



Press Release

Western Australia, 21 February 2020

ARENA announces funding for Yara Pilbara and ENGIE's feasibility study on a renewable hydrogen to ammonia solution in fertiliser production

Collaboration partners Yara International ASA and ENGIE have welcomed the announcement of \$995,000 in funding from the Australian Renewable Energy Agency (ARENA) towards their feasibility study, which is examining the potential to make renewable hydrogen technology work in industrial-scale facilities.

Yara International is working towards making carbon-free fertiliser, and renewable hydrogen is the major enabler for making CO₂-free or "green" ammonia, which in turn, is the key ingredient for "green" fertiliser, as industrial feedstock and potential energy carrier. Yara's goal is to ensure we will be the market shaper for green ammonia and low carbon fertiliser production. ENGIE is committed to developing industrial-scale solutions based on renewable hydrogen, produced by electrolysis using a green energy supply, and believes that hydrogen is the key that will unlock the full potential of renewables and carbon-free energy solutions.

The collaboration on the feasibility study aims to assess the first step towards converting the Yara Pilbara plant from one that relies completely on natural gas for its hydrogen, to one where a share of its hydrogen comes from renewable power. Reaching that goal would further reduce the plant's CO₂ emissions.

Yara and ENGIE regard the Pilbara region as the ideal location for such a project, with plenty of sun and seawater, which are key ingredients to producing renewable hydrogen.

"We appreciate that ARENA has recognised Yara and ENGIE's complementary expertise and experience on this complex project via this commitment. ARENA's support will assist in completing the feasibility study so that we can fully understand the opportunity for generating renewable hydrogen for use in our Pilbara facilities", said Tove Andersen, Yara International Executive Vice President Production.

Ms Andersen said that reducing the costs associated with producing, storing, transporting and deploying hydrogen is crucial for adaption of this technology. Integrated projects like the green hydrogen plant at Yara Pilbara would allow for a real-world, real-time analysis of costs and processes.

“As an energy transition enabler, ENGIE is heartened by ARENA’s support for the joint project with Yara to decarbonise its ammonia production. This is also a great example of government support for a renewable hydrogen industry to take off in Australia. ENGIE is ready to contribute.” said Michèle Azalbert, CEO of ENGIE’s Hydrogen Business Unit.

The feasibility study will investigate the opportunity for a renewable hydrogen plant, assessing a number of variables to identify the optimal scale of solar power generation, feeding multi-megawatt electrolyzers. The green hydrogen generated would then be fed into the existing ammonia plant, located in the Pilbara region of Western Australia.

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About Yara

Yara grows knowledge to responsibly feed the world and protect the planet, to fulfil our vision of a collaborative society, a world without hunger and a planet respected. To meet these commitments, we have taken the lead in developing digital farming tools for precision farming and work closely with partners throughout the whole food value chain to develop more climate-friendly crop nutrition solutions. In addition, we are committed to working towards sustainable mineral fertilizer production. We foster an open culture of diversity and inclusion that promotes the safety and integrity of our employees, contractors, business partners, and society at large. Founded in 1905 to solve the emerging famine in Europe, Yara has a worldwide presence with about 17,000 employees and operations in over 60 countries. In 2019, Yara reported revenues of USD 12.9 billion.

www.yara.com

About ENGIE

Our group is a global reference in low-carbon energy and services. In response to the urgency of climate change, our ambition is to become the world leader in the zero-carbon transition "as a service" for our customers, in particular global companies and local authorities. We rely on our key activities (renewable energy, gas, services) to offer competitive turnkey solutions.

With our 160,000 employees, our customers, partners and stakeholders, we are a community of Imaginative Builders, committed every day to more harmonious progress.

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