

PRESS RELEASE

HHI Group to Present Smart Shipping Mobility at CES Debut in 2022

- *HHI Group to showcase next-generation shipping mobility featuring fully autonomous navigation.*
- *The Group to introduce cutting edge innovations and vision in industrial and consumer robotics and in alternative energy.*
- *Key executives, including Kisun Chung, CEO of Hyundai Heavy Industries Holdings, to make appearance at CES 2022 to observe the latest technological trends and seek corporate partnership.*



Rendering image of Hyundai Heavy Industries Group's model leisure boat at CES 2022, demonstrating with the use of LEDs how the technology can be used in ocean shipping. Visitors can board the boat and experience a navigational simulation game using VR technology. ©Hyundai Heavy Industries Group

SEOUL, SOUTH KOREA, December 20, 2021 – South Korea's **Hyundai Heavy Industries Group** will attend the Consumer Electronics Show next year, making its debut at the mega global tech-industry trade show better known as CES, slated for a four-day run on Jan. 5-8 in Las Vegas.

HHI Group, which includes the world's largest shipbuilder **Hyundai Heavy Industries**, will offer a glimpse into the future of shipping mobility, with emphasis on autonomous navigation through its presentation at CES 2022. Its booth will present cutting edge industrial machinery, one of its core sectors, merging artificial intelligence with robot technology. The Group will also introduce its own unique vision into the future in the field of energy, based on eco-friendly technology.

HHI Group's booth at CES 2022 will feature:

- **Avikus** autonomous navigational system
- **Robotics** in industrial and daily technology
- **Offshore hydrogen** value chain

Avikus, which stems from the word *avviker*, an etymological root for Vikings, is HHI Group's in-house venture launched in December 2020, specializing in the development of autonomous marine navigational systems. It became the nation's first company to successfully demonstrate a fully autonomous navigation of a 12-passenger cruise ship on Pohang Canal in June this year.

Avikus will showcase its autonomous navigation capabilities, using a six-meter (20-foot) model leisure boat, and demonstrating with the use of LEDs how the technology can be used in ocean shipping. Visitors will be able to board the boat and experience a navigational simulation game using VR technology.

"The autonomous navigation technology will not only allow an easier access to maritime leisure activities, but also provide innovations in logistics, and transform all aspects of marine development from probing for resources, eliminating pollution, to marine ecology studies," said the Group's spokesperson. "Avikus also plans to become the world's first company to conduct an autonomous navigation of a large-scale commercial vessel in the ocean early next year."

The Group's industrial construction machinery units **Hyundai Doosan Infracore** and **Hyundai Construction Equipment** will highlight its robotic industrial equipment and remote-control capabilities that will provide safe and effective solutions in all aspects of the building process, from surveys and measuring, operational planning to actual construction. This section features an interactive game that allows visitors to build a marine city in a simulated version while helping them easily understand the solutions of HHI Group's industrial robotics. **Hyundai Robotics**, a pioneer in South Korea's industrial automation and robotic sector, will also display various service robots that can provide everyday robotic solutions ranging from food and beverages to anti-viral and disinfection services.

HHI Group will also present its blueprint for an offshore hydrogen value chain. Its network of units, such as Korea Shipbuilding & Offshore Engineering, Hyundai Heavy Industries, Hyundai Oilbank, and Hyundai Electric, boasts a unique business structure and technological capacity to cover full hydrogen value chains which include the production of eco-friendly green hydrogen; its storage, shipping, and transportation; the sale as vehicle fuel; and hydrogen fuel cells to convert it into clean electricity. HHI Group will install a 3.6-meter (12-foot) offshore wind generator as well as its model of a hydrogen-powered future ship, while offering a video presentation on its overall value chain, including the green hydrogen production platform, a liquified hydrogen terminal, and hydrogen stations.

"**Kisun Chung, CEO of Hyundai Heavy Industries Holdings**, will lead a group of key executives including Seok Cho, CEO of Hyundai Electric, and Young-cheul Cho, CEO of Hyundai Doosan Infracore, to CES 2022 and observe firsthand the latest innovations and technology on display at other global firms' booths and seek potential corporate partnerships and cooperation," said the spokesperson.