



Energy Community Methane Mondays - Methane emissions detection, measurement and quantification technologies

October 11th, 2021

OUR MEMBER COMPANIES

BR DXY **E**xonMobil oromco CNPC equinor PETROBRAS REPJO Occidental



## THE INITIATIVE : LOWER CARBON VIA COLLECTIVE ACTION & PARTNERSHIPS



- Voluntary
- **Ambitious** •
- Additional •
- Action oriented ٠





## **CLIMATE INVESTMENTS :** LOWER CARBON VIA INVESTING IN SOLUTIONS

- Invest •
- Implement ٠
- Achieve impact at a global scale





**Reduce carbon** dioxide emissions. by increasing energy efficiency in power, industry and transport

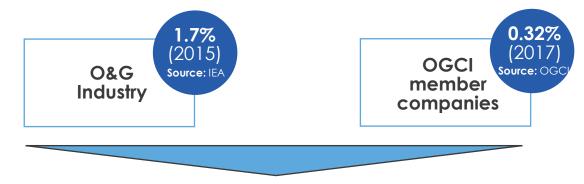


**Recycle and store** carbon dioxide applications such as industrial processes and power generation

CLIMATE



### Methane Intensity from the Oil & Gas Industry...



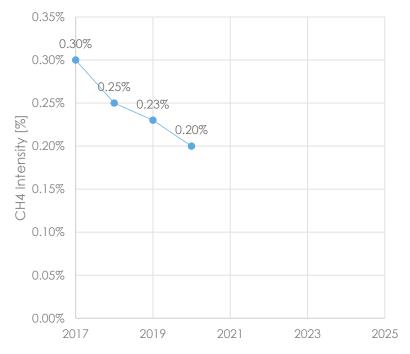
... highlights two challenges that OGCI & the rest of the O&G industry need to rapidly overcome



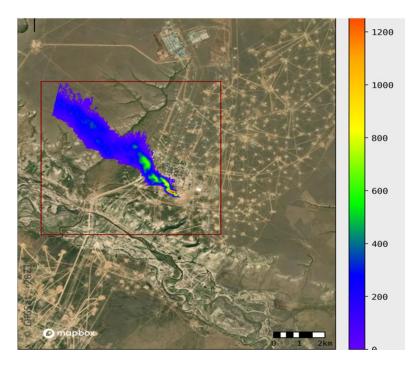
Sources: IEA Methane Tracker (2020), IEA WEO (2019), OGCI Annual Report (2019)



### OGCI Upstream Methane Intensity Target



# Deploying satellite campaigns to mitigate methane emissions in developing countries



## #2 Increase transparency & data accuracy



#### Global Gas Flaring Reduction Programme with World Bank and Colorado School of Mines



### Analysis of global natural gas supply chains with Imperial College London

GHG emissions [gCO2e/MJ] CH4 emissions [gCO2e/MJ] % of produced CH4 used and emitted

Origin	Upstream	Transport	Regasification	Market
	11.44	1.57	0.93	Asia (Japan)
Australia	4.03	0.01	0.03	
Australia	4.78 %	1.68 %	1.19 %	
	12.48	1.55	0.34	
SE Asia	0.17	0.004	0.006	
	8.80 %	1.79 %	0.61 %	
North America	26.87	4.66	1.52	
	13.94	0.04	0.05	
	22.38 %	4.12%	0.16%	
Middle East	9.22	2.15	0.35	
	0.085	0.004	0.006	
	13.49 %	2.53 %	0.62 %	
	9.22	1.66	0.35	Europe (UK,
	0.085	0.004	0.006	Germany,
	13.49 %	2.01 %	0.63 %	Spain, Greece,
	3.08	3.78		Tirkey, Italy)
Russia	0.82	0.33	N/A	
	4.73 %	8.01 %		
North Sea	3.46	0.02		
	0.10	0.01	N/A	
	4.68 %	0.02 %		
	5.00	1.67	0.06	
	0.11	0.03	0.00	
	9.64 %	1.58 %	0.00 %	

Sources: GGFR (2021), ICL (Minerals, Energy and Environmental Engineering Research Group, Analysis of global natural gas supply chains, 2019)



OGCI welcomes dialogue and engagements with O&G operators outside OGCI membership, to jointly collaborate to reduce direct emissions from the O&G industry.

Practical efforts include:

- 1. Sharing of best practices and material to reduce GHG Scope 1 & 2 emissions.
- 2. Support to improve quantification and reporting of CH4 emissions.
- 3. Testing, demonstrating and deploying emerging detection and measurement CH4 technologies.
- 4. Joint engagement with policymakers to support the implementation of direct and / or indirect regulation tackling specifically methane emissions reduction.