



JOINT MEDIA RELEASE

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MPA and NUS Enterprise Strengthen Maritime Innovation Ecosystem through PIER71™ *More than S\$100million raised by startups since 2018*

The Maritime and Port Authority of Singapore (MPA) and NUS Enterprise, the entrepreneurial arm of the National University of Singapore (NUS), have renewed their partnership for another three years to further develop Singapore into a leading maritime technology startup hub through the PIER71™ (Port Innovation Ecosystem Reimagined @ BLOCK71) programme.

2. Under the renewed partnership, MPA and NUS Enterprise will introduce new initiatives to strengthen the PIER71™ brand and programmes, attract more innovative startups from around the world, support their growth in Singapore, and help them expand to the region and beyond. These include:

- a. Expanding the global outreach of PIER71™ by collaborating with major maritime innovation clusters and adjacent industries to attract high-quality startups to Singapore and support local startups in expanding overseas. This will be done through collaborations with partners such as NUS Enterprise as well as through MPA's regional offices and representatives.
- b. Organising technology and networking events to facilitate collaborations and profile Singapore's vibrant MarineTech ecosystem.
- c. Enhancing business support services provided by PIER71™ Landing Pad, a co-working and networking space at JTC Launchpad @ one-north, which offers specialised guidance to help MarineTech startups address operational and growth challenges while they establish their office in Singapore.
- d. Catalysing venture capital investment and deals to support MarineTech startups in Singapore.

3. Since its launch in 2018, PIER71™ has nurtured over 140 MarineTech startups. These startups have raised over S\$100 million in investments since the initiative was launched in 2018, with 14 startups raising close to S\$28.9 million in 2024. MPA has awarded grant funding to 61 startup projects, with over 27 technologies¹ developed through these projects being deployed in the maritime industry to date.

¹ Refer to Annex A for success stories of Smart Port Challenge Alumni

4. Mr Teo Eng Dih, Chief Executive, MPA, said, "Singapore is committed to fostering a dynamic and globally connected Marine Tech ecosystem. By expanding PIER71™'s overseas outreach, strengthening business support, and catalysing investment, we aim to attract talent and startups to drive the next wave of maritime innovation in support of the growth of Maritime Singapore."

5. Dr Tan Sian Wee, Senior Vice President (Innovation & Enterprise), NUS, said, "PIER71™ has played a key role in building the maritime innovation ecosystem through our partnership with MPA, supporting over 140 startups that have raised over S\$100 million. Renewing this collaboration will further accelerate MarineTech innovation. With NUS' entrepreneurial resources and BLOCK71's global network, we will continue empowering startups to address key maritime challenges. This partnership also reinforces Singapore's standing as the world's top maritime centre, a position held for 11 consecutive years."

6. Associate Professor Benjamin Tee, Vice President (Ecosystem Building), NUS Enterprise, said, "Through initiatives like the Smart Port Challenge and PIER71™ Ascend, we have created a platform that helps startups innovate and scale in the maritime sector. Last year, the Smart Port Challenge received a record number of nearly 200 proposals, and we are looking forward to even more this year. These programmes provide key support, from mentorship to funding, helping MarineTech startups turn their ideas into impactful solutions."

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Annex A: Success Stories of Smart Port Challenge Alumni

Since its inception in 2018, the Smart Port Challenge has supported many successful startups. Examples include:

1. [Avetics Global](#)

Avetics Global played a key role in Singapore's methanol bunkering trials in 2024, using drones equipped with volatile organic compound detectors and infrared cameras to remotely monitor potential leaks. Avetics drones also assisted in the recent oil spill incidents at sea to provide timely aerial footage of the spill to identify oil slicks and sheens and facilitate deployment of oil recovery vessels.

This technology has enhanced MPA's capabilities in the Emergency Operations Centre and is supporting the industry's move toward a multi-fuel bunkering future, contributing to efforts in decarbonisation.

2. [Clear Robotics](#)

Clear Robotics specializes in the development of unmanned, electric boats and ships designed to perform dull, dirty, and dangerous maritime tasks. Their solar-powered vessels achieve a reduction in marine emissions and fuel costs by 90%, while concurrently decreasing manpower requirements by three times. Currently, the company has deployed a fleet of over 12 vessels for various applications, including garbage removal, ship surveys, and seabed mapping, collaborating with government agencies and ports throughout Asia. These vessels are equipped with self-docking capabilities and solar charging systems, and the technology can also be retrofitted onto traditional vessels and ships. Originally based in Hong Kong, Clear Robotics has since relocated its headquarters to Singapore.

3. [CRecTech](#)

CRecTech has revolutionized the conversion of biogas into bio-methanol with its innovative catalyst technology. This breakthrough simplifies the production process from the traditional four steps to just two, eliminating several unit operations typical of conventional methods. As a result, CRecTech achieves significant energy savings, particularly in heating, due to the enhanced efficiency of its catalyst. This advanced process not only lowers the carbon footprint and production costs of bio-methanol but also enhances the accessibility and affordability of renewable methanol fuel, especially for the maritime industry.

4. [Portcast](#)

Portcast, headquartered in Singapore, Portcast is one of the first Southeast Asian companies to establish a presence at NUS Enterprise's BLOCK71 Nagoya, which serves as a gateway for Southeast Asian startups looking to expand into Japan.

Portcast's solution is deployed on over 5,000 vessels, supporting 100+ carriers and NVOCCs at 12,000 ports. It provides real-time and predictively supply chain visibility. Its

port congestion tracker feature provides visibility on vessel waiting time, number of waiting vessels, enabling shipping lines to manage supply chain disruption. Portcast recently raised SGD 8.8 mil (USD6.5 mil) in a Series A funding round.

5. [Thiospark Energy](#)

Thiospark Energy tackles the challenges faced by modern maritime battery technologies, including limited travel duration, fire hazards, and infrastructure constraints. Their advanced batteries extend the travel duration of electric vessels threefold, all while achieving a 30% reduction in weight, are more compact and improve payload capacity.

By utilising byproducts from oil refineries, Thiospark's batteries promote sustainable and clean energy storage solutions, resulting in a 20% reduction in battery costs. Furthermore, the incorporation of polymer ceramic electrolytes significantly minimizes heat generation during charging and discharging, thereby enhancing safety and prolonging battery lifespan, as part of the push for all new harbour craft and pleasure craft to be fully electric, use cleaner biofuels or be compatible with net-zero fuels by 2030.

About PIER71™

Founded by the Maritime and Port Authority of Singapore (MPA) and the National University of Singapore (NUS), through its entrepreneurial arm NUS Enterprise, PIER71™ (Port Innovation Ecosystem Reimagined at BLOCK71) aims to grow Singapore's maritime innovation ecosystem. PIER71™ boosts innovation in the maritime and maritime-related industries by attracting talents, creating opportunities for the exchange of knowledge and ideas, attracting investments into startups and accelerating ventures.

PIER71™ designs and delivers programmes to uncover opportunities within the industry and supports entrepreneurs from ideation to acceleration of their ventures. PIER71™ provides access to various markets, demand drivers, technology solution providers, investors and more. PIER71™ also represents a budding and increasingly vibrant ecosystem of stakeholders who are keen to digitalise and create the next wave of maritime innovation.

For more information, please visit <https://pier71.sg>

About the Maritime and Port Authority of Singapore (MPA)

MPA was established on 2 February 1996 with the mission to develop Singapore as a premier global hub port and international maritime centre, and to advance and safeguard Singapore's strategic maritime interests. MPA is the driving force behind Singapore's maritime and port development, taking on the roles of maritime and port regulator and planner, international maritime centre champion, national maritime representative, and a champion of digitalisation and decarbonisation efforts at regional and international fora such as at the International Maritime Organization and the International Organization for Marine Aids to Navigation. MPA partners industry, research community and other agencies to enhance safety, security, and environmental protection, facilitate maritime and port operations and growth, expand multi-domain capabilities, and support the cluster of maritime ancillary services and manpower development. MPA is responsible for the overall development and growth of the maritime multi-domain and the Port of Singapore.

For more information, please visit www.mpa.gov.sg/

About National University of Singapore (NUS)

The National University of Singapore (NUS) is Singapore's flagship university, which offers a global approach to education, research and entrepreneurship, with a focus on Asian perspectives and expertise. We have 16 colleges, faculties and schools across three campuses in Singapore, with more than 40,000 students from 100 countries enriching our vibrant and diverse campus community. We have also established more than 20 NUS Overseas Colleges entrepreneurial hubs around the world.

Our multidisciplinary and real-world approach to education, research and entrepreneurship enables us to work closely with industry, governments and academia to address crucial and complex issues relevant to Asia and the world. Researchers in our faculties, research centres of excellence, corporate labs and more than 30 university-level research institutes focus on themes that include energy; environmental and urban sustainability; treatment and prevention

of diseases; active ageing; advanced materials; risk management and resilience of financial systems; Asian studies; and Smart Nation capabilities such as artificial intelligence, data science, operations research and cybersecurity.

For more information on NUS, please visit www.nus.edu.sg.

About NUS Enterprise

NUS Enterprise, the entrepreneurial arm of the National University of Singapore (NUS), plays a pivotal role in advancing innovation and entrepreneurship at NUS and beyond. We actively promote entrepreneurship and cultivate global mind-sets and talents through the synergies of experiential learning, active industry partnerships, holistic entrepreneurship support and catalytic entrepreneurship outreach. Our initiatives and global connections support a range of entrepreneurial journeys and foster ecosystem building in new markets. We provide expertise and connections to create successful spin-offs and translate innovations into the marketplace through industry collaboration. These initiatives augment and complement the University's academic programmes and act as a unique bridge to industries well beyond Singapore's shores.

For more information, please visit <https://enterprise.nus.edu.sg>.

About Singapore Maritime Week 2025

SMW is an annual gathering of the international maritime community to advance key industry issues and exchange ideas to bring the sector forward. Driven by MPA, in collaboration with industry stakeholders and research and educational institutions, SMW brings together key opinion leaders and industry leaders through conferences, dialogues and forums.

The range of activities and events organised by MPA, industry stakeholders and research and educational institutions, as well as the cosmopolitan profile of participants, reflect the vibrancy and diversity of Singapore as a global hub port and leading international maritime centre.

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