

WESTERN AUSTRALIAN RENEWABLE HYDROGEN STRATEGY

**400. Mrs L.M. O'MALLEY to the Minister for Water:**

I refer to the McGowan government's efforts to support and grow Western Australia's hydrogen industry, especially as the economy starts to recover from COVID-19. Can the minister outline to the house how the nation-leading project announced yesterday to produce renewable hydrogen and graphite from wastewater will benefit Water Corporation and its operations?

**Mr D.J. KELLY replied:**

I thank the member for Bicton for this question and I thank her for her interest in this really exciting project. This week we announced an agreement between Water Corporation and Hazer Group to build a facility at the Water Corporation's Woodman Point wastewater treatment plant. That plant will use Australian-first technology to produce low-emission hydrogen and graphite from wastewater. Some people will already be aware that the Water Corporation already collects biogas, a by-product of treated wastewater, at a number of its wastewater treatment plants. It takes the biogas and instead of venting it into the atmosphere as a very dangerous greenhouse gas, the Water Corporation burns it and produces electricity, which then reduces its emissions and runs the wastewater treatment plants.

This technology takes biogas and processes it instead of just burning it. The products that come out of that process are hydrogen and graphite. Of course, hydrogen is a very valuable fuel and there are lots of opportunities in emerging economies for hydrogen as a fuel. Graphite is also a very valuable product for the production of lithium-ion batteries, water purification and a lot of other industrial applications. I congratulate the Water Corporation and Hazer Group on this project. The technology was developed here in Western Australia and comes out of PhD research at the University of Western Australia. That research resulted in Hazer Group being formed. It is a company based here in Western Australia and it is now listed on the Australian Securities Exchange. This plant is the pilot plant for proving the concept—a commercial demonstration plant that is not as large as it would need to be to be fully commercial, but when fully operational will produce 100 tonnes of clean, low-emission hydrogen per year, and approximately 380 tonnes of high-purity graphite.

It is a great technology for the Water Corporation to promote. It gives the Water Corporation a revenue stream for its excess biogas and it also takes it further along its journey to decarbonise its operations. It builds on the announcement we made earlier this year about a \$30 million solar panel project, which the Water Corporation is already implementing, to power more of its operation through renewable energy. I congratulate the Hazer Group, which is a great Western Australian company, for producing great research and delivering this technology. I also congratulate the Water Corporation for the innovation it is using in a range of areas to deal with climate change and to decarbonise its operations. I had great pleasure in opening the Water Corporation's innovation hub in 2018. It is basically a facility that people can tap into to obtain as much wastewater—raw sewage—as they want to see what businesses they can develop from that wastewater. The member for Hillarys may know that wastewater is pretty smelly at times, but it is a valuable resource. I congratulate the Water Corporation and the Hazer Group for turning wastewater into a valuable new industry here in WA.