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# Available tools for quantifying emissions

Global Methane Forum

Manon Simon - March 20<sup>th</sup>, 2024

## Mist – What is it?

A step-by-step methane inventory and abatement tool



Targeted for the oil and gas sector

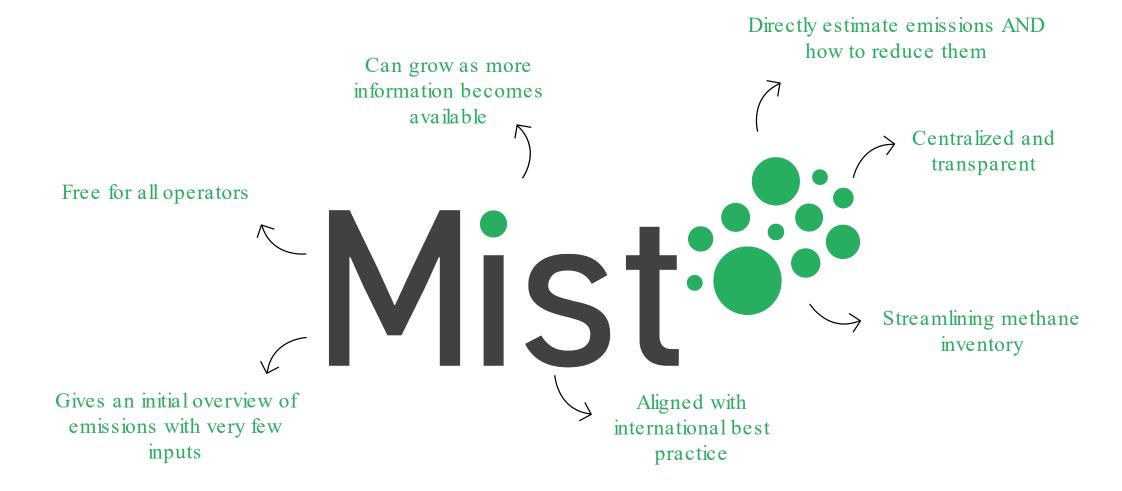


Key objective – Understand where your emissions are coming from to be able to address them

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# What does Mist have to do with this?

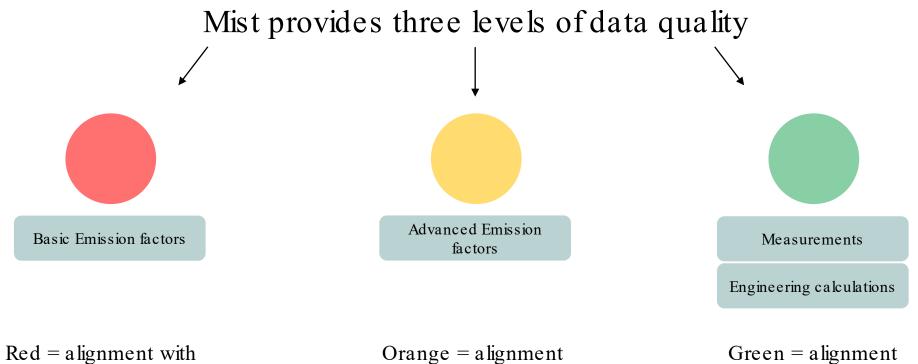
Methane inventory systematic tool – for the oil and gas sector



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		Faci	ity – potent	ialemiss	ion sour	ces				
Acid gas removal		Associated gas venting		Gas flaring		Centrifugal compres		sor	Pumps	
Well drilling Gas d		distribution - leaks We		casinghead gas ven		ing Hydrocarbon s		rbon stor	age tank	
Well completion and w		workover Oth	kover Other Glyc		coldehydrator		Pipes blowdown		Vesselblowdown	
Controllers	Controllers Comp		pressor blowdown Incor		nplete combustion		Crude oil storage tank		Leaks	
Produced w	Produced water tanks		ll testing Incidents		Liquids unloading		Reciprocating compressor		ompressor	
Pipeline blov	vdown	Waste water tanks Perm		eation	on Vesselblowdown		Gas an	nalyzer		
$\downarrow$		$\downarrow$		$\downarrow$			$\downarrow$			
Emission	S	Data quality		Abatement potential			Abatement cost			
	)	***								

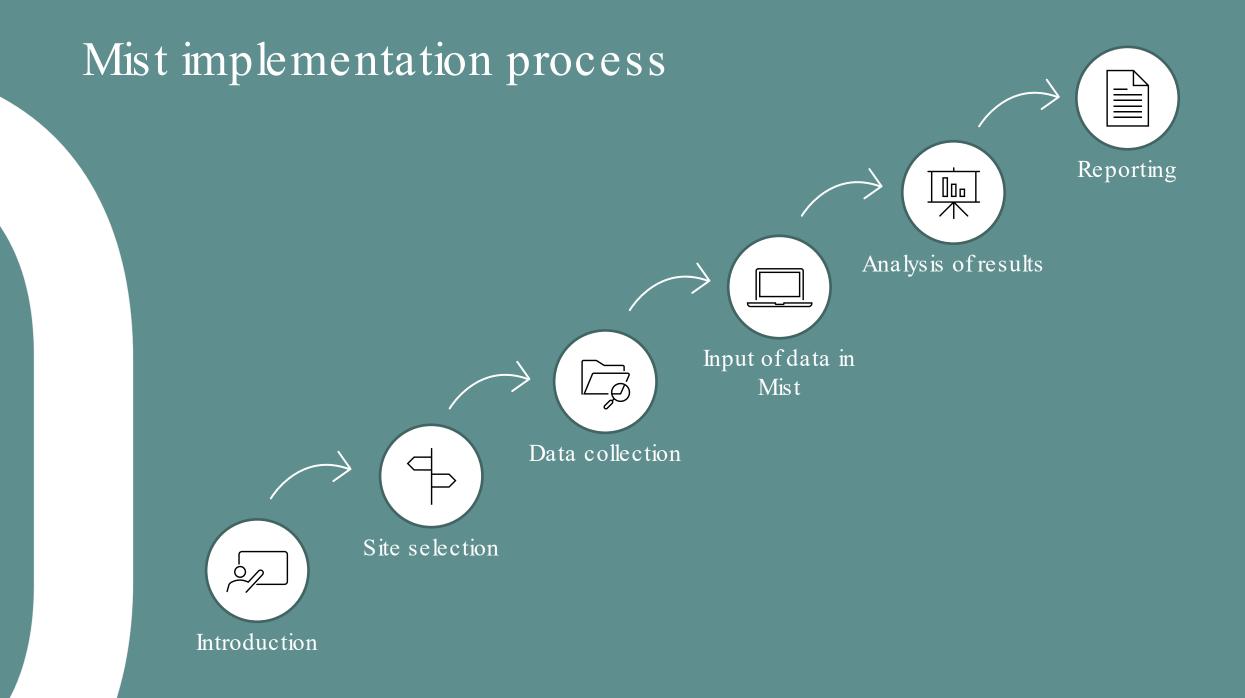
# **Different levels of data inputs and data quality** Aligned with OGMP 2.0



Red = alignment with OGMP level 2 or 3 with basic data Orange = a lignment with OGMP level 3 with advanced data Green = alignment with OGMP level 4

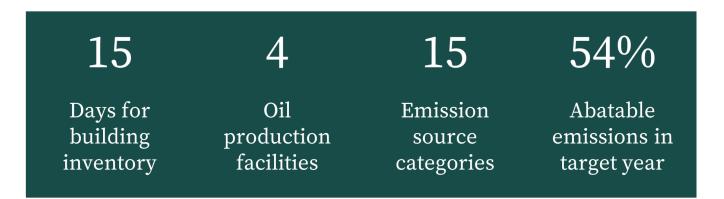
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Data quality is provided at emissions level and aggregated at facility and company level



# Case study Iraq: Key results

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"Mist helped us understand sources of emissions in our oil and gas facilities, possible mitigation options to implement, and the economic benefits of the abatement projects."

**Operations manager** Irag - Midland Oil Co.



### Looking forward with Mist...

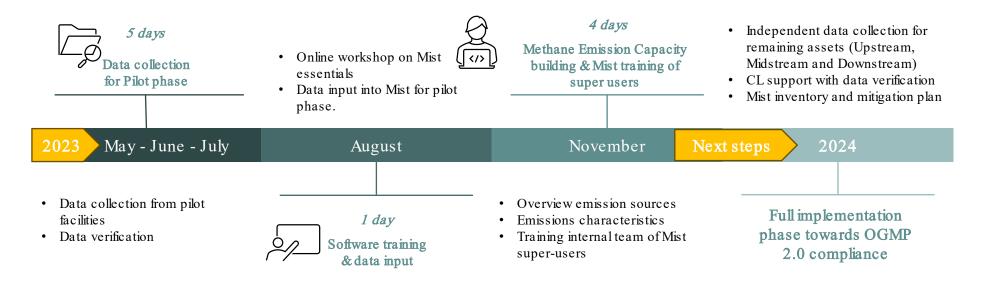
Following a successful training and deployment with Midland, the Ministry has initiated independent deployment of Mist within additional oil companies, with the objective of covering all upstream operations in Iraq.

# Case study: EP Petroecuador

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Training and deployment process

### The training and deployment process: Pilot Phase



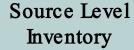




Pre-filled based on data already in Mist

Flexibility to:

- Identify active sources during site level measurement
- Override emission rates
- Specify preferred quantification methods



**Reconciliation** Comparison of

source and site level inventories to improve quantification

Multiple reconciliation methods to drive emission reduction Site Level Measurements

Mist Knowledge

Provide recommendations for:

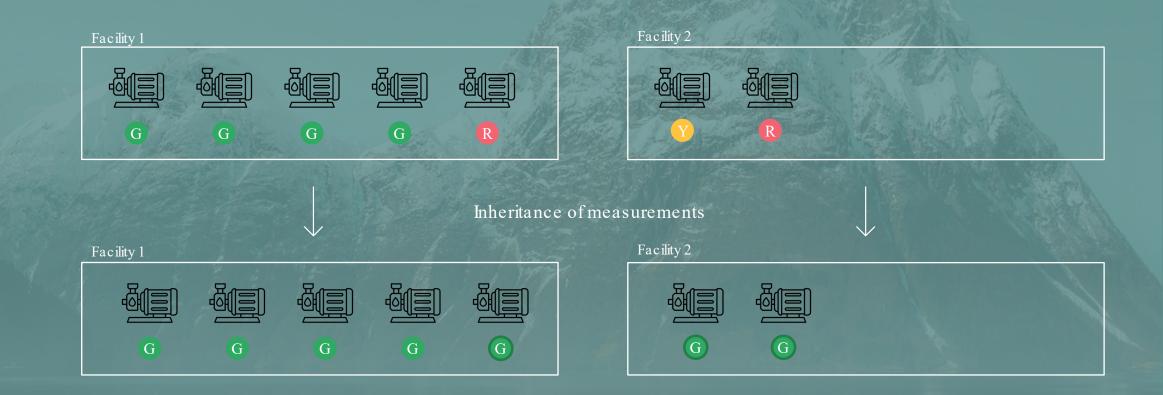
- Improved Quantification
- Emission Mitigation
- Links to relevant Mist pages and Wiki for more information

- Track emissions calculated by measurements to incentivize improved quantification
- Checklist to confirm applicability of site level measurement to ensure meaningful reconciliation
- Geared towards super emitting sources



# Inheritance of measurements

Automatic development and use of measurement-based emission factors when a representative sample of emission sources have been measured for a 'like system'



Mist is a powerful tool to understand the issue and start acting on it

Contact us for a demo mist@carbonlimits.no

or scan the QR code below



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https://www.carbonlimits.no



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