

Business

Europe battery makers power up for a green tech recovery

Green stimulus packages to boost clean transport

NORTHVOLT: European battery makers are gearing up to take advantage of massive “green” stimulus packages unveiled since the coronavirus pandemic though many acknowledge it will be tough to match the Asian giants that dominate the mainstream market. While Sweden’s Northvolt, and more recently France’s Verkor, are making a play for large-scale production, other European companies are focusing on niche markets and new technologies rather than taking on Chinese and South Korean firms with mass production of batteries destined for electric vehicles (EVs).

From Greek battery maker Sunlight to startups like InoBat Auto in Slovakia and Switzerland’s Innolith, firms say the challenge of building economies of scale fast to compete head on means finding niches is a more likely path to success, for now. “Having battery giants in Europe, it’s still possible,” said Sunlight Chief Executive Lampros Bisalas.

“We just need to run and catch up and innovate faster than the others.” Sunlight’s Greek factory is the world’s largest producer of lead-acid batteries for automated guided vehicles, forklifts and energy storage systems and it is now shifting to lithium cells. But Bisalas isn’t going after the EV market dominated by China’s Contemporary Amperex Technology (CATL), Japan’s Panasonic and South Korea’s LG Chem,

Samsung SDI and SK Innovation.

He’s focusing on lithium-iron-phosphate (LFP) production, a type of battery suited to forklifts, locomotives and robots that perform short tasks with breaks in between. “These markets are billions of dollars,” said Bisalas. “We see a very big opportunity there, because we see lithium ion producers, especially from China, being focused on EVs.” Ever since it launched the European Battery Alliance in 2017, Europe has been pushing local firms to develop an industry that should flourish in a low-carbon future and ensure the continent is not reliant on imported products - or technology.

‘Sovereignty crisis’

Now, China hosts 80% of the world’s lithium-ion cell production - the type of battery expected to power the fast-growing EV industry - and most of the capacity coming online in Europe over the next five years belongs to Asian firms. But the European Union has committed 550 billion euros (\$647 billion) to climate protection and clean technologies over the next seven years, and these plans hinge on batteries to store renewable energy - and to power EVs.

Researchers have already identified 13 European battery projects that could be eligible for EU support, in countries including France, Germany, Slovakia and Poland - though some are

being driven by Asian manufacturers, such as LG Chem’s plans to expand its factory in Krakow. European EV production is expected to increase six-fold in the next five years and EU leaders expect the battery value chain - from mining to production to recycling - will be worth 250 billion euros by 2025.

But some European startups concede they can’t catch up with the large-scale, low-cost Asian incumbents. InoBat Auto, for example, a Slovak startup backed by U.S. energy technology company Wildcat Discovery Technologies and Czech utility CEZ, is instead heading into the fast lane. Chief Executive Marian Bocek said the European auto industry’s reliance on imported mass-produced batteries has created a “technological sovereignty crisis”, forcing manufacturers to design cars around the batteries.

So it is planning to tailor batteries for high-performance vehicles that may need something special. It plans to bring a 100 MWh (megawatt/hour) production line online next year in Slovakia near Peugeot, Kia Motors and Jaguar Land Rover’s plants - which it said could eventually become a 10 GWh (gigawatt/hour) facility. There, InoBat will test battery chemistries and make prototypes tweaked to each carmaker’s needs. “Our focus is more on a sort of niche, on-demand battery segment for high-performance vehicles that cannot go to the

LG Chems or SK Innovations of the world,” Bocek said.

Competitive edge

Analysts say the next generation of batteries must last longer, charge faster and be safer and greener than those on the market now, and that gives European companies a chance. “That is how Europe can conceive a competitive edge over China,” said Wood Mackenzie energy storage analyst Mitalee Gupta. “It will get competitive pretty quickly.”

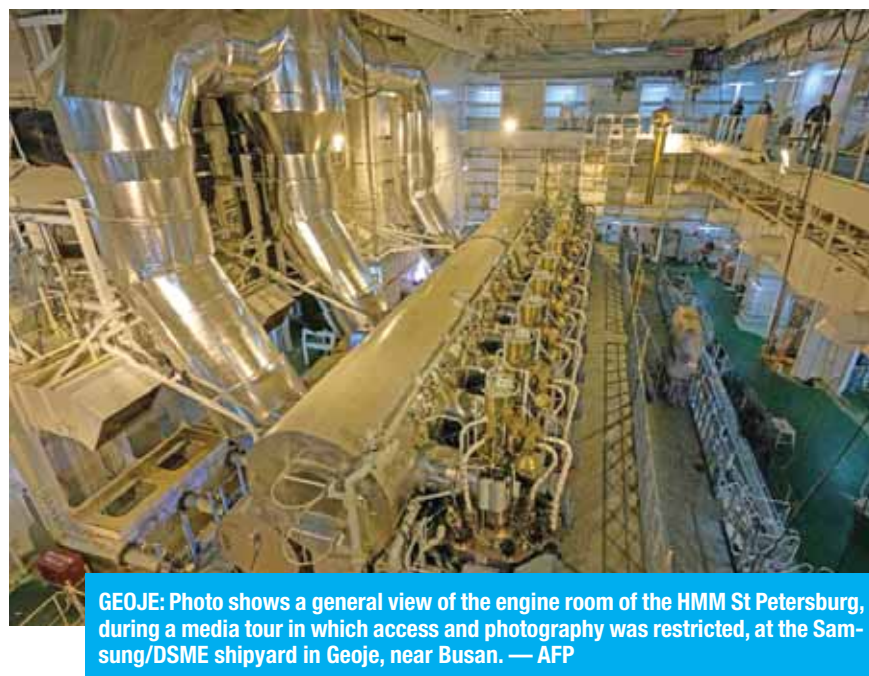
Swiss battery technology company Innolith, for one, is looking for an edge with new technologies. The company, which bought US battery producer Alevo’s intellectual property after its bankruptcy in 2017, said its labs in Germany will have prototypes this year for an NMC 811 cell that will deliver up to 315 Wh/kg (watt hour per kg). NMC 811 cells include less cobalt than most mainstream EV batteries, which means they have the potential to deliver more power and with cheaper components. “We cannot just take the same technology which is used, for example, in China or South Korea and copy-paste,” said Chief Executive Konstantin Solodovnikov. In Austria, battery technology company Kreisel Electric said it has licensed its NMC 811 technology to a European-based battery producer, which it declined to name. — Reuters

Biggest container ships take shape in South Korea

GEOJE: On the bridge of one of the world’s biggest container ships, a worker in a grey protective suit installs the compass that will guide the leviathan across the world. The finishing touches are being put to the HMM St Petersburg at the Samsung Heavy Industries shipyard on the island of Geoje, at the southern tip of South Korea.

Deep in the bowels of the enormous vessel, welders are dwarfed by the giant engines that will propel it at a maximum speed of over 22 knots. At 400 meters (1,300 feet), the HMM St Petersburg is 100 metres longer than the Eiffel Tower is tall, and 62 meters wide. It has a capacity of 23,820 TEU (twenty-foot equivalent units, the standard measure of a shipping container), which owner Hyundai Merchant Marine (HMM) describes as enough to carry seven billion choco-pies, a popular Korean snack-one for every human being on the planet.

It is the 12th and last of a new class of 24,000-TEU vessels HMM is putting into service, the largest of their kind in the world and costing 170-180 billion won (\$143-151 million) each. The first of



GEOJE: Photo shows a general view of the engine room of the HMM St Petersburg, during a media tour in which access and photography was restricted, at the Samsung/DSME shipyard in Geoje, near Busan. — AFP

the class to begin operations, the 23,964-TEU HMM Algeciras, made its maiden voyage in April when it set a new world record for shipment volume. The South’s shipbuilding industry is one of the world’s biggest and was one of the drivers of its decades of economic growth, but in recent years has been hammered by global oversupply and cheaper competition from China.

Similarly the Korean shipping industry was plunged into turmoil by the collapse

of Hanjin Shipping, once one of the world’s top 10 container lines, which was declared bankrupt in 2017. HMM St Petersburg will be delivered in September and make its maiden voyage to Shanghai and other Chinese ports, before heading through the Suez Canal to Rotterdam, Hamburg, Antwerp, and London. The journey from South Korea to Europe and back is a 12-week round trip, but despite its size and the distance covered, the vessel will have a crew of just 23. — AFP

Microsoft back in phone business with folding Android device

WASHINGTON: Microsoft is back in the smartphone business-sort of-with a new Android-powered folding device it claims fills a needed gap in mobile computing. The tech giant began taking orders Wednesday for its Surface Duo, a dual-screen handset starting at \$1,399. Microsoft first announced the device last October. “We designed Surface Duo for people who want to get more done with the device in their pocket,” said Panos Panay, chief product officer for Windows and Devices.

“Our internal research shows that three out of four people report struggling to complete complex tasks while away from their computer. That’s because smartphones with a single screen aren’t designed for you to easily do multiple things at once.” The Duo represents a fresh entry into hand-held devices for Microsoft, which years earlier surrendered the smartphone market to operating systems from Apple and Google after its own line of Windows-powered handsets failed to gain traction.

The new device with a folded display of 5.6 inches opening up to an 8.1-inch screen, will compete against other folding handsets from Samsung, Huawei and others. It seeks to stand out from its rivals thanks in part to the ability to run apps from Microsoft Windows as well as those from the Google-powered Android mobile system. Panay said the Duo also aimed to offer a “seamless cross-device experience” with PCs running the Windows 10 operating system, including the ability to get notifications and texts, make calls, share images or copy and paste content between the two devices. — AFP