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## Exporting Green Hydrogen to the EU: Key Considerations for Producers under New EU Rules

The EU is expected to be an attractive market for the import of renewable fuels such as green hydrogen and ammonia, and synthetic gasoline, jet fuel, methanol and other e-fuels. Under the <u>REPowerEU Plan</u>, the EU has set a target of 10 million tonnes of renewable hydrogen imports by 2030 and announced that new financing will be available for non-EU hydrogen producers under a Global European Hydrogen Facility.

On February 13, 2023, the European Commission adopted two Delegated Acts under the EU's Renewable Energy Directive II.<sup>1</sup> The <u>First Delegated Act</u> outlines the conditions under which hydrogen, hydrogen-based fuels or other energy carriers (including ammonia) can be considered renewable fuels of non-biological origin ("RFNBOs"), which will enable these fuels to be used by EU transport fuel suppliers to satisfy the EU's requirement that renewable energy represents at least 14% of the transport sector's energy use by 2030.<sup>2</sup> The <u>Second Delegated Act</u> and its associated <u>Annex</u> set out the methodology for determining the lifecycle GHG emissions savings for RFNBOs, which must represent greater than 70% relative to a fossil fuel comparator in order to qualify towards the renewable energy targets.<sup>3</sup>

The rules set out under the Delegated Acts generally apply equally to EU and non-EU fuel producers. The Delegated Acts will be submitted to the European Parliament and Council for approval and are the result of prior proposals and counterproposals from the Commission and Parliament. The Parliament and Council have a maximum of four months (total, including extensions) to either accept or object to the Commission's proposal.

## **Key Considerations**

Producers, project investors, lenders and offtakers/importers of renewable fuels into the EU should take note of the following:

• **Producers will generally need to demonstrate "additionality" in their use of renewable electricity from 2028.** Generally, from 2028, unless electricity is taken from the grid in a bidding zone<sup>4</sup> where the average proportion of renewable electricity exceeds 90% (or the electricity emissions intensity is lower than 18 gCO<sub>2</sub>eq/MJ), only new renewable capacity can be used to produce RFNBOs. Producers can meet this additionality test by showing that they have (1) themselves produced an amount of renewable electricity that is at least equivalent to the amount of electricity claimed as fully renewable; or (2) entered into renewables power purchase agreement(s) for an amount of renewable electricity that is at least equivalent to the amount of renewable.<sup>5</sup> In either case, the new renewable capacity must have come into operation no earlier than 36 months prior to the relevant electrolyzer.

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- Advantage for early movers. The additionality requirement outlined above will not apply until 2038 for projects if the relevant electrolyzer comes into operation before 2028.
- Government financial support for the additional renewable electricity generation facilities can
  disqualify the fuel produced. The installation generating renewable will not satisfy the additionality
  requirement if it has received support in the form of operating or investment aid.<sup>6</sup> Limited exceptions apply,
  including for financial support for land or grid connections or if the support has been fully repaid. It is unclear
  whether for these purposes generally applicable tax credits/incentives (including those available under the US
  Inflation Reduction Act) and/or arms'-length loans would count as aid.
- Monthly correlation is permitted until 2030 for non-EU producers, then hourly. Until 2030, non-EU producers will have to ensure at least a monthly correlation between hydrogen production and the renewable electricity produced under their PPA(s) and/or utilized from new co-located storage assets (if applicable).<sup>7</sup> Hourly correlation will be required from 2030.
- Geographic correlation is also required. The renewable electricity used must also be generated in the same, or an interconnected, "bidding zone".<sup>8</sup> In the case of non-EU countries where the EU 'bidding zone' concept does not apply, the provision should be implemented based on a similar concept in that jurisdiction such as similar market regulations, the physical characteristics of the electricity grid, the level of interconnection or, as a last resort, the country.
- Renewable fuels must demonstrate greater than 70% lifecycle GHG emissions savings over a fixed fossil fuel comparator.<sup>9</sup> Carbon capture may be used to offset the total emissions from production and use of a RFNBO. However, in the case of emissions from inputs during production (for example, the use of CO<sub>2</sub> to produce e-methanol or e-gasoline), this is subject to the satisfaction of at least one of five conditions.<sup>10</sup> These include, among others, that the CO<sub>2</sub> captured is from specified industrial activities and must have been taken into account upstream in an 'effective carbon pricing system' (which is not defined in the Delegated Acts), or alternatively is directly captured from the air.
- Non-governmental (voluntary) certification schemes will be used to evidence compliance with the EU
  rules. A certification process relying on 'voluntary schemes' will be introduced to ensure that non-EU
  producers adhere to the EU criteria. Voluntary schemes are certifications provided by private entities. The EU
  Commission has not yet established a timeline for the approval of these schemes. Once these individual
  schemes are approved by the Commission, EU Member States will be required to accept the evidence
  obtained from the schemes. This is planned to mirror the system currently in place for biomass and biofuels,
  under which 15 certifications are currently approved (11 of which have 'global' coverage).
- Compliance with the EU rules is likely to be required for EU/EU-related funding. While specific details of
  the Global European Hydrogen Facility are still to be announced, support under that program as well as
  support from the European Investment Bank and/or EU Member State export credit agencies is likely to require
  compliance with the provisions of these Delegated Acts.

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## **ENDNOTES**

- <sup>1</sup> Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast).
- <sup>2</sup> The Commission has also proposed an <u>amendment to the Renewable Energy Directive</u> that would result in RFNBOs being counted towards renewable targets regardless of the end-sector use where they are consumed.
- <sup>3</sup> Article 3, Second Delegated Act and the <u>Annex to the Delegated Act</u>.
- <sup>4</sup> Article 2 (65) of Regulation 2019/943 defines this as the largest geographical area within which market participants are able to exchange energy without capacity allocation.
- 5 Article 5, First Delegated Act.
- <sup>6</sup> Article 5(b), First Delegated Act. This requirement does not apply to renewable energy installations directly connected to an electrolyzer which does not draw power from the grid.
- <sup>7</sup> Article 7, First Delegated Act.
- <sup>8</sup> Article 2 (65) of Regulation 2019/943 defines this as the largest geographical area within which market participants are able to exchange energy without capacity allocation.
- <sup>9</sup> Article 2, Second Delegated Act.
- <sup>10</sup> A10., Annex to the Second Delegated Act.

Questions regarding the matters discussed in this publication may be directed to <u>Olivier de Vilmorin</u>, <u>Craig Jones</u>, <u>Jon Hannah</u> or <u>Sam Saunders</u>, or to any Sullivan & Cromwell LLP lawyer with whom you have consulted in the past on similar matters. Additional S&C resources about energy transition matters may be found <u>here</u>.

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