METCOAL METHANE
PARTNERSHIP

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International Methane Emissions Observatory
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Methane emissions from energy production

Methane emissions from energy sector
Total: 123MT

- Oil: 43%
- Gas: 40%
- Coal (Thermal): 28%
- Coal (Coking): 12%

UNEP's IMEO: action centered around the agent of change

The International Methane Emissions Observatory exists to provide open, reliable, and actionable data to the individuals that can act to reduce methane emissions.

From data to action
Low carbon alternatives are insufficiently mature to replace metcoal in steel production at scale.
Thermal coal use has a plethora of clean alternatives.

Demand for steel and metcoal will persist
IEA's most aggressive decarbonisation scenario sees only a 30% drop in metcoal production by 2030. For thermal coal the drop is starker, standing at 50%.

Metcoal has high value supply chain
Metcoal is typically twice as expensive as thermal coal.

The UN position on thermal coal is clear: thermal needs to be phased out
in OECD nations by 2030 and by 2040 in other countries. The UN position on metallurgical coal is not explicit.
Coal Mine Methane averages 1/3 of steel climate footprint
MMP Principles

Partnership

Reporting Commitments
Member companies commit to reach level 5 reporting for their sites within 3 years from joining the partnership for operated underground sites. For non-operated sites and all surface mines this is 5 years.

2030 Performance Targets
Achieving a 60-75% reduction of methane emissions per unit of marketed coal down to a level of 1-3 tonnes of methane per kilotonne of marketed coal.

Science Studies
Member companies are supported throughout the journey from level 1 to level 5 reporting and can partner in IMEO funded science studies that help to define best reporting methods.
Reporting: from emission factors to empirical measurements

Level 1 – per aggregated source categories | country level

Level 2 – per aggregated source categories using available source-specific activity data and regional or country-specific emission factors | asset level

Level 3 – per detailed source type using available source-specific activity factors and generic emission factors for a given source type derived from existing literature, engineering calculations, or source-level measurements | source level

Level 4 – per detailed source type using source-specific activity factors and source-specific emission factors established with empirical measurements, taken at an appropriate sampling frequency | source level

Level 5 – Emissions reported similarly to Level 4, but with the addition of reconciliation with site-level (top down) measurements

Progression to the next reporting level represents a reduced uncertainty in the reported emissions figures. Technical guidance will be provided to ensure that requirements/criteria for meeting each of the 5 levels is clear and science-based.

UNEP’s IMEO will provide support towards meeting reporting requirements
Application of Gauss’s theorem to quantify localized surface emissions from airborne measurements of wind and trace gases

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The future of Metcoal Methane Partnership

Current Status
Draft framework under consideration by the 4 foundational companies

Next steps
Joint creation of Technical Guidance Documents

Contact Us
Open to all metcoal companies co-designing the partnership.
Thank you