Climate Investment Update

Methane: EU Methane Regulation is finally adopted

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Climate Change & Equities - Global

- EU regulation to reduce energy sector methane emissions in the EU and the global supply chain has been adopted
- Coal, oil and gas operators and importers will need to adhere to the same reporting standard on a separate timeline
- We think as direct monitoring tools and regulations advance, companies may need to step up their abatement actions

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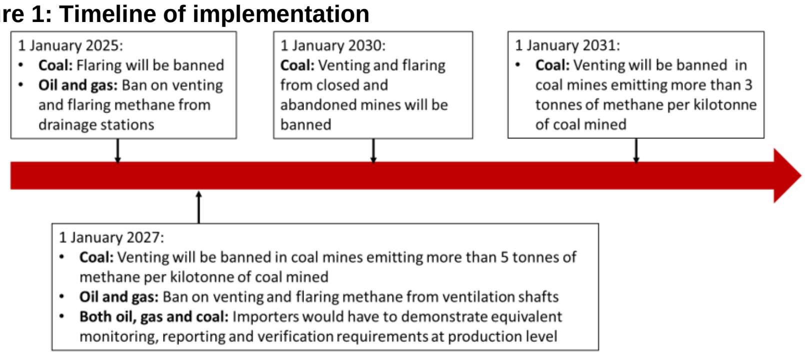
The time has come: This week, the EU Commission formally adopted the EU Regulation to reduce energy sector methane emissions in Europe and in its global supply chains. Under the new regulation, fossil energy companies operating in the EU will be subjected to a number of reporting standards and restrictions from 2025 and similar policies will be applied to coal, oil and gas importers from 2027.

Advancing the Global Methane Pledge (GMP): More than 120 (now 155) countries, including the US and the EU, signed the GMP at COP26 in 2021. Yet, little progress has been made since then. We think the new EU methane regulation is likely to push forward the GMP, especially in enhancing the standards of monitoring, reporting and verification of methane emissions. In our view, the new rule is likely to promote international cooperation and coordination in delivering the initiatives proposed by GMP, as it would involve both domestic production and imports.

Methane performance profiles in the making: The EU will build a database with country performance profile from 2026, using the data collected between 2024 to 2026. Countries and companies that took actions to abate emissions would receive a "preferred channel".

More to be delivered: There are also initiatives that are under review and will be finalised in the later stage. For example, the EU plans to set a "maximum methane intensity value" for natural gas and importers who fail to meet the exact methane limits could face fines. Also, the technological advancement in methane detection is likely to lead to increased public and government scrutiny on methane leakage.

Figure 1: Timeline of implementation



Source: European Parliament

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Technology and transparency

Methane detection technologies have become more advanced

Methane emissions data is going public, there is nowhere to hide:
Technology advancement has led to more transparency over monitoring and detecting methane leakage. MethaneSAT, a satellite that will track methane emissions around the globe, was launched on 4 March 2024. The data will be available for free to the public on Google Earth Engine later this year. Google will analyse the methane readings using artificial intelligence to map the readings onto known oil and gas plants[1]. These data can verify the accuracy of the estimates of the methane emissions published by the companies.

Global methane monitoring tool to be established

Also, the EU Regulation mentioned the establishment of a global methane monitoring tool and methane transparency database, which will regularly publish updates on big methane emitters. These technological advancements will increase the transparency of the emissions data of the oil and gas facilities. We think this will also put pressure on non-EU countries and producers that are not exporting their products to the EU, as leaked information will be made publicly available. In our view, it is likely to prompt other jurisdictions to strengthen their reporting standards of methane leakage in oil and gas sector, and to prompt companies to set up better detecting and monitoring system to reduce reputational risks.

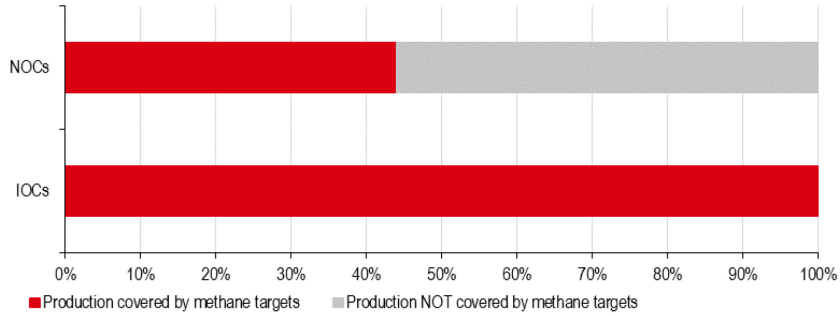
Who is ready, who is not?

The pressure is on

NOCs are not as prepared for the new EU regulation compared to IOCs…

International oil companies (IOCs) are generally more prepared for the EU regulation on methane reduction than the national oil companies (NOCs). NOCs are more insulated from investor pressure, shareholder resolutions and public demands[2] compared to IOCs, even though NOCs produce more than half of the global oil and gas. In our view, the inclusion of importers in the EU new rule is likely to accelerate the development and adoption of methane abatement technologies in NOCs' operations.

Figure 2: NOCs and IOCs production that is covered by methane targets



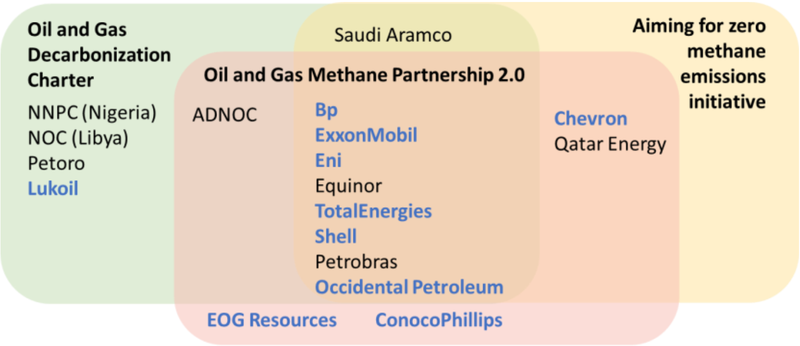
Source: HSBC (based on Environmental Defense Fund)

…despite the fact that NOCs have been stepping up their efforts in recent years

Regardless, NOCs have been stepping up their action in monitoring and controlling methane emissions in their operations in recent years. There is growing pressure on the NOCs, as countries are setting more ambitious climate targets for their energy sector. The climate actions of NOCs usually trail the policy direction of the government. In COP28, a number of NOCs have signed the new Oil and Gas Decarbonisation Charter. NOCs are likely to come up with action plans and implementation details in the next step. That said, we think NOCs will start investing in technologies to enhance methane monitoring and reporting to achieve net-zero emissions in their oil and gas operations. As the EU has given importers a longer period for preparation, we think NOCs are not likely to face major difficulties at the time of implementation of EU methane regulation.

[1] The new MethaneSAT will track methane emissions from space, World Economic Forum, 28 February 2024
[2] National Oil Companies, Climate Commitments, and Methane, Center for Strategic & International Studies, 13 December 2023

Figure 3: Selected companies that signed to international methane initiatives



Source: HSBC.
N.B. International oil companies (IOCs) are in blue colour

Collaboration between IOCs and NOCs can accelerate the pace of methane reduction

Extension of monitoring measures to NOJVs is a win-win for NOCs and IOCs

Collaboration between IOCs and NOCs is important to advance in addressing methane reduction. One of the methods is extending IOCs' methane reduction commitment and operational controls to their non-operated joint venture (NOJVs), which could involve NOCs.

The extension of methane reduction commitment to non-operated assets could encourage the IOCs to apply similar control and measures on the reduction of methane emissions in their NOJVs. Most supermajors report methane emissions of their non-operating assets under the equity method, and a few provide ample support for the NOJVs to adopt the same controls and standards as their operating assets.

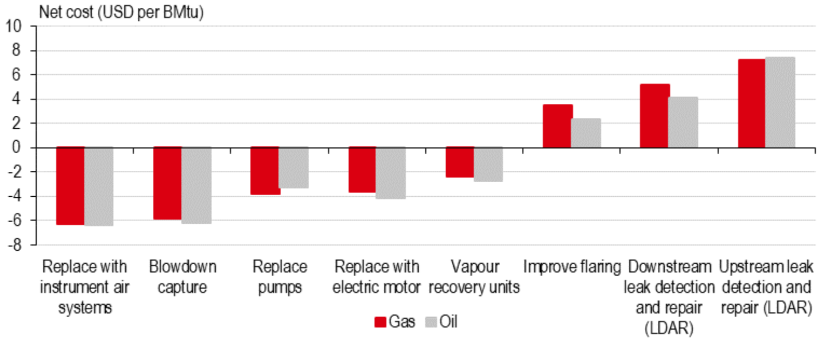
Figure 4: Corporate actions on NOJV's methane emissions

Company	Details
bp	BP collaborated with NOJVs in 2023 included seminars on methane monitoring technologies, awareness raising sessions on OGMP and workshops to identify emissions reductions opportunities
Shell	Shell held sessions with several joint-venture partners to discuss the importance of methane emissions management, technical knowledge transfer and the benefits of the OGMP 2.0 reporting framework in 2023.
TotalEnergies	TotalEnergies is in advanced discussions with certain operators of their non-operated assets to make Airborne Ultralight Spectrometer for Environmental Applications (AUSEA) technology available to them and carry out targeted detection campaigns on these assets.

Source: Companies' disclosure

Some abatement technologies do not incur positive marginal net costs and could even generate profits for the oil and gas companies in the long run. For example, capturing and selling the methane gas that is otherwise lost in operations can generate overall savings.

Figure 5: Average marginal net cost for oil and gas abatement



Source: HSBC (based on Global Methane Tracker, IEA, 13 March 2024)

Through the extension of controls and measuring standards on NOJVs, supermajor oil companies can share skills and technology in methane reduction with NOCs or other oil and gas companies that are currently lagging behind while enhancing returns. We think the implementation of EU methane regulation is likely to foster more collaboration in the industry and could turn out to be a net benefit for oil and gas companies.

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