Woodside Energy

Fact Sheet
September 2025

Understanding Methane and Woodside's Response

What is methane?

Methane (CH_4) is a greenhouse gas that comes from both natural sources, such as wetlands, and human activities including agriculture, landfills and energy production.

In oil and gas operations, methane is the main component of natural gas and may be released during production. Methane emissions management is an important part of global efforts to limit climate change.

What is Woodside doing to reduce methane emissions?

Managing methane emissions is a key part of Woodside's climate strategy. Woodside's methane management plan is to **measure**, **reduce**, and **report** methane emissions and **lead** by supporting the adoption of best practice across industry through advocacy and collaboration.

Woodside is taking action to reduce methane emissions at our Western Australian LNG facilities, and operations globally.

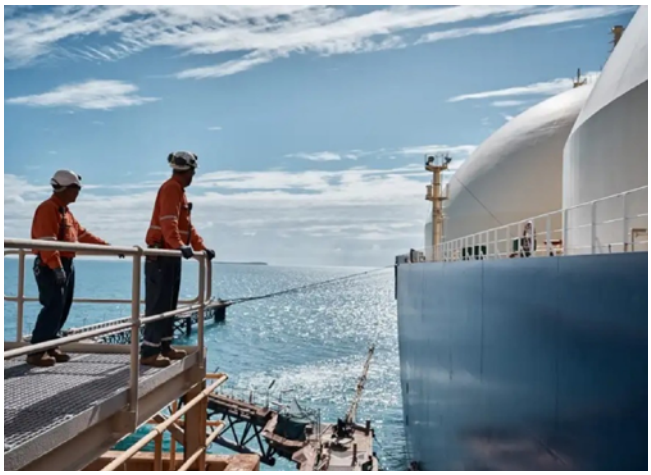
- **Woodside is taking action in many different ways to manage methane emissions with new technologies.**
- **Our reported methane emissions are lower than the Oil and Gas Climate Initiative 2025 target of below 0.2%*.**
- **Methane forms part of our greenhouse gas emission performance, annual reporting and is linked to Woodside executive remuneration.**

*Woodside methane emissions data for 2022, 2023 and 2024 relative to an industry target characterised by OGCI's 2025 methane intensity target. OGCI's 2023 upstream intensity in their 2024 progress report was 0.14%.

UN's Oil and Gas Methane Partnership 2.0

In 2024, Woodside joined OGMP 2.0 the United Nations Environment Programme's flagship oil and gas methane mitigation and measurement program, a leading global initiative for improving how oil and gas companies measure and report methane emissions.

OGMP
Oil And Gas Methane Partnership 2.0



How is Woodside reducing methane emissions at our Karratha Gas Plant and Pluto LNG facilities?

Woodside has adopted many new and emerging methane measurement technologies, such as **satellites**, **drones**, **hyperspectral cameras** and **Gas Mapping LiDAR**.

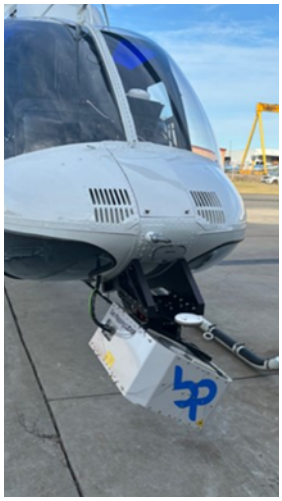
Operational improvements: minimising flaring through improved operational practices supported by real-time monitoring and by upgrading flare systems to work efficiently and where feasible to capture and reuse the gas. Flaring is a controlled burning of natural gas during production and is used to keep people safe and prevent the uncontrolled release of gases.

Measurement: we use both top-down and bottom-up methods for measurement with advanced aerial, ground and flare monitoring and detection technologies to generate real time insights that support smarter, more targeted methane management.

- Aerial detection provides a site-level view and helps prioritise areas for inspection and repair, offering a top-down perspective at less frequent intervals.
- Ground detection complements this with detailed, scheduled checks at the component level, identifying specific leaks and necessary repairs.
- Flaring monitoring adds a continuous, real-time layer, focusing on equipment-level performance and combustion efficiency.

Industry Initiatives: we actively collaborate with a variety of industry and academic bodies. This includes through engagements such as METRIC (Methane Emissions Technology Reduction and Innovation Collaboration) with JOGMEC (Japan Organisation for Metals and Energy Security), the ASEAN Methane Leadership Program, the UNEP International Methane Emissions Observatory and the University of Western Australia to develop and validate methane measurement techniques.

Innovation: we're implementing advanced technologies to monitor operations and optimise equipment performance. By combining aerial, ground, and flaring detection methods, we aim for comprehensive, data-driven methane emissions management that meets OGMP 2.0 standards.



Example of top-down emissions monitoring

Helicopter Gas Mapping LiDAR (GML) is one example of a multilayered detection and repair program.

Technology: Using a helicopter with LiDAR sensors to detect, localise and quantify methane emissions.

Capabilities: GML is able to detect and attribute methane emissions to components at emission rates less than 1kg/hr, without having enter the premises.

How does it work?

- Deployment: At a speed of 120kph, a helicopter is deployed over an approved flight path, in a similar grid-like pattern to mowing the lawn.
- Data collection: GML laser sensor captures methane plumes and quantifies methane emissions in real-time.
- Analysis: Data is processed, visualised and integrated into compliance reports, ensuring transparency and accuracy.
- Use: Guides inspections to support compliance, maintenance and repair. It establishes methane emissions benchmark for new sites.

What are the benefits?

- *High sensitivity and accuracy*: GML is a high-precision technology, ensuring accurate identification and quantification, with a high likelihood of detecting small emissions.
- *Aerial Efficiency*: The technology is mounted on the aircraft, allowing for rapid scanning of large areas, without the need for on-site access.
- *Cost-Effectiveness*: By pinpointing methane emissions from the air, it reduces the need for extensive ground crew deployment, saving time and operational costs.
- *Actionable Data*: The system provides geo-registered methane plume imagery and precise GPS coordinates, enabling efficient and targeted response to methane emissions by operations teams.
- *Safety & Environmental Impact*: Detecting methane from a distance minimises risks to personnel.
- *Proven Technology*: Bridger Photonics' GML has been recognised with awards and is backed by scientific studies, showcasing its reliability and innovation.

Transparency and accountability

Woodside reports its methane emissions to the Australian government under the National Greenhouse and Energy Reporting (NGER) Determination, which tracks greenhouse gases from industrial facilities. This includes greenhouse gas emissions from flaring and methane slippage.

Our Western Australian LNG facilities are also subject to the Safeguard Mechanism, which sets a limit on greenhouse gas emissions and requires us to either reduce these emissions or purchase carbon credits.

In addition, we voluntarily report to OGMP 2.0, the UN Environment Programme's flagship oil and gas methane mitigation and measurement programme.

For more information CLICK HERE