STEEL METHANE PROGRAMME //
COAL METHANE DATABASE MINE DATA SHEETS

UNITED STATES



May 2026

UN environment programme | International Methane Emissions Observatory

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For more information, please contact unep-smp@un.org | methanedata.unep.org

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ABOUT THIS DOCUMENT

Greater transparency on methane emissions from coal mines is essential to understand, manage and ultimately reduce the climate footprint of steel production.

The steel sector faces an urgent need to reduce its greenhouse gas emissions. Metallurgical (met) coal – a key ingredient in global steel production – adds on average a quarter to the climate footprint of steel through its methane emissions. At the same time, it represents a major, cost-effective mitigation opportunity: up to 90 per cent of abatable emissions could be reduced at less than 1 per cent of the retail price of steel. Despite this, global inventories continue to rely largely on default emission factors that do not adequately reflect real-world conditions, slowing targeted mitigation efforts.

The Steel Methane Programme (SMP) is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain. SMP is managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO).

Robust quantification of methane emissions from met coal mining is essential. Existing estimates are often fragmented and inconsistent, reflecting methodological differences and variable data quality. To address these gaps, the United Nations Environment Programme's International Methane Emissions Observatory (IMEO) has developed an integrative modelling framework that combines different data sources to generate unified, probabilistic mine-level emission estimates.

Introducing mine data sheets

The Steel Methane Programme (SMP) increases methane transparency through its Coal Methane Database (database), hosted on IMEO's Eye on Methane data platform. The database compiles integrated, mine-level emissions estimates that draw on

scientific research, satellites and inventories. This provides mining companies, steel producers and policymakers with transparency to inform engagement and drive methane reductions.

The database now covers around 250 met coal mines globally, representing roughly half of global met coal production. The modelling framework is designed for operating mines and should be interpreted in that context. Mines included in the database span a broad geographic area, with priority given to operations with significant met coal output and relevance to the steel supply chain. Coverage and data availability vary by country and mine.

The mine data sheets presented in this document provide an overview of a country's methane emission estimates from individual met coal mines.

Data sources and methodology

Methane emission estimates draw on multiple, independent lines of evidence, including:

- Reported inventory data, where available.
- Peer-reviewed scientific literature.
- Satellite and aerial observations.
- Other publicly available data sources.

These inputs are integrated within IMEO's modelling framework to produce mine-level methane emission intensities and absolute emission estimates. Explicit uncertainty ranges reflect data availability and methodological uncertainty, providing insight into both emission magnitude and associated confidence.

Updates and further information

Mine data sheets are updated twice a year. Updates may include:

- Additional or improved data inputs.
- Methodological refinements.
- Expanded mine coverage.

The Coal Methane Database is an integral part of Eye on Methane // GLOBAL. Download Coal Methane Database data sets or learn more about IMEO's data integration approach.

For questions, feedback or to engage further, please contact: unep-smp@un.org.

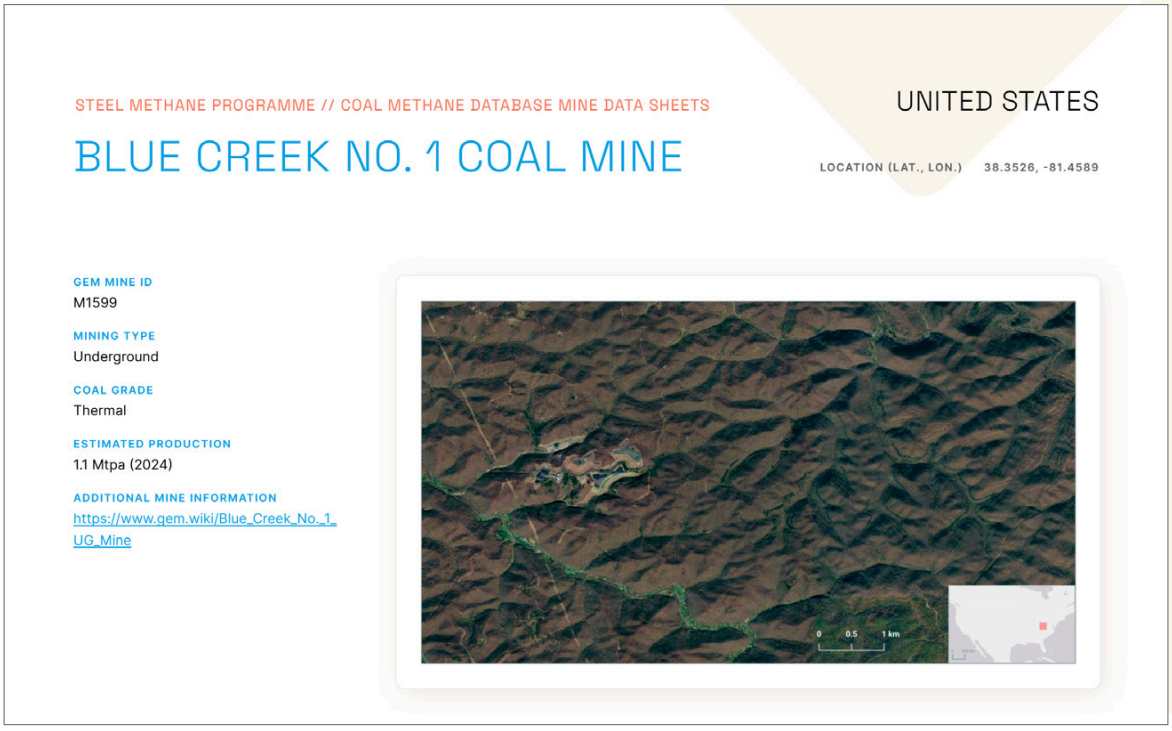
How to read mine data sheets

Each data sheet provides key information on mine, location, production and coal type, alongside IMEO's mine-level methane emission intensity estimate and a summary of the underlying evidence base for that estimate.

Mine information and context

The upper section summarizes key contextual information about the mine. The "Production Estimate" is reported in million metric tonnes per annum (Mtpa) and expressed as run-of-mine (ROM) equivalent production. For this section, IMEO uses the nearest-year production data available from Global Energy Monitor's mine wiki. In rare cases – for example, where GEM records very low or outdated production – the estimate may draw on the primary source referenced by GEM to identify the most recent available value.

Where production data or direct ROM data are not available, values are derived according to the Coal Methane Database methodology. This may include capacity-based estimates or conversion from saleable production to ROM-equivalent production, where needed.



Methane emission profile

The methane emission profile presents IMEO's mine-level estimate of methane emissions intensity and absolute emissions:

- The central value represents IMEO's integrated methane emission estimate derived from multiple data inputs and its associated uncertainty margins (as a percentage). This value is based on nearest-year production data reported by Global Energy Monitor.

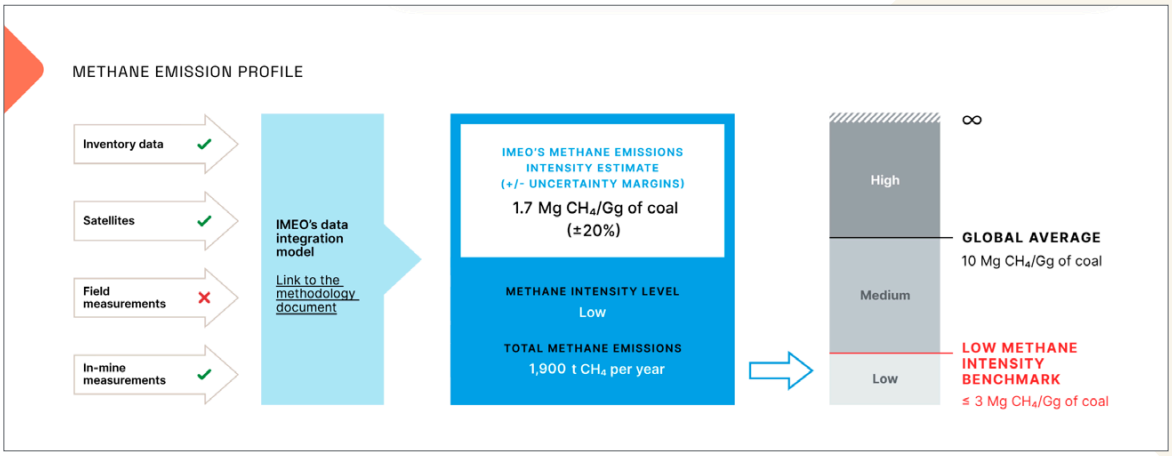
- The positioning of the estimate relative to global averages and **Low Methane Intensity Benchmark** thresholds provides contextual information on mine-level emissions in both quantitative and qualitative terms (Low, Medium, High) and is not a rating of compliance or performance.

- The arrows on the left-hand side indicate the types of data inputs that inform IMEO's data integration model for the mine.

Note:

- The **global average** of 10 Mg CH_4/Gg of coal shown on the right-hand side corresponds to the 2022–2024 average met coal methane intensity based on the International Energy Agency's Global Methane Tracker and its annual Coal analyses.

- The 3 Mg CH_4/Gg **Low Methane Intensity Benchmark** is an indicative low-intensity reference for metallurgical coal. It represents the average methane intensity of metallurgical coal production with full abatement of methane emissions, consistent with the IEA's Net Zero Emissions by 2050 Scenario.



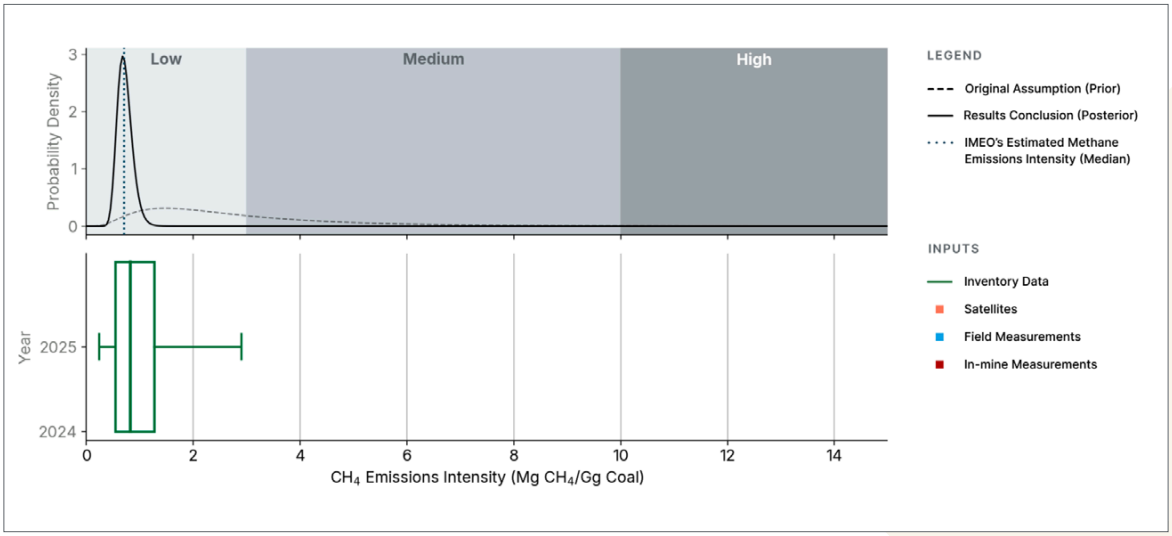
Data inputs and integration results

The charts illustrate how multiple data inputs are combined to produce IMEO's mine-level methane emissions intensity estimate:

- The lower chart shows the top 15 weighted data inputs, together with their associated uncertainty ranges, used to derive IMEO's methane emissions intensity estimate for the mine. The classification of these inputs is described in the Inputs section. Inventory estimates are presented as a single box-and-whisker representation.

- The upper chart presents the results of IMEO's data integration model, showing the probabilistic distribution of methane emission intensities consistent with the available evidence.

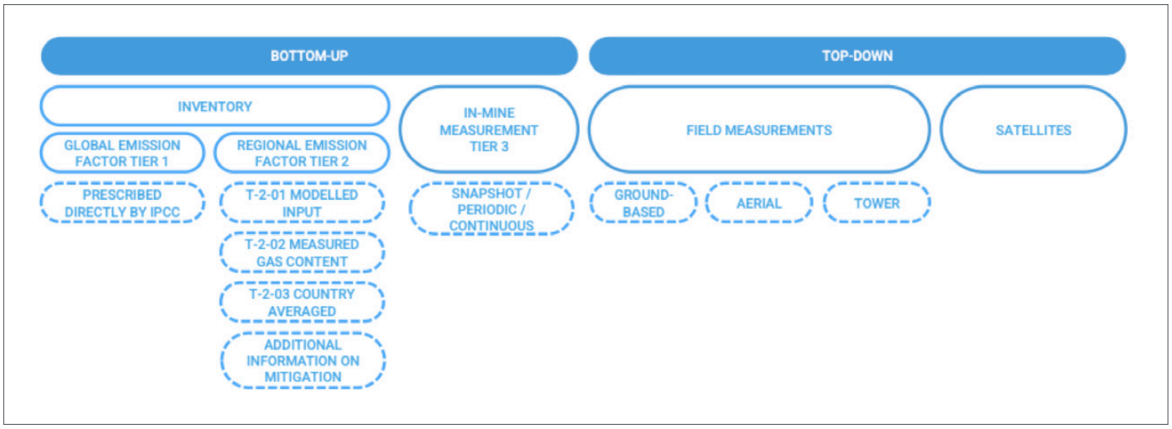
The relative influence of individual data inputs within the integration model is informed by their relative uncertainties, which have been attenuated by multiple factors including data recency, location of measurement in production chain (before or after potential mitigation), and data source trust.



Top data inputs table

The table lists the most influential data inputs used in the estimate and their identifiers including:

- **Data approach** – Method used to estimate the value
  Examples:
  - Bottom-up;
  - Satellites;
  - Field measurements



- **Data category** – Sub-category of the method used to estimate the value

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category
Satellite	2025	1.2	38%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification

Examples:
- Bottom-up:
  - Inventory: Tier-1; Tier-2-01; Tier-2-02; Tier-2-03;
  - In-mine: Tier-3;
- Satellite
- Field measurements
  - Aerial;
  - Ground;
  - Tower

- **Data source –** Resource where the value was reported or published
  Examples: Science study (external); Science study (IMEO); Company reporting; Independent reporting; IPCC; UNFCCC; IMEO MARS

- **Reporting period**
- **Emissions value and units**
- **Associated uncertainty**

Data categorisation is in line with the internal cataloguing presented above. Please note that for satellite entries, the values shown represent annualized mine-level estimates based on all available images (detects and non-detects), aggregated across the known emission sources associated with the mine.
Additional data beyond those shown are available in the full data set.

Disclaimer

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

Further information

For more details, please consult the full Coal Methane Database and the accompanying methodology documentation or contact IMEO at unep-smp@un.org.

UNITED STATES

WORKMAN CREEK COAL MINE

LOCATION (LAT., LON.) 37.8947, -81.3781

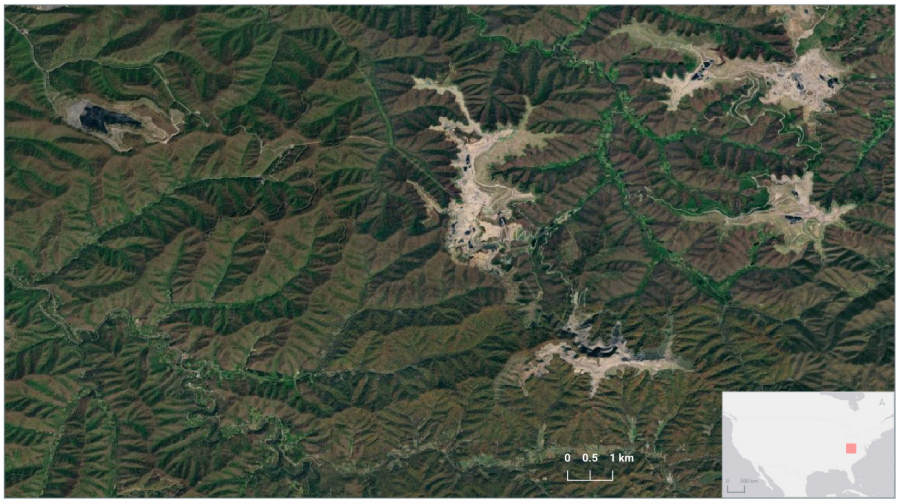
GEM MINE ID
M1341

MINING TYPE
Surface

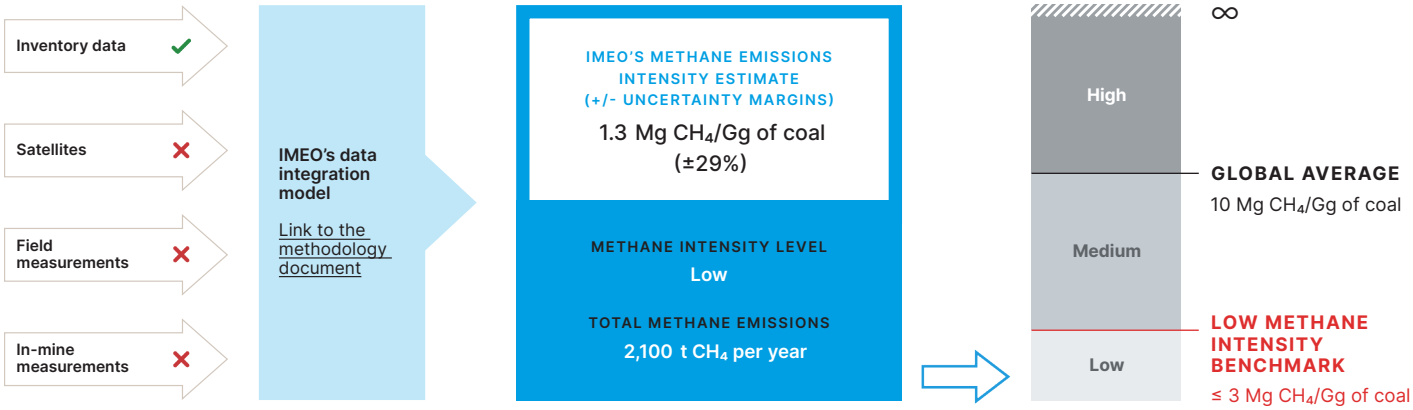
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1.7 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Workman_Creek_Surface_coal_mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

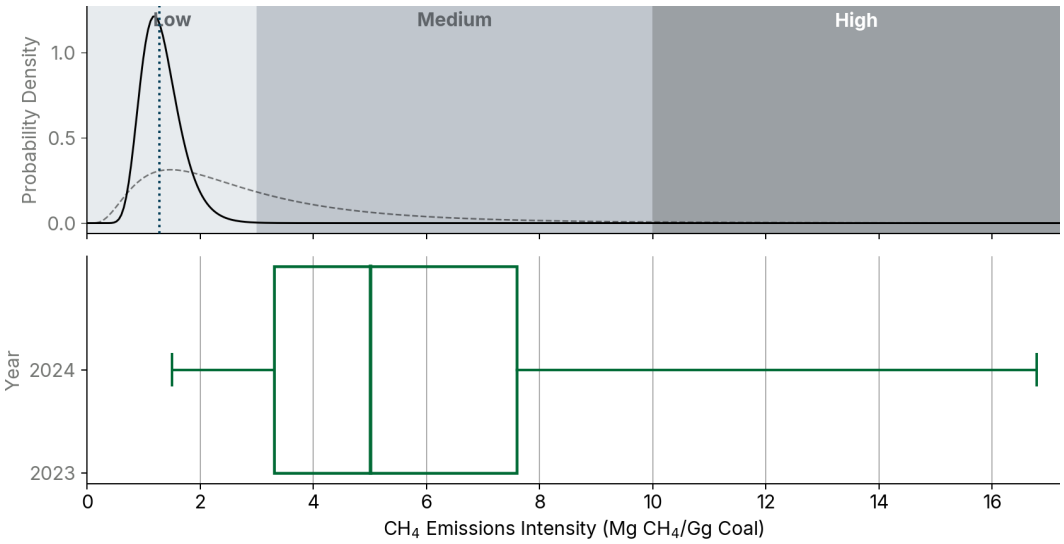
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR WORKMAN CREEK COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	0.6	50%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	4	75%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	0.8	75%	Mg CH_4/Gg Coal	Tier-2-02	US NIR Report	Link
Inventory	2024	1	106%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2023	10	161%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2023	10	242%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2023	10	343%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

DEEP MINE 41

LOCATION (LAT., LON.) 37.0961, -82.3883

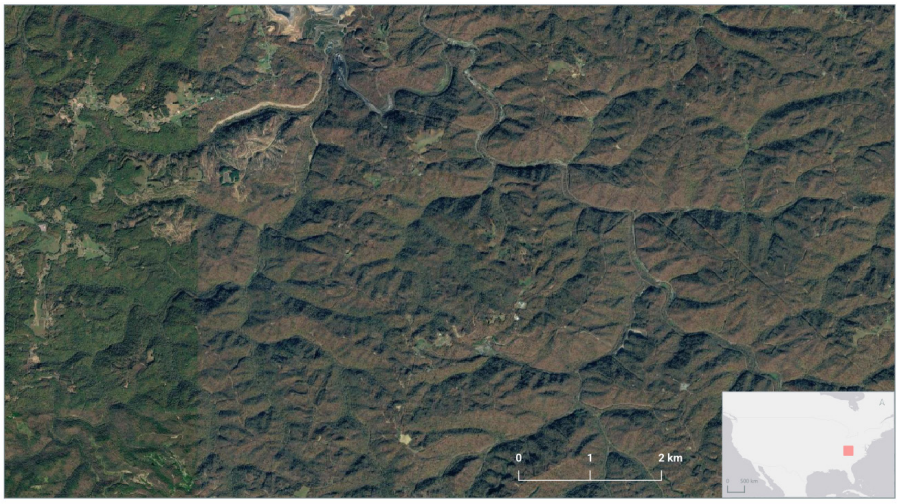
GEM MINE ID
M1308

MINING TYPE
Underground

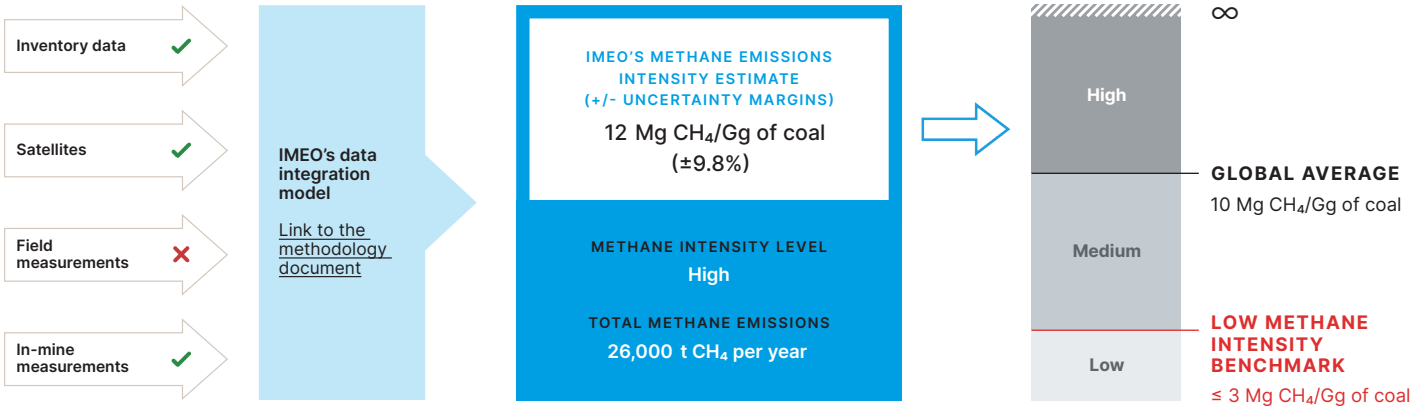
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
2.2 Mtpa (2023)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Deep_Mine_41_coal_mine



METHANE EMISSION PROFILE



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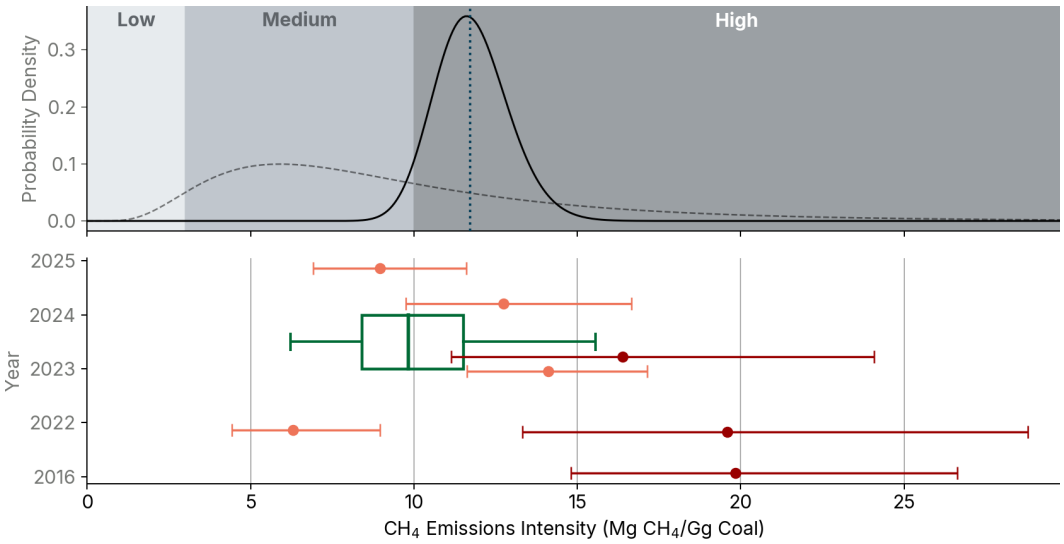
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR DEEP MINE 41



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

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Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2023	14	20%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	9	26%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	13	27%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2016	21	30%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Satellite	2022	7	36%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2023	10	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2022	21	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
Inventory	2023	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2023	18	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2023	13	60%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2023	10	85%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

CUMBERLAND COAL MINE

LOCATION (LAT., LON.) 39.81, -80.17

GEM MINE ID
M1012

MINING TYPE
Underground

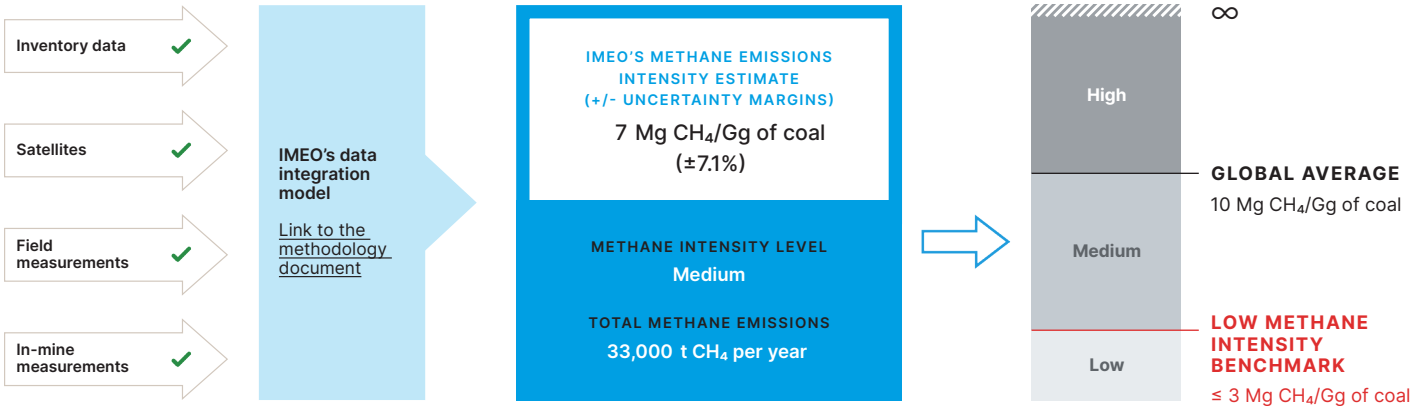
COAL GRADE
Thermal

ESTIMATED PRODUCTION
4.7 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Cumberland_Mine



METHANE EMISSION PROFILE



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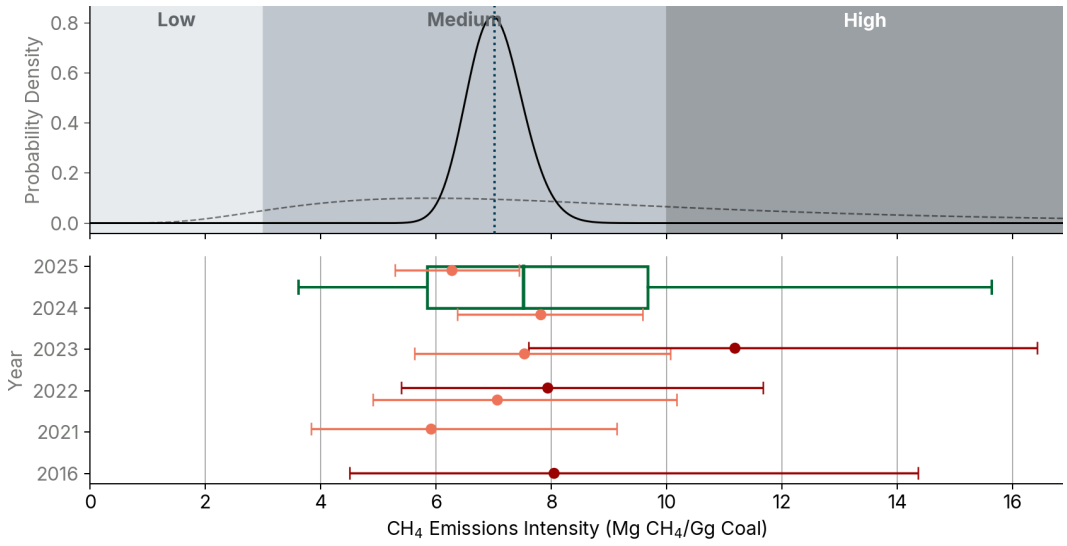
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR CUMBERLAND COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	6	17%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	8	21%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	8	30%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2022	8	38%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2022	9	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	12	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2021	6	46%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2016	10	63%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	7	89%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	99%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	135%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

NO. 4 COAL MINE (AL)

LOCATION (LAT., LON.) 33.3286, -87.3316

GEM MINE ID
M1397

MINING TYPE
Underground

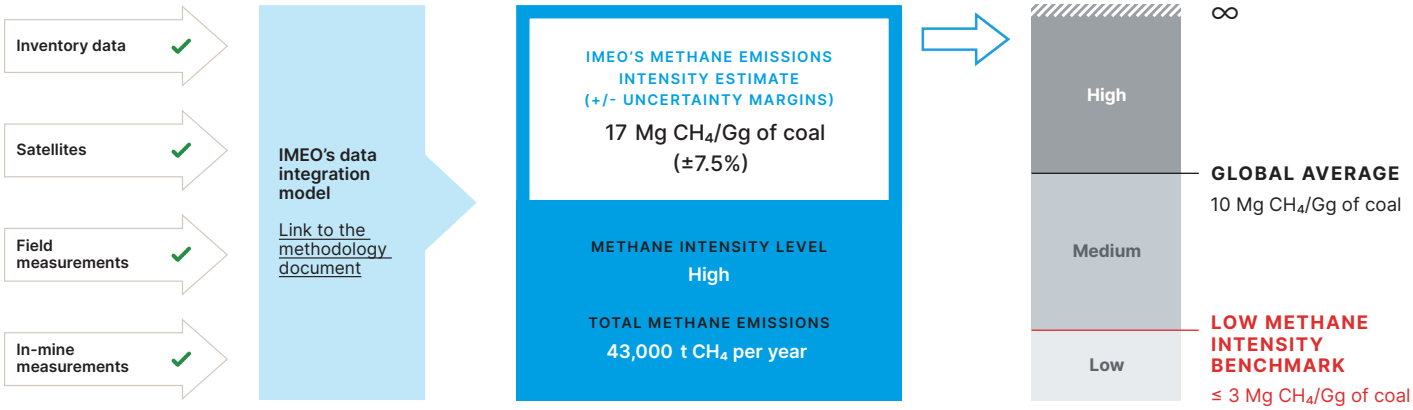
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
2.5 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/No._4_Coal_Mine_(AL)



METHANE EMISSION PROFILE



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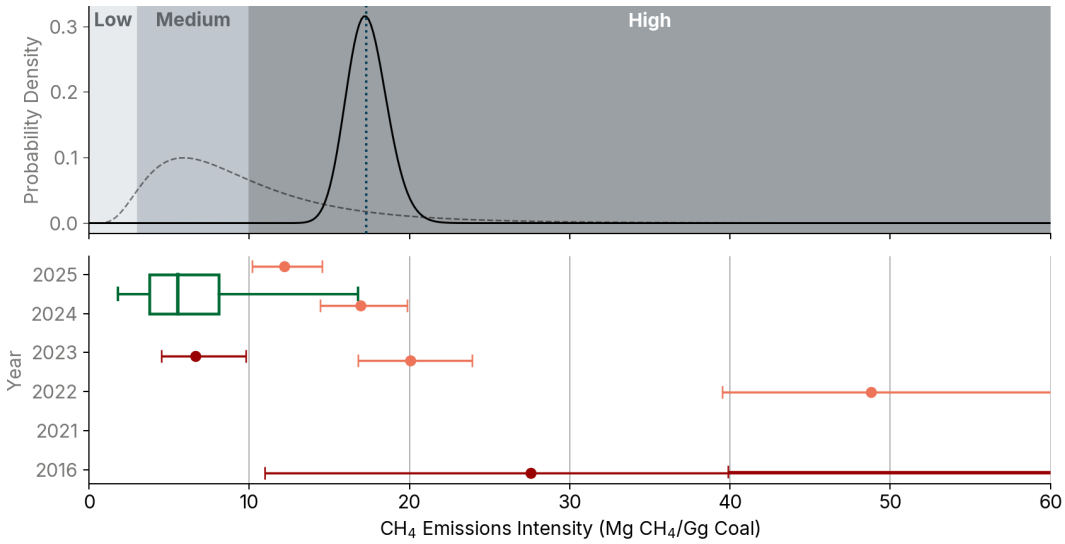
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR NO. 4 COAL MINE (AL)



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	17	16%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	20	18%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	12	18%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2022	50	21%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2021	100	26%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2023	7	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	100	109%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
In-mine measurements (Company reporting)	2016	40	116%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	136%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	176%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	225%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

BUCHANAN #1 COAL MINE

LOCATION (LAT., LON.) 37.2112, -81.9027

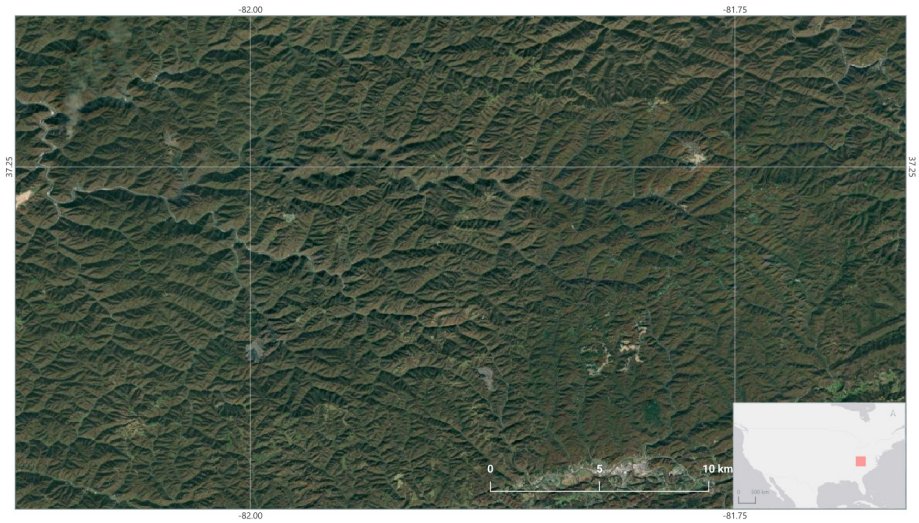
GEM MINE ID
M0998

MINING TYPE
Underground

COAL GRADE
Thermal & Metallurgical

ESTIMATED PRODUCTION
3.5 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Buchanan_Mine_1



METHANE EMISSION PROFILE

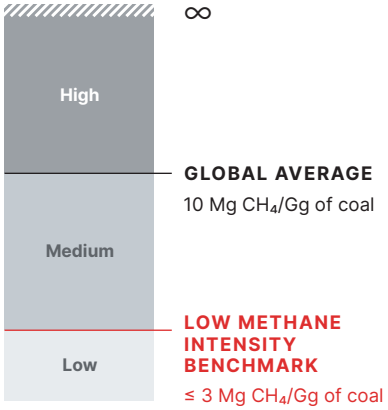
Inventory data ✓
Satellites ✓
Field measurements ✓
In-mine measurements ✓

IMEO's data integration model
Link to the methodology document

IMEO'S METHANE EMISSIONS INTENSITY ESTIMATE (+/- UNCERTAINTY MARGINS)
14.9 Mg CH_4/Gg of coal (±6.6%)

METHANE INTENSITY LEVEL
High

TOTAL METHANE EMISSIONS
52,000 t CH_4 per year



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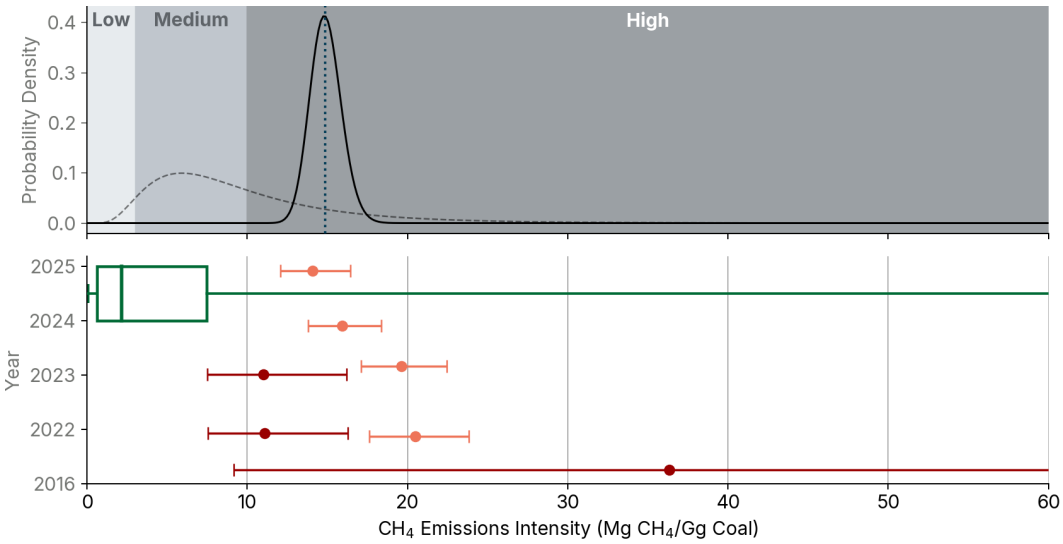
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR BUCHANAN #1 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2023	20	14%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	16	14%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2022	21	15%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	14	15%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2022	12	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	12	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	100	238%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	0	1249%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	0	1327%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	0	2030%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

BECKLEY POCAHONTAS COAL MINE

LOCATION (LAT., LON.) 37.7744, -81.2578

GEM MINE ID
M0990

MINING TYPE
Underground

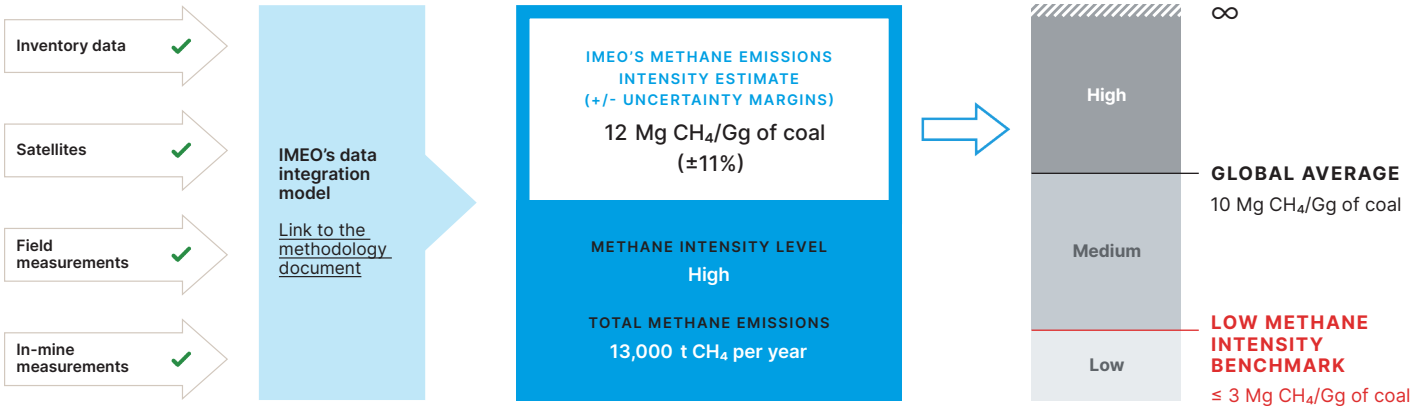
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Beckley_Crystal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

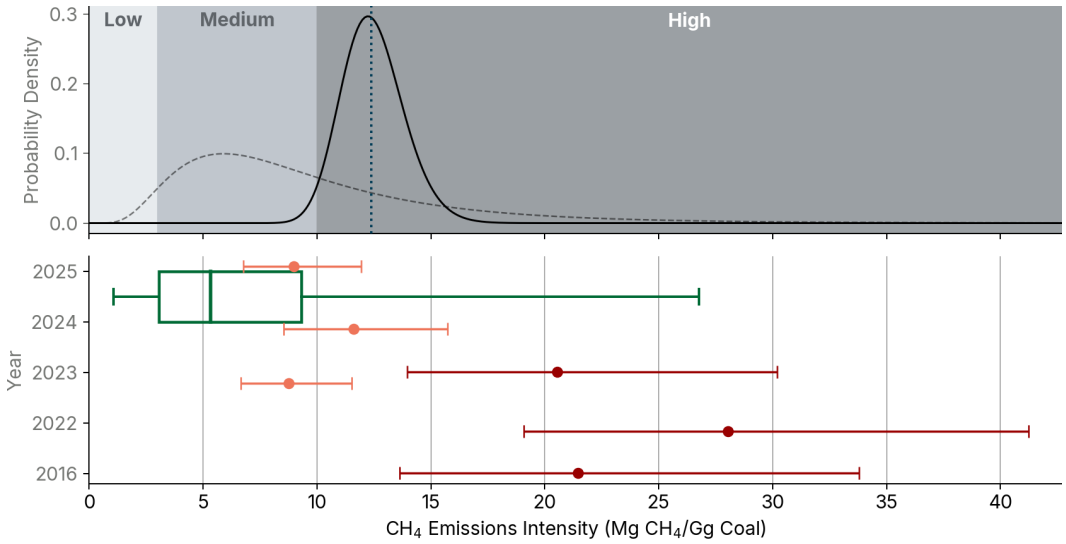
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR BECKLEY POCAHONTAS COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2023	9	28%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	9	29%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	12	31%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2022	30	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	22	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	20	48%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	6	115%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	117%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	160%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	283%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	341%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	360%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	419%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	475%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

LEER COAL MINE

LOCATION (LAT., LON.) 39.3404, -79.9753

GEM MINE ID
M1036

MINING TYPE
Underground

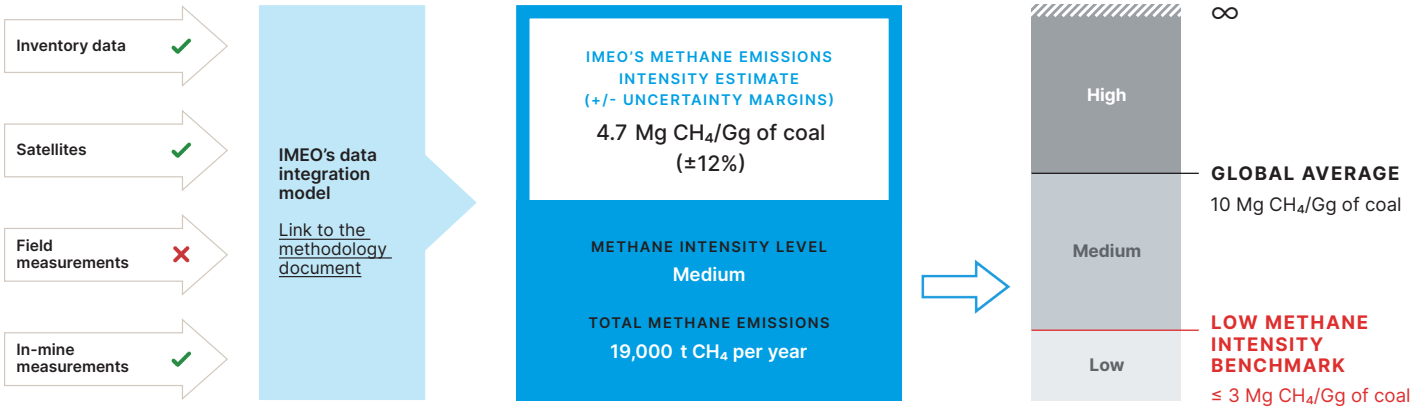
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
4.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Leer_coal_mine



METHANE EMISSION PROFILE



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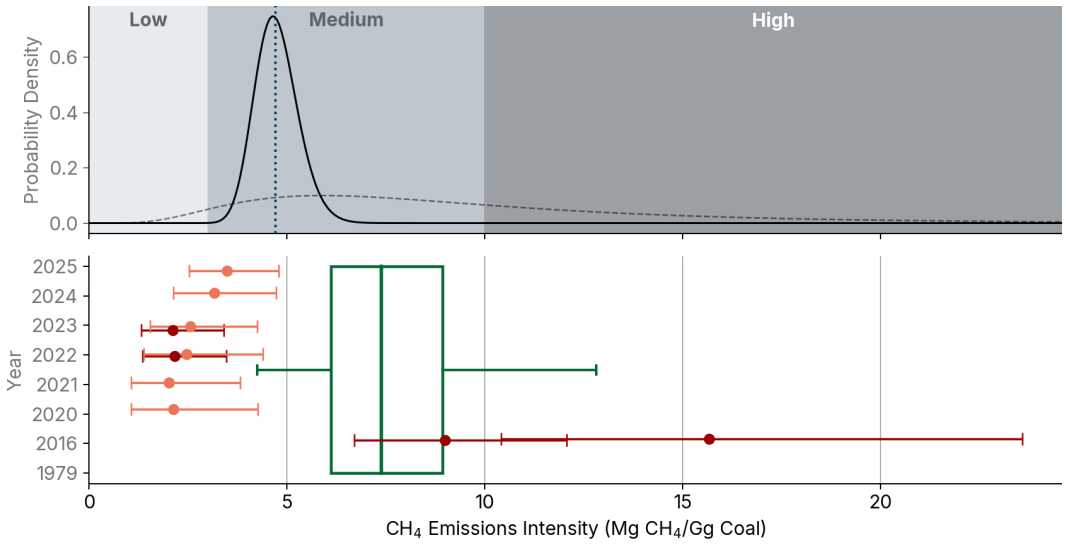
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR LEER COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
In-mine measurements (Company reporting)	2016	9	30%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Satellite	2025	4	33%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	3	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2016	17	43%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	8	50%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2022	2	50%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	2	50%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	4	50%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2023	3	54%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2022	3	63%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	10	70%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Satellite	2021	2	71%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	8	71%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	1979	8	75%	Mg CH_4/Gg Coal	Tier-2-02	Iannacchione et al., 1979	Link
Satellite	2020	3	79%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	

UNITED STATES

LEER SOUTH COAL MINE

LOCATION (LAT., LON.) 39.34, -79.9762

GEM MINE ID
M1037

MINING TYPE
Underground

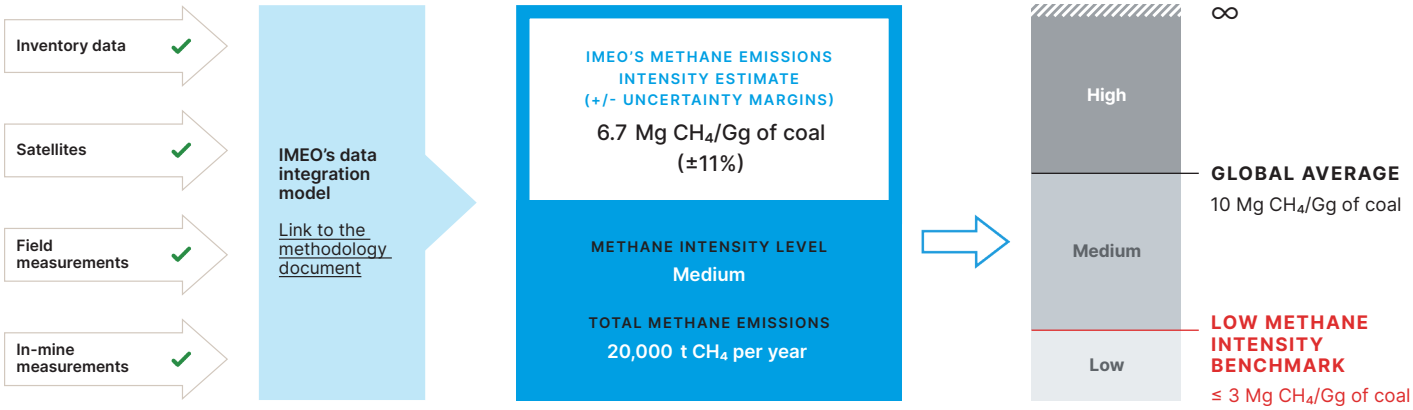
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
2.9 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Leer_South_coal_mine



METHANE EMISSION PROFILE



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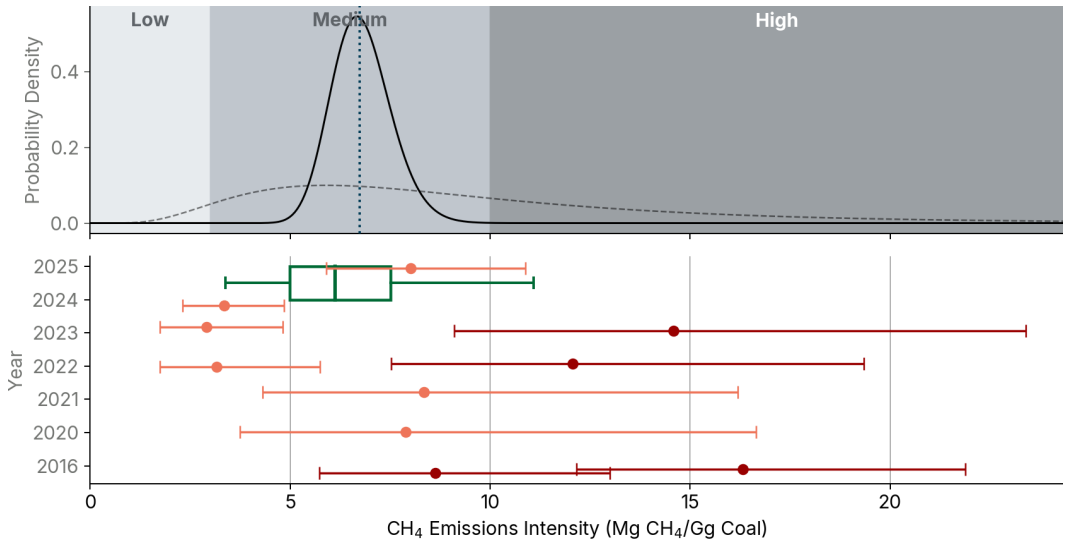
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR LEER SOUTH COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

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Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
In-mine measurements (Company reporting)	2016	17	30%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Satellite	2025	8	31%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	4	38%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2016	9	43%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	8	50%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2022	13	50%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	16	50%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	4	50%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2023	3	54%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2022	4	65%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	7	70%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	8	71%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2021	10	74%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2020	10	86%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	5	95%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

OAK GROVE MINE

LOCATION (LAT., LON.) 33.4953, -87.1406

GEM MINE ID
M3577

MINING TYPE
Underground

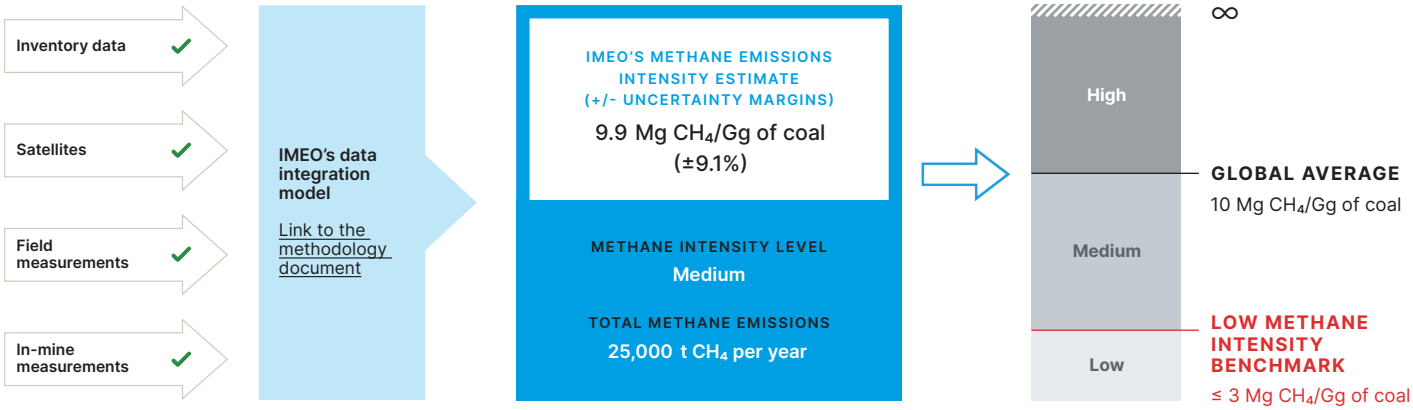
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
2.6 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Oak_Grove_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

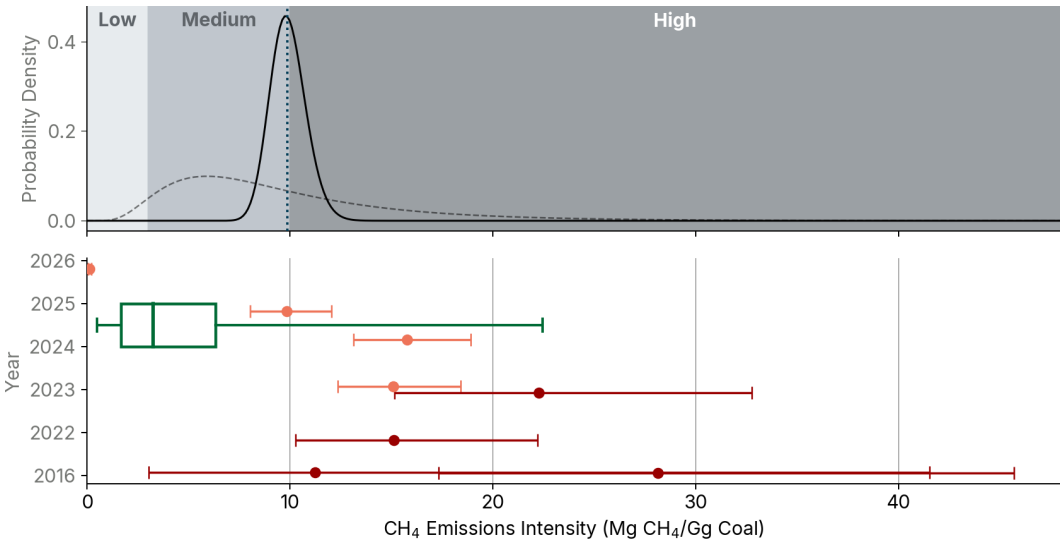
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR OAK GROVE MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

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Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	16	18%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	15	20%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	10	20%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2022	16	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	24	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	30	52%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Satellite	2026	0.1	75%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	10	182%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
In-mine measurements (Company reporting)	2016	30	212%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	4	231%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	249%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	0	662%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

MOUNTAINEER II COAL MINE

LOCATION (LAT., LON.) 37.91, -81.8

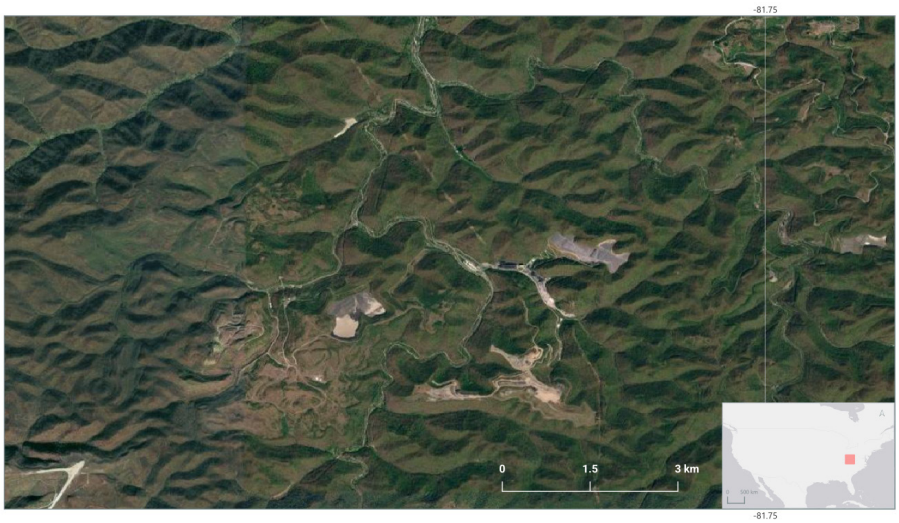
GEM MINE ID
M1048

MINING TYPE
Underground

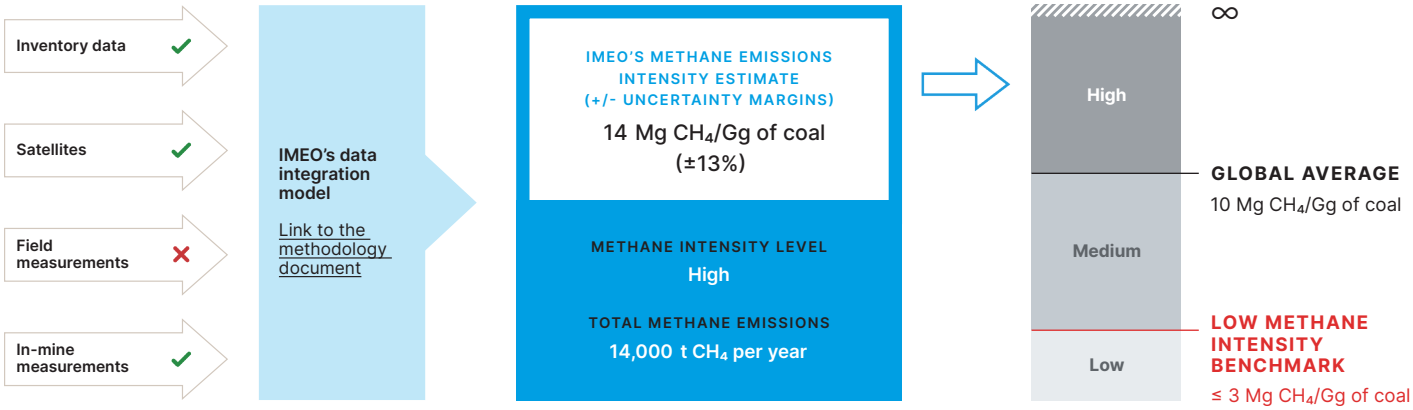
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Mountaineer_II_Mine



METHANE EMISSION PROFILE



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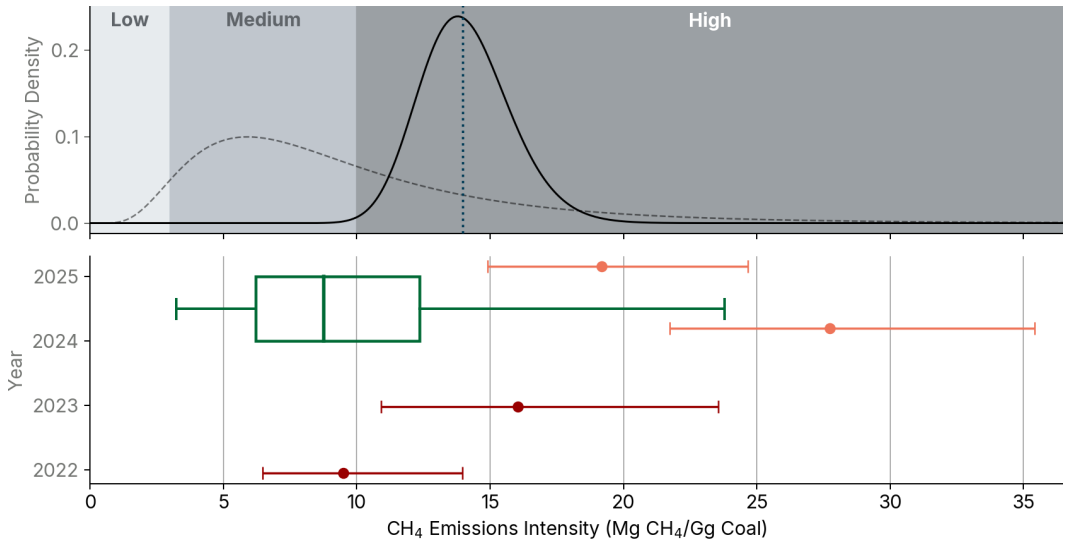
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR MOUNTAINEER II COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	29	25%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	20	26%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	10	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2022	10	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
In-mine measurements (Company reporting)	2023	17	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	13	60%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	85%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	212%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	237%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	273%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

UNITED STATES

NO. 7 COAL MINE

LOCATION (LAT., LON.) 33.3241, -87.2414

GEM MINE ID
M1051

MINING TYPE
Underground

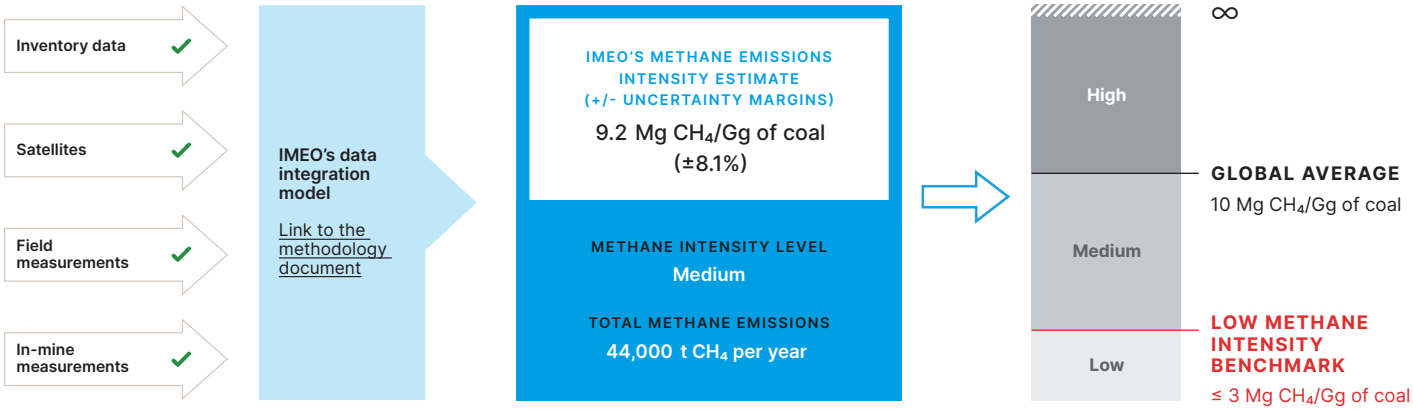
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
4.8 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/No._7_coal_mine_(USA)



METHANE EMISSION PROFILE



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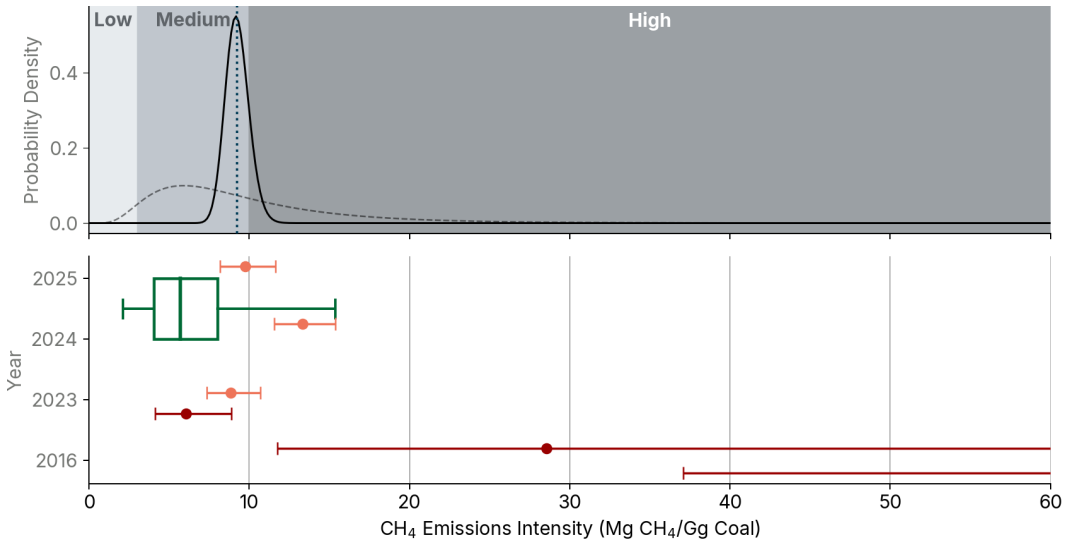
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

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More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR NO. 7 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	13	14%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	10	18%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	9	19%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2023	6	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	40	109%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
In-mine measurements (Company reporting)	2016	100	116%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	136%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	176%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	225%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

LYNN BRANCH NO. 2 COAL MINE

LOCATION (LAT., LON.) 37.7717, -81.931

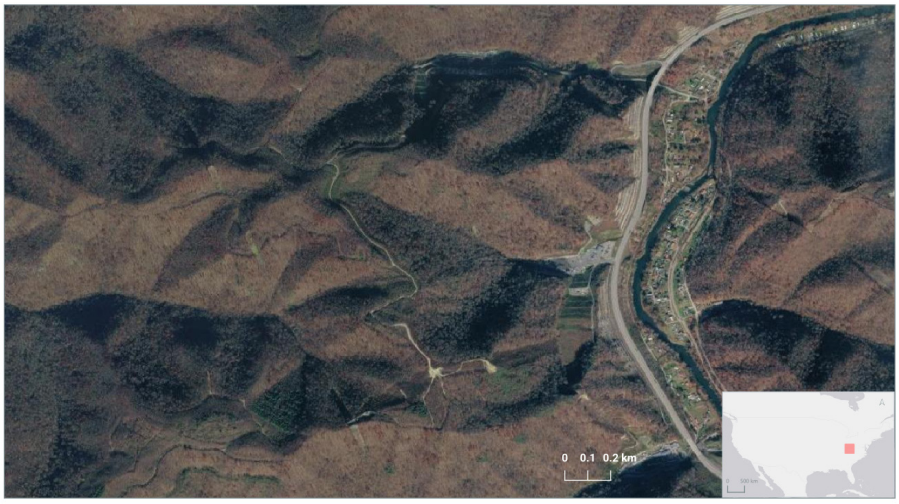
GEM MINE ID
M1617

MINING TYPE
Underground

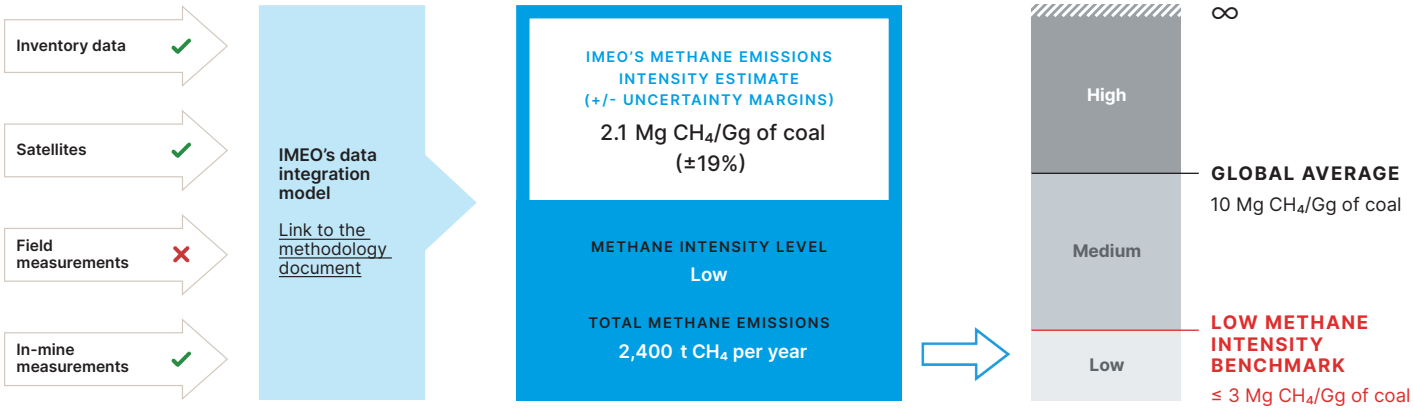
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Lynn_Branch_coal_mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

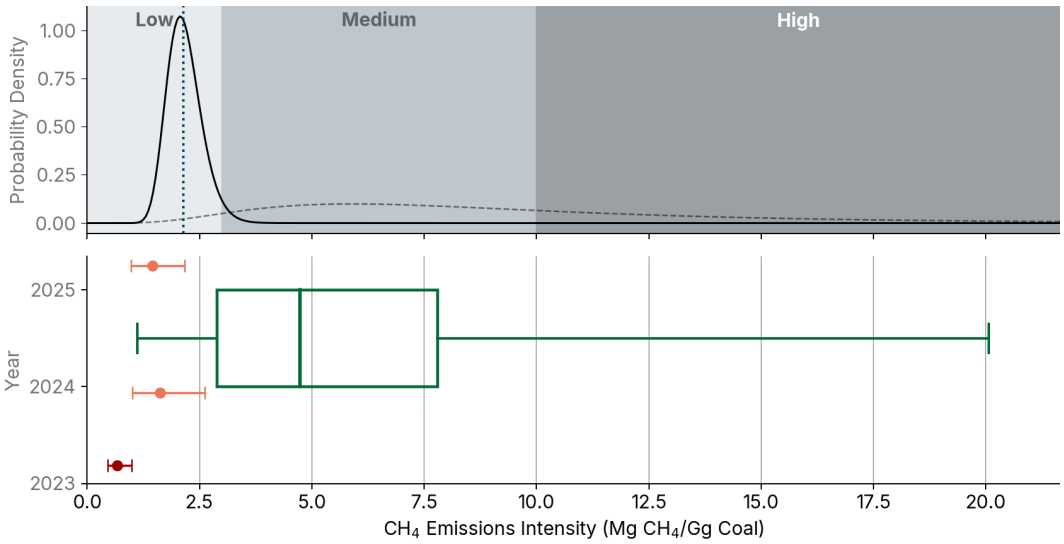
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR LYNN BRANCH NO. 2 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
In-mine measurements (Company reporting)	2023	0.7	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	1.6	41%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	1.8	50%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	155%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	205%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	266%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	457%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	536%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

UNITED STATES

AFFINITY COAL MINE

LOCATION (LAT., LON.) 37.704, -81.2305

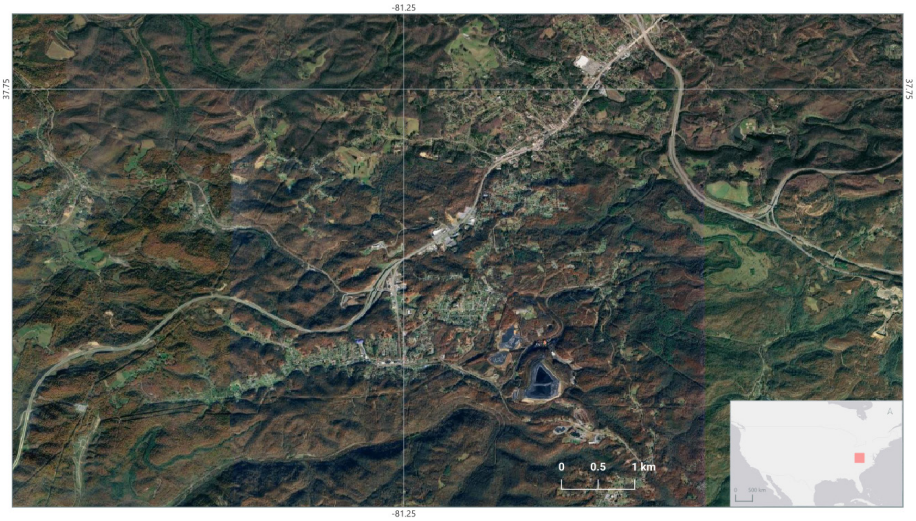
GEM MINE ID
M1596

MINING TYPE
Underground

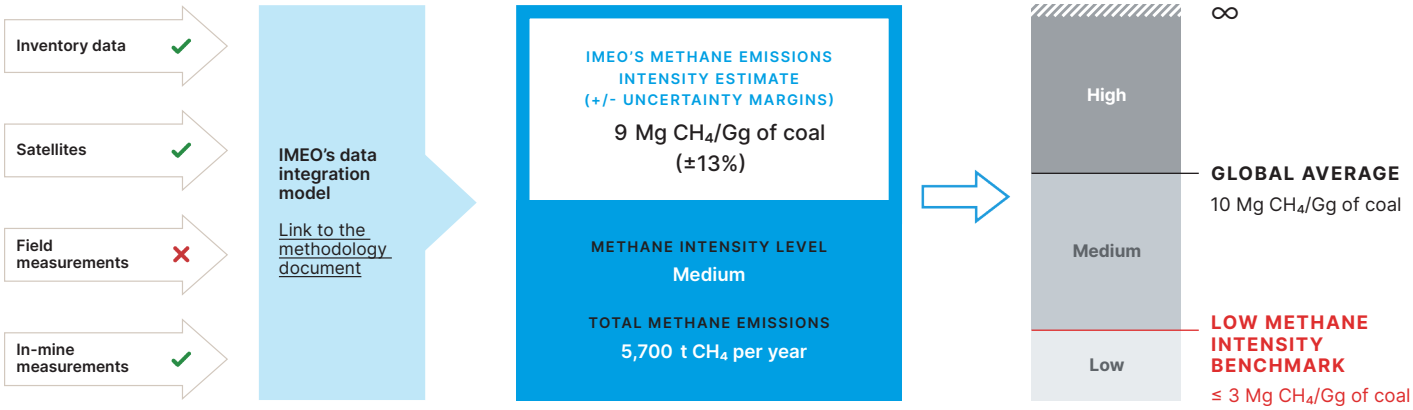
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.6 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Affinity_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

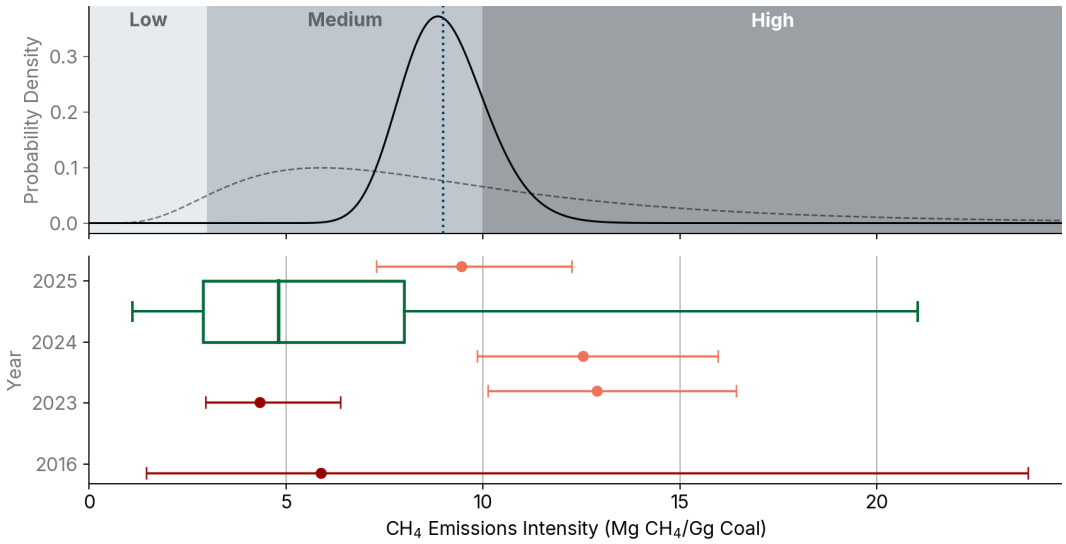
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR AFFINITY COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	13	24%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	13	25%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	10	26%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2023	5	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
In-mine measurements (Company reporting)	2016	20	247%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	10	310%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	437%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

UNITED STATES

JERRY FORK EAGLE COAL MINE

LOCATION (LAT., LON.) 38.2967, -80.9902

GEM MINE ID
M1614

MINING TYPE
Underground

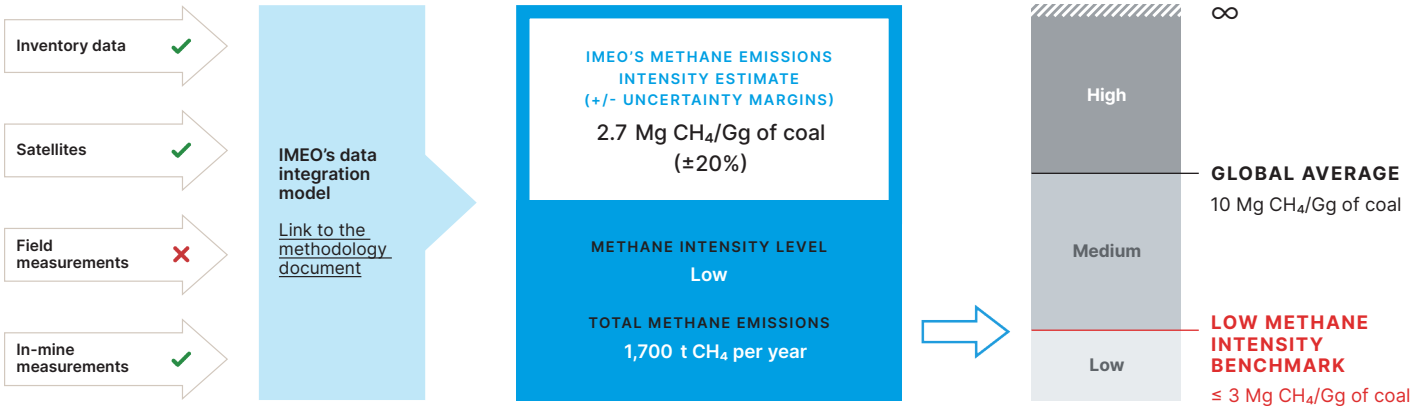
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.6 Mtpa (2023)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Jerry_Fork_Eagle_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

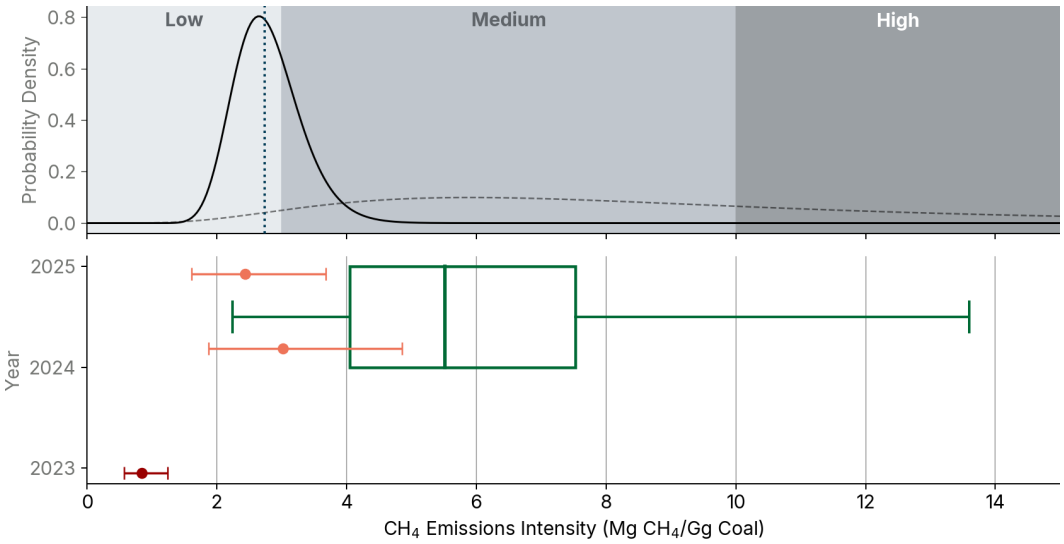
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR JERRY FORK EAGLE COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
In-mine measurements (Company reporting)	2023	0.9	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	5	41%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	3	43%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	3	50%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	5	95%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	7	131%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	176%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

EAGLE #3 COAL MINE

LOCATION (LAT., LON.) 37.7783, -81.4828

GEM MINE ID
M2815

MINING TYPE
Underground

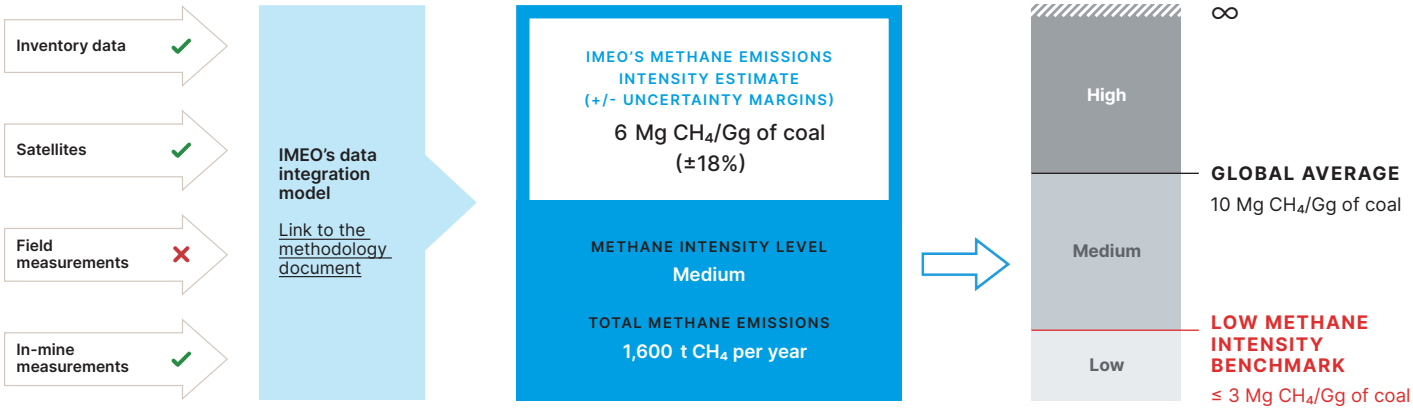
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.3 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Eagle_3_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

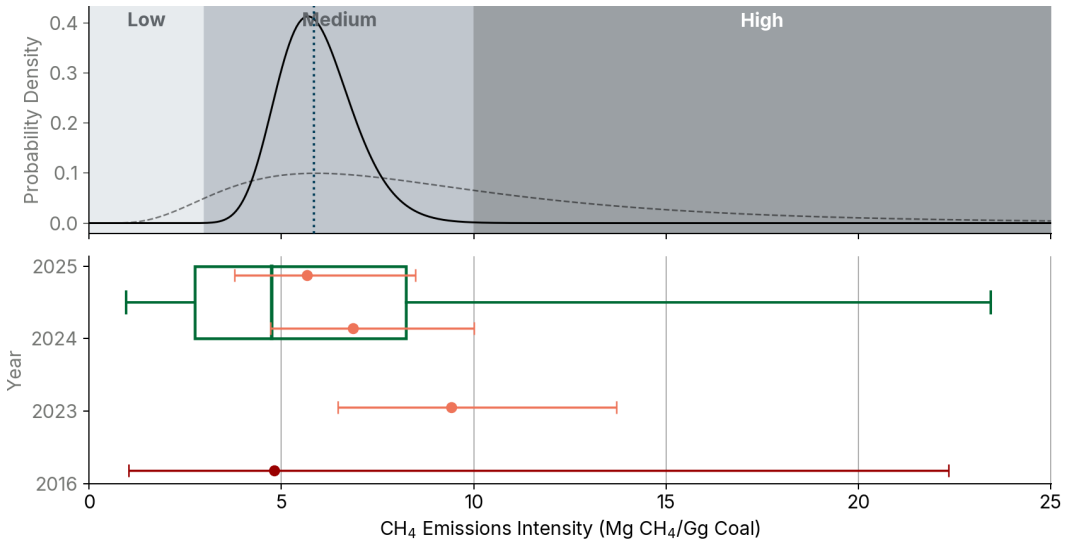
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR EAGLE #3 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	7	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	10	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	6	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	183%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	246%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
In-mine measurements (Company reporting)	2016	20	310%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	10	325%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	354%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	395%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	503%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	564%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

UNITED STATES

DAVY BRANCH COAL MINE

LOCATION (LAT., LON.) 37.7997, -81.9467

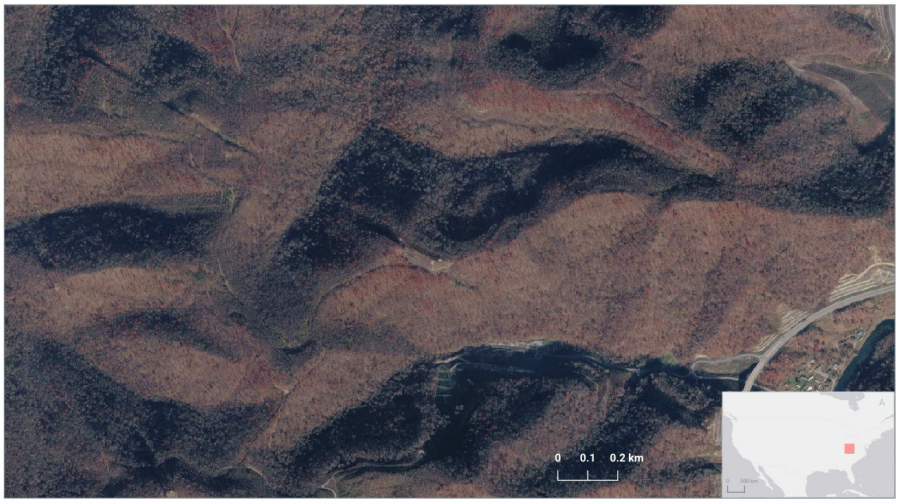
GEM MINE ID
M2346

MINING TYPE
Underground

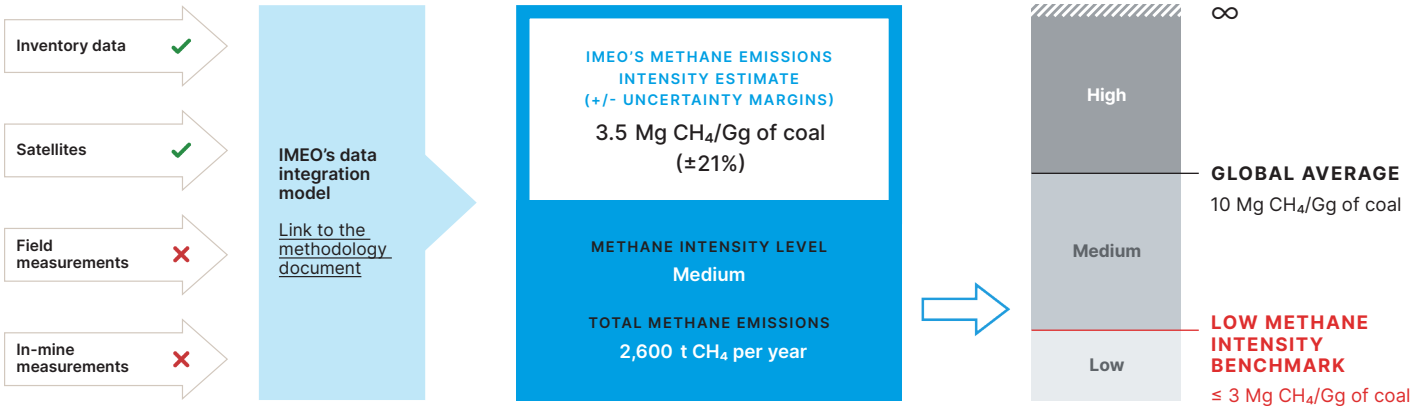
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.7 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Davy_Branch_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

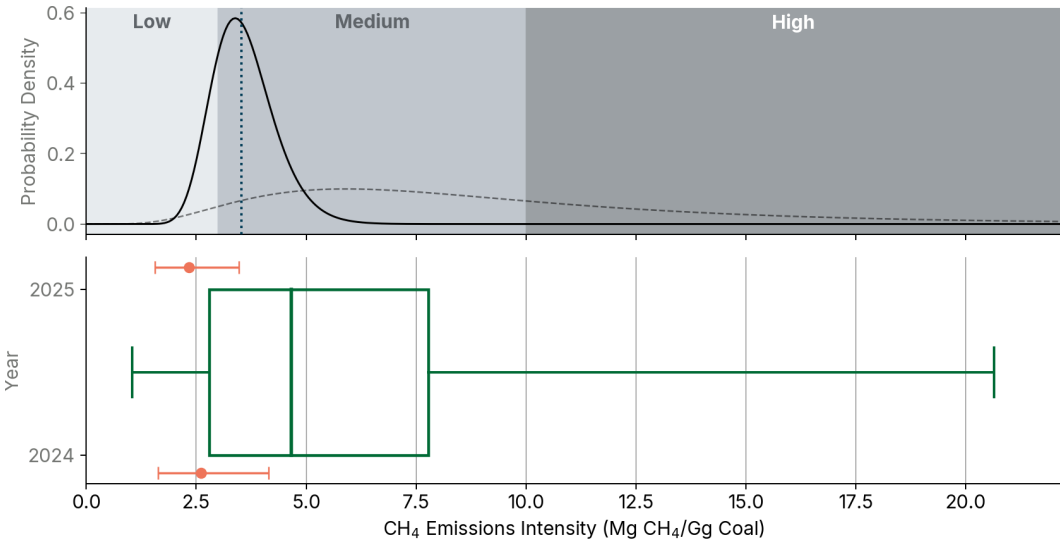
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR DAVY BRANCH COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	3	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	3	49%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	155%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	205%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	266%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	473%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	578%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

UNITED STATES

ROAD FORK 52 MINE

LOCATION (LAT., LON.) 37.5781, -81.57

GEM MINE ID
M3608

MINING TYPE
Underground

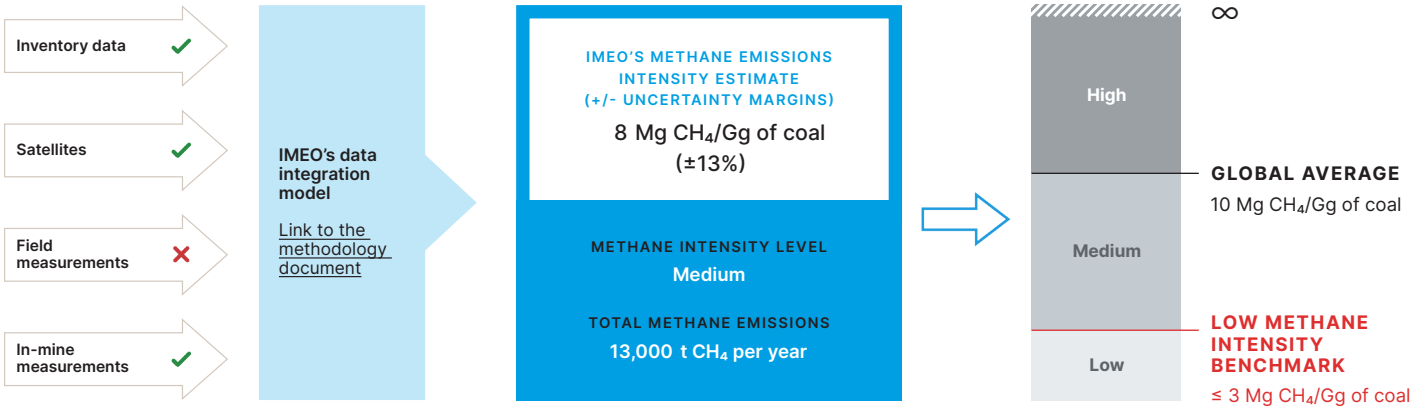
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1.6 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Road_Fork_52_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

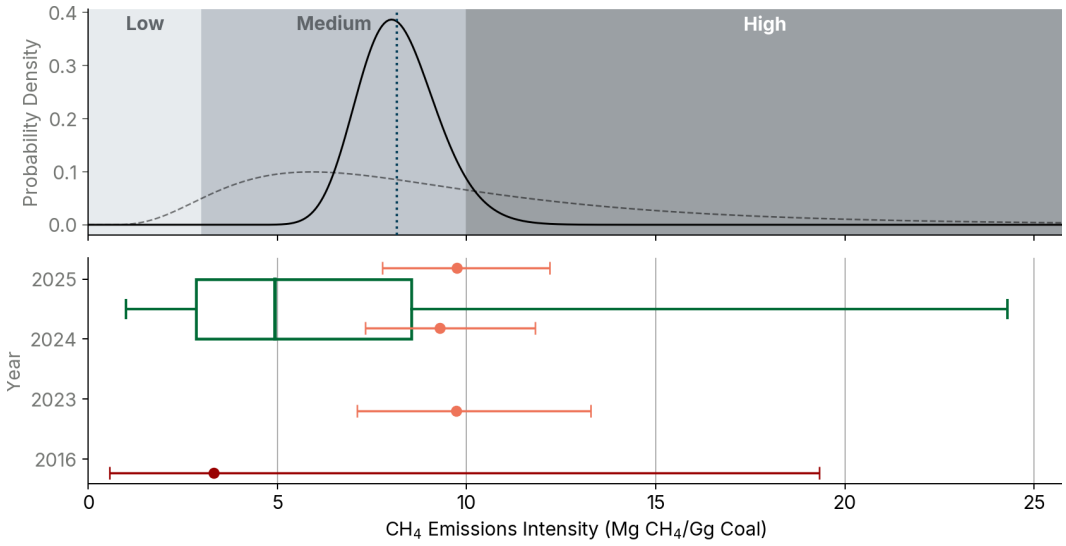
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR ROAD FORK 52 MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	10	23%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	10	24%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	10	32%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	234%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	323%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	435%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
In-mine measurements (Company reporting)	2016	20	461%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	10	571%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

UNITED STATES

SEWELL MINE B COAL MINE

LOCATION (LAT., LON.) 37.5061, -81.6236

GEM MINE ID
M2694

MINING TYPE
Underground

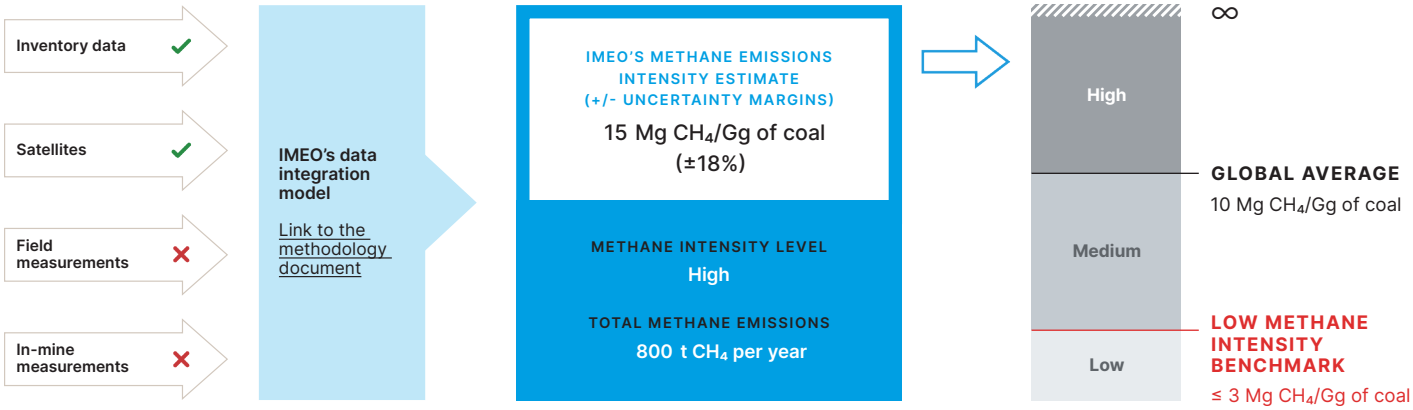
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Sewell_Mine_B_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

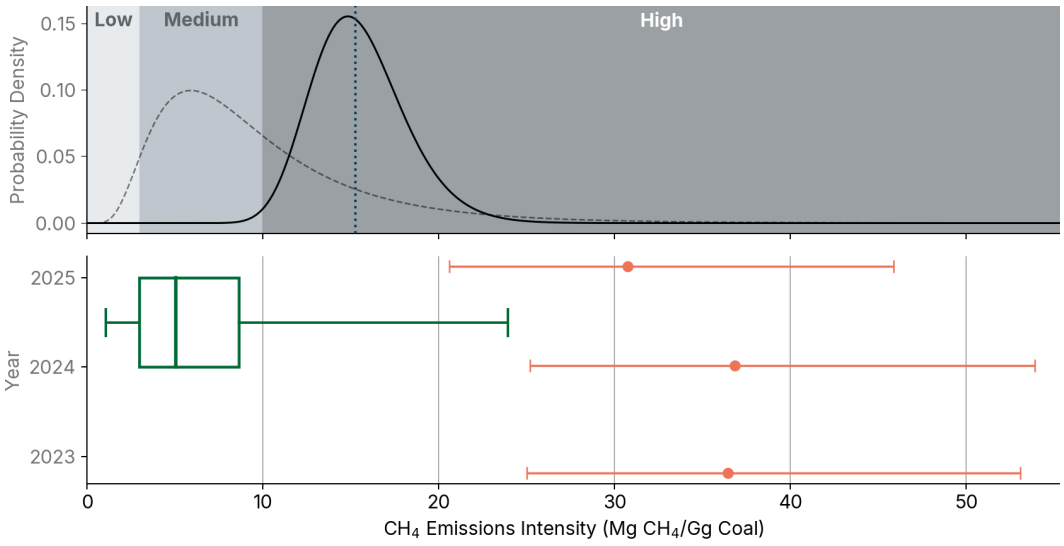
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR SEWELL MINE B COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2023	40	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	40	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	30	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	234%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	323%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	382%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	435%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	544%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

Note: Coal grade reclassified by IMEO from unknown to metallurgical.

UNITED STATES

FLYING EAGLE MINE

LOCATION (LAT., LON.) 37.7567, -81.5544

GEM MINE ID
M3466

MINING TYPE
Underground

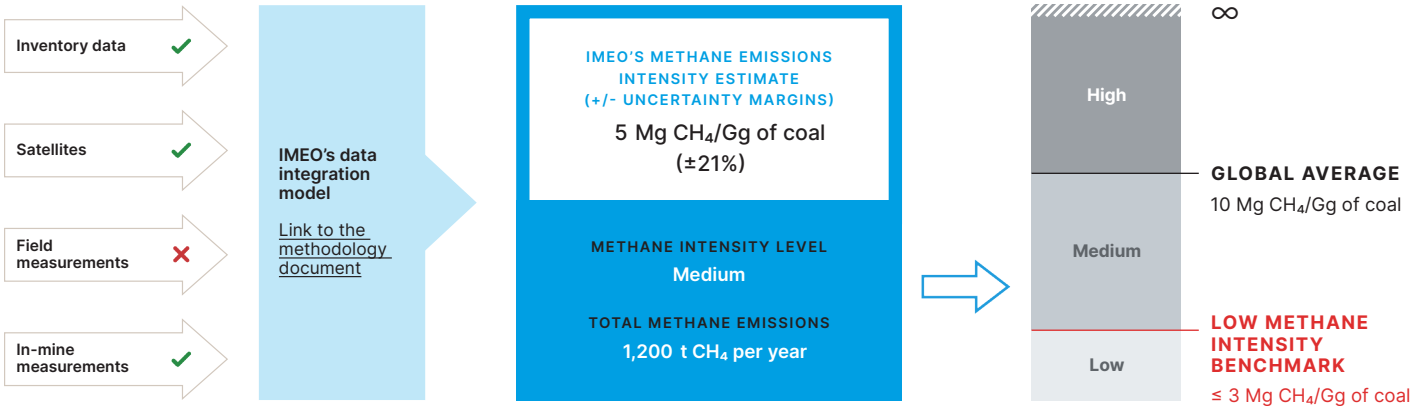
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.2 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Flying_Eagle_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

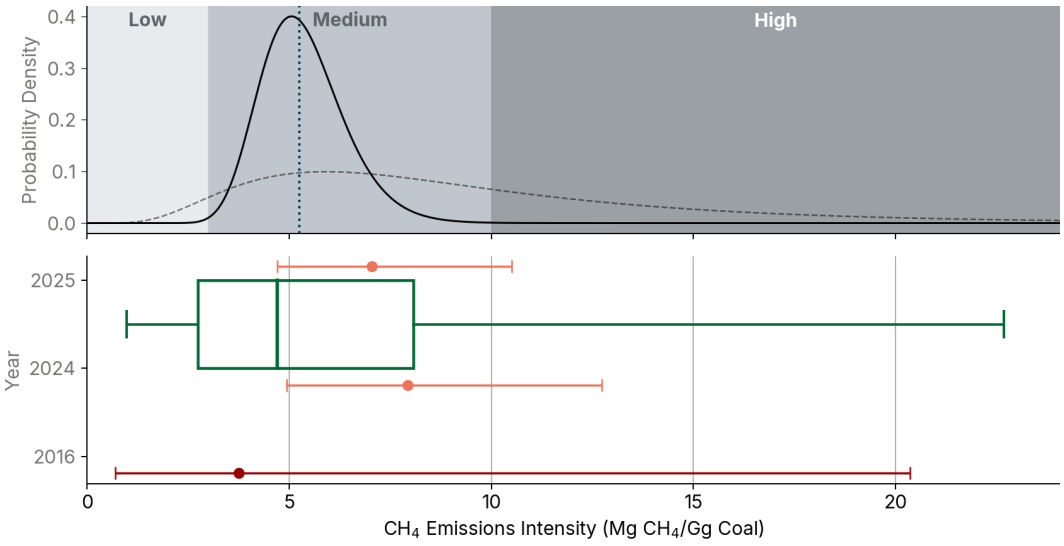
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR FLYING EAGLE MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	8	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	9	50%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	183%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	246%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	282%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	325%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	395%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
In-mine measurements (Company reporting)	2016	20	405%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	10	477%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	521%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	535%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

HORSE CREEK EAGLE COAL MINE

LOCATION (LAT., LON.) 37.8915, -81.3015

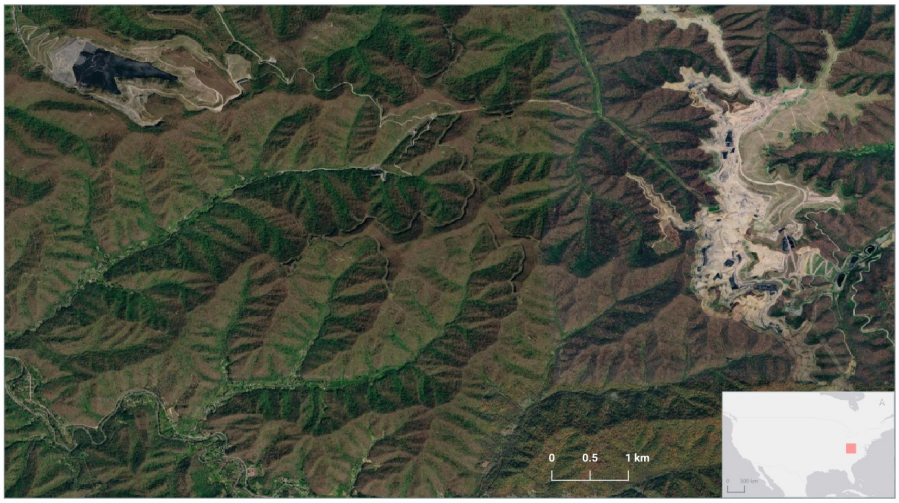
GEM MINE ID
M2797

MINING TYPE
Underground

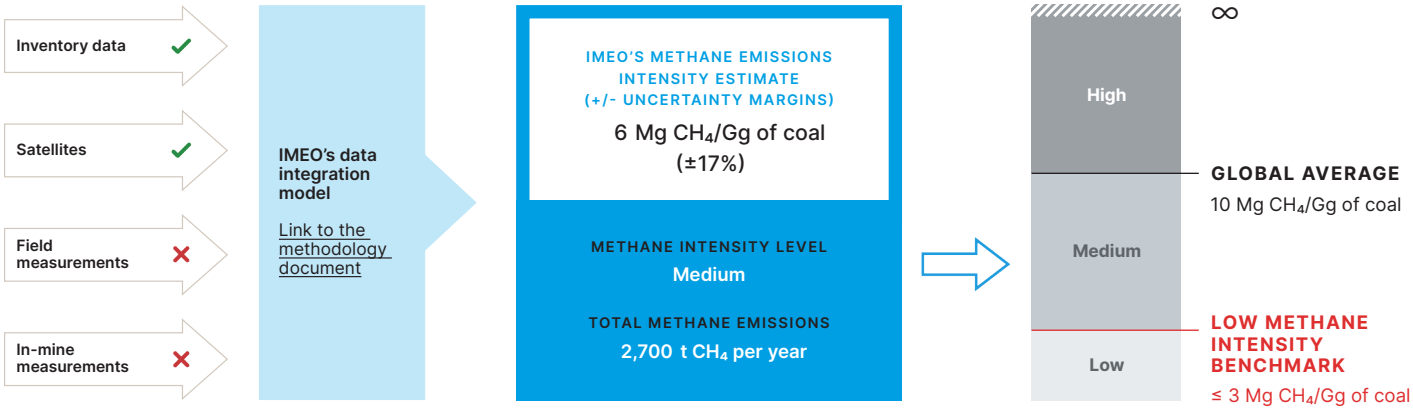
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.4 Mtpa (2023)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Horse_Creek_Eagle_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

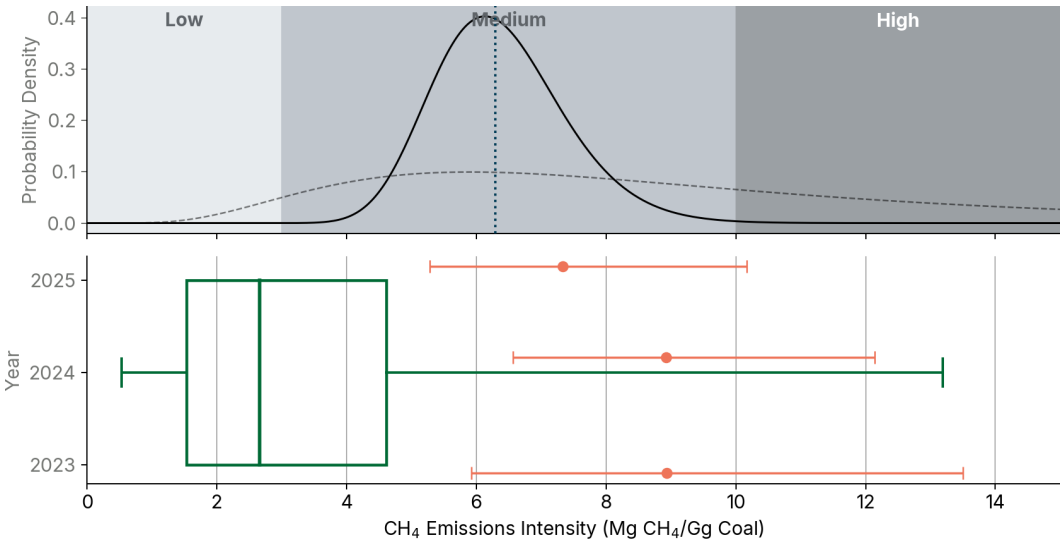
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR HORSE CREEK EAGLE COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	9	31%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	8	34%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2023	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2023	10	43%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2023	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2023	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2023	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	0	283%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	2	396%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	0	396%	Mg CH_4/Gg Coal	Tier-2-02	US NIR Report	Link
Inventory	2024	1	537%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

ALMA NO. 1 COAL MINE

LOCATION (LAT., LON.) 37.7514, -82.3097

GEM MINE ID
M3372

MINING TYPE
Underground

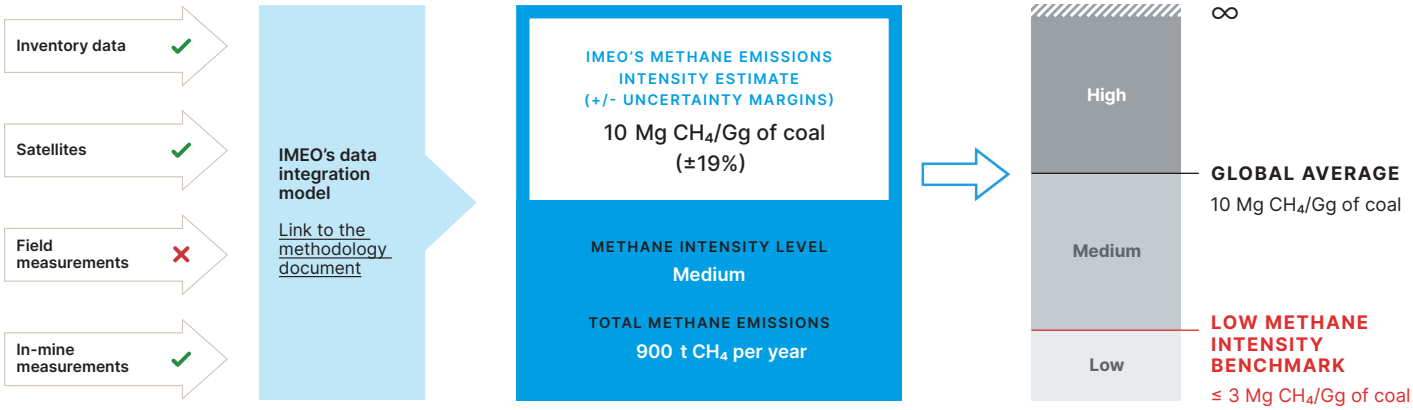
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Alma_No._1_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

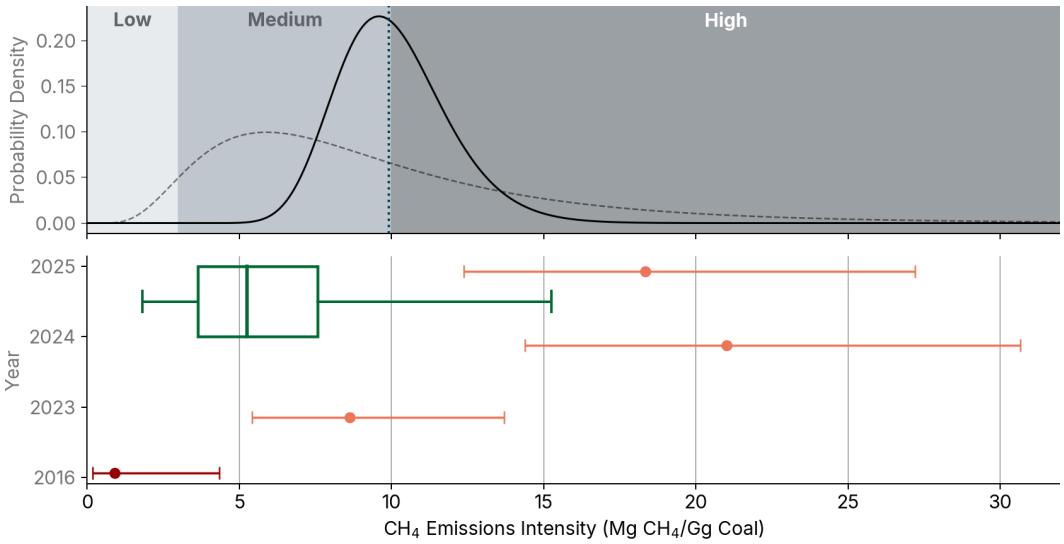
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR ALMA NO. 1 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	23	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	20	41%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	10	49%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
In-mine measurements (Company reporting)	2016	0	328%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link

Note: Coal grade reclassified by IMEO from unknown to metallurgical.

UNITED STATES

BLACK EAGLE COAL MINE

LOCATION (LAT., LON.) 37.9569, -81.5397

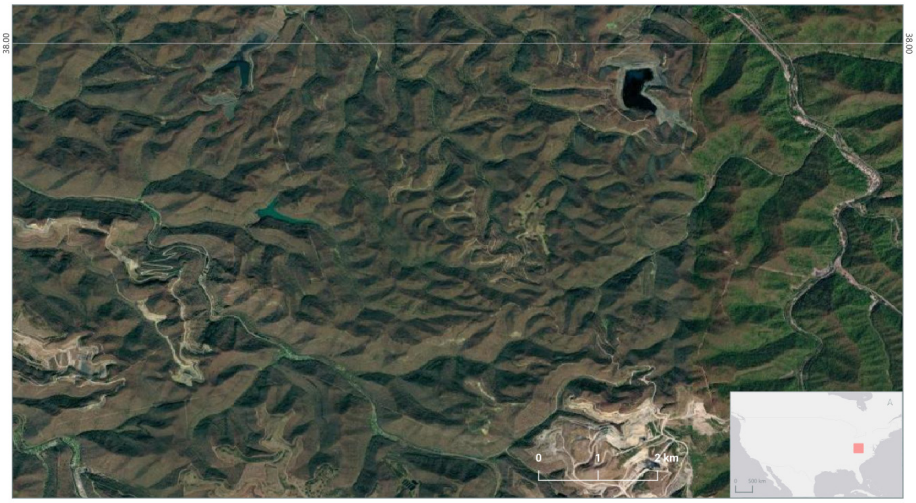
GEM MINE ID
M3402

MINING TYPE
Underground

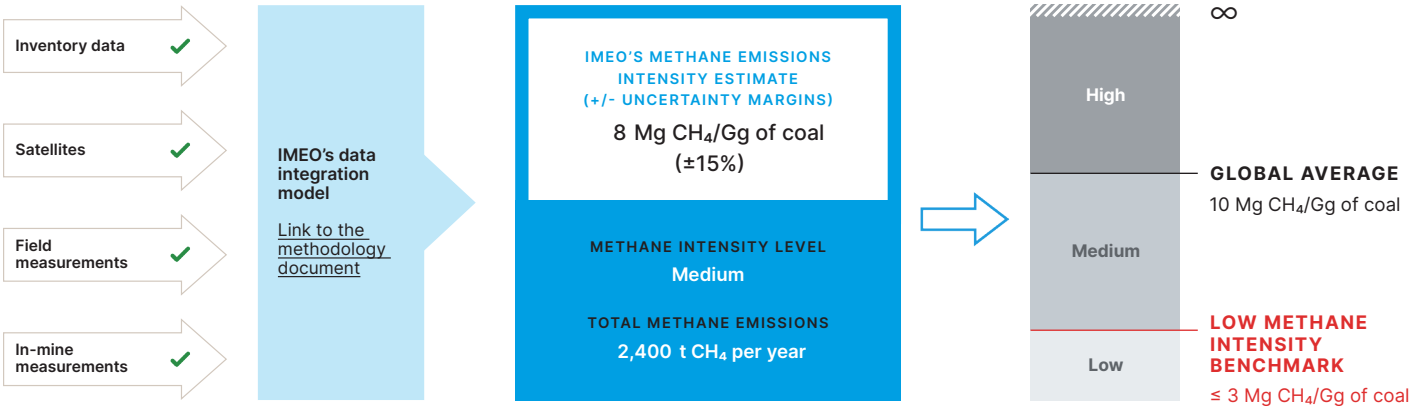
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.3 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Black_Eagle_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

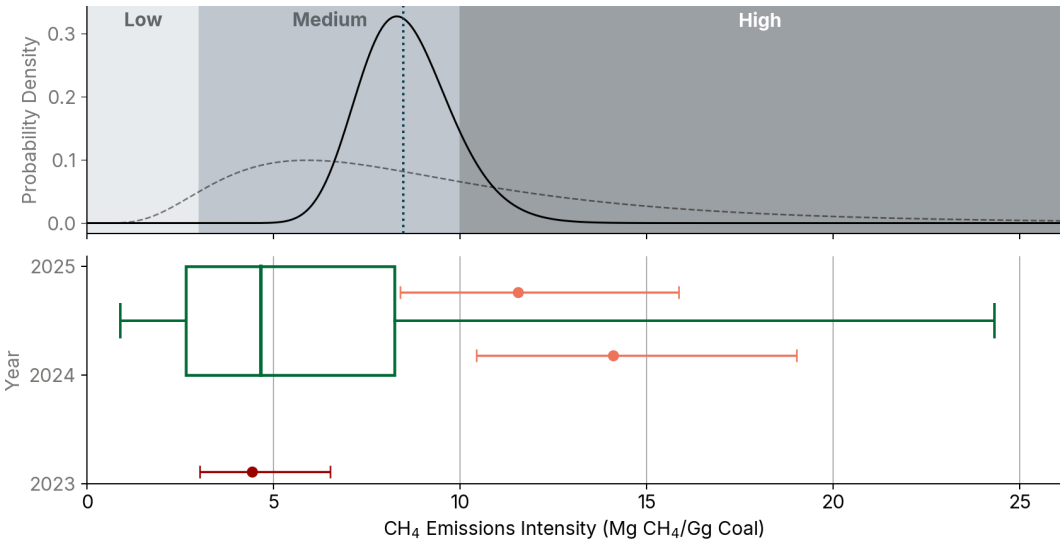
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR BLACK EAGLE COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	15	31%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	12	33%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2023	5	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	373%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	530%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

Notes: Field measurement data withheld due to confidentiality considerations. Coal grade reclassified by IMEO from unkown to metallurgical.

UNITED STATES

BERWIND COAL MINE

LOCATION (LAT., LON.) 37.37, -81.65

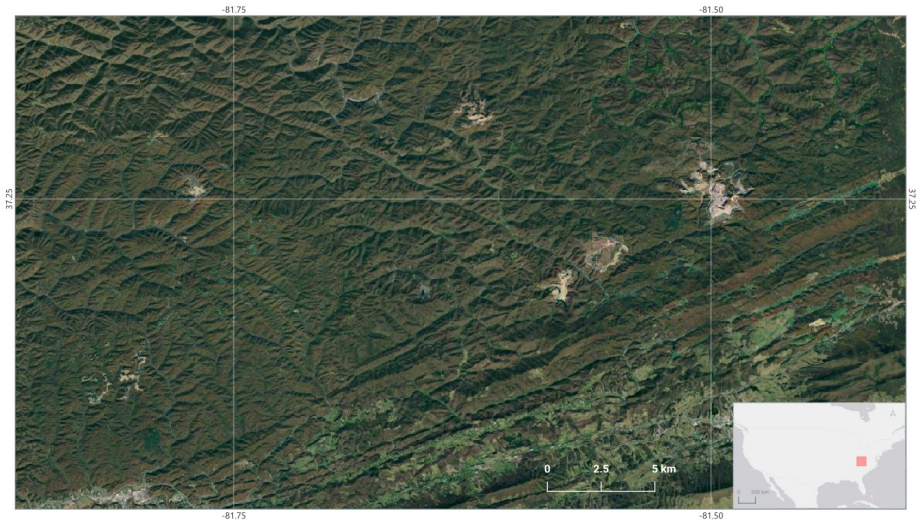
GEM MINE ID
M2908

MINING TYPE
Underground

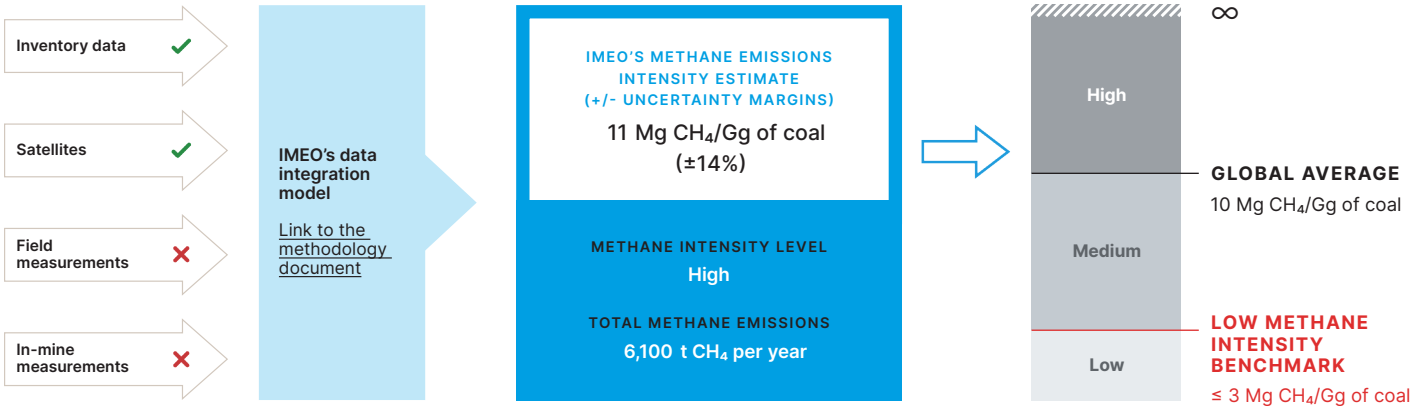
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.5 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Berwind_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

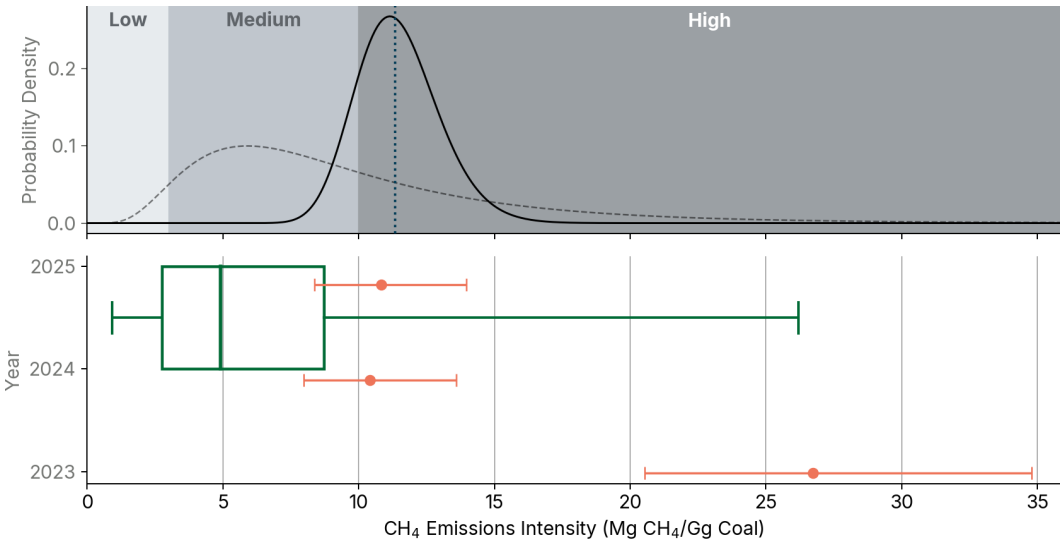
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR BERWIND COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	11	26%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	28	27%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	11	27%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	382%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	544%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

UNITED STATES

BLUE CREEK NO. 1 COAL MINE

LOCATION (LAT., LON.) 38.3526, -81.4589

GEM MINE ID
M1599

MINING TYPE
Underground

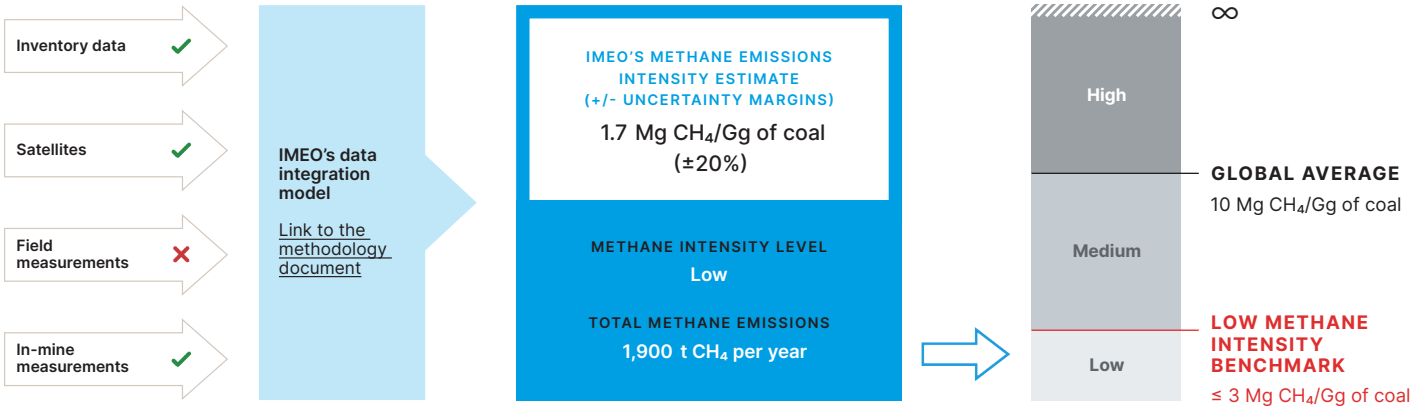
COAL GRADE
Thermal

ESTIMATED PRODUCTION
1.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Blue_Creek_No._1_UG_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

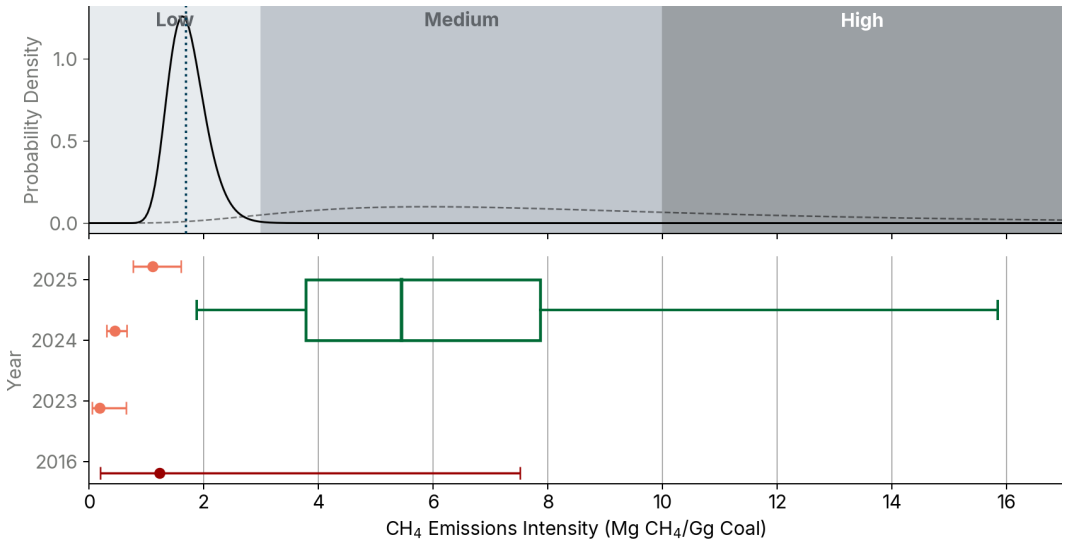
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR BLUE CREEK NO. 1 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	1.2	38%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	0.5	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Satellite	2023	0.4	189%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
In-mine measurements (Company reporting)	2016	10	507%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link

UNITED STATES

SHOAL CREEK COAL MINE

LOCATION (LAT., LON.) 33.4869, -87.2656

GEM MINE ID
M1068

MINING TYPE
Underground

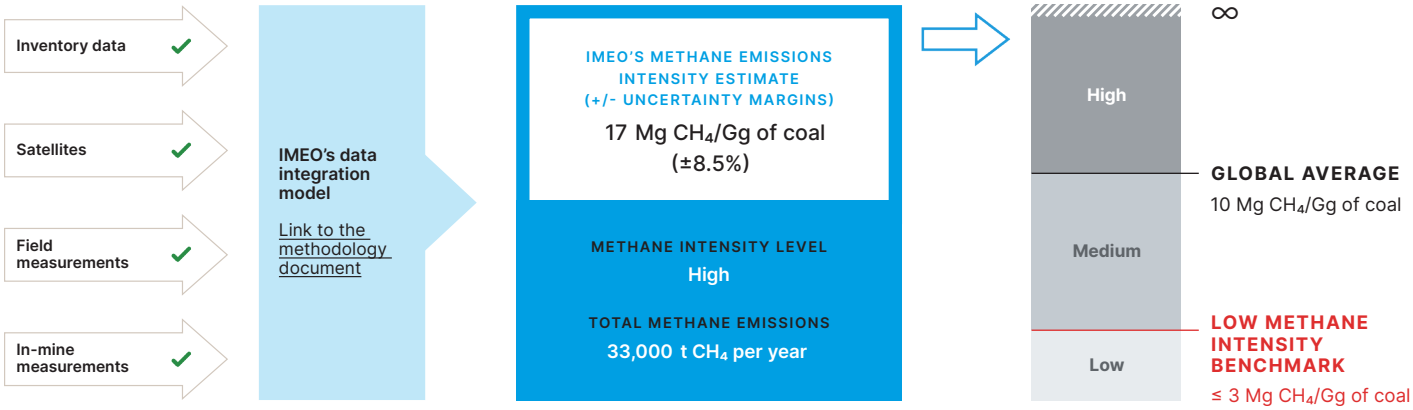
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
1.9 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Shoal_Creek_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

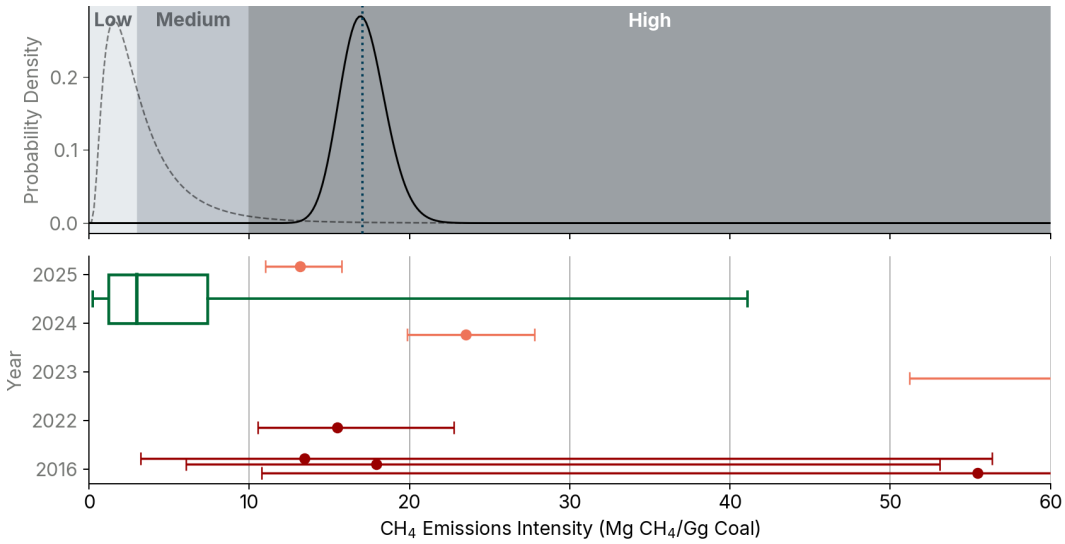
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR SHOAL CREEK COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	24	17%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2023	60	17%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	13	18%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2022	17	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2022	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
In-mine measurements (Company reporting)	2016	30	150%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
In-mine measurements (Company reporting)	2016	40	261%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
In-mine measurements (Company reporting)	2016	200	369%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link
Inventory	2024	10	436%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	607%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	665%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	0	884%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link

Note: Field measurement data withheld due to confidentiality considerations.

UNITED STATES

GATEWAY EAGLE COAL MINE

LOCATION (LAT., LON.) 37.8424, -81.6307

GEM MINE ID
M2782

MINING TYPE
Underground

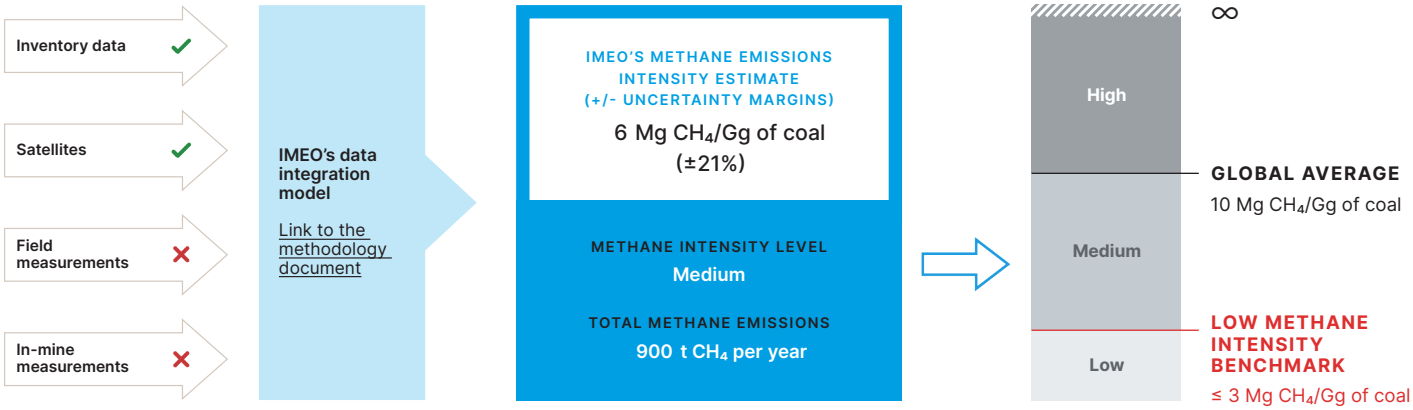
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Gateway_Eagle_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

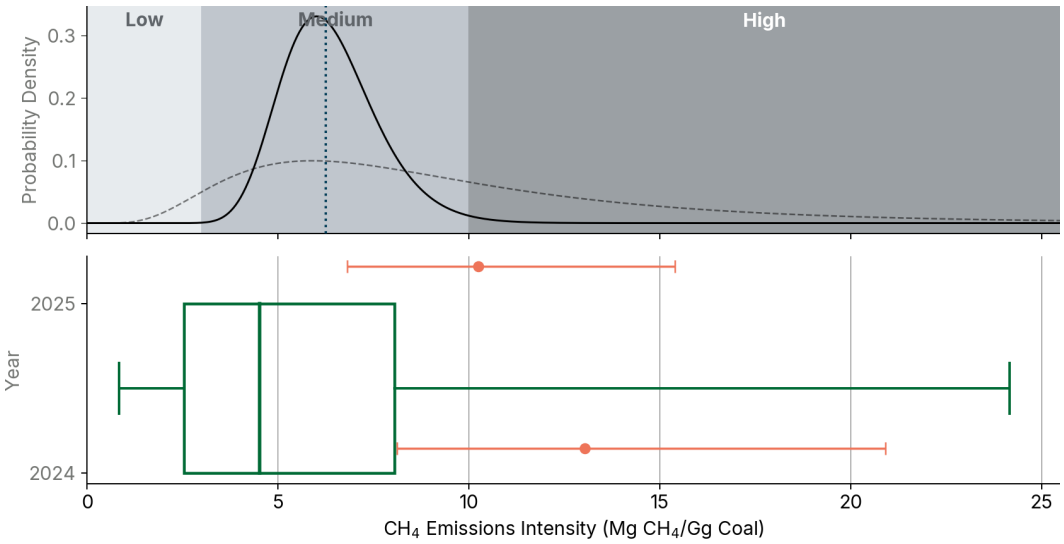
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR GATEWAY EAGLE COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	11	43%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	15	50%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	282%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	354%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	373%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	395%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	428%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	483%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	503%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	530%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	535%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

MAPLE EAGLE NO. 1 COAL MINE

LOCATION (LAT., LON.) 38.0831, -81.3328

GEM MINE ID
M2605

MINING TYPE
Underground

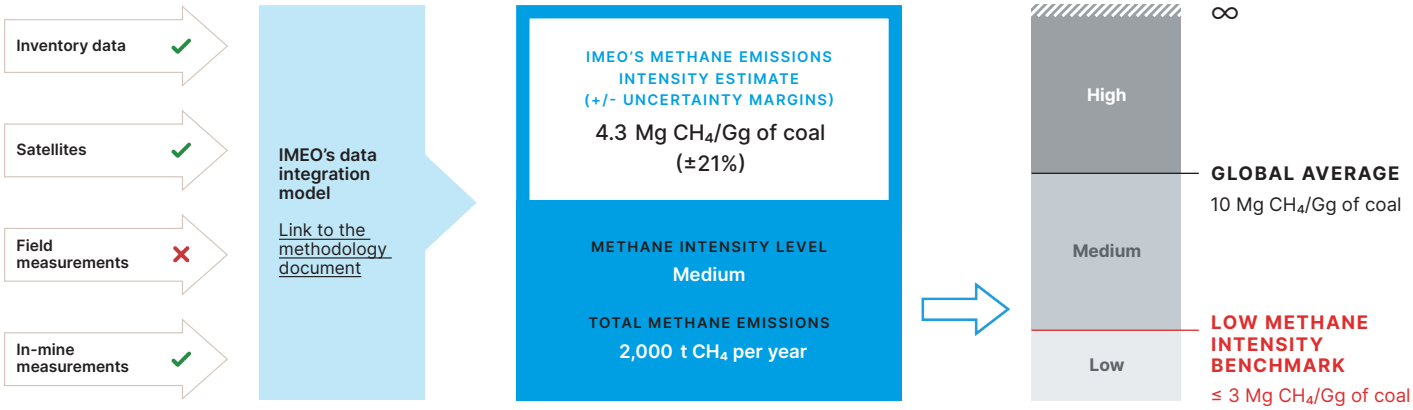
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.5 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Maple_Eagle_No._1_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

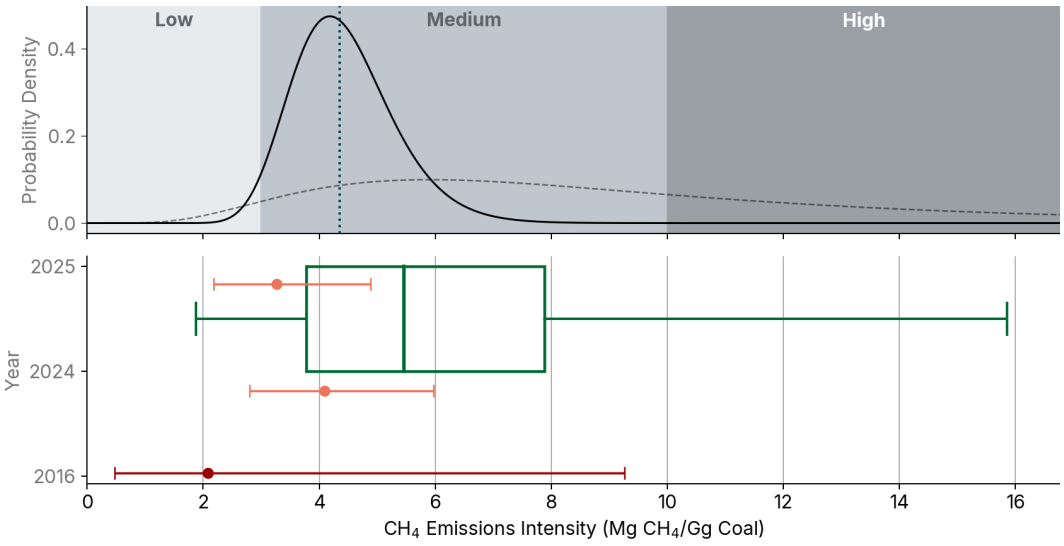
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR MAPLE EAGLE NO. 1 COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2024	4	39%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	4	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
In-mine measurements (Company reporting)	2016	10	287%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA 2019	Link

UNITED STATES

EAGLE SEAM DEEP COAL MINE

LOCATION (LAT., LON.) 37.71, -81.7491

GEM MINE ID
M1608

MINING TYPE
Underground

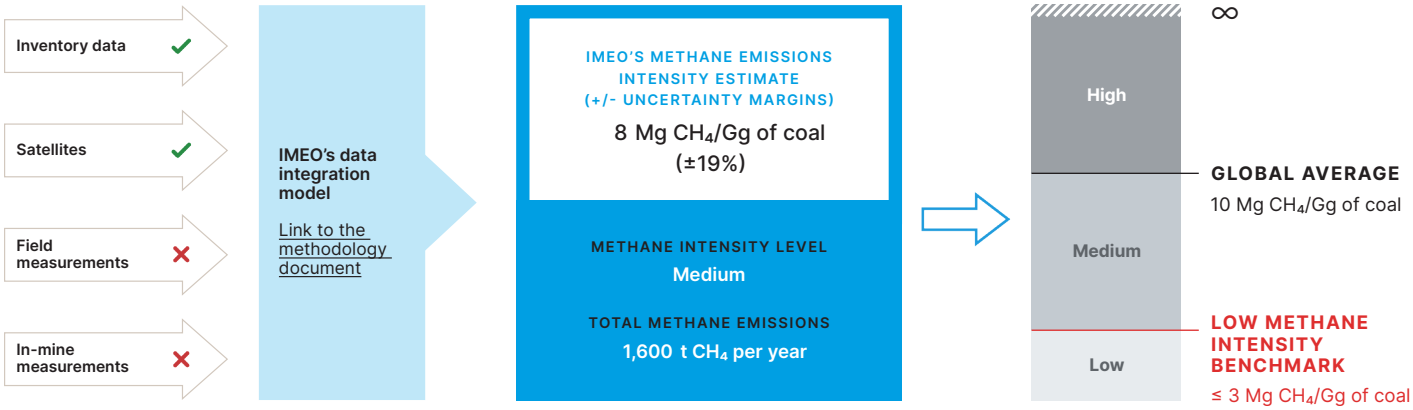
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.2 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Eagle_Seam_Deep_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

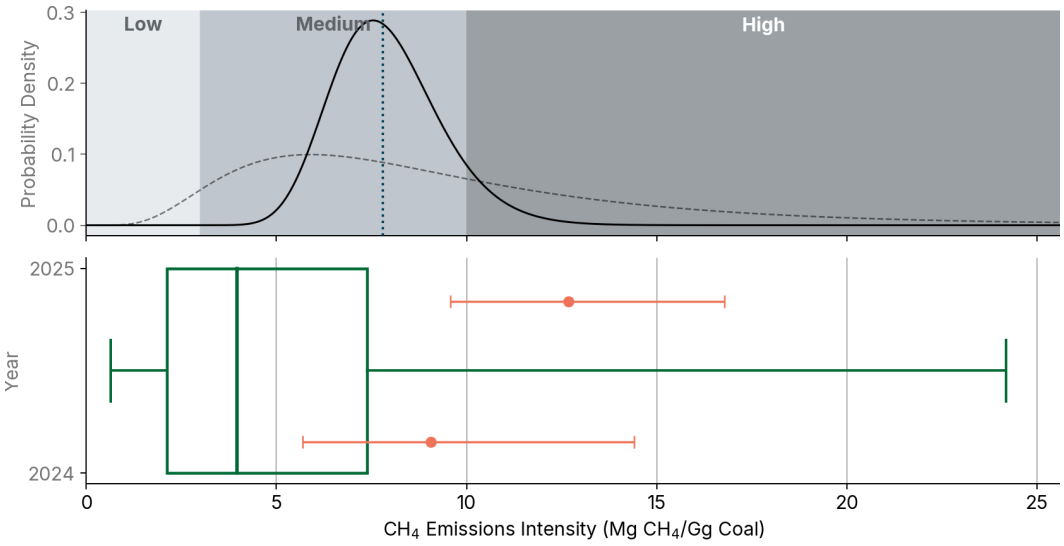
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR EAGLE SEAM DEEP COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	13	29%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2024	10	49%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link
Inventory	2024	10	457%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	477%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	483%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	578%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link

UNITED STATES

LONGVIEW COAL MINE

LOCATION (LAT., LON.) 39.1216, -79.9692

GEM MINE ID
M1040

MINING TYPE
Underground

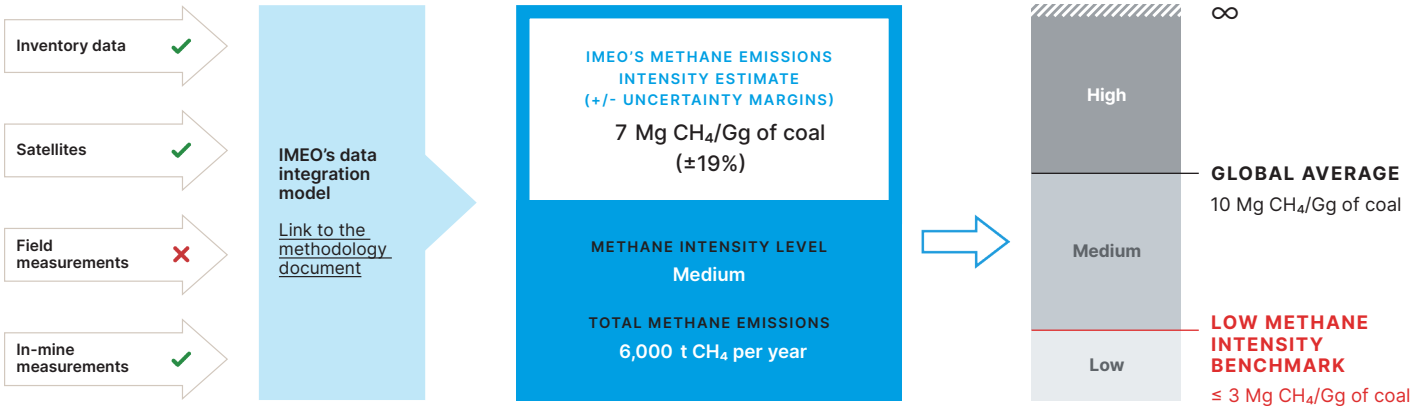
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.8 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Longview_coal_mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

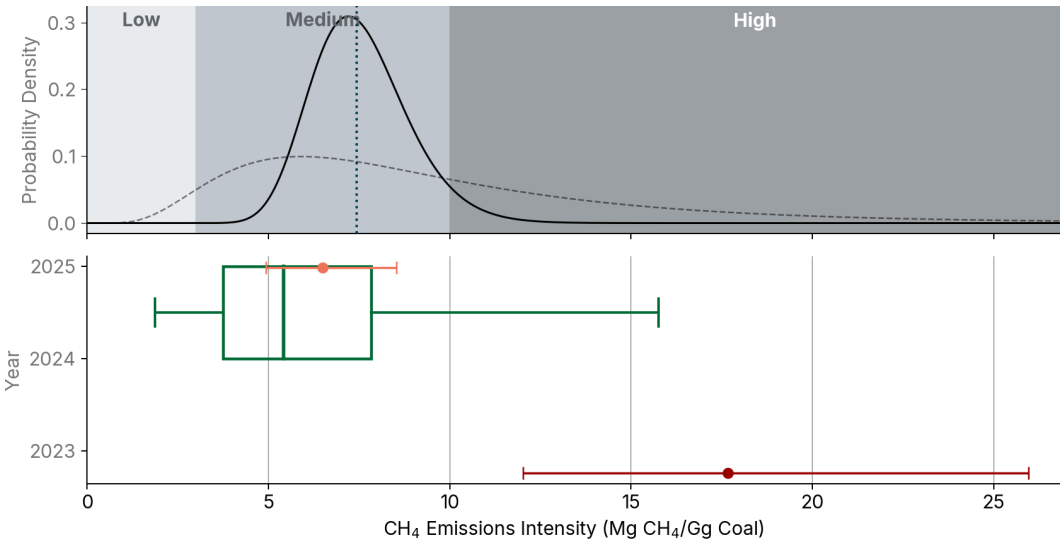
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR LONGVIEW COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	7	28%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
In-mine measurements (Company reporting)	2023	19	40%	Mg CH_4/Gg Coal	Tier-3 / In-mine	US EPA	Link
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

CASSELMAN COAL MINE

LOCATION (LAT., LON.) 39.6574, -79.2022

GEM MINE ID
M2871

MINING TYPE
Underground

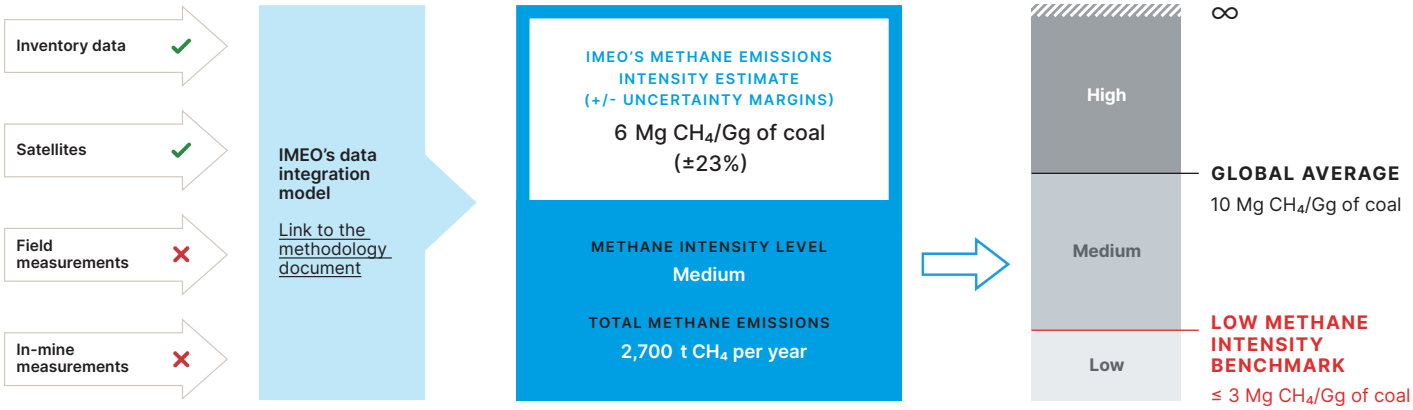
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.5 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Casselman_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

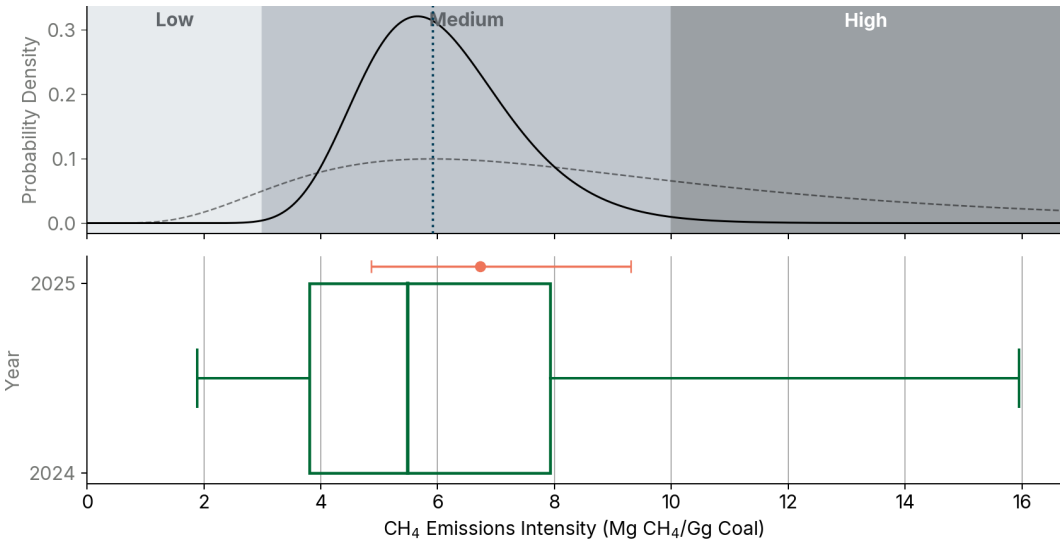
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR CASSELMAN COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Satellite	2025	7	33%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

UNITED STATES

HARMONY COAL MINE

LOCATION (LAT., LON.) 40.7792, -78.7114

GEM MINE ID
M2785

MINING TYPE
Underground

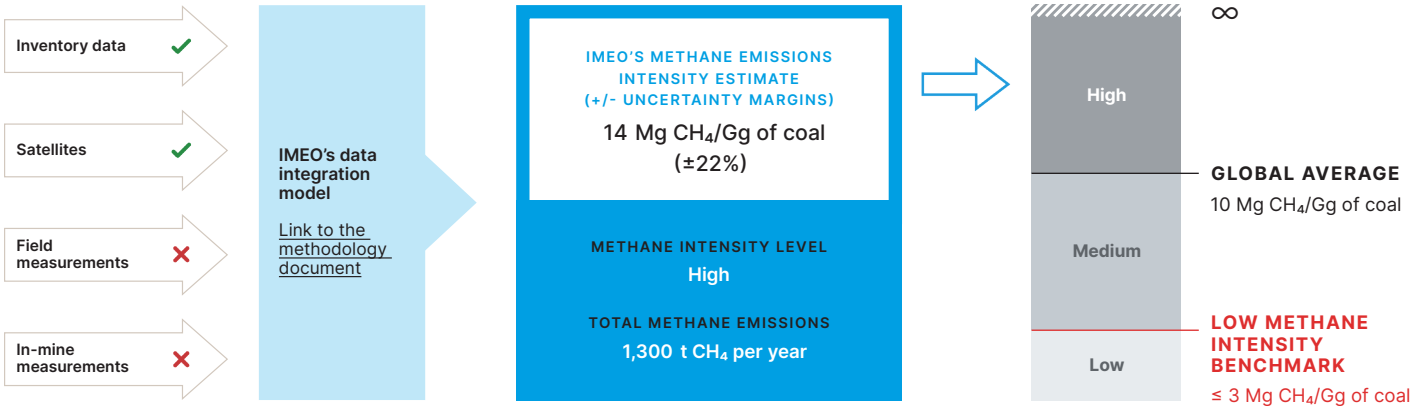
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.1 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Harmony_Coal_Mine



METHANE EMISSION PROFILE



The Steel Methane Programme (SMP), managed by the UN Environment Programme's International Methane Emissions Observatory (IMEO), is a global initiative to make methane emissions from coal measurable, transparent and actionable across the steel supply chain.

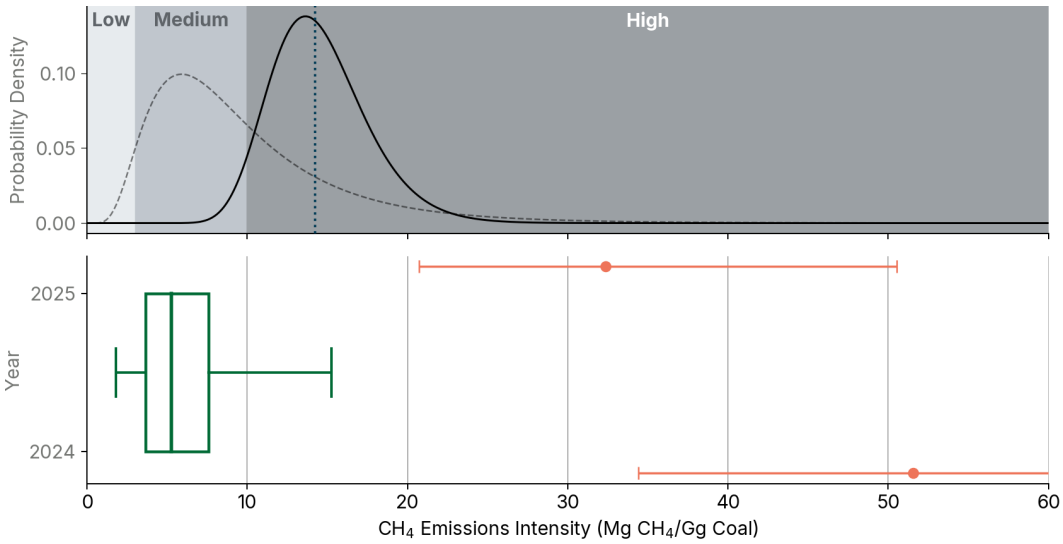
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR HARMONY COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2024	60	42%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2025	40	47%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link

Note: Coal grade reclassified by IMEO from unknown to metallurgical.

UNITED STATES

PARKWOOD COAL MINE

LOCATION (LAT., LON.) 40.6611, -79.3281

GEM MINE ID
M2714

MINING TYPE
Underground

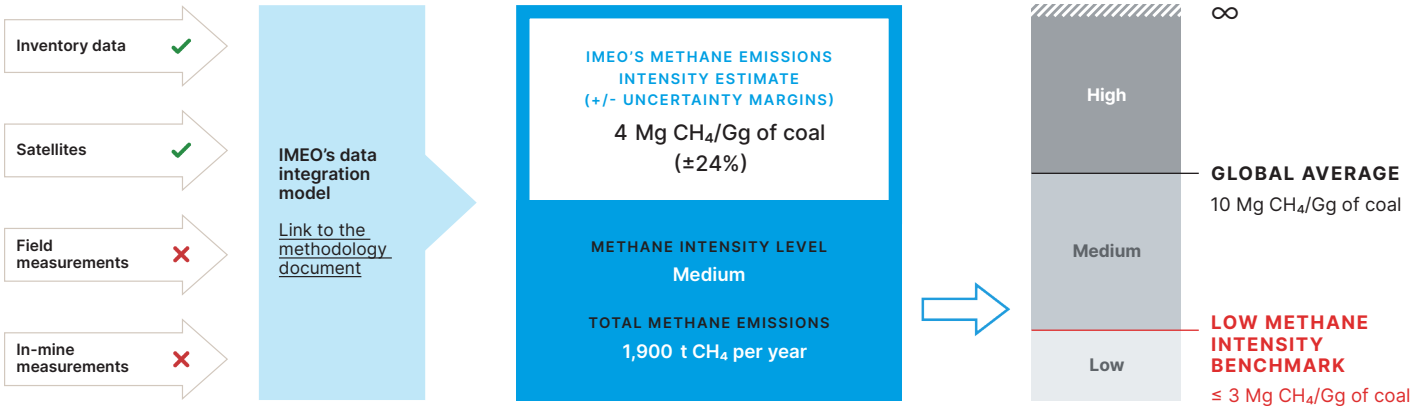
COAL GRADE
Metallurgical

ESTIMATED PRODUCTION
0.4 Mtpa (2024)

ADDITIONAL MINE INFORMATION
https://www.gem.wiki/Parkwood_Coal_Mine



METHANE EMISSION PROFILE



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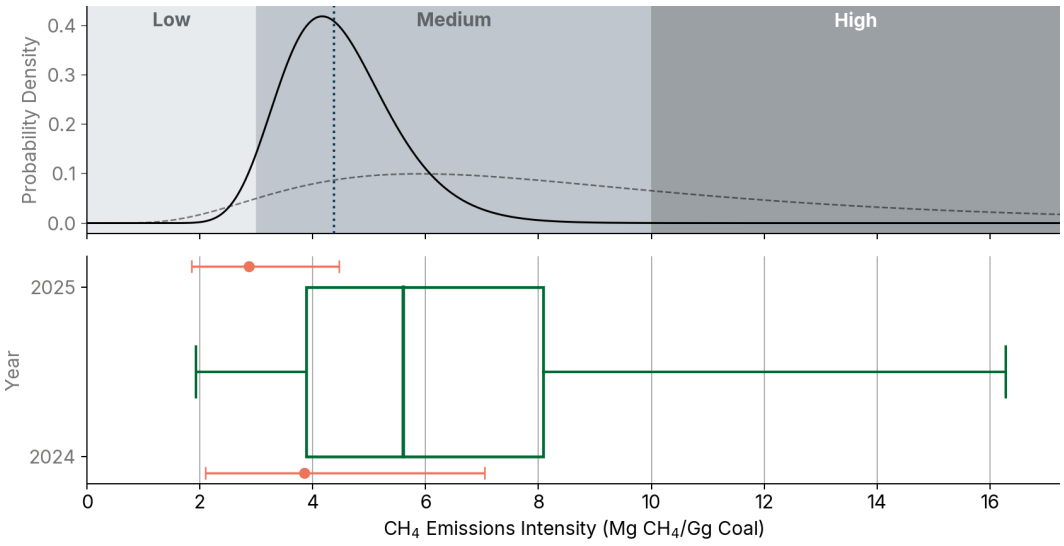
SMP increases methane transparency through its Coal Methane Database, hosted on IMEO's Eye on Methane data platform.

All emissions values presented in this document are model-derived estimates based on publicly available data sources, complemented by a limited set of third-party satellite data. They are subject to uncertainty and should not be interpreted as exact measurements or definitive representations of emissions at individual mines or companies. They are not a compliance or performance rating and are not a recommendation in view of procurement decisions.

More information

METHANE EMISSIONS DATA INPUTS

RESULTS OF IMEO'S DATA INTEGRATION MODEL FOR PARKWOOD COAL MINE



LEGEND

- Original Assumption (Prior)
- Results Conclusion (Posterior)
- IMEO's Estimated Methane Emissions Intensity (Median)

INPUTS

- Inventory Data
- Satellites
- Field Measurements
- In-mine Measurements

Read the methodology

Download the full data set

TOP PUBLIC DATA INPUTS (WEIGHTED)

Data beyond top 15 data sources is available in the full data set.

Inventory inputs may appear more than once due to similarity indexing used to incorporate comparable data points into the model. See methodology for further detail.

Data Approach	Reporting Period	Value	Uncertainty (%)	Unit	Data Category	Source Category	
Inventory	2024	6	40%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Satellite	2025	3	46%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Satellite	2024	5	66%	Mg CH_4/Gg Coal	Satellite	Sub mine level quantification	
Inventory	2024	6	127%	Mg CH_4/Gg Coal	Tier-2-03	US NIR Report	Link
Inventory	2024	10	162%	Mg CH_4/Gg Coal	Tier-2-01	GEM Tracker 2025	Link
Inventory	2024	10	206%	Mg CH_4/Gg Coal	Tier-1	IPCC 2006 guidelines	Link