OIL AND GAS METHANE PARTNERSHIP (OGMP 2.0) MODULE

PRESENTATION 2 – The OGMP 2.0 reporting levels

TO UNDERSTAND HOW TO REACH THE DIFFERENT REPORTING LEVELS OF THE OGMP 2.0 FRAMEWORK

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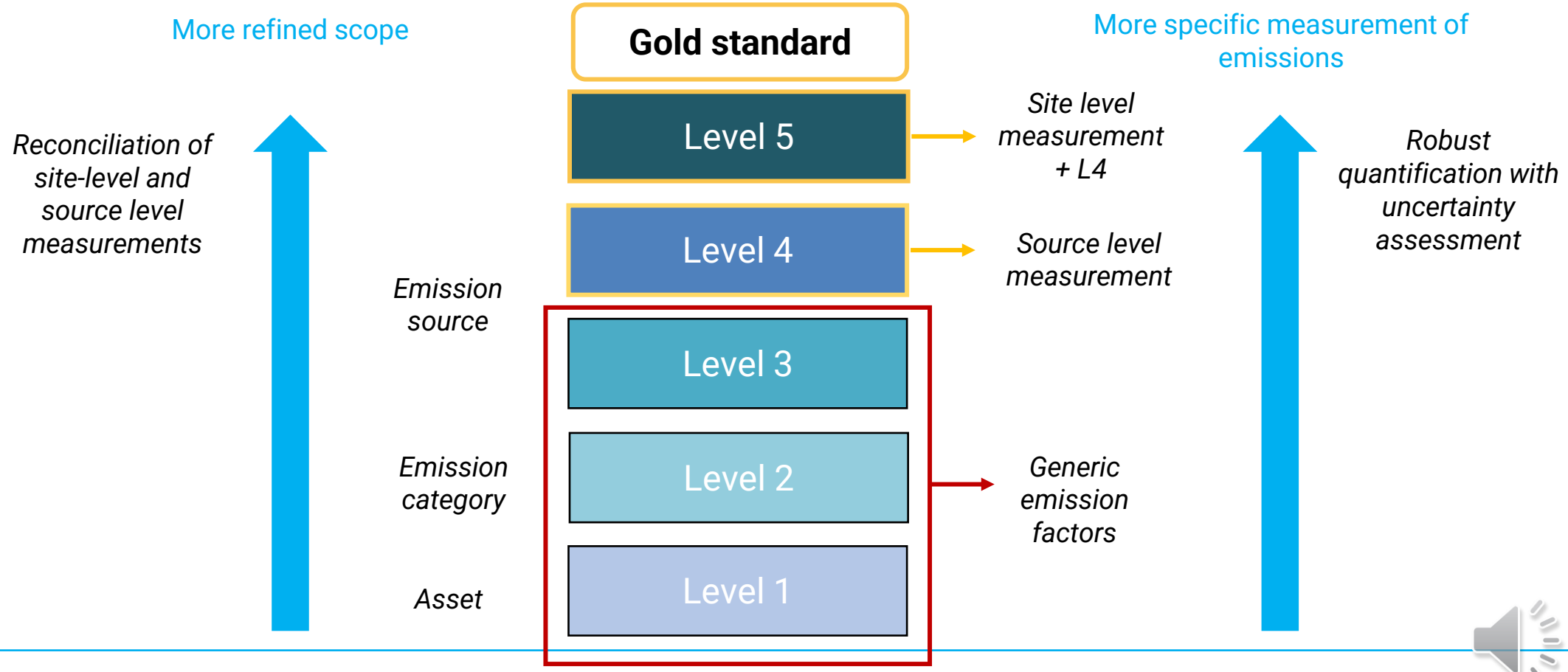
The 5 levels: a “common language” for reporting emissions



Level 1: generic estimate at country/venture/asset/facility scale

Asset/facility scale

Emissions =

Activity factor	×	**Emission factor**
At asset/country/ facility level		Generic

Example:

Emissions =	Volume of gas produced	×	Average emissions per volume of gas in the country

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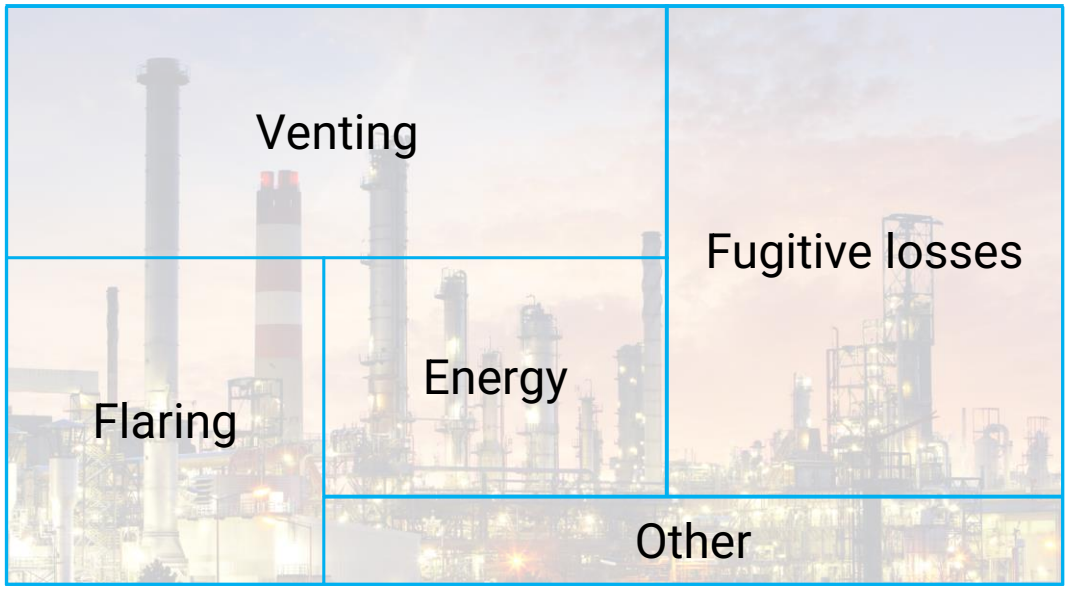
Level 2: generic estimates at emission category level

For upstream*:



Emission category scale

Estimates based on generic emission factors or other generic calculation, typically:

Emissions = **Activity factor** At asset/country or emission category level × **Emission factor** Generic but specific to the emission category

Example:

Emissions = Volume of gas produced × Average emissions per volume of gas in the country × Share of emissions attributed to vents (IPCC factor)

* For mid-downstream: Fugitive losses, Venting and Incomplete combustion

Link to “Level 1 and Level 2 TGD”: https://www.ogmpartnership.com/ogmp-technical-guidance-document-level-1-and-2

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Level 3: generic estimates at emission source level

Emission source scale

Emissions = **Activity factor** At emission source level **✖** **Emission factor** Source-level generic emission factors

14 core emission sources:
- Gas well hydraulic fracturing
- Oil well casinghead
- Purging and venting
- Incidents, energency stops and malfunctions
- Liquids unloading
- Reciprocating compessors
- Leaks
- Incomplete combustion
- Unstabilized liquid storage tanks
- Leaks and permeation from underground pipes
- Pneumatic controllers, pumps, shutoff valves and control instruments
- Centrifugal Compressors
- Glycol Dehydrators
- Flare Efficiency

Example:

Emissions = Hours of operation of the compressor × Emissions per hour and per compressor for the specific type of compressor

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Level 4: specific estimate at emission source level

Emission source scale

Emissions =

Measurement-based emission factors
(based on a representative sample)

Results of engineering calculations

Results of process simulation

other methods...
Guidance on accepted methodologies is given source by source in the TGDs

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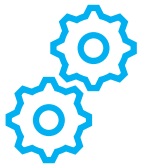
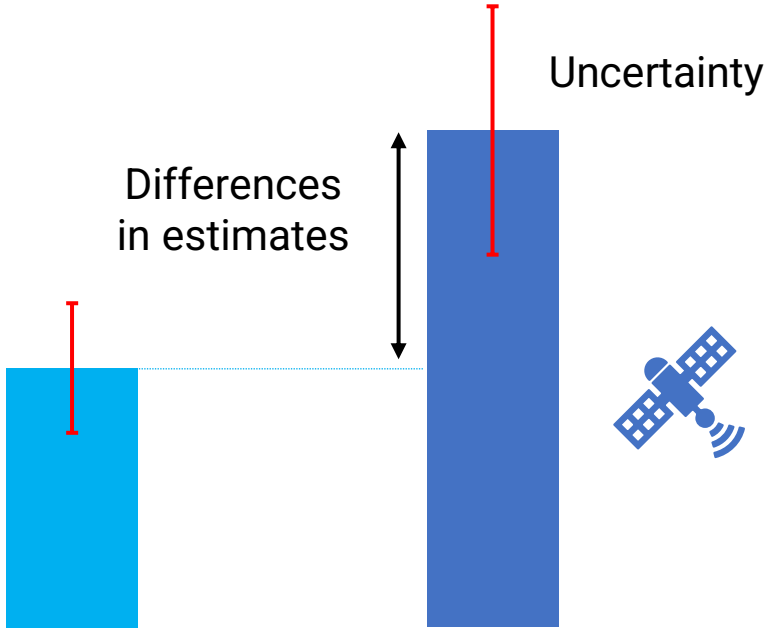
Level 5: reconciliation between site-level and source level estimates





Statistical analysis to **reconcile data**:

- Determine the best, **consolidated emission estimate** for the asset
- Determine the associated **uncertainty**
- **Understand any discrepancies** between the estimates to improve reporting
- Include **all potential sources** in the mitigation strategy

- Findings can be extrapolated to similar facilities with similar conditions.
- Level 5 required on most assets to reach the gold standard.
- Guidance can be found in «Reconciliation and Uncertainty» document

Link to «Reconciliation and Uncertainty» https://www.ogmpartnership.com/uncertainty-and-reconciliation-guidance

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Moving through the reporting levels to improve the quality, specificity and granularity of methane emissions data through measurements.

Once companies successfully achieve Level 5, they are recognized as Gold Standard Reporting.

Thanks for your attention.

Training material developed by: CARBON LIMITS

In collaboration with the **UNEP OGMP 2.0 Team**

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