

Input to the stakeholder consultation on the Delegated Act on Low Carbon Fuels

Climate Action Network (CAN) Europe is Europe's leading NGO coalition fighting dangerous climate change. With over 200 member organisations active in 40 European countries, representing over 1,700 NGOs and more than 40 million citizens, CAN Europe promotes sustainable climate, energy and development policies throughout Europe.

CAN Europe is a large network representing more than 40 million citizens, dedicated to advancing climate action. We would like to express our deep concerns regarding the promotion of so-called low-carbon fuels with the recently published Delegated Act (DA). We believe this approach undermines the EU's long-term decarbonization goals. The reliance on 'low carbon' hydrogen (LCH), fossil-based with Carbon Capture and Storage (CCS) or produced from nuclear energy, diverts critical attention and financial resources from hydrogen produced from renewable energy (solar and wind), which should be the primary and only focus. Instead of the promotion of LCH, tight financial resources should only be invested into renewables based hydrogen for the sectors that can't be electrified to enforce a sustainable transformation towards a net-zero economy within planetary boundaries. Hydrogen produced from renewables will be a scarce resource and should be used only in those sectors that are hard to electrify and where no other more efficient solutions exist. In addition, hydrogen is a potent greenhouse gas with a warming potential more than 30 times higher than carbon dioxide over a 20 year time period. We see it of utmost importance to elaborate on several guiding principles that this Delegated Act (DA) should take into account.



- 1) No to fossil based hydrogen in the absence of adequate methane measurement.
- Until now, oil and gas companies have never been able to calculate their methane leakages rigorously enough, properly aligned with estimates from independent research institutes. Although satellite data is becoming increasingly accessible, a methodology for calculating methane leaks will only come in 2027 under the methane regulation. At the same time, serious scientific evidence exists on the global warming potential of methane leakages, which is why these emissions must be taken into account from the start in the methodology to determine the greenhouse gas emission savings of low-carbon fuels. As long as site specific measurements cannot be ensured, fossil based hydrogen should not be labelled as "low carbon hydrogen". Otherwise, this risks opening the door to public financial support for these fuels, while low carbon hydrogen should not be eligible for any kind of financial support (e.g. Hydrogen Bank auctions should be accessible to RFNBO only). The tight financial resources for the sustainable transition should only be invested into renewables based hydrogen. However, if the route of a default value was to be pursued, the proposed value corresponding to a 1.1% leakage rate needs to be raised to reflect the changing mix of gas suppliers to the EU (more LNG, more suppliers located further away from the EU, more reliance on unconventional/shale gas in the US). Studies highlight that methane leakage from upstream gas production could be significantly underestimated and that a 3% methane leakage rate is a more realistic value.
- 2) CCS cannot clean up the act of fossil based hydrogen. CAN Europe believes and reiterates that first and foremost radical action needs to be taken to phase out almost all greenhouse gas emissions in Europe as quickly as possible in a socially just manner. Capturing carbon from the atmosphere, should be seen as complementary to emission reduction efforts, and not as an alternative. In that, nature based solutions should be prioritised as they also increase ecosystem resilience and have co-benefits in climate adaptation, while CCS hasn't proven yet that it can contribute appreciably to the mitigation of greenhouse gas emissions. Irrespective of the possible use of CCS technology, we must ensure that efforts are made to reduce emissions at source. Energy savings and sustainable renewable energy technologies are the only options to replace climate polluting technologies in the energy sector. CCS must only be applied as a last resort after all options for emissions reductions are exhausted, including demand-side measures such



as ecodesign of products and material efficiency. CCS may have a role in the decarbonisation of very few processes such as in the lime, cement and waste incineration sectors in case no technological options to avoid process emissions can be found. Deploying CCS for the production of fuels, however, is likely to delay the necessary phase-out of fossil gas and must therefore be avoided. For the above mentioned risks, we recommend that fuels produced using CCS should not be considered low carbon. We therefore strongly recommend adopting a higher GHG emission reduction factor (see point below), implying a high CCS rate, as we need a minimum carbon capture rate of 90% corresponding to best in class technology.

- 3) Increasing the greenhouse gas emission reduction factor of Low Carbon Fuels and applying a strict end date for their use. Currently the DA is calling for a 70% reduction of greenhouse gas emissions compared to the reference value of the fossil fuel comparator (94gCO2eq/MJ) equivalent to 3,38 kg CO2eq/kg H2. To ensure that only those low carbon fuels which have reduced most fugitive emissions from methane (with very high GWP potentials) and hydrogen are eligible, the DA should require a progressively decreasing GHG emissions threshold, in line with the UK Low Carbon Standard, starting at 2,4kg CO2e per 1kg of hydrogen produced, coming down to 1 kg CO2e by 2029. An end date for the use of these low carbon fuels should be set as of 2031 in order to set the incentives to achieve a full phase out of fossil gas from the energy sector by 2035.
- **4) No expansion of fossil gas supply to produce hydrogen.** The EU should introduce a requirement to ensure that fossil gas used to produce hydrogen is sourced exclusively from gas wellheads that came into operation before the DA's date of adoption, to avoid incentivizing new gas production.
- 5) The use of historical grid emission intensities should not be allowed when calculating the emissions intensity of Low Carbon Fuels. The use of grid calculating electricity by electrolysers at times of high demand could lead to increased electricity production from fossil marginal units. Whereas methods b) and c) outlined in Annex A point 6 provide some safeguards against such misuse of electrolysers, method a) does not provide sufficient incentive for electrolysers to switch off as demand for grid electricity increases. The resultant start-up of fossil marginal units would increase the emissions



intensity of grid electricity. This increased emissions intensity would not be captured by the calculation of the carbon footprint of LCFs, so the true emissions will be underestimated. Method a) should therefore not be allowed.

