



Executive Perspectives

A blog-post by Juergen Wollschlaeger, managing director at Raffinerie Heide GmbH

Germany's national hydrogen strategy: a step in the right direction, but how do we keep up progress?

Following the news of Germany's draft national hydrogen strategy, our Managing Director, Juergen Wollschlaeger explains what a regulatory framework must offer to ensure that Raffinerie Heide and others can progress hydrogen projects and deliver for the global energy transition.

News of Germany's draft national hydrogen strategy represents an essential step towards positioning the German industry as globally leading in the development of hydrogen technologies. The potential for hydrogen – and “green” hydrogen in particular – to make a significant impact in our efforts to decarbonise globally is vast and it's hugely exciting for Raffinerie Heide to be a part of this journey.

The nature of the decarbonisation challenge means that the approach we take must reach across a broad range of different sectors. Transport, industry and heating are all areas of the economy that represent significant hurdles on the pathway to a net-zero future. Not only is Germany's new strategy set to prioritise the development of hydrogen applications in these areas, but will also focus on how “green” hydrogen can be produced on an industrial scale – namely through the scale-up of electrolysis capacity – to effectively fuel a low-carbon future.

These key prongs of Germany's strategy are very well-aligned with the hydrogen-related projects we're pursuing at Raffinerie Heide. The scale-up of “green” hydrogen production and utilisation to reduce emissions from our operations and products, while providing decarbonised heat for people's homes, all reflect the combined vision of the Reallabor Westküste 100 and KEROSyN100 projects we are involved in.

Developing the right regulatory framework will be crucial for the future success of hydrogen technologies. The progress Germany is making here offers encouragement that things are moving in the right direction, however, getting this right will require policymakers to continue working in partnership with industry, while also looking beyond our borders.

If “green” hydrogen is to be successfully produced on an industrial scale, the policy framework must work in a way to encourage closer integration between different low-carbon projects. For instance, curtailment regimes for renewable energy generators need to be set up in a way that will enable excess capacity to be effectively utilised for “green” hydrogen development.

A significant amount of wind power generated in northern Germany – about 40% – never makes it on the grid. Currently, the German Government hands over €294 million to northern wind turbine operators, compensating them for dumping this excess power – a fit-for-purpose regulatory framework will need to address this. Enabling wasted renewable power to be redirected to hydrogen production would offer a win-win for both wind developers, “green” hydrogen developers, energy consumers and taxpayers.

According to the Hydrogen Council, Germany’s national hydrogen strategy is one of 18 roadmaps being pursued by nations globally. While this is hugely encouraging, tackling climate change is a complex and global challenge. With this in mind, the regulatory discussion must stretch beyond our borders, while also recognising the interplay between all sectors of the economy.

Our KEROSyN100 project involves the development of cleaner, synthetic aviation fuel, through combining “green” hydrogen with captured CO₂. As the leading supplier of aviation fuel to Hamburg Airport, there is a significant opportunity for Raffinerie Heide’s synthetic fuels to decarbonise the aviation industry and thus establishing a circular economy.

However, at an EU level, synthetic fuels are not currently accounted for within sector-specific CO₂ targets. Quotas for synthetic fuels that genuinely reflect contribution to decarbonisation and similar measures globally could be one of the answers to ensuring that this element of the energy transition is progressed as effectively as possible.

Concluding thoughts:

A fully formed national hydrogen strategy for Germany is a welcome prospect, and we applaud the significant efforts that have been made to reach this point.

To keep up this progress, and as policymakers move plans forward, continued partnership with industry to create the right regulatory framework will be needed.

Taking a cross-sector and cross-border perspective will be crucial. If we get this right, a low carbon future could be within our grasp.

About Raffinerie Heide

Raffinerie Heide GmbH is part of the Klesch Group and is one of the largest employers in Dithmarschen, Schleswig-Holstein, with around 560 employees and 40 trainees. The company has an annual processing capacity of 4.5 million tonnes of crude oil, equal to the oil demands of the entire state of Schleswig-Holstein. The refinery with a medium-sized ethos, which was

founded in 2010, produces traditional petroleum products such as petrol, diesel and aviation fuel. It also produces light heating oil and base materials for the chemicals industry. Raffinerie Heide, which is one of the most complex refineries in Europe, is among the best in the continent in terms of utilisation and availability thanks to its strict standards of care in relation to maintenance.