

Contact:
Horizon Fuel Cell Technologies
sales@horizonfuelcell.com
www.horizonfuelcell.com



PRESS RELEASE

Horizon Supplies 2MW Fuel Cell CHP Powerplant

Singapore, 10 October 2023

Horizon Fuel Cell recently delivered a containerised 2MW PEM fuel cell “Combined Heat and Power” (CHP) system, and targets deployment of zero emission stationary powerplants up to 100MW around the world

Horizon Fuel Cell group is well known for high power-density proton exchange membrane (PEM) fuel cells, especially in applications such as heavy vehicles, enjoying a prominent position in the world’s largest fuel cell commercial vehicle market of China. Some may not be aware that Horizon has also supplied containerised fuel cell power systems up to 1.5MW previously, and this latest delivery of a 2MW system is the largest system yet supplied by the company.



Horizon 2MW CHP “under the hood”

The 2MW CHP system recently supplied uses waste hydrogen from an industrial process, and generates both electricity and heat, which results in system efficiency exceeding 90%.

HORIZON DELIVERS 2MW POWERPLANT

To date most deployments of Horizon containerised fuel cell powerplants have been to chemical companies and manufacturing parks, where waste hydrogen is available as a low or no-cost feedstock to curb increasing power bills. Often these waste hydrogen streams are simply burnt, and while they were historically seen as a nuisance, that is changing as hydrogen is increasingly viewed as an important energy carrier.

With a dramatically increased focus on decarbonised solutions in industry, as well as transport and power sectors around the world, Horizon sees a bright future for MW-scale integrated green hydrogen powerplants replacing diesel generators and complementing renewable power generation. With mandates targeting reduced carbon emissions taking hold in many regions, it's inevitable that standalone stationary power systems will need to operate with zero emissions, and PEM fuel cell technology is a great fit for this application, as they are suited to operating "on-demand", with rapid startup and ramp-up characteristics.

After many years focused on establishing a strong market position on smaller PEM fuel cells, Horizon successfully transformed itself into a global leader in high powered fuel cells for demanding applications such as commercial vehicles and MW-scale backup power. Horizon leverages highly vertically-integrated manufacturing capabilities in PEM fuel cells, and leads the market in power density characteristics for high powered fuel cells, with single stacks able to generate more than 250kW continuously.

Horizon will focus on deployment of integrated green power solutions up to 100MW, combining electrolysers, hydrogen storage, fuel cells and batteries for zero emission independent power, and offering important stabilisation for power grids facing massively increasing renewable generation and challenges in balancing generation with demand.