

Response to consultation on Delegated Act outlining the Methodology to determine the greenhouse gas (GHG) emission savings of low-carbon fuels to be used for the certification of low-carbon fuels pursuant to Article 9 of Directive (EU) 2024/1788.

Offshore Norge is an employer and industry organization for companies with activities on the Norwegian Continental Shelf (NCS), representing more than 100 companies within oil and gas, CCS, offshore wind, and marine minerals. Some of our member companies are progressing projects for production of blue hydrogen or blue ammonia<sup>1</sup>. Both of these fuels can qualify as low-carbon fuels under the proposed methodology, and represent the main interest of the Norwegian offshore industry related to the low-carbon fuel delegated act (LCF DA).

Offshore Norge considers, in alignment with Recital 13 of Directive (EU) 2024/1788, that lowcarbon fuels represent an essential component of Europe's energy transition. The required deep decarbonization of hard-to-electrify sectors will critically depend on Europe's capability to produce and use low-carbon fuels at substantial scale in the near and medium term. This will, in addition to clear qualification criteria for such fuels, require policy instruments that enable and reward industry using low-carbon fuels as a pathway to deep decarbonization. A market for low-carbon fuels is an essential supplement to the creation of a market for renewable fuels. Offshore Norge would therefore encourage the introduction of targeted policy measures that create a level playing field between low-carbon and renewable fuels.

Norway is well placed to provide EU with blue hydrogen and ammonia in alignment with the 70% GHG emission reduction threshold compared to the fossil fuel comparator of 94  $gCO_2e/MJ$ . There are three key reasons for this:

- Average combined upstream and midstream carbon intensity for Norwegian gas is very low, at about 1.5 gCO<sub>2</sub>e/MJ. This compares with the 10.45 gCO<sub>2</sub>e/MJ default value (upstream carbon intensity only) included in Part B of the Annex to the LCF DA.
- The carbon intensity of the Norwegian electricity mix is very low, at approximately 4.7 gCO<sub>2</sub>e/MJ.
- There are significant opportunities for geological storage on the NCS.

A life cycle analysis of production of blue hydrogen or ammonia in Norway will therefore, with these carbon intensity inputs and a high (higher than 90%) CO<sub>2</sub> capture rate, comply with the 70% GHG emission reduction target.

With these introductory remarks as a backdrop, Offshore Norge appreciates the opportunity to share the following views on the draft LCF DA:

 The draft LCF DA does not provide clarity that low-carbon fuel producers are allowed to use certified values for elastic inputs, if and where available. Making this option permissible would incentivise the use of elastic inputs with lower carbon intensity. Offshore Norge considers that this is critical to drive down the emissions associated with low-carbon fuels over time and enable longer term investments into low-carbon fuel value chains in Europe. While permission to use default values might be necessary to reduce administrative burden in case of unclear origin of the natural gas or other

<sup>&</sup>lt;sup>1</sup> Production of hydrogen or ammonia from natural gas feedstock, where emissions from the natural gas reforming process are captured and permanently stored in geological formations.

energy inputs, there should not be any hurdles to use certified values. Offshore Norge therefore recommends that the *shall* in the first sentence in the second paragraph of Point 7 is replaced with *may*. This allows for using data from the actual production process, also for elastic inputs that are not obtained from an incorporated process. For avoidance of doubt, Offshore Norge recommends adding the following sentence immediately after this first sentence in the second paragraph:

- Projects can demonstrate better performance than default values (for CO<sub>2</sub>, N<sub>2</sub>O and methane emissions) through certified values for project specific inputs.
- 2. The term *incorporated process* is not clearly defined. Offshore Norge recommends that a clearer interpretation than what is given in footnote 4 is provided. It also seems that the wording in footnote 4 should be changed from "... renewable liquid and gaseous transport fuel of non-biological origin or recycled carbon fuel" to "... low-carbon fuel". In general, Offshore Norge considers that the dependence on being classified as an incorporated process, and the use of the term dedicated supply infrastructure, creates uncertainty, and should be reviewed. For instance, it is not clear whether dedicated supply infrastructure requires an exclusive direct line between the source and the sink of the natural gas or whether others can be connected to the same pipeline.
- 3. Paragraph 1 of point 7 in the annex to the draft LCF DA states that GHG emissions of elastic inputs obtained from an incorporated process shall include all emissions over the full value chain for these inputs, including extraction, processing and transport. For elastic inputs that are *not* obtained from an incorporated process, on the other hand, it appears from Table 1 in Part B that midstream emissions do not need to be included (indicated to be not applicable). If this is correct, then this should be clearly stated.
- 4. The lack of visibility to the requirements for calculation of upstream methane intensity in the to-be-developed methodology set by the Commission in accordance with Article 29(4) of Regulation (EU) 2024/1787 creates a concern for project developers aiming to take an investment decision prior to the publication of this methodology. To avoid delays in project investments, project developers should, until the methodology is published, be permitted to put forward methodologies for determining the upstream methane intensity for approval by authorities, and to deploy this methodology for reporting of their upstream methane intensity in accordance with Article 12 of Regulation (EU) 2024/1787 (for projects in the Union) or Article 27(1) and Article 28(1), (2) and (5) of Regulation (EU) 2024/1787 (for projects. Alternatively, the Commission should put forward a first draft of the methodology already in 2025, so that low-carbon fuel producers have better visibility to its requirements.
- 5. With regards to downstream emissions from transport and distribution of low-carbon fuels (etd), Offshore Norge would like to convey the following recommendations:
  - The Commission should provide default values to make accounting as little burdensome as possible for producers who have no control over the downstream transport and distribution. Nevertheless, wherever actual data is available, deviation from the default values should be possible.
  - The LCF DA should state, for clarity, that for shipments of low-carbon fuel products (and also shipments of inputs e<sub>i</sub>, such as LNG), the GHG contribution

from transport should include emissions from the ballast and laden legs of the voyage to cover all shipping emissions aligned with Regulation (EU) 2015/757.

- The LCF DA should clarify if both scope 1 and 2 emissions of downstream transport systems shall be included. Offshore Norge considers that only scope 1 emissions from downstream transport and distribution should be included. The scope 2 emissions, such as electricity-sourcing for transport systems, are usually outside of the influence of low-carbon fuel producers.
- The draft LCF DA should clarify rules for allocation of emissions in the downstream transport system to individual renewable and low-carbon fuel production sites. This is particularly relevant for pipeline systems.
- 6. Recital 13 and Article 92 of Directive (EU) 2024/1788 sets out that the 70% emission reduction threshold should become more stringent for facilities that begin operation from January 1, 2031. While Offshore Norge supports the desire and plan to make the thresholds more stringent as the market for renewable and low-carbon fuels develops, we consider that the decision to make it more stringent should take into account the possible effect on the pace of further market development. Secondly, it is important that projects have visibility to what the threshold will be when they are making the investment decision. We would therefore argue that a decision to make the threshold more stringent should not have retroactive effect on projects that have taken financial investment decision prior to the publication of the new threshold. If this principle is not followed, we believe there will be a risk that project that are aiming to start production in 2031 or shortly thereafter may delay investment decisions.
- 7. Point 13 of the annex to the draft LCF DA provides limited clarity on how the emissions from use  $e_u$  shall be determined. For instance, the use of ammonia as a fuel is relatively limited and there is limited data on relevant emission factors for ammonia combustion, which take into account technologies for cleaning the exhaust gas and limiting release of N<sub>2</sub>O. Offshore Norge considers that unless reliable emission factors for a low-carbon fuel is published by the European Commission, then the combustion emissions shall be based on the conversion of the carbon content of the fuel into CO<sub>2</sub>. Consequently, for hydrogen and ammonia, which does not contain carbon, the emission factor should be set to 0.
- 8. Point 17(b) of the annex to the draft LCF DA specifies that for CO<sub>2</sub> transport, emissions should be allocated to individual low-carbon fuel production sites using a massbalance based allocation method. However, the LCF DA should also clarify how emissions for CO<sub>2</sub> injection/storage (Point 17(c)) should, for multiple use storage sites, be allocated to low-carbon fuel producers among the respective CO<sub>2</sub> sources.
- 9. Offshore Norge considers that it is inconsistent to only mention the exclusion of EHR in 17(a), as it applies generally to  $e_{ccs}$  as a whole. We therefore recommend that the text "and which is not used for enhanced hydrocarbon recovery" is deleted from 17(a), and that the following sentence is introduced after the first sentence of Point 17:
  - This applies to permanently secure and environmentally safe geological storage of captured CO<sub>2</sub>, where the storage is not used to increase hydrocarbon recovery, and leads to an overall reduction in emissions compared to the case with no CO<sub>2</sub> capture.

10. Once the LCF DA is agreed and adopted, it will be used to develop the certification scheme for low carbon hydrogen and its derivatives. From other processes (especially RFNBO certification) we know that setting up a certification scheme and getting it recognized can take a long time and uncertainties arise from the interpretation of unclear regulations. The Commission should avoid the same uncertainties and delays as seen by the industry for RFNBOs. Certification Schemes for RFNBOs should be extended to low-carbon fuels and RFNBO certifiers should also be able to certify low-carbon fuels. This will also ensure efficient auditing procedures.