

TABLE OF CONTENTS

Company Description..... 2

Company Target (Elements 1-3)..... 2

Operated Assets 4

 Commitment to Reach L4/L5 (Element 4) 4

 Credible and Explicit Path for Operated Assets (Element 5)..... 7

 Plans for L4 10

 Plans for site level measurement and reconciliation 10

Non-operated assets..... 13

 List of non-operated assets, if applicable (Element 6) 13

 Commitment to work with non-operated ventures - Demonstrated reasonable endeavors (Element 7)
 13

 Explicit and credible path for non-operated assets, listing milestones for each asset, if applicable
 (Element 8) 13

COMPANY DESCRIPTION

A description of the company should be included, as will be included in the company fact sheet in the annual report.¹

COMPANY TARGET (ELEMENTS 1-3)

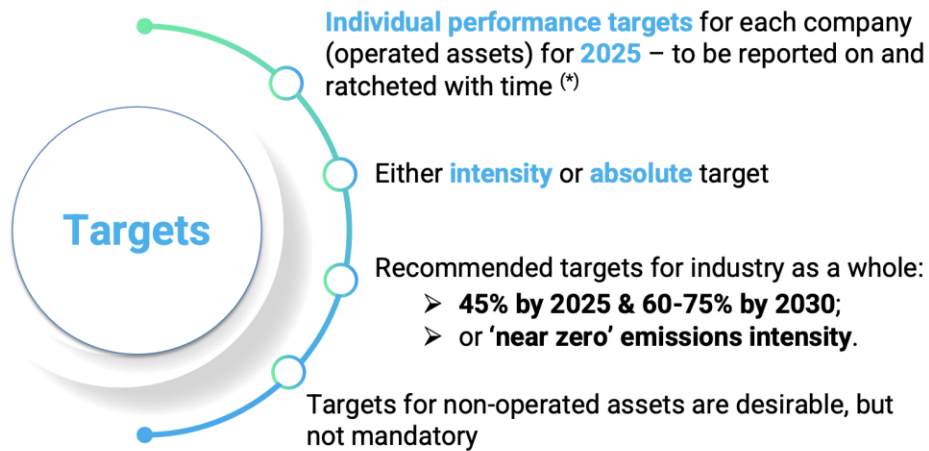
Describe company target here (Element 1). The company target should be company wide and on either an intensity or absolute basis. For intensity based targets, there is no baseline year (not applicable). For absolute targets, the baseline year must be defined (Element 2). For members that signed the MOU in 2022 or earlier, targets must be by 2025 (Element 3).

Anticipated guidance for 2023 MOU signatories:

The target should be no later than the 5th reporting year (rather than 2025 explicitly).

Year	2023	2024
Reporting Year		1
Covered data		2023
New Members Example	Sign MOU	Disclose 2028 (5 year) target with implementation plan and year 1 report

Notes:



(*) Companies can review their targets in case of investments, divestments, new assets, changes in the quantification methodology, In the case that a target is modified, an explanation is required in the revised implementation plan. Should the quantification methodology change, companies are encouraged to review the emissions related to the reference year considering the new methodologies and learnings during their methane journey. Reduction targets should show actual emissions variations.

Companies who set a **methane intensity target** will define the denominator used in the methane intensity target. The appendix of the annual report provides an idea of the targets and forms of the target selected

¹ <https://www.unep.org/resources/report/eye-methane-international-methane-emissions-observatory-2022-report> (See company fact sheets in appendix)

by peer companies.² The OGMP 2.0 does not recommend a particular form of a methane intensity goal (e.g., methane emitted/gas to market, methane emitted/produced gas, methane emitted/BOE, methane emitted/energy content). Companies are free to adopt existing company targets or new targets that best represent their ambition and particular portfolio.

For example, upstream companies may select the sum of all gas marketed over the annual period. In the case of mid- and downstream segments, they may select transmitted gas, distributed gas, length of the pipeline, regasified gas, withdrawal gas, etc.

Those companies who set an **absolute reduction target** should also report their baseline year for calculating the absolute reduction in methane emissions.



Recall that the target will be publicly disclosed.

² <https://www.unep.org/resources/report/eye-methane-international-methane-emissions-observatory-2022-report>

OPERATED ASSETS

COMMITMENT TO REACH L4/L5 (ELEMENT 4)

Table 1. List of all operated assets with materiality analysis and commitment to achieve L4/5 with a staged approach by asset.

	Materiality	Year 1	Year 2	Year 3	Year 4	Year 5
Operated Asset 1	%	Level X	Level X	Level X	Level X	Level X
Operated Asset 2	%	Level X	Level X	Level X	Level X	Level X
Operated Asset 3	%	Level X	Level X	Level X	Level X	Level X
Operated Asset ...	%	Level X	Level X	Level X	Level X	Level X

Notes:

Such a table can be used to demonstrate the materiality analysis at a portfolio level and communicate commitment to reach L4/L5 in three years for operated assets. The requirement to get to Level 4/5 for all in-scope assets means that for all assets with material emissions, where there are no restrictions on reporting, reporting occurs at level 4 with demonstrated efforts to move to level 5.

Demonstration of efforts will take into account any narrative included in the implementation plan. We would recommend attempts at site level measurements with possible reconciliation for a nominal 1/3 of assets and/or covered emissions with subsequent year over year progress, striving to move to level 5 for all material assets, but consider fewer than 1/3 of assets on a case by case basis.

Asset definitions:

According to the OGMP Reporting Framework:

Asset/operating unit: the term does not imply a level of aggregation of operations, but should be a logical business or operating unit (e.g. individual processing plants, gathering facilities, or offshore platforms; producing basins; regional assets; LNG operations, pipeline network with all the components, etc.). Partner companies can determine the appropriate level at which they describe their participating facilities, within the following criteria:

- *An operation/asset unit should be defined such that all facilities or sites of the unit are participating in the program (e.g. several production batteries within a sub-region are listed as one operation/asset).*
- *An operation/asset unit that is defined by geographical bounds should typically be smaller than a country, and could be one site / facility or a group of these.*

A description of the asset should be included, including the number of each type of facility aggregated into the asset and each asset should be categorized into one of the following asset types:

UPSTREAM	
Asset type	Example facilities
Exploration	Wells
Abandoned wells	Abandoned wells
Production per basin: Onshore – Conventional	Wellheads
	Abandoned wells
	Tank batteries
	Gas Processing Unit
	Gathering and boosting facilities
Production per basin: Onshore – Unconventional	Wellheads
	Abandoned wells
	Tank batteries
	Gas Processing Unit
	Gathering and boosting facilities
Production Offshore	Offshore platform
	Dynamic Platform

	Static platform
	FSO (floating storage unit)
	Offshore gas transport hub
Gas Processing Unit	Gas Processing Unit
Gathering and boosting facilities	Gathering and boosting facilities
Tank batteries	Tank batteries
MIDSTREAM	
<i>Asset type</i>	<i>Example facilities</i>
LNG Liquefaction terminals	LNG Liquefaction terminal
LNG Shipping	LNG tanker
LNG regasification terminals	LNG regasification terminal
Transmission - Pipeline main lines (same country/region)	Pipeline segments
Transmission – Stations (same country/region)	Reduction & regulating stations / Measurement stations / Valve stations / Consumer supply stations for metering and regulating
Transmission - Compressor stations	Compressor station
Underground gas storage	Underground storage
DOWNSTREAM	
<i>Asset type</i>	<i>Example Facilities</i>
Distribution – Lines	Main lines + services lines
Distribution – Stations	Reducing and/or metering stations; Valve stations; Injection stations
Distribution – LNG Satellite stations	LNG Satellite stations
Distribution – Compressors	Compressors

- An asset cannot cover more than a country.
- An asset cannot cover facilities across multiple segments (e.g. wells and LNG terminals cannot be under the same asset).
- Production assets cannot cover more than a basin and cannot aggregate onshore and offshore production.

Materiality at portfolio level: All material assets are ranked in terms of absolute emissions per asset. This step requires that emissions from operated assets are estimated at least at level 3.³ All assets that account for 95% of total emissions for a given operator are considered material. For purposes of this ranking we consider total emissions from each asset *without accounting for equity* (for reporting purposes only the equity share of emissions are attributed to a given operator). The subset of assets that account for less than 5% of emissions can be considered as immaterial because they have a significantly small contribution to total emissions from a given operator. Thus, emissions from this subset of assets is still reported but not required to get to level 4 and 5. Should assets outside of scope of reporting become in scope due to changes in the company portfolio over time, the company will have the same pathway to gold standard with respect to those assets as a new company joining OGMP as described in section 4.2.2 of the reporting framework.

Example chart:

Example Only	Materiality	Year 1	Year 2	Year 3	Year 4	Year 5
Operated Asset 1	45%	L3	L4	L5	L5	L5
Operated Asset 2	30%	L3	L3	L4	L4	L5
Operated Asset 3	21%	L3	L3	L4	L5	L5
Operated Asset 4	4%	L3	L3	L3	L3	L3

All material assets reported at levels 4/5 by year 3, with year over year progress to all L5 + staged approach.

CREDIBLE AND EXPLICIT PATH FOR OPERATED ASSETS (ELEMENT 5)

Include a narrative describing the explanation of what is planned with respect to the staging.

Table 2: Materiality Analysis for Operated Asset 1

	Emissions (L3)	Materiality	L4 Plans
Largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Source ...	X	%	Method/measurement

Asset 1 plans for site level measurement and thoughts on reconciliation.

³ Where initial materiality assessments are conducted with data less than level 3, the materiality analysis should be updated with subsequent implementation plan revisions such that the materiality analysis is conducted with the highest quality data until materiality is determined on the basis of emissions from operated assets estimated at least at level 3.

Table 3: Materiality Analysis for Operated Asset 2

	Emissions (L3)	Materiality	L4 Plans
Largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Source ...	X	%	Method/measurement

Asset 2 plans for site level measurement and thoughts on reconciliation.

Table 4: Materiality Analysis for Operated Asset 3

	Emissions (L3)	Materiality	L4 Plans
Largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Source ...	X	%	Method/measurement

Asset 3 plans for site level measurement and thoughts on reconciliation.

Table ...: Materiality Analysis for Operated Asset ...

	Emissions (L3)	Materiality	L4 Plans
Largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Next largest source	X	%	Method/measurement
Source ...	X	%	Method/measurement

Asset ... plans for site level measurement and thoughts on reconciliation.

OR... For operators with multiple similar assets

Table 2: Materiality Analysis for Operated Assets (of type X)

	Asset 1 Emissions (L3)	Asset 1 Materiality	Asset 2 Emissions (L3)	Asset 2 Materiality	Asset ... Emissions (L3)	Asset ... Materiality
Source 1	X	%	X	%	X	%
Source 2	X	%	X	%	X	%
Source 3	X	%	X	%	X	%
Source ...	X	%	X	%	X	%

PLANS FOR L4

Source 1 plans for L4 (for either all or match which methods to which asset)

Source 2 plans for L4 (for either all or match which methods to which asset)

Source 3 plans for L4 (for either all or match which methods to which asset)

Source ... plans for L4 (for either all or match which methods to which asset)

PLANS FOR SITE LEVEL MEASUREMENT AND RECONCILIATION

Asset 1 plans for site level measurement and thoughts on reconciliation

Asset 2 plans for site level measurement and thoughts on reconciliation

Asset 3 plans for site level measurement and thoughts on reconciliation

Asset ... plans for site level measurement and thoughts on reconciliation

Notes:

The staged approach is shown in **Table 1**, but should also include an explanation of what is planned. The plans can change – we realize that many things will be tried and may be modified based on experiences. For example, the narrative may describe philosophy of which assets will be first as opposed to others (e.g., a company may want to trial certain types of technologies in a lower cost region before rolling out more broadly, or there already may be other operators in a region that are sharing experiences).

The asset level materiality analysis and indication of possible technologies are often paired.

This asset level materiality refers to sources within the assets. Ideally, there would be materiality analysis (table) per asset (illustrated above in the first option). The table could also reference the L4 methods planned per source for the material sources within the asset.

Materiality at asset level (note different definition than materiality of assets within a portfolio, which is 95%). This asset level materiality analysis informs the obligation to report the vast majority of emissions at level 4 for any given asset. In practice, this means:

- Prioritize more complete coverage of Level 4 measurements at assets that account for a larger share of operator-level emissions.
- For a given asset, rank all sources of emissions based on best available data (minimum L3)
- Perform L4 on sources that account for a minimum of 70% of the methane emissions from each asset with a justification as to why >90% is not reached.

The indication of possible technologies/methods may be provided alongside the materiality analysis by asset or described separately and referenced to the asset materiality. (There is not need to repeat the same text over and over if the same methods will be applied to multiple assets – simply indicate which assets will adopt those methods for a given source.) They could be provided as a set of methods planned per asset or as a list that is referred to by asset (see options above). The general approaches should be described in sufficient detail such that a determination can be made as to whether the planned approaches conform to the guidance for the referenced level (i.e., be able to determine if the proposed method is, in fact, level 3, level 4, or level 5).

Table 2: Example Materiality Analysis for Operated Assets (Production)

	Production Asset 1	Production Asset 1 Materiality	Production Asset 2	Production Asset 2 Materiality	Production Asset 3	Production Asset 3 Materiality	Production Asset 4	Production Asset 4 Materiality
Fugitive Emissions (equipment leaks)	180	23%	150	22%	25	10%	65	20%
Pneumatic pumps	80	10%	65	10%	12	5%	43	13%
Pneumatic controllers	455	59%	430	64%	70	27%	125	38%
Condensate Tanks	0	0%	0	0%	15	6%	2	1%
Flares	0	0%	14	2%	32	12%	85	26%
Liquid unloading	57	7%	12	2%	85	33%	3	1%
Produced water tanks	4	1%	3	0%	18	7%	8	2%
Total	776	100%	674	100%	257	100%	331	100%
Bold to move to L4		92%		96%		87%		96%
						Least material source and approaching 90% condensate tanks are not material at any other asset, focussing on most material sources		

Fugitive emissions L4 method – will HiFlow sampler to measure all fugitive emissions (direct measurement)

Pneumatic pumps – will develop asset specific emission factor using drone measurements on 25% of pumps (statistical analysis of data will indicate if additional measurements are needed the subsequent year)

Pneumatic controllers in assets 1, 2, and 3 – will perform inspection of all pneumatic controllers and apply US EPA proposed equation W-1B in proposed amendments to US EPA Subpart W (see below).

$$E_i = GHG_i * \left[\left(24.1 * \sum_{z=1}^x T_z \right) + (0.3 * Count * T_{avg}) \right] \quad (\text{Eq. W-1B})$$

All of the pneumatic controllers are intermittent bleed at these assets and this equation was derived from empirical data taken from the basins where assets 1, 2, and 3 are located for intermittent bleed

pneumatic controllers and thus we have concluded are reasonably representative. Essentially, this equation recognizes that intermittent bleed pneumatic controllers are low emissions except for a sub-population (which can be sizable), where the pneumatic controllers are malfunctioning, in which case, the emission is orders of magnitude higher. The proportion of pneumatic controllers malfunctioning (which is detectable by optical gas imaging inspection) is the most important factor for estimating emissions from this source.

Pneumatic controllers in assets 4 – will validate Equation W-1B for this asset via drone measurements on 50% of the pneumatic controllers, with classification by OGI detection of malfunctioning or not malfunctioning.

Of note, pneumatic controllers are being phased out at all four assets over a five year period, and so this source will become increasingly less material

Flares at assets 3 and 4 – flares will be risk assessed based on the historical flow estimates over the last 5 years. For the collection of flares that have contributed 75% of the flow for each asset, flow meters will be installed to validate the flow measurements. All flares will be monitored continuously for a lit pilot light by thermocouple and where temperatures indicate the pilot light to be unlit, 0% destruction efficiency will be assumed. Otherwise, 98% destruction efficiency will be assumed. Where flaring persists greater than 1 day, ops will inspect to ensure robust flame and periodically monitor with OGI to ensure there is no “tail” indicating substantive uncombusted hydrocarbon.

Liquid unloadings at all assets – will be estimated with site specific engineering calculations based on specific configurations/piping of facilities.

Site level measurement plans for Assets 1, 2, and 3 – Planning LiDAR flights over 100% of facilities, 2 times per year. Will evaluate each detection for abnormal conditions. Where not abnormal, will evaluate if any observed emissions are already within range of L4 method. Where abnormal conditions exist, will conduct root cause analysis and evaluate whether abnormal method needs adaptable to consider a broader range of potential emissions scenarios. Will provide summary results as part of reconciliation details.

Site level measurement plans for Asset 4 – Planning drone flights at 25% of facilities once per year. Will develop distribution of emission rates and compare to distribution of emission rates over all facilities for similarity and evaluate where substantive differences emerge.

NON-OPERATED ASSETS

LIST OF NON-OPERATED ASSETS, IF APPLICABLE (ELEMENT 6)

Table X. List of non-operated assets with country, location, name of operator, and equity percentage held by the reporting member.

	Materiality	Country	Location	Operator Name	Equity %	Notes
Non-operated Asset 1	%	Country	Lat/long	Operator	%	Such as if not reportable because <5% equity
Non-operated Asset 2	%	Country	Lat/long	Operator	%	
Non-operated Asset 3	%	Country	Lat/long	Operator	%	
Non-operated Asset ...	%	Country	Lat/long	Operator	%	

COMMITMENT TO WORK WITH NON-OPERATED VENTURES - DEMONSTRATED REASONABLE ENDEAVORS (ELEMENT 7)

Should describe plans to work with NOJV partners. Can be included in tabular list of assets. Can be combined with element below – commitment (element 7) plus description (element 8).

EXPLICIT AND CREDIBLE PATH FOR NON-OPERATED ASSETS, LISTING MILESTONES FOR EACH ASSET, IF APPLICABLE (ELEMENT 8)

This should be provided as a narrative providing an overview of what is planned. The plans can change – we realize that many things will be tried and may be modified based on experiences.