

HYDRO PLAN TO DELIVER GREEN JOBS EXPLOSION

Port Pirie smelter owner Nyrstar has launched a study into a \$750m renewable energy project to transform the region



Air Liquide inaugurated, the largest membrane electrolyser in the world in Quebec. Picture: Air Liquide

CAMERON ENGLAND

A \$750m hydrogen project planned for Port Pirie has the potential to transform the regional city, creating a greener future and new jobs for generations to come.

It would also form part of a renewable energy industrial precinct in the Spencer Gulf, delivering a massive boost to the region.

Construction of the world's largest hydrogen electrolyser, to be built in Port Pirie, could begin in little more than a year, with an engineering study into the \$750m project under way.

Global commodities company Trafigura, which owns the Nyrstar lead smelter at Port Pirie, and the State Government will co-fund a \$5m study into building a hydrogen plant next to the current lead smelter.

Trafigura's general manager for Australia, Tim Rogers, said the company expected to be in a position to make a final investment decision on the project by the end of 2022, and with approvals in place, construction would start the following year.

The project would create 150-300 jobs during construction and up to 25 ongoing roles, and solidify Port Pirie's future as an industrial hub, Mr Rogers said.

The project would be built in stages, with the full-scale plant able to produce 100 tonnes per day of green hydrogen from a 440 megawatt electrolyser – a device which splits water into hydrogen and oxygen using renewably sourced energy. Even at the initial expected capacity of 85MW, the facility would comfortably be a contender for the largest in the world by today's standards.

Mr Rogers said the hydrogen would be exported as ammonia, while the oxygen produced would be used by the lead smelter.

There was also the possibility of developing a fuels business to feed into the heavy transport sector.

“The hydrogen will be used both domestically, for heavy trucking, and then for export in the form of ammonia,” Mr Rogers said.

“The integration with the existing site is a key element of what we believe is a unique value proposition for this project.” Mr Rogers said the company globally believes “we have an important role to play in the decarbonisation of various sectors”, including marine transport, transport, and metals production.

Nyrstar vice president Australian operations Dale Webb said the project would “transform” how the company's Port Pirie smelter and the broader Australian operations did business.

“This project allows Nyrstar Australia to really step forward and take a more leading role in terms of creating low-carbon metals for the future,” Mr Webb said.

“It will deliver the opportunity to get renewable oxygen, renewable power, for our operation, allowing us to reduce our costs and create low-carbon metals.

“When we talk about our rich history of 130 years of operation (in SA), what this project does is it provides confidence for the next generation of workers in Port Pirie and the Upper Spencer Gulf that there is a sustainable business and a sustainable future for Nyrstar Australia.” Deputy Premier Dan van Holst Pellekaan said the project would be “fantastic” for the Upper Spencer Gulf region, and would be complementary to any other potential hydrogen projects developed in the state. Mr van Holst Pellekaan said it tied in perfectly with the government's Hydrogen Action Plan, which envisaged using the state's large renewable energy resources to underpin a hydrogen industry.

“Our vision is a renewable energy industrial precinct in the Spencer Gulf – incorporating Port Pirie, Port Augusta, Whyalla and our worldclass copper resources, to support jobs for generations to come,” he said.

Mr van Holst Pellekaan said talks would continue with Trafigura and the federal government about a cofunding partnership for the full-scale development.

He said the project did not diminish the support for other potential hydrogen developments in the region, but it did have “the potential to be up and running sooner” than other projects under consideration.

Whyalla steelworks owner GFG Alliance has ambitions to incorporate hydrogen into

its energy mix over the longer term, while the federal government has flagged the creation of seven hydrogen hubs nationally, with one to be located on the Eyre Peninsula, most likely at Whyalla.

The state government is also currently considering seven bids to use land at Port Bonython, with interested parties known to include H2U, which wants to develop a \$240m hydrogen project.

Nyrstar employee Michaela Crouwkamp, a second year fitter and turner apprentice at the smelter, said it was great news.

“I’m excited by the news that Trafigura and Nyrstar are looking at building a new green hydrogen plant,” she said. “It’s positive for the business, but also the community and provides opportunities and jobs”.

Trafigura is one of the world’s largest commodities trading companies, dealing in metals and oil and gas, and it also has a renewables division.

Nyrstar recently committed to building a \$23m product recycling facility at the Port Pirie smelter, with that project attracting \$7m in support from the state government.