

Hail Creek Open Cut mine greenhouse gas emissions reporting and management

June 2026

Hail Creek mine has operated for more than 20 years, providing stable employment and strong economic contributions to regional Queensland.

The Eastern Margin Extension Project (Extension Project) proposes to extend mining for additional three years, to 2038. Over this period, Hail Creek mine will produce an additional 24 million tonnes of product coal, at current authorised annual production rates, and within the existing Mining Lease.

Reporting greenhouse gas emissions

Hail Creek mine reports greenhouse gas emissions in accordance with Australia's regulated emissions reporting framework.

This includes obligations under:

- the National Greenhouse and Energy Reporting Scheme, known as NGER Scheme
- the Safeguard Mechanism
- relevant Australian sustainability and climate-related disclosure requirements.

Hail Creek mine's emissions reporting includes fugitive emissions, including methane, from open-cut coal mining operations. In 2024, Hail Creek mine transitioned to Method 2 for reporting open-cut fugitive emissions under the NGER Scheme.

The Australian Government has stated that the current approach to emission estimation under Method 2 is equivalent to the highest (most sophisticated) Intergovernmental Panel on Climate Change (IPCC) method tier, and that Australia is currently the only country in the world to use methods of this tier to estimate fugitive methane and carbon dioxide emissions from both underground and open-cut coal mines.

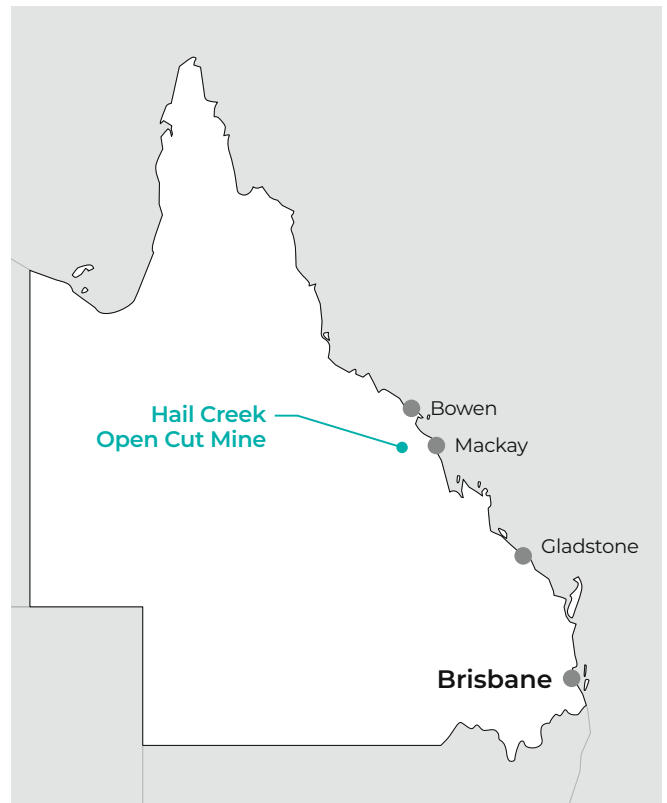
As such, Hail Creek mine's use of Method 2 represents global regulatory best practice for estimating fugitive emissions from open-cut coal mines.

Managing greenhouse gas emissions

Hail Creek mine continues to report emissions in line with NGER requirements and manage greenhouse gas emissions in accordance with the Safeguard Mechanism.

The Safeguard Mechanism requires Australia's highest greenhouse gas emitting facilities to collectively reduce their emissions in line with Australia's emission reduction targets of 43% below 2005 levels by 2030 and net zero by 2050.

Production and emissions from the Extension Project will also need to comply with the Safeguard Mechanism. For the Extension Project, Hail Creek mine has also made further emissions-related commitments, including preparing a draft greenhouse gas abatement plan, undertaking a gas pre-drainage feasibility study, and (on a three-yearly basis) reviewing existing and emerging emissions reduction technologies to evaluate opportunities to further reduce emissions and improve energy efficiency.



Glencore is also working collaboratively with industry peers through the Australian Coal Association Research Program to investigate and assess opportunities to abate fugitive emissions feasibly and practicably in open-cut coal mining.

The shortfalls of satellite and aircraft-based monitoring

Satellite and aircraft-based technologies are not permitted under the NGER Scheme for reporting annual emissions from open cut coal mines. These technologies are unproven and unregulated for use in annual emissions reporting for open cut coal mines.

Glencore continues to monitor and review the development of emerging technologies for methane detection and measurement. Glencore's observation is that these emerging 'top-down' technologies would currently find it challenging to comply with the principles of regulated methods.

Glencore remains aligned with the Australian Government and the Climate Change Authority's position that further work is required before these methods can be applied to estimate emissions inventory with transparency and credibility.

Responding to claims about under-reporting of methane emissions

There have been a range of studies on Hail Creek mine based on satellite and aircraft data, including the 2025 United Nations Environmental Program (UNEP) paper which has been referenced elsewhere in the media.

Glencore takes these claims seriously. Glencore observes that these claims are based on satellite or aircraft studies of extremely limited duration. Comparing these extremely limited duration observations (from unproven and unregulated emerging technologies) to annual NGER-reported values is scientifically invalid.

Glencore has raised significant doubts about the credibility of such studies including the 2025 UNEP funded paper.

This paper uses out-of-date data in combination with extremely limited aerial surveys conducted over a period representing less than 1% of the mine's operating time within a two-year period.

This limited data was then used to extrapolate an annual emissions inventory for the mine. The use of such a small data sample lacks credibility.

Further, the 2025 UNEP paper:

- Does not acknowledge that Hail Creek mine has moved from Method 1 to a Method 2 measurement approach
- Does not reflect inherent mining variability
- Failed to detect methane emissions from parts of Hail Creek mine (which are reported under NGERs)
- Failed to assess upwind methane emissions; and
- Simplistically attributes any methane anomalies in the vicinity of the mine to the mine, without any data to support whether these emissions are related to the mine or from other sources.

Glencore believes these limitations highlight why satellite, aircraft and other remote sensing technologies require further research, validation and regulatory scrutiny before their potential suitability for annual emissions inventory reporting can be assessed.

Frequently asked questions (FAQs)

FAQ	THE FACTS
Is Hail Creek mine under-reporting methane emissions?	No. Hail Creek mine reports emissions in accordance with Australia's regulated National Greenhouse and Energy Reporting Scheme, known as NGER. In 2024, Hail Creek mine moved to Method 2 under the NGER Scheme, which represents global regulatory best practice for estimating fugitive emissions from open-cut coal mines.
What is Method 2?	Method 2 is a regulated and approved emissions estimation method under Australia's NGER framework. Method 2 uses mine-specific data and sampling to estimate fugitive greenhouse gas emissions from open-cut coal mining operations. The Australian Government has stated that Method 2 is equivalent to the highest (most sophisticated) Intergovernmental Panel on Climate Change tier currently used for estimating emissions from coal mines.
Is Hail Creek mine complying with Australian climate reporting laws?	Yes. Hail Creek mine reports emissions in accordance with applicable Australian legislation and regulatory requirements, including the NGER Scheme and Safeguard Mechanism obligations.
What is the Safeguard Mechanism?	The Safeguard Mechanism is an Australian Government policy that sets declining emissions baselines for large industrial facilities, including coal mines. Facilities are required to keep emissions within those baselines or obtain and surrender eligible carbon credits where required.
What is Glencore doing to manage emissions at Hail Creek mine?	Hail Creek mine reports emissions under NGER Scheme and manages emissions in accordance with the Safeguard Mechanism. For the proposed Extension Project, Hail Creek mine has also prepared a draft greenhouse gas abatement plan, committed to undertaking a gas pre-drainage feasibility study and continuing to assess existing and emerging technologies that may be feasible for future emissions reduction (on a three-yearly basis).
Why doesn't Glencore rely on satellite or aircraft data instead of NGER reporting methods?	Satellite and aircraft-based technologies are unregulated and unproven techniques that are not permitted to be used for annual inventory reporting under the NGER Scheme.
Why does Glencore believe satellite and aircraft-based methane studies are unreliable?	These emerging technologies are not proven nor permitted for use in estimating annual coal mine emissions inventory. There are significant limitations in the studies relating to coal mines including the use of extremely limited periods of observation, which are then extrapolated. Other shortfalls include the incorrect use of a mine's reported emissions, failure to account for mining variability, and uncertainty regarding the source of detected methane anomalies including failure to assess potential upwind methane sources.

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