

JOINT MEDIA RELEASE

Breakthrough Energy Fellows – Southeast Asia announces first cohort of climate technology innovators

New Singapore-based Fellows pioneering solutions to decarbonise hard-to-abate areas including shipping and critical raw materials

MR No.: 047/24

Singapore, Tuesday, 29 October 2024

1. Breakthrough Energy Fellows – Southeast Asia (BE Fellows – SEA)¹ announced its first two projects today at the Singapore Week of Innovation & Technology (SWITCH). Organised by Enterprise Singapore (EnterpriseSG) and MP Singapore, SWITCH is the flagship startup event with a focus on deep tech and frontier technologies. The Singapore-based Fellows are pioneering solutions that are essential to decarbonise the global economy, including the development of clean fuels and recycling of critical raw materials.
2. One of the projects being developed is by [CRecTech](#), which is developing a solution to produce methanol from biogas at scale to reduce carbon emissions from the maritime industry. Currently, the industry accounts for approximately 3% of global carbon emissions, and faces challenges decarbonising due to the lack of affordable renewable fuels like bio-methanol. With its novel catalytic process, CRecTech aims to simplify and reduce the cost of bio-methanol production to drive adoption at scale. More than 2kg of CO₂ would be abated for every kilogram of marine fuel oil substituted with CRecTech's bio-methanol; at scale this could translate to nearly a billion tonnes of maritime CO₂ emissions abated.
3. **Lim Kang Hui, Co-Founder & CEO, CRecTech**, said, "Being selected to join BE Fellows – Southeast Asia validates the need to fill the technological gap in addressing the decarbonisation challenge in the maritime sector. Through the programme, we will

¹ The BE Fellows – SEA is the first regional hub of Breakthrough Energy's Fellows programme. It was [unveiled](#) in April by Breakthrough Energy, Temasek, and EnterpriseSG and aims to support Southeast Asia innovators by tackling early-stage barriers to climate technology innovation in the region, and drive the commercialisation of deep tech climate technologies.

JOINT MEDIA RELEASE

advance our technology readiness level, moving closer to demonstrating our solution and establishing a suitable supply value chain to deploy our renewable bio-methanol technology.”

4. [Lincore](#), which has a focus on refining critical raw materials, is the other Singapore-based project selected for the BE Fellows – SEA cohort. The World Bank estimates 3 billion tonnes of metals and minerals will be required by 2050 to meet the needs of the global energy transition. To reduce the reliance of mining new metals and minerals, there is an urgent need to improve the recycling of existing critical materials. Lincore seeks to address this with its electro-metallurgical refining technology. Lincore’s process extracts critical materials like Lithium, Nickel, Cobalt and Manganese from black mass (shredded recycled batteries) and produces precursor materials that can be used to manufacture new batteries.
5. **Saikiran Reddy, CEO, Lincore**, said, “Being selected as a BE Fellow – Southeast Asia is an incredible opportunity for Lincore. The technical and business mentorship as well as the funding will be critical as we de-risk our technology and navigate through the ‘valley of death’ from the lab to market. I’m thrilled to be joining this climate tech community and to be able to learn from fellow entrepreneurs who share a deep commitment and vision to decarbonise our planet.”
6. In line with the global Fellows programme, the first cohort of Fellows from Breakthrough Energy Fellows – SEA will receive technical support, funding, and business resources to develop, validate and de-risk their technologies. Additionally, these Southeast Asia projects can tap Temasek and EnterpriseSG’s vast regional connections, resources and market insights to further expedite the development and commercialisation of their region-specific climate solutions.
7. The Singapore-based founders will also benefit from being part of an impactful global group of [more than 100](#) innovators from Europe, the United Kingdom, and United States who together form the Fourth Cohort of Breakthrough Energy Fellows. The full list of Fellows and projects is available [here](#).

JOINT MEDIA RELEASE

8. **Ms. Ashley Grosh, Vice President, Breakthrough Energy Fellows**, said, “We are thrilled to welcome these inspiring innovators to the Fellows programme. These projects are proof of the exciting innovation already happening in the region and the importance of cultivating a strong ecosystem to support more early-stage discovery. We are currently seeking submissions for our next Cohort of Fellows and urge anyone with clean technology solutions to apply.”
9. **Mr. Russell Tham, Head, Emerging Technologies, Temasek**, said, “We’re encouraged by the quality and immense promise demonstrated by the first cohort of Fellows from Southeast Asia. Given that Asia accounts for half of global carbon emissions, we all need to lean in and support the scale up of innovative solutions that can address the pressing decarbonisation challenges unique to this part of the world. As a global investor anchored in Asia, we’re committed to bringing our networks and expertise in value creation – coupled with Breakthrough Energy’s extensive global innovation network and ecosystem, and Enterprise Singapore’s regional know-how – to scale climate tech innovations in this region, and accelerate the just energy transition.”
10. **Ms. Cindy Khoo, Managing Director, Enterprise Singapore**, said, “Southeast Asia is home to an abundance of innovative ideas and deep tech talent with the potential to solve today’s pressing climate change challenges. We are already seeing promising developments and are excited to bring ecosystem partners together through initiatives like the Breakthrough Energy Fellows – SEA and platforms like SWITCH, to catalyse more of such early-stage deep tech solutions.”
11. The application for the next cohort of the Breakthrough Energy Fellows – SEA is now open, and interested parties can apply [here](#). The next cohort will be selected in the first half of 2025 and begin the programme in September / October 2025.
12. As part of a broader strategy to strengthen the innovation ecosystem to identify and support emerging climate technologies, Breakthrough Energy, Temasek, and EnterpriseSG are engaging academic institutions, national labs, and incubators in Singapore and across the region.

JOINT MEDIA RELEASE

13. BE Fellows – SEA is collaborating with National University of Singapore (NUS) Enterprise to provide Southeast Asia Fellows access to regional BLOCK71² facilities in Indonesia and Vietnam. These include co-working spaces with resources, mentorship, networking opportunities, and a collaborative environment for fundraising and scaling growth. BLOCK71 is a technology-focused start-up incubator and accelerator by NUS Enterprise, in partnership with corporates and government agencies.
14. In addition to the BE Fellows – SEA cohort, this week also marks the graduation of the first Singapore Climate Ventures cohort, a programme providing startup skills to aspiring climate entrepreneurs at the graduate level. Organised by Nanyang Technological University, Singapore (NTU Singapore), NUS and Temasek, with support from Breakthrough Energy, the part-time venture education programme is offered through NTU Singapore and NUS. Projects developed throughout the programme may seek funding and other support through venture creation programmes like Breakthrough Energy Fellows - Southeast Asia.

-End-

For media enquiries, please contact:

Alison Menon

Breakthrough Energy
+1 202 468 0839

alison@breakthroughenergy.org

Celine Koh

Temasek
+65 9753 0547

celinekoh@temasek.com.sg

Lydia Lee

Enterprise Singapore
+65 9139 9470

lydia_lee@enterprisesg.gov.sg

² BLOCK71 has supported 1,600 early-stage startups since 2011, including ShopBack, Carousell, PatSnap and other fast growth startups.



TEMASEK

Enterprise
Singapore

JOINT MEDIA RELEASE

About Breakthrough Energy

Breakthrough Energy is committed to accelerating the world's journey to a clean energy future. The organization funds breakthrough technologies, advocates for climate-smart policies, and mobilizes partners around the world to take effective action, accelerating progress at every stage.

For more information on Breakthrough Energy, please visit www.breakthroughenergy.org. Information specific to Breakthrough Energy's Fellows program, please visit www.breakthroughenergy.org/our-work/fellows/

About Temasek

Temasek is a global investment company headquartered in Singapore, with a net portfolio value of S\$389 billion (US\$288b) as at 31 March 2024.

Temasek's Purpose "So Every Generation Prospers" guides it to make a difference for today's and future generations. Operating on commercial principles, Temasek seeks to deliver sustainable returns over the long term.

It has 13 offices in 9 countries around the world: Beijing, Hanoi, Mumbai, Shanghai, Shenzhen, and Singapore in Asia; and Brussels, London, Mexico City, New York, Paris, San Francisco, and Washington, DC outside Asia.

For more information on Temasek, please visit www.temasek.com.sg

About Enterprise Singapore

Enterprise Singapore is the government agency championing enterprise development. We work with committed companies to build capabilities, innovate and internationalise.

We also support the growth of Singapore as a hub for global trading and startups, and build trust in Singapore's products and services through quality and standards.

Visit www.enterprisesg.gov.sg for more information.