ROTTERDAM TO SUPPLY EUROPE WITH 4.6 MEGATONS OF HYDROGEN BY 2030

The port of Rotterdam, the cluster of companies operating here and abroad and public agencies / governments envisage that they will together be able to supply Europe with at least 4.6 Mt of hydrogen annually by 2030. This will contribute substantially to the European objectives of:

- **limiting climate change,**
- **increasing energy independence and**
- **creating sustainable wealth.**

Combined efforts represent a concrete implementation of the heightened European ambition, which, within the context of REPowerEU, envisages a fourfold increase in the production and import of hydrogen compared to the Fit for 55 package (from 5.6 Mt to 20 Mt). This hydrogen could be used for ensuring the sustainability of society, in particular as a fuel and a feedstock for transport and industry. As a general rule, 1 Mt of hydrogen cuts carbon emissions by 10 Mt. Our efforts could therefore help keep 46 Mt of CO_2 per year out of the atmosphere by 2030. That is why, as companies, we are working to deliver:

Local production
Several companies are working on concrete projects aimed at launching large-scale production of electrolytic hydrogen powered by North Sea wind power between 2024 and 2026. Together, all of the projects and plans would be good for 2.5 GW of electrolysis by 2030 and produce 0.25 Mt of green hydrogen. A project to produce low-carbon hydrogen from refinery gas is also underway. This would mean a total of 0.6 Mt of hydrogen could be produced locally by 2030.

Imports
Importing energy will remain necessary. Europe does not have the capacity to produce enough renewable energy to meet the 2030 and 2050 targets. The sooner Europe starts replacing imports of oil, gas and coal with imports of green and low carbon energy, the sooner it will achieve the European climate and energy independence objectives. Green hydrogen can be produced wherever there is abundant supply of sun, wind and space. From Southern Europe and North Africa to Australia and Latin America. Diversity of supply, is security of supply. Our first import projects (hydrogen and its derivatives) add up to at least 4 Mt in 2030.

Infrastructure
Supplying end-users in NW Europe with large volumes of hydrogen affordably, safely and reliably from ports such as Rotterdam will require a pipeline infrastructure. This will begin as an infrastructure within coastal industrial clusters, and between ports and inland industrial clusters, allowing us to transport hydrogen from Rotterdam to steel, chemical, cement and industries at large as well as to filling stations to fuel trucks and barges.

TWO CRUCIAL CONDITIONS

To achieve this, the two most crucial conditions are:

1) certification of hydrogen, to ensure imported hydrogen is recognised as a value-adding part of the solution, and
2) closing the financial gap between the use of renewable & low carbon hydrogen and its derivatives compared to their current CO_2-emitting alternatives.

OUR PROPOSAL

We, the companies and organizations listed below, are convinced that together we can accelerate the development of the hydrogen economy in Rotterdam and NW Europe. Current efforts are directed at further detailing plans to organise and implement all parts of the supply chain. Rotterdam has calculated it will be able to produce and receive at least 4.6 million tonnes of hydrogen by 2030. This will allow the port and all its connected companies and partners to make an active contribution towards the achievement of European targets. Consequently, close collaboration with the European Union is required.

Let's work together to get the hydrogen economy up and running. Now.

City of Rotterdam · provincie Zuid-Holland · Port of Rotterdam

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