

Need for speed and scale up for renewable fuels in mobility to curb climate change impact

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The EU and Member states like the Netherlands are stepping up their ambitions to tackle climate change. By 2030 CO₂-emission levels should be 55% lower than they were in 1990. Of all economic sectors that have to bring down their emission, the mobility sector is the one sector that faces difficulties in curbing these levels. In some countries they are still higher than the 1990 levels. As such the climate mitigation achievements in mobility are becoming the Achilles heel for the climate achievements of countries as a whole.

While the registration numbers of newly purchased battery electric vehicle show strong growth profiles, the actual share in the total, also still growing, vehicle fleet by 2030 remains rather moderate. The EU expects around 30 million BEVs on a total of 260 million passenger cars by 2030.

To reach high climate reduction in mobility, by 2030 the total allowed volume of fossil-based fuels and energy carriers in mobility should have dropped by one third compared to the 2019 levels (as 2020 and 2021 are not fully representative as they showed COVID-19 affected volumes). That cannot be achieved by electric mobility alone, or with modal shift actions. Our analyses show that in the coming decade an urgent need for higher volumes of renewable fuels (either bio-based or renewable electricity based) need to be deployed in the mobility sector, representing around one third of all energy used in transport.

Compared to the current average physical level of 6-8% share this requires speed and scale actions to develop drop in fuels, fuels for which engines need (slight) adaptation, new investments in advanced biofuel and RFNBO (renewable fuels of non-biological origin) production capacity, design and establishment of new sustainable feedstock supply chains, and last but not least the right policy frameworks that support this innovation and investment agenda.

Biography

Eric van den Heuvel founded studio Gear Up, an independent firm supporting organizations in the transition to a low carbon economy, by providing strategic advice, process and project management services and guiding and facilitating stakeholder involvement processes. Furthermore, the studio develops own concepts in the field of renewable fuels, alternative fuels and the circular economy. Projects he is involved in include among others the management of the Netherlands Platform Sustainable Biofuels, assisting the European alternative and Renewable Transport Fuels Forum, providing strategic support to various international operating companies active in renewable fuels, and providing strategic advice to Netherlands Ministries and the European Commission.

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