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Singapore's startups venture into the worldâ??s first Blue Carbon Innovation Studio

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A Blue Carbon Innovation Studio organized by Idemitsu and Hatch Blue in Singapore brought together some of the industry's brightest entrepreneurs.

â??All biologically driven carbon fluxes and storage in marine systems that are amenable to management can be considered as blue carbon. Alongside other ocean and aquatic carbon dioxide removal pathways, blue carbon forms part of a suite of high potential, greenhouse gas significant solutions to combat climate change and regenerate/protect degraded ecosystems. This programme brings together a unique cohort of blue carbon and carbon removal startups, aiming to support ecosystem development,â?• explains **Peter Green, seaweed project advisor and manager at Hatch Innovation Services**.

â??Participating teams are engaging with some of the worldâ??s leading blue carbon experts who truly understand the challenges and opportunities these companies face. Weâ??re so excited to work with these ambitious innovators and to support this critical sector. This initiative seeks to shine a light on the potential global opportunities and at the same time provide an important space for the innovators to connect, grow and collaborate. Weâ??re excited to see what comes out of it,â?• reflects **Wayne Murphy, co-founder and managing partner of Hatch Blue.**

Keitaro Sugihara, president and CEO of Idemitsu Americas Holdings, adds: â?? Idemitsu has been collaborating with Hatch Blue to deeply explore the ocean's potential in decarbonisation. We recognise the tremendous opportunities that blue carbon can offer. As one of the largest energy companies in Japan, with a strong presence in Asia, we have decided to support the acceleration and development of new technologies in this blue carbon sector, particularly those that can be deployed in Southeast Asia and Japan,â?•

The participants

1.) **BlueGreen Water Technologies**: remediates harmful algal blooms using proprietary, regulatory-approved formulas and remote sensing technologies. The ecological balance is restored in a sustainable process that leads to large scale removal of greenhouse gasses and meets multiple sustainable development goals.

2.) **Blusink**: creates â??Blusinkies,â?• apple-sized disks made from waste materials that, when placed in oceans, support marine life and naturally convert carbon emissions into stable, long-lasting carbon storage. These disks help turn ocean areas into effective carbon removal sites by fostering ecosystems that lock away carbon for thousands of years.

3.) **CarbonEthics**: is an Indonesia-based developer of tech-enabled natural climate solutions. Starting with developing expertise in blue carbon ecosystems, it is now broadening its expertise to include peatland and green ecosystems.

4.)**Distant Imagery Solutions**: is a leading provider of aerial and underwater solutions for environmental analysis, monitoring and coastal habitat restoration. Based in the UAE, their products include drones that plant mangroves by shooting seeds into the ground.

5.) **Kumi Analytics**: a Singapore-based subscription service (data as a service) which has a remote sensing sustainability solution for mangrove carbon sequestration.

6.) **MacroCarbon**: cultivates floating seaweeds in the ocean and transforms them into sustainable hydrocarbons and biochar. They co-develop a range of carbon-negative, drop-in replacements for aviation fuels, plastic precursors, and chemical inputs currently made with fossil fuels â?? reducing global dependence on fossil carbon, while sequestering carbon for the long term.

7.) **NetaCarbon**: their AI-enabled technology tailors corporationsâ?? carbon sourcing process by matching their selection criteria with project developers capable of creating high-quality customised offsets.

8.) **Ocean Ledger**: is a geospatial software platform that measures and models natural coastal capital and coastal risk. It equips conservation organisations, coastal developers, and re/insurance companies with tools for coastal risk assessment and informed decision-making in coastal adaptation and nature-based solutions.

9.) **OoNee Sea Ranch**: has developed a restorative aquaculture system for sea urchin ranching in Oregon. By harvesting a delicacy (urchins) from the ocean and then on-growing them on land, it helps with kelp forest restoration.

10.) **Scape Carbon Inc**: provides cost-effective, onsite decarbonisation for coastal heavy industries by using reactors that sequester CO2 with seawater and minerals, while recovering valuable metals.

11.) **ZerOcean Energy**: develops commercial structuring to enable a hybrid of project deployment and asset management. It is focused on scaling direct ocean capture and ocean alkalinity enhancement technologies into commercial scale infrastructure.