeholder analysis

Feasibility studies, flue gas characterization, pilot test programs, risk assessment

FEED study, vendor selection and performance testing support



Owner's advisor for detailed engineering, fabrication and construction

Support development of commissioning program, operating procedures and maintenance plans

Facility performance analysis



Staffing, training and development programs

Troubleshooting and debottlenecking

Identify opportunities for optimization and improvement

Current, Real-World Experience

Our expertise is grounded in our team's hands-on experience on projects including the development, construction and ongoing optimization of SaskPower's Boundary Dam Unit 3 CCS Facility – the world's first fully integrated post-combustion CCS facility on a coal-fired power plant.

We are committed to remaining at the forefront of the rapidly evolving CCS industry, and we are assisting a growing list of industry clients that includes potash processing, cement manufacturing, natural gas combustion, oil and gas production, chemical processing and hydrogen development.

Boundary Dam Unit 3 (BD3) CCS Facility



The BD3 CCS Facility began operation in 2014, a retrofit that extended the life of the Boundary Dam Power Station's oldest 150-megawatt turbine with a CCS retrofit designed to capture **90%** of the unit's CO₂ emissions.

BD3 has now captured more than **5 million** tonnes of CO₂ – equivalent to taking more than **1 million** cars off the road for a year.

The CO_2 is pumped deep underground into geologic formations that are closely monitored to ensure it is safely and permanently removed from the atmosphere.

As a successful first-of-its-kind project, BD3 offers critical lessons and continued innovation that new CCS projects can use and build upon to improve performance, reduce costs and minimize the risks related to large-scale CCS deployment.

What Our Clients Are Saying

"The Knowledge Centre has been instrumental to the success of Heidelberg's Edmonton cement plant CCUS project. Starting with initial concept validation, funding applications and completing our feasibility study, through to support of our FEED and early procurement work, the Knowledge Centre's strategic and technical expertise minimized risks and ultimately helped us deliver a positive business case for the project. We expect their support will be invaluable as we proceed through construction, commissioning, and the ongoing optimization of the facility once it is up and running."

 Corwyn Bruce, CCUS Project Director, Heidelberg Materials North America

"The candid and open sharing of issues and how you resolved problems through design, construction and operation was beyond our expectation. I'm sure we'll face our own issues and unknowns but for sure we can reduce our risk based on our interaction with the Knowledge Centre."

- James Beresford-Lambert,

Engineering Manager, VPI Immingham LLP (UK)



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