## What Should the EU Do Regarding Decarbonisation?



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## **Summary**

Rather than imposing a carbon tax border, the European Union (EU) should ban coal and set a maximum level on methane emissions from upstream gas production. Doing so will not only help the world to fight climate change, but also increase Europe's soft power by exporting its regulatory power outside its territory.

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The newly elected European Commission finds itself in a difficult position. On the one hand, the 20-20-20 targets for 2020<sup>1</sup> are unlikely to be met at a time when the United Kingdom (the best in class in terms of energy transition) is now leaving the EU. On the other hand, increasing pressure from European voters present and future<sup>2</sup> calls for immediate action in the face of rising concern about global warming and its consequences.

Debates over approaches to addressing climate change have intensified in Europe in recent years. The Green Deal for Europe, released in December 2019, suggests the overall direction Europe should take to reach carbon neutrality by 2050 and become a front-runner in green technologies and industries. If the Commission wants to gain credibility, it must now offer some concrete actions by leveraging recent advances in technology to achieve deliverables by the end of its 5-year term in 2024. Technology that is unavailable, out-of-reach, or too pricy<sup>3</sup> for final customers will need to be excluded. If it is not, EU member states may face social unrest, as has happened with the French yellow vest movement, from constituents that do not want their cost of energy to rise.

As part of the Green Deal, the EU Commission could consider implementing a World Trade Organization (WTO)—compatible carbon tax border for selected sectors. It is interesting to note that:

- the original concept goes back more than twenty years, but has failed so far to be implemented, as it requires a unanimous vote of member states;<sup>4</sup>
- the selected sectors have not been disclosed;
- the indicative timetable has been pushed back to 2021;<sup>5</sup> and
- there is a significant difference between a carbon tax (as already implemented in some selected countries)<sup>6</sup> and a yet-to-be-designed WTO-compatible carbon tax border, which could be viewed by non-EU countries as a hidden way to implement protectionist measures. In a world where trade wars are increasing, a full analysis of the potential outcome is absolutely necessary to avoid unintended consequences for diplomatic and commercial relations.

It is imperative to get rid of coal as quickly as possible: it is the worst polluting fossil fuel and can be replaced quite easily—for example, by natural gas. Should this occur, the production of gas must have a transparent and acceptable greenhouse gas (GHG) footprint. For now, the gas industry seems unprepared and uncertain about the strategy to adopt in such context. But soon to be available data should help both the gas industry and policymakers make the right decisions. Even ahead of the EU analysis,<sup>7</sup> experts have published a crucial proof-of-concept of the unique capacity of satellites not only to detect but also to measure methane emissions from oil and gas operations worldwide.<sup>8</sup> Satellite measurements thus offer a promising approach by regularly scanning the entire globe.

<sup>&</sup>lt;sup>1</sup> More details on the EU's targets for 2020, 2030 and 2050 are available at: http://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL\_BRI(2019)631047

<sup>&</sup>lt;sup>2</sup> Fridays for Future demonstrations include kids and teenagers.

<sup>&</sup>lt;sup>3</sup> Biomethane is today ten times more costly to produce than gas.

<sup>&</sup>lt;sup>4</sup> The plans to change decision making into qualified majority should provide a solution if it were to be adopted.

<sup>&</sup>lt;sup>5</sup> The annex to the communication on the Green Deal is available at:

 $<sup>\</sup>underline{https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719\&uri=COM\%3A2019\%3A640\%3AFIN}$ 

<sup>&</sup>lt;sup>6</sup> EU Emission Trading Scheme or UK Carbon Emissions Tax

<sup>&</sup>lt;sup>7</sup> In January 2019, a tender "Limiting Methane Emissions in the Energy Sector" was launched by the EU Commission (available at https://etendering.ted.europa.eu/cft/cft-document.html?docId=48834) with the aim to "Develop a robust methodology to measure methane emissions in the energy sector."

<sup>&</sup>lt;sup>8</sup> Sudhanshu Pandey et al., "Satellite observations reveal extreme methane leakage from a natural gas well blowout," *Proceedings of the National Academy of Sciences of the United States of America*,

Instead of imposing a WTO-compatible carbon tax border, Brussels should move quickly to address emissions across the EU's gas supply chain. The first step should be to tackle emissions from production in the EU territories. Doing so will have a marginal effect on worldwide emissions, since European production is small and declining. But by setting emissions performance standards at home, the EU will have the opportunity to lead the world in pioneering this system, and also, more importantly, set the bar for environmentally responsible practices in the energy sector worldwide.

The EU, therefore, will have to answer two questions: Which standards need to be set, and how can the EU make sure they are properly implemented?

The Oil and Gas Climate Initiative (OGCI),<sup>9</sup> which consists of thirteen major international oil and gas companies, aims to improve methane data collection, and develop and deploy cost-effective methane management technologies. In 2018, OGCI members announced a target to reduce the collective average methane intensity of its aggregated upstream gas and oil operations to below 0.25% by 2025 (from 0.32% in 2017), with the ambition to ultimately achieve a level of 0.2%.<sup>10</sup> Regarding the standards, one could start with anything below 3 percent, as this is the level at which gas becomes worse than coal. Thus, the EU Commission might recommend a level of 0.25% in its proposal on methane emissions from upstream oil and gas today for delivery in 2025. In the meantime, the EU should set a timeframe to eliminate coal and ban any coal imports<sup>11</sup> from the same starting date of this regulation. Europeans must understand that limiting upstream gas emissions and pushing coal out of the energy mix must run in parallel.

This approach could be very well received by investment funds and the banking community.<sup>12</sup> Firstly, it would provide an industry-defined standard that has been adopted by the EU. Secondly, it would increase transparency and predictability. Once the standard and the methodology are set and data is available, no one will be able to hide any longer.

Gas companies that wish to sell gas to Europe will be required to certify their methane emissions. The EU, having a home standard, would then be in a position to accept non-EU gas only if it meets the set criteria. By the time the legislation is implemented, companies will be able to comply. This measure will generate extra costs, which shareholders may be willing to pay to ensure that the gas produced by their company is clean enough to meet EU requirements and retain revenues while improving their corporate image.

It is very possible that some states will perceive this measure as an attack on their sovereignty, since each state has permanent sovereignty over its natural resources; <sup>13</sup> gas exploration and production is in the hands of their fully or majority state-owned companies. Those who decide not to follow the EU rules will rightly be unable to access the EU premium market, as allowing them access would create an unlevel playing field between companies investing in methane leakage reduction and those showing less regard for the environment.

https://www.pnas.org/content/early/2019/12/10/1908712116 published on 16 December 2019

<sup>&</sup>lt;sup>9</sup> OGCI is an industry-led organization that includes thirteen member companies from the oil and gas industry pledged to "accelerate the reduction of greenhouse gas emissions" in full support of the Paris Agreement and its aims." For more details, please see: https://oilandgasclimateinitiative.com/our-members/

<sup>&</sup>lt;sup>10</sup> OGCI's Agenda is available at: <a href="https://oilandgasclimateinitiative.com/policy-and-strategy/#our-agenda">https://oilandgasclimateinitiative.com/policy-and-strategy/#our-agenda</a>

<sup>&</sup>lt;sup>11</sup> In 2018, Europe imported 149.6 Mtoe of coal (BP Statistical Review 2019)

<sup>&</sup>lt;sup>12</sup> "Clean data is critical: lessons learned from shale oil"; December 2, 2019, available at: https://am.vontobel.com/en/insights/clean-data-is-critical-lessons-learned-from-shale-oil

<sup>&</sup>lt;sup>13</sup> Under UN resolution 1803 (XVII) of 14 December 1962, an EU mechanism impacting production rights of foreign states could be viewed by them as an extraterritorial intervention.

This system, if put in place by the EU, will have an impact on global gas production. The EU Commission will kill two birds with one stone: it will both reduce GHG emissions worldwide and increase its soft power by exporting its regulatory power outside of its territory. The latter aspect has always been Europe's greatest strength. Last but not least, nothing prevents other countries outside the EU from reproducing the European model. Such a regulation can be implemented now, and should have no extra cost for European customers, as most companies are claiming they are already investing to achieve below 0.25% methane leakage by 2025, a move they have deemed feasible. However, this is only the starting point. All companies have targets to reduce methane emissions and gas flaring. As a consequence, the EU regulation should have such targets embedded from the start. The final goal will be no methane leakage and no flaring. As always, the devil will be in the details, but the path could be a dynamic regulation framework allowing progress in a context of uncertainty.

Even though accurate data on the scale of the problem is currently scarce, making it hard to design robust policies, policy makers will soon have to make strategic decisions over the pace and path of energy transition. Policy design should therefore be developed in the context of two evolving constraints: accuracy and transparency. As both science and technology rapidly push the boundaries of what is quickly feasible, the first objective of the regulation would be to require robust monitoring, reporting, and verification based on a harmonized EU methodology<sup>14</sup> that would be mandatory for all selling gas in the EU market. These measurements and data should be gathered and characterised in a centralised database and communicated to the market and to the regulators in traffic light coding/merit order format. Inspiration could be taken by both the electricity and energy efficiency markets, and data could be integrated into the existing European Energy Markets Observatory, or, as suggested by the European Union Agency for the Cooperation of Energy Regulators (ACER), be hosted by a European Methane Emissions Observatory. This could even be part of a broad Earth-monitoring program managed under the new Directorate-General for Defence Industry and Space (DEFIS).

By setting the methodology and standards, the EU could provide economic opportunities for its companies to provide those scientific numbers. Besides, the EU would demonstrate that its Green Deal is also providing new economic growth opportunities. Finally, it would set EU environmental standards at an international level.

Instead of imposing a risky, untested WTO-compatible carbon tax border that could spark a trade war, the EU could more efficiently ban coal and set a maximum level on methane emissions from upstream gas production to reduce greenhouse gas emissions worldwide.

<sup>&</sup>lt;sup>14</sup> That could be the one developed by the tender "Limiting Methane Emissions in the Energy Sector" launched by the EU Commission. Available at <a href="https://etendering.ted.europa.eu/cft/cft-document.html?docId=48834">https://etendering.ted.europa.eu/cft/cft-document.html?docId=48834</a>