

ZEP briefing – Hydrogen and decarbonised gas package

On 15 December, the European Commission presented two legislative proposals (a [Regulation](#) and a [Directive](#)) to decarbonise the European gas market and energy system by facilitating the uptake of renewable and low-carbon gases, including hydrogen. These proposals are commonly referred to as the ‘Hydrogen and gas package’.

The package does not mention CO₂ infrastructure. For CCS/CCU, the only reference made is to their role in abating the remaining emissions from fossil gas, which according to the Commission’s text will represent one-third of the gaseous fuels in the 2050 energy mix; this is based on the relevant [scenarios](#) used by the Climate Target Plan Impact Assessment.

Content:

- Recognition of the role of low-carbon hydrogen in the short and medium term (until 2030) to reduce emissions from existing hydrogen production and to support the uptake of renewable hydrogen in parallel.
- Low-carbon gas is defined as (i) the part of gaseous fuels in recycled carbon fuels as defined in the REDII Directive, (ii) low-carbon hydrogen, and (iii) synthetic gaseous fuels where the energy content is derived from low-carbon hydrogen, which meets the greenhouse gas (GHG) emission reduction threshold of 70% across the full life-cycle.
- Low-carbon hydrogen is defined as hydrogen, where the energy content is derived from non-renewable sources but meets a GHG reduction threshold of 70% across the full life-cycle.
- Low-carbon fuel means recycled carbon fuels as defined in the REDII Directive. This refers to low-carbon hydrogen and synthetic gaseous and liquid fuels, where the energy content is derived from low-carbon hydrogen, which meets the GHG emission reduction threshold of 70% across the full life-cycle.
- For installations producing low-carbon hydrogen and synthetic gaseous fuels, which will start operations from 1 January 2031, the 70% threshold should become more stringent.