

2023 BC Energy Regulator Mandate Expansion



What is a Mandate?

A mandate is the responsibility to oversee particular activities, and is the authority granted to us by the province to carry out specific actions to regulate those activities. For the [BCER](#), our mandate includes overseeing the full life cycle of energy resource activities in B.C. From site planning through to restoration, we ensure energy activities are undertaken in a manner that protects public safety and the environment, supports reconciliation with Indigenous peoples, conserves energy resources and fosters a sound economy and social well-being. See our [About the BCER](#) fact sheet for more on our key priorities and initiatives.

How Did Our Mandate Change in 2023?

Legislation passed by the B.C. Government in November 2022 provided our organization with an expanded mandate to include the regulation of [hydrogen](#), ammonia and methanol, plus an expanded role in carbon capture and storage (CCS). It also renamed the BC Oil and Gas Commission as the British Columbia Energy Regulator (BCER). See the Province's [News Release](#) and [Legislation](#).

November 24, 2022

These changes did not take immediate effect when the legislation was passed – they required a regulation to bring them into force.

On Feb. 17, 2023, the B.C. Government issued a regulation bringing into effect the name change and establishing a new Board structure for the BCER.

February 17, 2023

Further mandate changes, including the regulation of hydrogen, ammonia and methanol, were brought into effect on Sept 1, 2023, as determined by the Provincial Government's [Order in Council 464](#).

On that date, the [Energy Resource Activities Act \(ERAA\)](#) formally replaced the Oil and Gas Activities Act.

September 1, 2023

Why Was Our Mandate Expanded?

The [CleanBC](#) plan identifies hydrogen as a key energy source to support emissions reductions in hard-to-decarbonize sectors (such as long distance trucking). Hydrogen manufacturing is a technically complex, emerging industry. With more than 25 years' experience overseeing oil and gas activities, we're well positioned to take action on new energy projects and help provide a strong, informed transition to low-carbon energy while supporting the goals of the [B.C. Hydrogen Strategy](#).



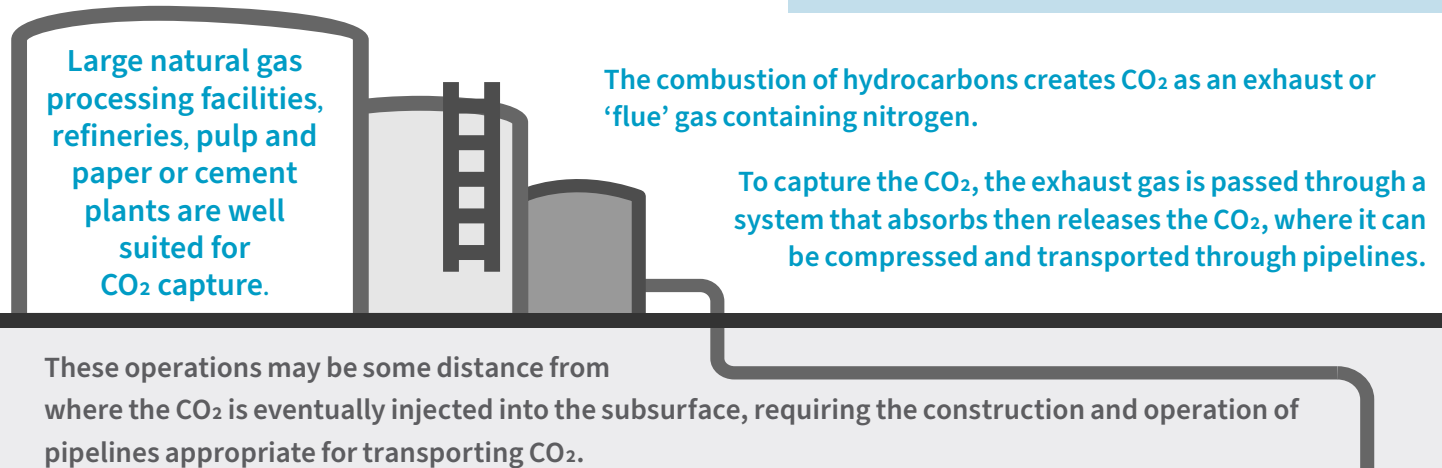
These Legislative Changes Give Us the Ability To:

- Regulate facilities that manufacture hydrogen, ammonia and methanol and regulate the associated pipelines. These BCER activities support achieving the goals identified in the B.C. Hydrogen Strategy.
- Regulate geological storage of all sources of carbon dioxide in B.C., not just those from oil and gas activities.
- Achieve our [Strategic Framework](#) outcome of supporting B.C.'s energy transition, low-carbon economy and meet future global energy needs.
- Ensure hydrogen, methanol, ammonia and carbon storage projects are part of our transparent, responsive engagement with Indigenous peoples, consistent with the [Declaration on the Rights of Indigenous Peoples Act](#).

What is Carbon Dioxide (CO₂) and Why Should it Be Captured?

CO₂ is a naturally occurring colourless, odourless and non-flammable gas vital to the environment. However, it is also a greenhouse gas that contributes to global warming. By capturing and storing CO₂, the amount that would otherwise be released to the atmosphere is significantly reduced.

How is CO₂ Captured?



How do Methanol and Ammonia Relate to Hydrogen?

The BC Hydrogen Strategy identified goals for the development of a clean hydrogen production industry to serve both domestic and export markets. One challenge the strategy identified in the development of hydrogen exports is the low density of hydrogen, making it expensive to transport in large quantities over long distances. A potential solution to help achieve high volume hydrogen exports is to convert hydrogen into denser chemicals that may be used as fuels, or broken down to recover the hydrogen upon reaching its destination. Prime candidates for chemicals to carry hydrogen in this manner are methanol and ammonia.

Hydrogen is the lightest and most abundant element, found in substances such as water and natural gas. When split from water or released from organic material, it is a versatile energy carrier that can be used to generate electricity and heat, effectively reducing CO₂ from sectors where electrification is not practical. By blending hydrogen into the natural gas grid, it can displace fossil fuels to heat and power homes and buildings. Hydrogen can also be used for producing low-carbon synthetic fuels to reduce emissions in transportation. This is especially important for industrial sites and remote communities powered by diesel.

Ammonia can be produced by combining hydrogen and nitrogen and is a colourless gas at room temperature. It is a globally traded commodity with a wide range of uses such as a refrigerant, cleaning agent, pharmaceutical ingredient and as a fertilizer in agriculture. There is growing interest in ammonia as a fuel for power generation and shipping.

Methanol, not to be confused with methane gas, is a form of industrially produced flammable liquid alcohol with a variety of uses including as a solvent (e.g., paint thinner), a fuel and as feedstock for the chemical industry. Methanol is a liquid at room temperature.

How is CO₂ Stored?

The injection and permanent storage of CO₂ into the *subsurface requires rock formations suitable for trapping and containing fluid. This determines the location of wells for underground storage to parts of the province with suitable geology, such as in the northeast. Underground CCS projects are designed and operated with ongoing measurement, monitoring, testing and reporting.

*Subsurface depth not to scale.