

Belfast green tech company unveils plans for 100 jobs in race to decarbonise industry

A Belfast green tech company plans to create nearly 100 jobs over the next two years as it goes to market with technology which enables the production of green fuels to help decarbonise industrial processes.

CATAGEN made the announcement as it launched five new climate technologies which it developed over the last nine months with the help of funding from the Department for Business, Energy & Industrial Strategy.

It has developed new ways to generate green hydrogen, bio-hydrogen and e-fuels, as well as complementary systems for carbon capture and hydrogen compression. Green hydrogen and e-fuels can be used to replace fossil fuels in across a range of sectors, including manufacturing, transport, power, mobility and agriculture.

Having developed the prototypes, CATAGEN said it is on course to deliver “full scale demonstrators” by 2024 and will grow its current headcount from 36 to 75 over the next year and to 130 the following year.

“We are creating new technologies that clean and decarbonise the air, applying our innovations to decarbonising challenging sectors such as industry, shipping, and aviation,” CATAGEN CEO Dr Andrew Woods said. “We are committed to finding a collective solution that will cut CO2 emissions and enable a move away from fossil fuels to cleaner energy sources.

“Technology, talent, and a united sense of purpose have taken us to the point where today our team can launch ClimaHtech, a configurable system which uses advanced climate technologies

to produce green hydrogen and efuels. This technology is scalable and by adopting efficient green hydrogen energy powered by renewable sources such as wind and solar, we can help fulfil net zero pledges across multi sector industries.”

CATAGEN was founded by Dr Woods and Professor Roy Douglas and focuses on developing innovative new technologies to create alternatives to fossil fuels for difficult-to-decarbonise sectors.

The company’s new technologies include a green hydrogen generator which uses CATAGEN’s patented recirculating gas reactor technology to create a highly efficient green hydrogen generator. Renewable energy powers the ClimaHtech HGEN to produce green hydrogen with no harmful by-products.

It has also developed an E-fuel generator which uses the company’s enhanced recirculating gas reactor technology to produce cost competitive and easily transportable E-fuel. CATAGEN has also developed a bio-hydrogen generator which uses its technology to produce cost-effective low carbon bio-hydrogen from a waste biomass source. The firm is also developing the ClimaHtech Compressor, a high-pressure hybrid pumping system for hydrogen storage and dispensing. Meanwhile, its CO₂ carbon capture technology uses low grade waste heat to capture CO₂ resulting in very low operating costs.