



#### **O**Reading Time: 6 minutes

The Advanced Clean Transportation (ACT) Expo in Long Beach, California, is the ideal location for a transportation exhibition for clean technology. The city hosts the Port of Long Beach, part of the San Pedro Bay Port Complex — that also includes the Port of Los Angeles. Combined, the ports have 20,000 trucks in their registries using combustion engines.

On the way to the port, as I drove towards Long Beach, I noticed about 80% of the vehicles were big rig trucks. The trucks spewed out noxious clouds of diesel smoke that I could smell in my electric car with the windows closed while wearing a respirator mask.

The good news is the Expo showed clean technology, programs, investments and support services from the small clean vehicles up to large Class 8 trucks. All of them should help improve air quality while offering better rides.

## Riding the Smooth Fuel Cell and Electric Waves

A popular aspect of the event is the ride and drive. I went for rides in Hyundai's Class 8 6×2 XCIENT Fuel Cell tractor and 6×2 XCIENT Fuel Cell rigid truck.

The drivers were able to make very tight turns with a small radius in the parking lot of the Long Beach Convention Center. I noticed that the rides were quieter and smoother than consumer electric cars. A driver commented on the quality of the suspension system of XCIENT trucks that feature rear air suspension, Automatic (ECAS) 4-bag type air suspension, plus cabin springs and shock absorbers.

"It's like riding on air," commented Derrick Joyce, Derek Joyce, Senior Manager, Product and Advanced Powertrain PR, Hyundai.

Hyundai Motor will deploy thirty Class 8 6×4 XCIENT Fuel Cell heavy-duty tractors at the Port of Oakland, California in 2023 with a maximum driving range of 500 miles.

There were long queues to ride in a variety of electric trucks, vans and school buses that included Bright Drop, Lightning e-motors, VIA, Nikola, Cummins, Blue Bird school buses, Karma, Hyliion, Daimler, Green Power, Orange EV, Lion Electric, SEA Electric and others.

Usually, a parking lot with that much traffic with gas or diesel-powered vehicles would have been extremely loud and stink. The entire area was quiet with the scent of the fresh wind from the ocean. Riders and drivers commented about the comfortable and quiet rides of all the vehicles.

There were many news conferences about electrification and safety. Daimler Trucks revealed the electric Freightliner eCascadia with a 230-mile range for short-haul routes.

Blue Bird Corporation partnered with Lightning eMotors, to create a new Class 5-6 electric vehicle platform. It can accommodate several battery configurations for last-mile delivery step vans, motorhomes, and other speciality vehicles.

Mack Trucks announced a program to electrify refuse trucks and Preco Collision Warning Technology for customers of the Mack LR Electric models.



# All Different Types and Sizes of Transformative Electric Vehicles

Everywhere I looked the exhibit hall, patios, hallways and entrance were packed with people and vehicles. The massive Dannar Power Station caught my attention. It is bright orange and shiny, and can transform into different types of utility vehicles and supply power.

Scott Crepeau, Director of Investments for DD Dannar LLC, showed the Transformer-like features of the Dannar Power Station.

The station can be outfitted with attachments for loading, hauling, dumping, digging, farming, grading, mowing and sweeping. There are over 250 compatible attachments. The power station can supply up to 635 kWh of power.

"It can be operated remotely with a joystick, requires little maintenance, with less downtime," says Crepeau.

He says retailers want farmers to use green technology and the Dannar Power Station is eligible for incentives from the California Air Resources Board's Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program.



Mani Iyer, Chief Executive Officer, Solectrac maker of electric tractors explained why electric tractors are needed.

"Agriculture contributes 10% to global warming. An electric tractor can do everything a diesel tractor can do in a much better fashion with no pollution and no vibration. It has full torque at 0 RPM and only one moving part," says lyer. He says the Solectrac e-tractors are very clean, safe and healthier than diesel tractors.

Solectrac recently moved into a 36,000-square-foot production facility in Windsor, California.



### Wheels That Glow Purple

Will Graylin, CEO of Indigo Technologies, proudly stood by an innovative display of Indigo Flow vehicles with a vehicle that was half Indigo Flow and half Indigo Flow Plus.

Flow vehicles do not have a driver or passenger side because the driver seat is in the middle to allow for access from either side of the vehicle, says Graylin.

On the left side of the display vehicle is the rideshare designed Flow and on the right side is the design of Flow Plus. The IndiWheels were glowing in purple.

"These are the magic carpet ride wheels," he mused and showed me the vast amount of cargo space in a car about the size of a Honda Fit.

"We are targeting a price range under \$30,000," Graylin said when I asked about the expected price range.



Tropos Motors introduced the next generation ABLE NXT with parts sourced from the US. The compact low-speed electric vehicle can go up to 55 mph on private property. The Easy Swap feature allows users to change cargo configurations in less than a minute.

The vehicle can then be used for last-mile delivery, maintenance, warehousing, municipality and park applications.

"It is the most energy-efficient vehicle with 5-miles per kilowatt-hour," says Jeff Esfeld, Sales and Business Development Director, Tropos.



Tropos Motors ABLE NXT

## Say Hi to More Hydrogen Fuel Cell Trucks

Cummins and Daimler Truck NA announced they will deploy and validate Freightliner Cascadia trucks with Cummins hydrogen fuel cell powertrains for use in North America. Cummins debuted the X15H 15-litre hydrogen engine.

Gaussin Group showed its H2 Racing Truck, which completed the Dakar Rally in Saudi Arabia in March

"It proves the viability of hydrogen fuel cell technology," says Guillaume Trehard, Director of Autonomous Systems, Gaussin Group. He says France's Gaussin is working on autonomous systems and vehicles for ports and logistics.

Gaussin Group also displayed its APM 75T electric or hydrogen terminal autonomous tractor.

In a news release, Gaussin announced its ATM 38T FULL ELEC logistic vehicles passed the one million kilometre mark since launching. Gaussin has 61 ATM electric yard tractors ordered for 2022 delivery in Europe, Australia and the US. Its factory in France can produce up to 2,400 vehicles per year.



#### The British are Coming (Again)

David Thackray, Marketing Director, Tevva, talked about the Tevva battery-electric truck and the company's ten years of experience in electrifying trucks. A former owner of a BMW i3 with a range extender, Thackray understands the importance of extending the range of electric vehicles.

The UK's Tevva will be launching a hydrogen-powered range extender model in the future.

"Hydrogen is the ally to the battery, not the nemesis," says Thackray.

Thackray gained insight into the American trucking industry by talking to the truck drivers at the event. American truck drivers on-average drive 750 miles a day and at 75 mph, which will require more energy than trucks in Europe, says Thackray.

Tevva is looking to set up a facility in America, possibly in Texas, Georgia or South Carolina.

He announced like Paul Revere but with a friendly twist to the colonists: "The British are coming. The British are coming – AND we are hiring."



No matter where electric vehicles are made that are coming to the port of Los Angeles, the port will be ready.

At the Expo, WattEV and the Port of Long Beach announced plans for a charging plaza for heavy-duty electric trucks. The plaza inside the port complex will provide charging for the combined ports of Long Beach and Los Angeles.

Lynn Walford

NEXT STORY

Pininfarina Launches its First Ever NFT Collection Dedicated to the Modulo Concept car

By Staff Writer - May 14, 2022



#### **OReading Time: 2 minutes**

Italy's Pininfarina is launching its first NFT Collection focused on one of the most iconic and futuristic automotive designs of all time – the Pininfarina Modulo concept car. The Pininfarina Modulo NFTs, in collaboration with 1of1, the luxury NFT specialists. and the musician, Sasha Sirota, will be offered as a series of five pieces of art, which will then be auctioned by RM Sotheby's within a dedicated online auction on 24-26 May, 2022.

The NFT Collection is inspired by the original one-off sketches of the Modulo, preserved until now in Pininfarina's private archive, and developed with the active collaboration of the Pininfarina design Team.

Each unique NFT comprises a package of artistic and experiential components that allow NFT owners to become part of the Pininfarina's iconic legacy by having access to a range of benefits a Privacy & Cookies Policy

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Each NFT will be characterised by a video-animation featuring original soundtracks and a unique period setting with each NFT presenting Modulo in a different context, respectively set within five distinct decades ranging from the 1970s through to 2020.

Chairman, Paolo Pininfarina, says: We are proud that our first NFT Collection is dedicated to give a new life to the Modulo. The concept car designed in 1970 is a manifesto of Pininfarina vision: beauty and innovation to design the future."

Silvio Angori, Pininfarina CEO, adds: "We enter the NFT world with the intention of exploring its boundaries and opportunities. The metaverse is an area we can make a significant contribution to by having been producers of cutting-edge creativity for 90 years. Our immense creative archive, the ability to imagine the future of design using the most advanced technologies open up new avenues for the further economic enhancement of our brand."

Pininfarina S.p.A. is an Italian car design firm and coachbuilder, with headquarters in Cambiano, Turin, Italy. It was founded by Battista "Pinin" Farina in 1930. In 2015, the Indian multinational giant Mahindra Group acquired 76.06% of Pininfarina S.p.A.

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