

OVER US\$23 BILLION OF SUSTAINABLE INFRASTRUCTURE PROJECTS IDENTIFIED AT INAUGURAL IPEF CLEAN ECONOMY INVESTOR FORUM IN SINGAPORE

- *About US\$6 billion of investment-ready projects presented to investors*
- *Up to US\$2 billion of new funding opportunities also pitched by climate technology companies*

1. The inaugural Indo-Pacific Economic Framework for Prosperity (IPEF) Clean Economy Investor Forum (“Investor Forum”) was held on 6 June 2024 at the Sands Expo and Convention Centre, Singapore. The full day, by-invite only event successfully brought together 300 participants from the region’s top investors, cutting-edge project proponents, innovative start-up entrepreneurs, Ministers and senior government officials. Singapore’s Prime Minister and Minister for Finance Lawrence Wong was the Guest-of-Honour.

2. Organised by the Singapore Ministry of Trade and Industry alongside the 13 other IPEF partners, the Investor Forum aims to facilitate high-quality business and capital matching and build connections between the public and private sectors through insightful conversations with expert panelists. The Investor Forum is a key initiative to advance the objectives of the IPEF Clean Economy Agreement, by mobilising financing in support of the development and deployment of clean energy and climate friendly infrastructure and technologies in the IPEF economies.

Over US\$23 billion of Investment Opportunities Identified, About US\$6 billion Presented at the Investor Forum

3. A total of **69 sustainable infrastructure projects amounting to over US\$23 billion of investment opportunities were identified at the Investor Forum. Of these, 20 investment-ready projects worth about US\$6 billion were presented to investors** at business matching sessions. Remaining projects worth about US\$17 billion were also identified as potential investment opportunities in future.

4. All IPEF partners were invited to nominate sustainable infrastructure projects through a process facilitated by PwC Singapore. The 20 investment-ready projects are in diverse areas including industrial parks, special economic zones, energy, agriculture and aquaculture, waste management, water and transport sectors, and were nominated by Brunei, Fiji, India, Indonesia, Republic of Korea, Malaysia, New Zealand, Philippines, Singapore, and Thailand. The list of these projects is at [Annex A](#).

Climate Technology Companies Pitched for Up to US\$2 billion in New Funding

5. In addition, **49 climate technology startups sought to raise up to US\$2 billion in new investments at the Investor Forum.** These were identified by

HolonIQ¹ from its shortlist of “Indo-Pacific Climate Tech 100” of top climate technology start-ups based in the Indo-Pacific region.

6. In the lead up to the Investor Forum, HolonIQ, in support of the Indo-Pacific Partnership for Prosperity, organised a call to recognise top climate technology startups and connect them with investors. HolonIQ shortlisted 100 startups after reviewing over 10,000 companies. The list of the 49 startups is at [Annex B](#).

Operational Launch of IPEF Catalytic Capital Fund and New Clean Energy Projects

7. The IPEF Governments announced new fundings and projects at the Investor Forum to pursue investments in the clean economy.

IPEF Catalytic Capital Fund by Australia, Japan, ROK and US

8. Australia, Japan, ROK and US announced the operational launch of an IPEF Catalytic Capital Fund, which is pooling resources to expand the pipeline of bankable clean economy infrastructure projects. A total of US\$33 million of initial funding is in progress and will be set aside to catalyse up to US\$3.3 billion of private investments in Official Development Assistance (ODA)-eligible countries.

Japan’s Hydrogen Fund and its IPEF Window

9. Japan will launch the Hydrogen Fund which aims to leverage private financing in strengthening cross-border hydrogen supply chains. The Hydrogen Fund will also establish an “IPEF window” to deploy funding for activities undertaken in the IPEF region. It is scheduled to start operations by Q3 this year.

Singapore-US-Vietnam Working Group on Cross-Border Electricity Trade

10. Singapore, the US and Vietnam established a working group to strengthen investments in renewable energy projects in the region as well as study the development of a regional subsea cables framework to facilitate cross-border electricity trade. This is the first such multilateral workstream among the three countries in promoting regional power interconnectivity, with the aim to establish regulatory frameworks, infrastructure, and a supportive ecosystem.

US Contribution of an Equity Investment to the Southeast Asia Clean Energy Fund II

11. The US International Development Finance Corporation (DFC) is contributing an equity investment to the Southeast Asia Clean Energy Fund II (SEACEF), pending congressional notification, which will enable SEACEF to raise approximately US\$175

¹ HolonIQ is a global research platform for the impact economy. It empowers governments, institutions, and investors around the world to make faster and better decisions and take immediate action on their innovation and growth agendas.

million to invest early-stage capital in projects and companies that will accelerate the transition to a climate-resilient economy and increase energy security in Southeast Asia. SEACEF's investments will catalyse financing from other investors for projects in clean power, energy storage, energy efficiency, electric mobility, and grid infrastructure.

US Approved Equity Investment to the Eversource Climate Investment Partners II Fund

12. DFC's Board has also approved an equity investment as part of the US\$900 million Eversource Climate Investment Partners II fund, which will provide capital, management, and expertise to innovative companies using new and existing capabilities to address climate change in India and Southeast Asia. Eversource will invest in companies operating in the following sectors: renewable energy, energy transition, electric mobility, circular economy, water management, and sustainable food and agriculture. By being in the first close of the Fund, which is expected later this year, DFC's early investment has been instrumental to mobilising additional capital.

13. The IPEF partners also welcomed various announcements from the private sector, as appended below. Please refer to [Annex C](#) for details of these announcements.

- Sembcorp's green ammonia project
- New coalition to catalyse infrastructure investment across IPEF emerging economies
- US participating organisations announced a host of major commitments, projects, and partnerships at the Investor Forum

Continued Cooperation Among IPEF Partners

14. Deputy Prime Minister and Minister for Trade and Industry Gan Kim Yong said, "The inaugural Investor Forum marks the first of several significant steps to build enduring collaborations across the IPEF countries and ignite the entrepreneurial journey of promising startups. Singapore's involvement in this high-level Forum complements and supports the ambitious agenda we are jointly driving in multilateral economic initiatives to facilitate the clean energy transition and to build resilient supply chains."

15. The IPEF Partners will continue to work with the Governments to build on the success of the Investor Forum to advance regional cooperation and accelerate the deployment of clean energy technology among others. The Governments will also continually engage the private sector and investors to follow up on the business-capital matches and grow the pipeline of investable sustainable infrastructure projects and climate tech startups with each year. The Investor Forum is intended to be held annually, to be hosted by various IPEF member countries.

- Annex A: List of investment-ready sustainable infrastructure projects presented**
- Annex B: List of 49 startups as part of the Indo-Pacific Climate Tech 100 presented**
- Annex C: Announcements from private sector organisations**
- Annex D: Quotes from speakers at the Investor Forum**

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Annex A

List of investment-ready sustainable infrastructure projects presented

S/N	Project Name	Country	Project Description
Hydro/Wind/Solar			
1	New Burgos Wind Farm	Philippines	50MW Wind Power Project to help country increase its share from renewable energy. The Project is expected to be developed with a total CAPEX of USD 100 Mn on PPP basis for a concession tenure of 25 years.
2	Kibungan Pumped Storage Hydro Electric Power Project	Philippines	The project involves developing a 500MW hydro power plant located in the northern section of Luzon Island, Philippines. The total project cost is estimated at USD 800 Mn.
3	Qaliwana Hydro-Scheme with Upper Wailoa Division	Fiji	Investment in hydro-energy power plant along with EFL (Energy Fiji Limited) with an estimated Project Cost of USD 250 Mn. The project will comprise of Outdoor powerhouse with 2x Francis turbines with estimated combined total output >20MW and is expected energy output of >40GWh per annum.
4	Rural Electrification Fund Support	Fiji	The project involves investment in the off-grid community solar systems to provide clean source of electricity to the rural areas. The project involves development of mini off-grids. In the project in the short-term i.e. in the next 18 months, it is expected to provide energy for atleast 10 rural communities.
5	ReNew: Gujarat UrjaVikas Nigam Limited Solar Energy Project	India	400 MW solar power project with a total CAPEX estimated at approximately USD ~215-225 million. Investment opportunity of scale for an investor to take up to 49% equity stake in the project. The PPA for supply of 400 MW to Gujarat UrjaVikas Nigam (GUVN) is already in place.
6	Sustainable Energy Investment Platform ("SEIP")	India	Wind Power Project with a target to reach 550 MW by 2025 and 2GW by 2026. The total Project cost is USD 100 Mn for a 100% equity buyout. Value plus approach targeting high credit off-takers owned by the government and/ or the private sector with a target to raise USD 400 Mn as project level equity contribution.
7	Powerica Orchid 53MW + 50MW wind power project	India	103MW wind power project will require USD 100 million Capital Cost. The project is

			scheduled to achieve 50MW COD by March 2025 and 53 MW by December 2026. The project is being developed under Build Own operate model.
Solar/Biomass/Biofuel/CCUS			
8	Biorefinery Plant –Plaju	Indonesia	Project Financing opportunity to develop a biorefinery plant in Cilacap(Central Java). This would require up to ~30% of investment to develop a Biorefinery plant with capacity of ~6kbpd. The project aims to increase supply of sustainable fuel (e.g. HVO, SAF, etc) by utilizing Indonesia’s waste-based feedstock availability as well as PT Kilang Pertamina Internasional’s extensive experience in refineries. The total project cost is estimated at USD 860 Mn.
9	Biorefinery Plant – Cilacap	Indonesia	The project involves investment opportunity for upto~49% stake to develop a Biorefinery plant with capacity of ~20kbpd in Plaju, South Sumatera. The project aims to increase supply of sustainable fuel (e.g. HVO, SAF, etc) by utilizing Indonesia’s waste-based feedstock availability as well as PT Kilang Pertamina Internasional’s extensive experience in refineries. The total Project Cost is estimated at USD 860 Mn.
10	Gas Separation Project to optimise Carbon Dioxide Capture	Thailand	The project aims to utilize carbon dioxide waste from Gas Separation Plant by turning carbon into baking soda (Sodium Bicarbonate) for Technical, Food, Feed Animal and Pharma Grade. This Project aligns with the Thailand’s policy aiming for Carbon neutrality by 2050 and Net Zero by 2065. The total project cost is estimated at USD 15-20 Mn.
11	Bio Energy Project	Malaysia	The Project involves setting up multiple bio refineries across Malaysia to promote the supply of bio fuels which can be used across different modes of transport.
12	Giga Factory Project	Malaysia	Battery production on Gigafactory scale focusing on battery packaging especially for EVs and BESS with the capacity of 10 GWh of batteries per year. The main subcomponents of the factory to include Electrode Manufacturing, Cell Assembly and Validation. The total project cost is estimated at USD 150 Mn.

13	Project Hotung (Solar project)	Singapore	The Project involves developing a solar project in Malaysia with a total Project Cost of USD 30 Mn by a Singapore based company.
Others			
14	Utraphimuk Elevated Tollway Extension	Thailand	The project aims to integrate with the Bang Pa-In -Nakhon Ratchasima Intercity Motorway Project (M6), completing the missing link in the motorway network that directly connects Inner Bangkok to the Northeastern regions, ensuring seamless connectivity. The total project cost is estimated as USD 1.2 Bn and total length is 22 kms. The Project is proposed to be developed on Design-Build-Finance-Operate Model with a total concession period of maximum 34 years.
15	Land-Based Atlantic Salmon Farm	Brunei	A USD 460 Mn aquaculture project for developing a land-based farm for salmon. Of the total capital requirement, USD 60 Mn have already been raised for the project. The project is proposed to be developed by a Private Player with backing from the government of Brunei.
16	Recirculation Aquaculture System ("RAS")	Brunei	Operational project with the requirement to build the infrastructure to increase the capacity of aquaculture by 3000 tonnes with a total CAPEX of USD 85 Mn.
17	Ammonia Co-Firing Technology	Republic of Korea	In Vietnam, through a G2G arrangement, the Korean government has identified three coal fired power plants i.e. Vinh Tan 4 & Vinh Tan 4 Ext., Song Hau 1 as possible candidates for using ammonia as co-firing. The total cost for implementing this technology is estimated at USD 210 Mn.
18	Beribi RBF (Industrial Park Redevelopment to promote use of sustainable energy)	Brunei	Industrial Park redevelopment project into mixed-used light industry and commercial development. The project is to be developed in two phases with the total project cost for Phase 2 is USD 59 Mn. the first phase of the project is currently under development.
19	Western Landfill Project	Fiji	New sanitary landfill solution in the Western Division of Fiji to replace four existing dumpsites. The project size is US\$15-20 million and is expected to be financed through a blend of public and private finance, including funds allocated from the ICBRE.

20	Avaada Decentralized Agri Solar PV Projects	India	1358 MWp Solar PV project under PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan). The total project cost to be disclosed at the discussion stage. The project is the world's largest decentralized agri-solar PV tender focussing agri-feeder solarisation. The project is proposed to be developed on Built Own Operate ("BOO") Model. For the project a PPA has been signed for 25 years.
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List of 49 startups from the Indo-Pacific Climate Tech 100 presented

SN	Country	Name	Website	Industry
1	Australia	Alchemy Charge	https://www.alchemycharge.com.au/	Energy
2	Australia	Allegro Energy	https://www.allegro.energy/	Energy
3	Australia	FutureFeed Pty Ltd	https://www.future-feed.com	Environment
4	Australia	MGA Thermal	https://www.mgathermal.com	Energy
5	Fiji	Electric Vehicle Direct (Fiji) Pte Ltd	https://www.evdirectfiji.com	Infrastructure
6	Fiji	Environmental Technology Solutions Pacific Pte Ltd	https://espacific.org/	Environment
7	Japan	Asuene Inc.	https://earthene.com/	Environment
8	Japan	EF Polymer K.K.	https://efpolymer.com/	Environment
9	Japan	Tsubame BHB Co., Ltd.	https://tsubame-bhb.co.jp/en	Environment
10	Japan	WOTA	https://wota.co.jp/en/	Environment
11	Japan	Helical Fusion Co., Ltd.	https://www.helicalfusion.com/en	Energy
12	Japan	SkyDrive	https://skydrive2020.com/	Mobility
13	Indonesia	Charged Indonesia	https://charged.co.id/	Mobility
14	Indonesia	SUN Energy	https://sunenergy.id/	Energy
15	India	Batx Energies Private Limited	https://batxenergies.com	Energy
16	India	igrenEnergi, Inc.	https://www.igrenEnergi.com	Energy
17	India	Kabira Mobility Private Limited	https://www.kabiramobility.com	Mobility
18	India	LOHUM	https://lohum.com/	Energy
19	India	Newtrace	http://www.newtrace.io	Energy
20	India	Sea6 Energy	https://www.sea6energy.com	Environment
21	Malaysia	Faradays Energy Sdn. Bhd.	faradaysenergy.com	Energy
22	Malaysia	Limpahan Engineering Sdn. Bhd.	https://www.limpahan.com/	Infrastructure
23	New Zealand	Mint Innovation	https://www.mint.bio	Environment
24	New Zealand	Miruku	https://www.miruku.com	Environment
25	New Zealand	Bspkl	https://www.bspkl.co/	Energy
26	New Zealand	Fabrum	https://fabrum.nz/	Energy
27	New Zealand	OpenStar Technologies	https://www.openstar.tech/	Energy
28	Republic of Korea	COSMOS LAB	https://cosmoslab.kr	Energy
29	Republic of Korea	Easymining	http://www.easymining.kr	Environment
30	Republic of Korea	Gridwiz	https://www.gridwiz.com/en/	Energy

31	Republic of Korea	PMGROW	pmgrow.co.kr	Energy
32	Republic of Korea	KevinLAB	http://kevinlab.com/	Energy
33	Republic of Korea	Nara Space Technology Inc.	https://www.naraspace.com/earthpaper	Environment
34	Republic of Korea	60 Hertz	https://60hz.io	Energy
35	Republic of Korea	carbonvalue	https://www.carbonvaluecorp.com	Environment
36	Singapore	Green Li-ion	https://www.greenli-ion.com/	Energy
37	Singapore	NEU Battery Materials	https://www.neumaterials.com/	Energy
38	Singapore	REDEX Group Pte Ltd	https://redex.eco/	Environment
39	Singapore	VFLOWTECH PTE LTD	https://vflowtech.com	Energy
40	Singapore	Eigen Energy	eigen.sg	Energy
41	Singapore	Evercomm Singapore Pte Ltd	https://www.evercomm.com.sg/about	Environment
42	Singapore	Blue Planet Environmental Solutions	https://blueplanet.asia/	Environment
43	Singapore	Terrascope Pte. Ltd.	https://www.terrascope.com/	Environment
44	Singapore	Ion Mobility	https://ionmobility.com/	
45	Thailand	Inno Green Tech company limited	http://www.inno-green-tech.com	Environment
46	Thailand	Carbonwize	https://www.carbonwize.io	Environment
47	Thailand	AltoTech Global	https://www.altotech.ai/	Infrastructure
48	Thailand	PAC Corporation (Thailand) Co. Ltd	https://www.pac.co.th	Infrastructure
49	USA	Altana	https://altana.ai/	Environment

Announcements from private organisations

SN	Announcement	Details
1	Sembcorp's green ammonia project	<p>Sembcorp, Sojitz and Kyushu Electric sign Heads of Terms for green ammonia offtake. This builds on an earlier Memorandum of Understanding by the consortium to explore the production of green ammonia in India for export to Japan.</p> <p><i>Please refer to Sembcorp's press release for further information.</i></p>
2	New coalition to catalyse infrastructure investment across IPEF emerging economies	<p>Global Infrastructure Partners, KKR, and the Indo-Pacific Partnership for Prosperity announced a new coalition to catalyse infrastructure investment across IPEF emerging economies. Coalition members, which also include Allied Climate Partners, BlackRock, GIC, the Rockefeller Foundation, and Temasek, will help facilitate the identification, promotion, and development of successful infrastructure projects in IPEF countries. They will also support coordination with governments, multilateral development banks, and development finance institutions to create solutions to de-risk investments. The coalition estimates that its members, taken together, have over US\$25 billion in capital that can be deployed in Indo-Pacific emerging market infrastructure investments in the coming years.</p>
3	US participating organisations announced a host of major commitments, projects, and partnerships at the Investor Forum	<p>Participating US companies and organizations announced a host of major commitments, projects, and partnerships at the Forum, including AWS, Bloom Energy, Google, the Global Energy Alliance for People and Planet, I Squared Capital, and Stonepeak. For additional details please refer to the US Department of Commerce website.</p>

Annex D

Quotes from speakers at the Investor Forum

SN	Name and designation	Quote
1	Verena Lim CEO (Asia), Macquarie Group	<p>“The weight of investment capital and the strong market fundamentals supporting clean energy continue despite more challenging macro conditions in many markets. At Macquarie, we are working in close partnership with the public and private sectors on practical solutions to enable decarbonisation and to support the commercialisation of climate solutions and technologies.</p> <p>The pace of technological change and its ability to accelerate decarbonisation drives our work across a range of evolving decarbonisation solutions, ranging from the scaling-up of clean fuels to carbon capture and storage.”</p>
2	Mark Wiedman Head of Global Client Business, BlackRock	<p>“Over the last few years, global investment in infrastructure and low-carbon energy has surged, while emerging markets – like Southeast Asia – have remained flat.</p> <p>BlackRock is helping to close this gap by leading in blended finance and transition investing. We are excited about what this opportunity means for our clients and the many societies in which we operate.”</p>
3	Sadek Wahba Chairman & Managing Partner, I Squared Capital	<p>“Public-private partnerships are critical vehicles for private capital to support necessary infrastructure projects and seek to protect developing economies from the impact of climate change.</p> <p>I Squared would like to thank the Singaporean business community for hosting the IPEF event this week and we look forward to deepening our partnership with all the key players in the region through more thoughtful and productive meetings like the ones we have just completed.”</p>
4	Richard Folsom Co-founder, Advantage Partners	<p>“It was a great privilege and honor for me to join the first IPEF Clean Economy Investor Forum which was an historic success.</p> <p>I felt a strong alignment with other participants to strengthen our efforts to promote clean energy and infrastructure globally and within the region, and I was able to make many valuable connections that</p>

		will be very helpful collaborators as we pursue hydrogen value chain projects and investments going forward in the region.”
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