

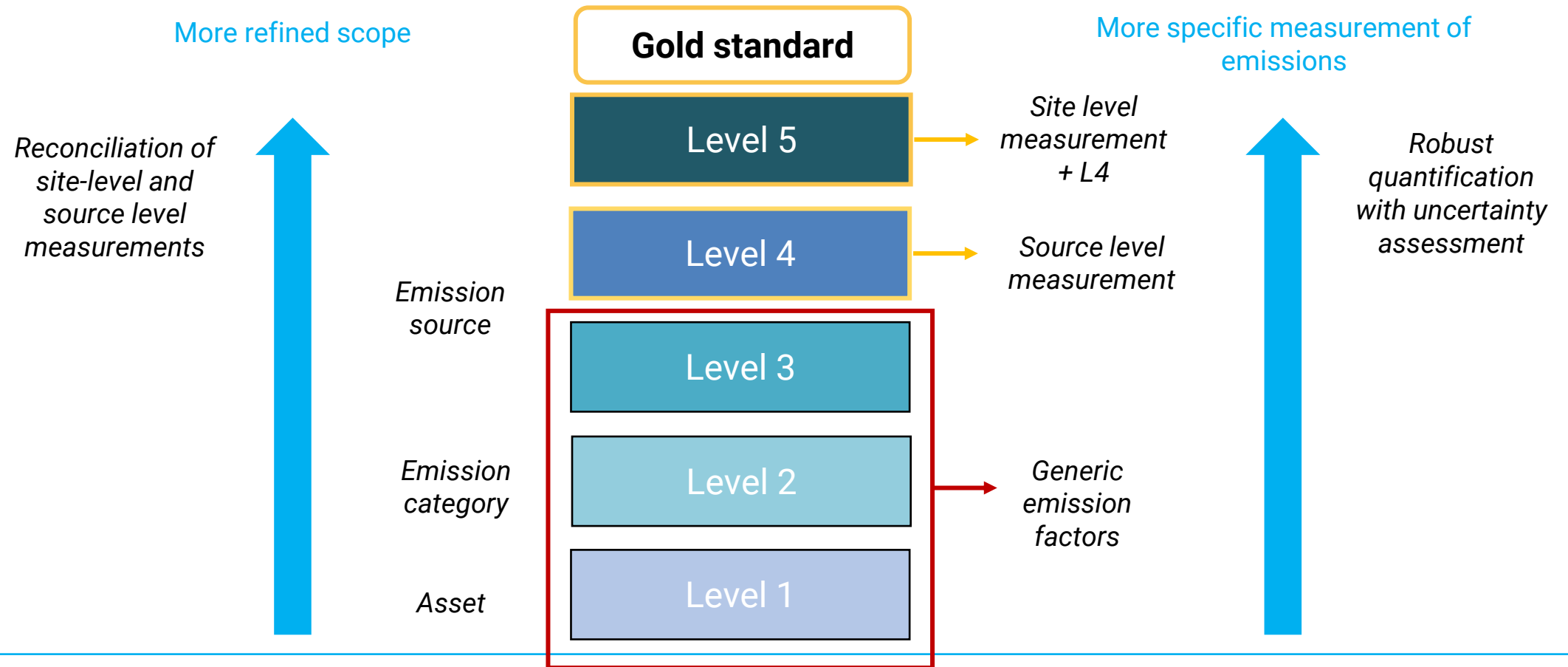
OIL AND GAS METHANE PARTNERSHIP (OGMP 2.0) MODULE

PRESENTATION 2 – The OGMP 2.0 reporting levels



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

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
At asset/country/
facility level

×

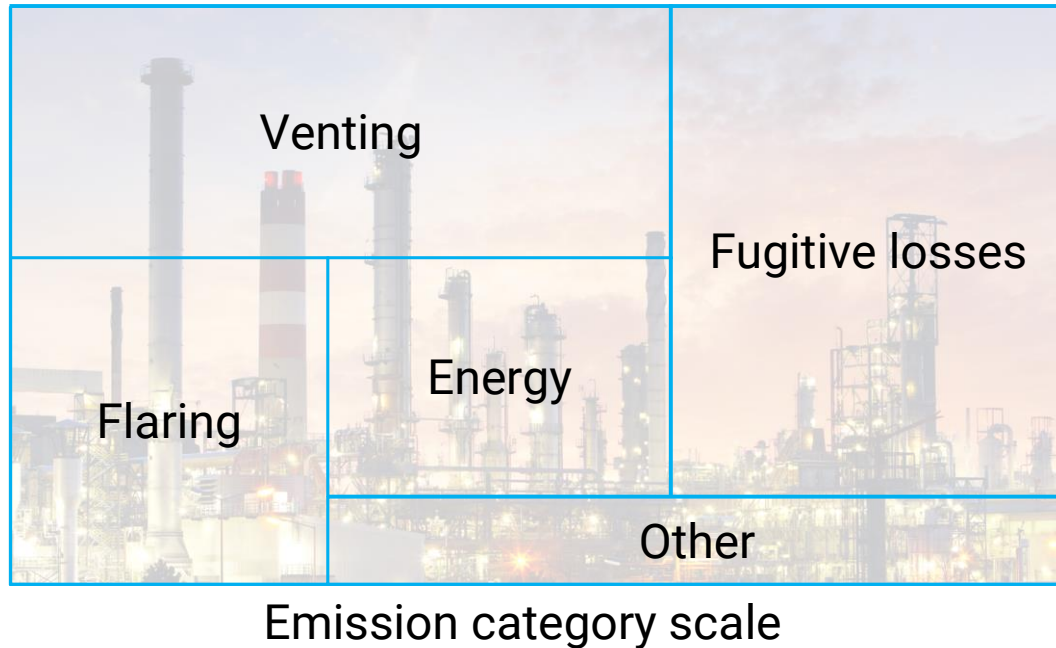
Emission factor
Generic

Example:

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

Level 2: generic estimates at emission category level

For upstream*:



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

$$\text{Emissions} = \text{Activity factor} \times \text{Emission factor}$$

At asset/country or emission category level Generic but specific to the emission category

Example:

$$\text{Emissions} = \text{Volume of gas produced} \times \text{Average emissions per volume of gas in the country} \times \text{Share of emissions attributed to vents (IPCC factor)}$$

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

Level 3: generic estimates at emission source level



Emission source scale

$$\text{Emissions} = \text{Activity factor} \times \text{Emission factor}$$

At emission source level Source-level generic emission factors

Example:

$$\text{Emissions} = \text{Hours of operation of the compressor} \times \text{Emissions per hour and per compressor for the specific type of compressor}$$

- 14 core emission sources:**
- Gas well hydraulic fracturing
 - Oil well casinghead
 - Purging and venting
 - Incidents, emergency stops and malfunctions
 - Liquids unloading
 - Reciprocating compressors
 - 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

Level 4: specific estimate at emission source level



Emission source scale



Measurement-based emission factors

(based on a representative sample)

Emissions =



Results of engineering calculations

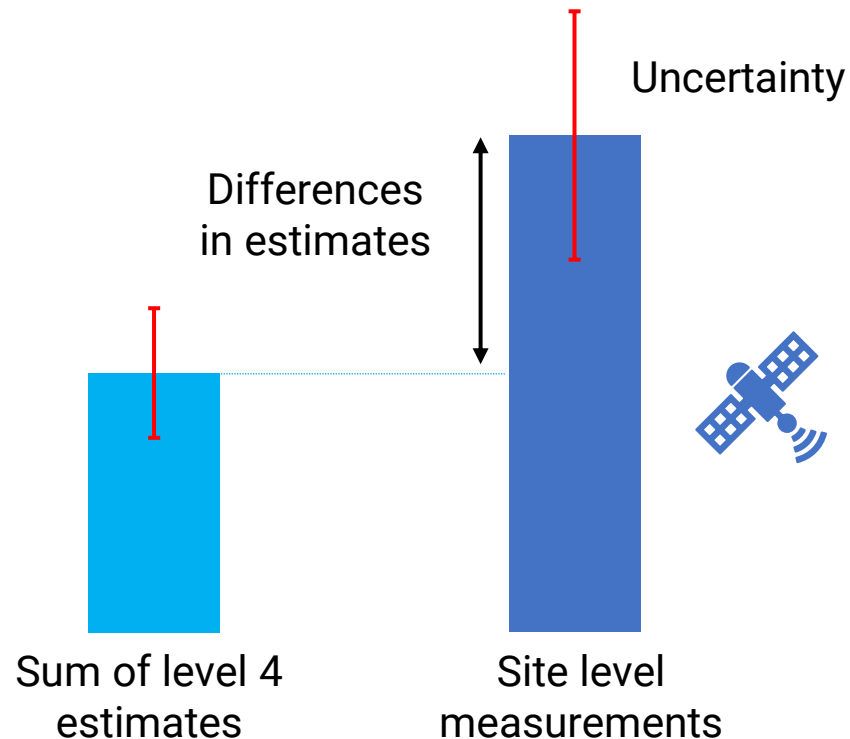
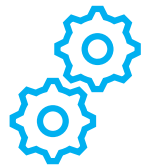


Results of process simulation

other methods...

Guidance on accepted methodologies is given source by source in the TGDs

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>

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**

