Upstream Enhanced Emissions – Info Sheet





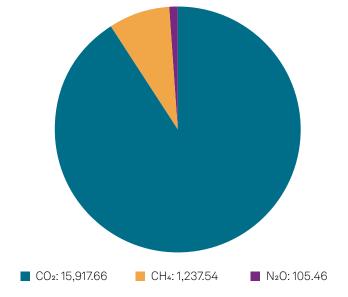
The S&P Global Commodity Insights **Upstream Enhanced Emissions** solution integrates our granular greenhouse gas (GHG) emissions dataset with our comprehensive upstream well and asset databases, and provides analytical tools to support GHG benchmarking, planning, screening, and abatement workflows.

The global initiative to curb GHG emissions is gaining momentum, with many companies signing up to the Oil and Gas Decarbonization Charter at COP28 and regulators around the world moving forward with stricter rules to achieve meaningful reductions this decade, particularly around flaring, and methane emissions. Upstream operators and their stakeholders need to prepare for the coming transformation and align their strategies with this commitment.

Making decisions with conviction about how to manage lower carbon oil & gas production over the next decades of the energy transition is only possible with comparable data about greenhouse gas (GHG) emissions and relative carbon intensity of different upstream wells and assets.

Emissions Summary (Point Forward)

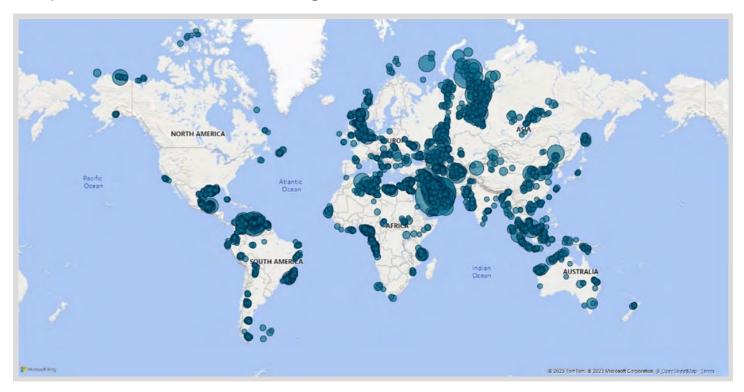
Absolute GHG Emissions (KtCO ₂ e)	5293.41
Current Year Emissions Intensity (KgCO ₂ e/boe)	15.15
Emissions Intensity (KgCO ₂ e/boe)	27.67
Emissions Intensity Production Lifecycle (KgCO ₂ e/boe)	14.17
Current Year Flaring Intensity (KgCO ₂ e/boe)	1.37
Current Year Methane Intensity (tCH ₄ /MMboe)	38.96
CO ₂ Emissions (Kt)	5072.88
N ₂ O Emissions (KtCO ₂ e)	11.49
CH ₄ Emissions (KtCO ₂ e)	209.04
Fuel Gas Combustion Emissions ($KtCO_2e$)	4263.90
Diesel Combustion Emissions ($KtCO_2e$)	57.47
Flaring Emissions (KtCO ₂ e)	261.99
Venting Emissions (KtCO ₂ e)	710.04
Other Source Emissions (KtCO ₂ e)	0.00



Emissions by GHG (Production Lifecycle)

Source: Vantage

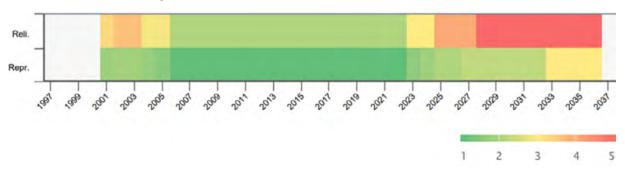
Comprehensive and Granular Coverage



Our Upstream Enhanced Emissions dataset provides a breakdown by main greenhouse gas (CO_2 , CH_4 , N_2O), and by source (combustion, flaring, venting, fugitives) for 19,000 projects internationally as well as 6 million onshore wells in North America, throughout their operating life. We also cover Scope 2 indirect emissions in North America and are working on adding them to our model for the rest of the world.

Credible GHG Estimates

S&P Global Commodity Insights addresses gaps in reporting and differences in methodology, granularity and boundaries by providing a consistent, transparent and detailed model of GHG emissions from each well and project in our comprehensive global upstream coverage. Our consistent methodology, together with the detail of our model, means clients can make accurate and meaningful comparisons with assets across the world. Our Data Quality Metric enhances transparency by providing a measure of confidence in each data point's reliability and representativeness.



Emissions Data Quality Metrics (DQMs)

Data Reliability – reflects a score between 1 and 5 where data reliability decreases as the score increases. 1 represents verified data and 5 an undocumented estimate.

Data Representatives – reflects a score between 1 and 5 where data representativeness decreases as the score increases. 1 accurately represents the relevant time period, geography, technology, and completeness of the estimate and 5 represents data from a larger, or unknown area of resolution, or different technology.

*For a description of the evaluation criteria associated with each score, please visit the Vantage Assumptions and Methodology Resources area. S&P Global's Data Quality Metric (DQM) assessments are based on the pedigree matrix included in Part II of The Right Measure study.

Source: Vantage

Intelligent Decision making with S&P Global Commodity Insights

Integrating our upstream enhanced emissions dataset with our upstream solutions allows E&P companies and their financial, government and service sector stakeholders to put GHG emissions at the heart of their upstream workflows. A detailed understanding of GHG intensity and performance drivers supports portfolio and asset level benchmarking, economic evaluation, abatement scoping, and planning for emissions regulations or targets.

This dataset is crucial for companies seeking to align with regulatory requirements, manage their environmental impact, and maintain competitive advantage in a sustainability-conscious market.

Key Workflows enhanced

The breadth, depth, and coverage of the Enhanced Emissions solution means better:

- **Benchmarking:** Compare performance to similar assets, rank emissions intensity against peers, identify drivers of top, and poor performance.
- Planning: Model impact of regulation or practice changes on emissions, plan emissions performance with reference to future emissions projected in line with production forecast.
- **Screening:** Put economic viability of new projects or acquisition targets to the test of a shadow carbon price, understand impact on portfolio's emissions intensity.
- Abatement: Identify assets that are underperforming, adopt abatement practices of the best-in-class, match abatement roadmap to portfolio emissions.

Where can I find additional resources?

Upstream Enhanced Emissions web page:

https://www.spglobal.com/commodityinsights/en/ci/products/upstream-emissions.html

Who can I contact to learn more?

External Queries: Client Service at ci.support@spglobal.com

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