

Aeristech expands to aerospace with HyFlyer II

Aeristech, a UK technology company, will provide its electric motors and hydrogen fuel-cell compressors technology solutions to the aviation industry. As a partner of the HyFlyer II project, its technology will be used to launch the world's first 19-seat hydrogen-powered plane by 2023. Aeristech's 25kW compressor targets larger fuel cell applications in the transport sector.

BioSolar aims to halve the electrolysers' costs

BioSolar Inc, a US developer of clean energy technologies, explores ways to reduce hydrogen electrolysers costs. It has also sponsored a research project at the University of California Los Angeles (UCLA). BioSolar claims that as half of the electrolyser costs come from two precious metals- platinum and iridium- it tries to cut it down by replacing them with the earth-abundant materials. However, the company has not disclosed the name of the abundant material. Other companies are also currently working on finding substitutes for the two contenders by substituting it with materials such as silica.

dynaCERT and Martin Technologies to collaborate

dynaCERT Inc (a Canadian based technology company) will work with Martin Technologies LLC Corporation (a US-based engineering company) to commercialise its carbon emission reduction technology (HydraGEN™ Technology). The technology works with IC engines and uses electrolysis to turn distilled water into hydrogen & oxygen gases. Mr Harold Martin, Chairman and CEO of Martin Technologies, has also joined the Advisory Board of dynaCERT Inc.

Hatch joined CHFCA as a new Executive Member

The Canadian Hydrogen and Fuel Cell Association (CHFCA) announced that Hatch joined it as an Executive Member. Hatch is currently offering its services to Air Liquide for the construction of 20-megawatt proton exchange membrane (PEM) hydrogen project.

James Cropper raises bets on hydrogen with PV3 acquisition

James Cropper, a UK paper maker, through its subsidiary, Technical Fibre Products Ltd (TFP) is acquiring PV3 Technologies Limited (PV3), a UK based manufacturer of coatings and catalysts for water electrolyser technologies. The acquisition is the latest step in TFP's growth, building on recent capacity expansion. It will increase TFP's portfolio of hydrogen technologies products to expand its market.

TFP's nonwovens have already been used as Gas Diffusion Layers (GDL) substrates for fuel cells. With PV3 deal, the company portfolio will include catalyst powders for fuel cells and electrolyser components. The company now

renamed PV3 to be called TFP Hydrogen Products Ltd. It expects that the electrolyser market is expected to grow at a CAGR of over 10% between 2020 and 2030.

Quebec provides funding as a part of its green economy strategy

The local officials in the Cote-Nord region, Canada, confirmed that CAN \$ 15 million would be invested in developing the green hydrogen sector in the area. The amount will be used specially on projects in the industrial and heavy transport sectors. The Government of Quebec announced the amount for the area as a part of its Green Economy 2030 plan, unveiled in November 2020. Further information on how to apply for the [funding can be found on the official website](#).

SOFC can be a solution for maritime decarbonisation

Alfa Laval will lead a consortium to speed up work on a solid oxide fuel cell (SOFC) technology project, called '[SOFC4Maritime](#)'. The aim is to use fuels cell technology to power ships. Alfa Laval will work with DTU Energy, Haldor Topsoe, Svitzer and the Mærsk Mc-Kinney Moller Center for Zero Carbon. The story is covered in detailed separately.

The European Commission has approved Schlumberger' Gnvia

Schlumberger New Energy announced that its newly formed JV company, Gnvia, a clean hydrogen production technology company is approved by the European Commission. As reported early, Gnvia is a public-private partnership company work on high-temperature reversible solid oxide electrolyte technology. Its technology is claimed to be efficient and reversible, switchable between electrolysis and fuel cells functions.

Thyssenkrupp to install a megawatt water electrolysis plant in Canada

Thyssenkrupp will install an 88 megawatt (MW) water electrolysis plant for Canadian energy company Hydro-Québec. The plant will be built in Quebec, with an annual production capacity of 11,100 tonnes of green hydrogen. Both the hydrogen and the oxygen will be supplied to a biofuel plant, producing biofuels from residual waste for the mobility sector. The plant's commissioning is set for late 2023 and is claimed to be the world first and largest green hydrogen plant.