

HYDROGEN + FUEL CELLS NORTH AMERICA TRADE SHOW TO DEBUT AT SOLAR POWER INTERNATIONAL 2017



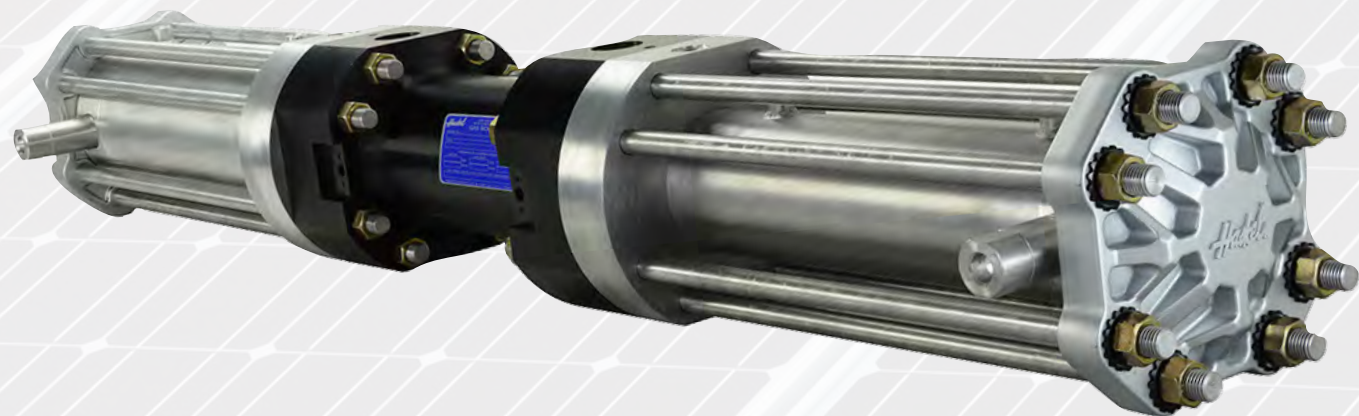
BY LARRY TURNER,
President & CEO of Hannover Fairs USA

World renowned event organizer Deutsche Messe is launching its popular energy-themed trade show, Hydrogen + Fuel Cells NORTH AMERICA (H2+FC North America), alongside Solar Power International at the Mandalay Bay Convention Center in Las Vegas from September 10-13. Deutsche Messe's U.S. subsidiary, Hannover Fairs USA, is organizing the debut of the trade show and its public forum, featuring exhibitors and guests who will discuss the latest developments in the industry.

For more than 20 years, H2+FC has been a part of the Energy Trade Fair at Hannover

Messe, the world's largest annual industrial technology show in Hannover, Germany. This renewable energy trade show has grown significantly over the past 10 years, and the inaugural H2+FC North America is modeled after the Hannover show. You can expect to see technologies that focus on renewable energy storage solutions, hydrogen generation and compression, and fuel cell systems all of which are closely interrelated and growing in importance in North America.

With its 18,000 visitors, Solar Power International is considered North America's largest trade show for the solar energy industry. Visitors,



especially those interested in hydrogen and fuel cell technology, will be able to examine a range of technology offerings on the H2+FC North America show floor and learn from industry thought leaders during the public forum.

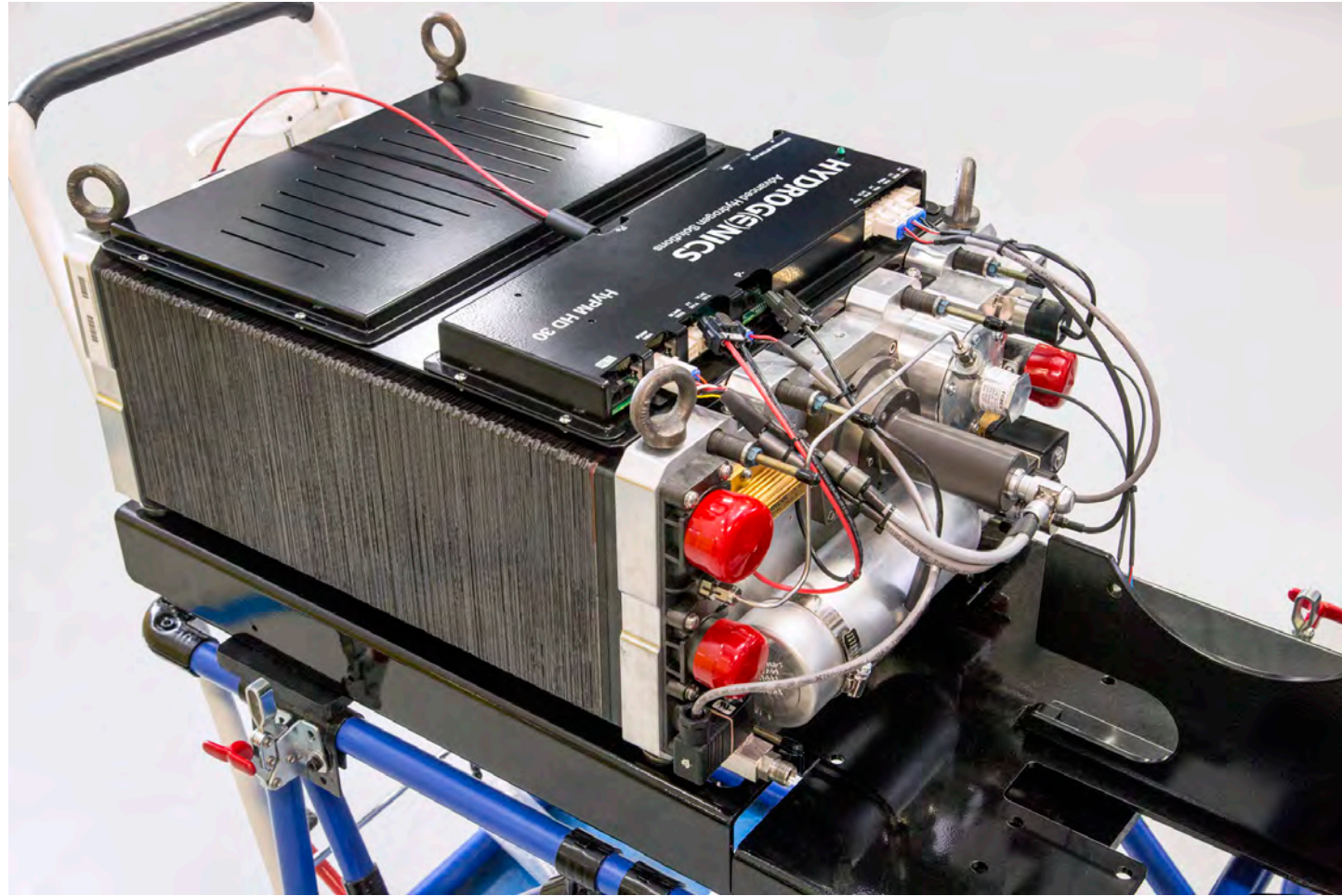
TEST DRIVE A FUEL CELL VEHICLE DURING THE SHOW

All visitors are welcome to test drive the

latest fuel cell electric vehicles during the show. The California Fuel Cell Partnership is sponsoring test drives of the 2017 Honda Clarity, Toyota Mirai and Hyundai Tucson Fuel Cell vehicles. Partaking in a test drive will be a great way to experience the automotive aspects of the technology showcased on the trade floor.

Keith Malone, Spokesperson for California Fuel Cell Partnership says, "Our ride and drive





offering is a great opportunity to test the latest fuel cell vehicles that are on the market around the world today and to learn more about them. These vehicles offer quick fill-ups in three-five minutes, they average about 265 miles to 366 miles on a fill up and like any electric vehicle have good torque, quiet drive and zero emissions.”

“H2+FC North America offers a terrific opportunity to demonstrate and to learn from the automobile makers who are involved and committed to fuel cell technology,” adds Keith.

LARGEST PRESENTATION OF ELECTROLYZERS IN NORTH AMERICA

Many of the electrolyzer technology firms attending H2+FC North America have exhibited at the Hydrogen + Fuel Cells show in Hannover and

are excited about bringing their innovations to Solar Power International in September.

“H2+FC North America is a great fit for ITM Power as we have a subsidiary in California. When we heard the same organizers as the show in Hannover are hosting the trade show in the U.S., we knew we wanted to exhibit,” says Steve Jones, Managing Director of ITM Power. ITM Power will be launching a series of large scale refueling station designs at H2+FC North America, including its new refueling station with capability to produce up to 20 tonnes of hydrogen per day and refueling systems for heavy duty vehicles and port applications.

“In our business, the key thing at the moment is scale. The technology is mature and ready for scale, but we need to see real world projects

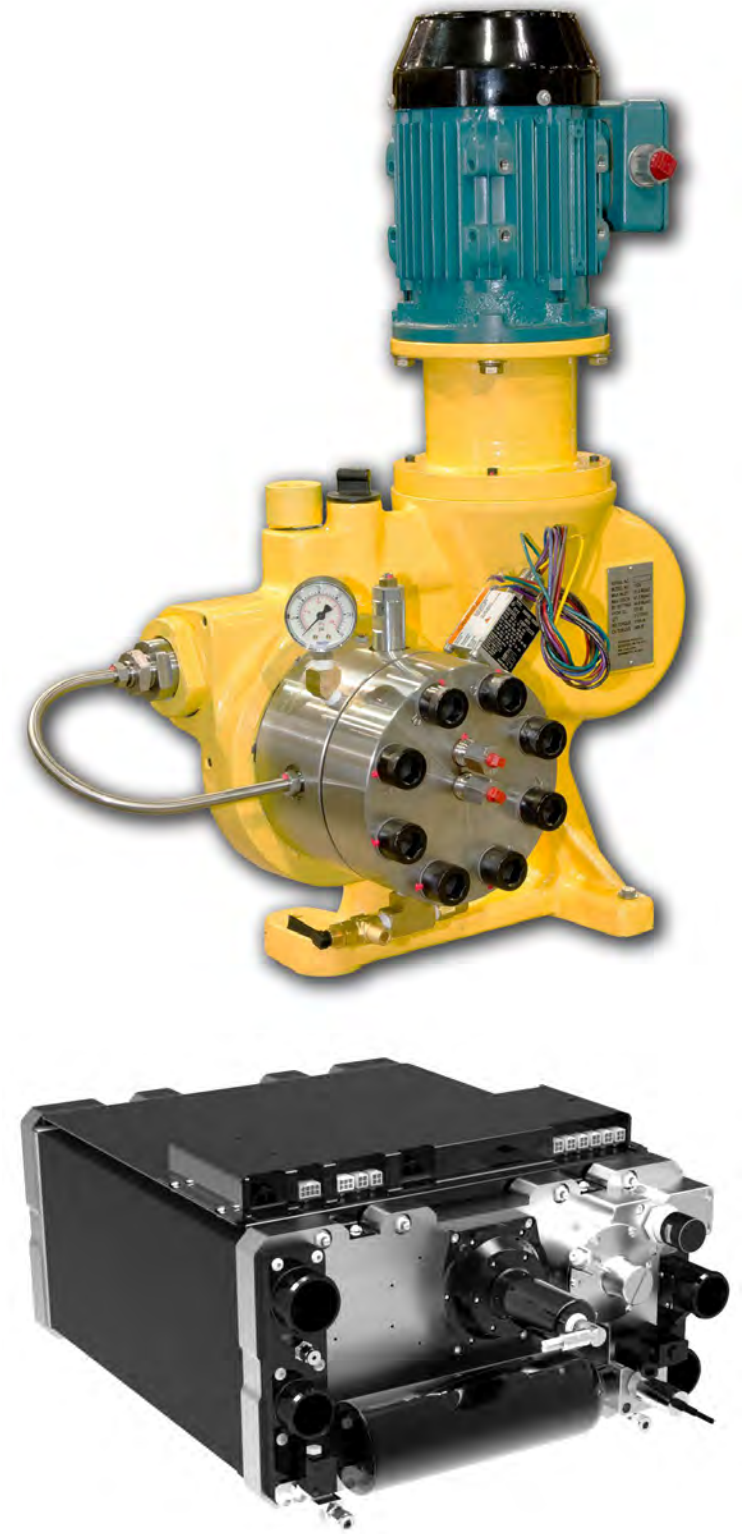
being deployed that demonstrate the value of the technology. Fuel cell vehicles are being deployed for passenger vehicles, trucks, trains and vessels and these industries require large volumes of hydrogen at low cost, which is ITM Power’s focus,” adds Steve.

ITM Power will be discussing green hydrogen production linked to solar and wind power and how this can be an economic alternative to gasoline or diesel or hydrogen fuel derived from fossil fuel sources, such as natural gas.

Hydrogenics, a hydrogen technology company that has been exhibiting at the show in Hannover for more than 20 years, will also be exhibiting on the floor of H2+FC North America. “Due to the increased interest in hydrogen technology across North America, H2+FC North America is a great opportunity for Hydrogenics to continue to showcase its leadership in this market,” says Daryl Wilson, President & CEO of Hydrogenics Corporation.

Hydrogenics’ solutions are based on two main platforms, fuel cells for power and electrolyzers for onsite hydrogen generation and storage. Hydrogenics’ HyPM™ fuel cell power modules apply hydrogen as a power source for everything from heavy duty mobility including buses, trains, planes and commercial fleets to backup, stationary and continuous power. The company is the leading supplier of PEM and alkaline electrolyzers for on-site and on-demand renewable hydrogen production, fueling stations and Power-to-Gas energy storage systems.

One of the key initiatives in the hydrogen and fuel cells industry is that government and industries are focused on reducing their carbon emissions. Adds Daryl, “On the fuel cell side, we





have seen a greater move towards hydrogen fuel cell electric vehicles as OEMs look for ways to reduce emissions in the transportation industry. And in order to see continued growth in hydrogen mobility, the hydrogen fueling infrastructure needs to be developed as well. We are also seeing growth opportunities in energy storage and Power-to-Gas as utilities look for ways to balance the energy grid.”

The transition to renewable and zero-emission hydrogen needs to be done in a way that is sustainable and cost effective. “Hydrogenics is looking forward to demonstrating for H2+FC North America attendees how our technology is delivering high value, cost effective and safe solutions to customers around the globe,” says Daryl.

Proton OnSite, the U.S. based division of Nel Hydrogen, will be showcasing large PEM and alkaline electrolyzers and their connectivity to renewable energy sources, such as solar or wind, and its hydrogen fueling solutions. The company will be discussing the variety of pathways to green energy via green hydrogen.

“Because of the growing interest in fuel cell



electric vehicles, we have a strong focus in expanding our base of H2 refueling station throughout the world. We see a lot of traction in hydrogen energy storage because organizations such as the newly formed Hydrogen Council understand the use of hydrogen to help achieve significant reductions in harmful carbon emissions,”



says David Bow, Senior Vice President of Sales and Marketing at Nel ASA and Proton OnSite.

“We exhibit at Hydrogen + Fuel Cells in Hannover every year and are excited to see the trade show in North America. With the solar and storage groups co-exhibiting, we’re anticipating good attendance and expect the North American exhibition will be an ideal opportunity to showcase our hydrogen electrolyzer and hydrogen fueling solutions to the North American market,” adds David.

INNOVATIONS IN HYDROGEN GENERATION AND COMPRESSION ON DISPLAY

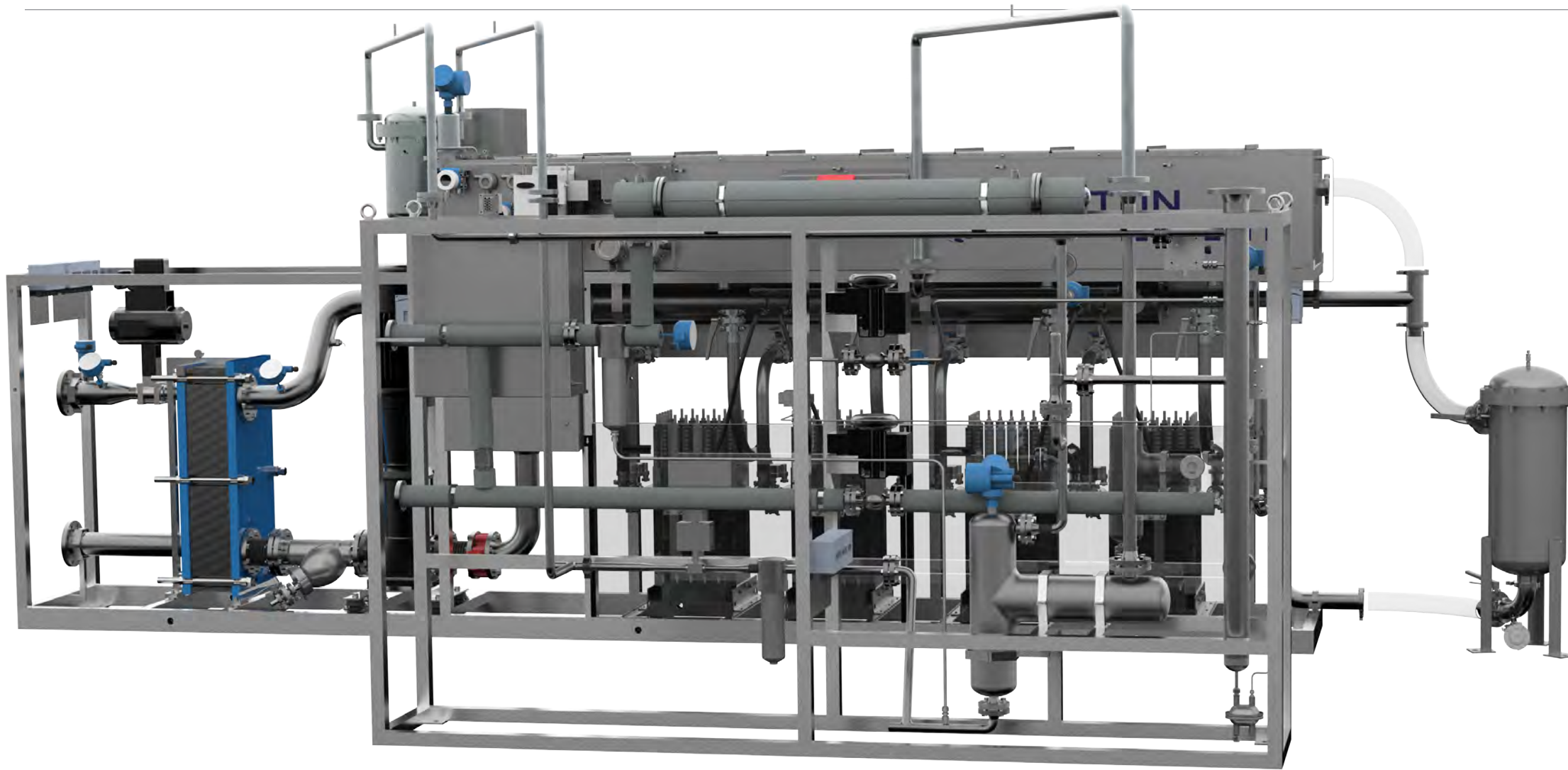
SAFCel, a leading developer of Solid Acid Fuel Cell stacks for stationary and portable power applications, from tens of watts to tens of kilowatts, will showcase its portable and remote fuel cell systems, as well as hydrogen generation stacks that produce ultra-pure, compressed hydrogen.

During the H2+FC North America show, the company will also be discussing its Oil & Gas (O&G) remote power units that are being deployed to electrify wellsites and thereby eliminate



the use of GHG (i.e., methane) emitting devices currently used on wellsites to provide mechanical power. Currently, SAFCel is focusing on Canadian O&G applications, as regulations banning the use of methane emitting devices will come into force in next three years, driving forward fast adoption of remote power technologies.

On the hydrogen generation side, SAFCel will be discussing how its hydrogen generators can take both standard (i.e., natural gas) and renewable fuels (i.e., bio-diesel or bio-methanol, and



solar based ammonia) and convert them to ultra-pure, compressed hydrogen for both stationary and mobile applications at a reduced cost compared to current central hydrogen production and distribution in compressed form.

“Currently in the industry, remote power sources to power electronics in both commercial and industrial are starting to take off, presenting a unique opportunity for fuel cells, which can provide reliable, long-term power where other sources cannot from either reliability or economic perspectives,” says Calum Chisholm, CEO of SAFCeLL, Inc. “For our hydrogen generation stacks, the cost reduction of producing hydrogen onsite from hydrogen dense liquid fuel

carriers will enable mass adoption of FCEVs, which are finally at the commercial level with respect to technology. Now the barrier to adoption shifts to availability of low cost compressed hydrogen,” adds Calum.

During H2+FC North America, SAFCeLL will be looking for partners to help it scale up its fuel cell and hydrogen generation stacks/systems in both power and volume.

Also exhibiting at the show, Haskel International, a firm that has been involved in hydrogen compression for 25 years and hydrogen refueling for 15 years, will be showcasing the Haskel H-Drive, a hydraulic driven hydrogen gas booster, alongside sister

brand, PPI, showcasing its diaphragm compressors. The combination of both technologies is used to achieve 1000 bar filling pressures per SAE protocol J2601.

“Key initiatives in our industry right now are higher capacities (fill rate of vehicles), and achieving fill rates equivalent to filling an automobile with gasoline, in less than five minutes,” says George Volk, Director of Global Sales at Haskel. “Since the hydrogen generates heat as the tank fills, the gas must be cooled. Much more energy is required than pumping gasoline, and we expect show visitors will be very interested in learning more about the combination of our new H-Drive and PPI diaphragm compressor.”

With all of this innovation demonstrated on the H2+FC North America show floor, we hope you will join us to explore and learn more about the latest hydrogen and fuel cells solutions this September in Las Vegas.

Larry Turner is President & CEO of Hannover Fairs USA, Inc. (HFUSA). HFUSA is the U.S. subsidiary of Hannover, Germany's Deutsche Messe – one of the world's largest and most active organizers of industrial technology events. Chicago, Illinois-based HFUSA helps U.S. companies expand domestically and internationally through exhibit and sponsorship opportunities at Deutsche Messe's worldwide portfolio of events. Participation in these events offers U.S. companies an unparalleled opportunity for business development through trade shows and conferences held in Hannover, Germany and North America, as well as in key markets such as China, India, Mexico and Turkey. HFUSA creates qualified new business leads, helps U.S. companies enter new markets and aids them in forming lasting partnerships. For more information, visit hfusa.com or contact Larry Turner at +1 (773) 796-4250 or lturner@hfusa.com.