

Annex A: List of organisations who have indicated their expressions of interest to explore collaborations with GCMD

No	Organisations
1.	ABS (American Bureau of Shipping)
2.	Anglo American
3.	Bureau Veritas (Marine) Singapore
4.	Clifford Capital Pte Ltd
5.	DBS Bank Ltd.
6.	Global Maritime Forum
7.	Green Shipping Programme
8.	Innovation Norway
9.	ITOCHU Corporation
10.	ITOCHU ENEX CO., LTD
11.	Jurong Port Pte Ltd
12.	Kawasaki Kisen Kaisha, Ltd. ("K" Line)
13.	Lloyd's Register Maritime Decarbonisation Hub
14.	Mærsk Mc-Kinney Møller Centre for Zero Carbon Shipping
15.	MISC Berhad
16.	Mitsui O.S.K. Lines Ltd.
17.	Motion Ventures
18.	NTU Centre of Excellence for Maritime Energy and Sustainable Development
19.	NTU EcoLabs Centre of Innovation for Energy
20.	Pacific International Lines (Pte) Ltd
21.	Pavilion Energy Singapore Pte. Ltd
22.	PSA Corporation Ltd.
23.	Rainmaking Transport
24.	RINA Singapore
25.	Rio Tinto
26.	Rotary Engineering
27.	Singapore LNG Corporation Pte Ltd
28.	Singapore Shipping Association
29.	Standard Chartered Bank (Singapore) Limited
30.	Trafigura
31.	Vopak Terminals Singapore Pte Ltd

Annex B: Bios of Prof Lynn Loo and Dr Sanjay Chittarajan Kuttan



An American engineer, Yueh-Lin (Lynn) Loo was born and raised in Kuala Lumpur, Malaysia. She is presently the Theodora D. '78 & William H. Walton III '74 Professor in Engineering and Director of the Andlinger Center for Energy and the Environment at Princeton University.

Lynn received her BSE in Chemical Engineering and in Materials Science and Engineering from the University of Pennsylvania, and her PhD from Princeton University. She spent a year at Bell Laboratories, Lucent Technologies before joining the faculty in the Chemical Engineering Department at the University of Texas at Austin. She returned to Princeton University in 2007. She is an international expert on organic and plastic electronics; her team focuses on the development and processing of materials for low-cost, lightweight and flexible solar cells and circuits, the combination of which has resulted in see-through solar cells that can be embedded in windows that change colour with electrical signals. Such “smart” windows can decrease building energy use while increasing occupant comfort. Recognized with the 2020 Thomas Edison Patent Award by the New Jersey Council of Research and Development, this technology is being further developed by Andluca Technologies, a startup that Lynn co-founded. With more than 200 publications, Lynn has delivered over 250 invited and plenary lectures globally. She is a fellow of the American Physical Society, a fellow of the Materials Research Society, and a Young Global Leader of the World Economic Forum. She is recognized with Sloan and Beckman Fellowships, the Dillon Medal from the American Physical Society, the O'Donnell Award in Engineering from the Texas Academy of Medicine, Science and Engineering, and the Colburn Award from the American Institute of Chemical Engineers.

Lynn was the Associate Director of External Partnerships at the Andlinger Center from 2011 to 2015, during which she launched and led Princeton E-affiliates Partnership, a corporate partner program to promote teacher-student-practitioner interactions and foster collaboration with the private sector. She served as Acting Vice Dean of the School of Engineering and Applied Science in the spring of 2016, and was appointed Director of the Andlinger Center in July 2016. In July of 2018, she founded Princeton's first executive education module in partnership with the World Economic Forum to contextualize the complexities of the energy transition and its impact on our environment for business leaders, government officials, investors and other key decision makers. With more than 115 associated faculty members spanning science and engineering disciplines and social sciences, the Andlinger Center is developing solutions to ensure our energy and environmental future.

Brought on board to expand its scope to include soft materials and polymers, she is an associate editor of Nano Letters. Lynn currently serves on the advisory boards of numerous companies, national laboratories, academic units at peer institutions, and journals. She served as program chair for the Division of Polymers of the American Physical Society, and chaired the Materials Engineering and Science Division of the American Institute for Chemical Engineers. While on sabbatical in Singapore in 2020, Lynn was a member of the International Advisory Panel for Maritime Decarbonisation that, among other recommendations, championed the founding of a maritime decarbonisation centre in Singapore to coordinate regional and global efforts to accelerate carbon emissions reduction in the sector.



Dr Sanjay Chittarajan Kuttan is currently the Executive Director of the Singapore Maritime Institute which is responsible for funding maritime research projects with industry and building local capabilities in the maritime sector, an appointment in 2018 after more than 2 years as a Programme Director/Senior Scientist at the Energy Research Institute at the Nanyang Technological University (ERI@N) managing the NRF funded Smart Multi Energy System project. Prior to that, Sanjay has held various positions across his career since 1994 both in private and public sector. His roles in the private sector range from line management (AP Technical Response Manager at ExxonMobil Asia Pacific, 10 years), business development (Business Development Manager at Mobil Oil Australia, 2 years); to management consulting (Petroleum Practice Expert/Engagement Manager at McKinsey & Company, 4 years) to policy and industry development and program management (Energy Market Authority, 2 years) and business leadership (Managing Director, Clean Technology Centre and Country manager, DNVGL - Energy, 5 years). In management consulting, he was primarily involved in the oil and gas sector covering refining operational improvements, fuels and lubes retail strategy and corporate performance culture transformation. At DNVGL, which was prior to joining ERI@N, he was engaged in Smart grids and power systems, renewables and grid integration, energy efficiency, electricity markets and energy policy. Before that he was the Director of Industry Development at the Energy Market Authority a Statutory Board under the Ministry of Trade and Industry (MTI). There he was in charge of three key clean technology projects embarked by the Authority i.e., Intelligent Energy System Pilot (aka Smart Grid), the Electric Vehicle Test bed and the Pulau Ubin Renewable energy project; and represented EMA at the Energy Efficiency Program Office and the Clean Energy Program Office. He also supported the Ministry of National Development on two working groups i.e., Punggol Eco Town, Sustainable Urban Living.

He is currently a council member of the Sustainable Energy Association of Singapore (2011) and a member of MTI's Pro-Enterprise Panel (2019). In 2020, he was also appointed to the Management Committee of Ecolabs, The Centre of Innovation for Energy, Advisory Board for Qi Square and District Councillor for the Central Singapore Community Development Council.

He served 14 years on Stamford Primary Advisory Committee, 8 years as Chairman (2006), 3 years as council member on the Singapore Chapter for the World Business Council for Sustainable Development (2012), 8 years on the advisory committee to the School of Electrical Engineering at the Ngee Ann Polytechnic (2010) and almost 2 years on Disciplinary Standing Sub-committee of Singapore Athletics Association (2019).

In 2011, during his time with the Energy Market Authority, he received the MTI Award (Borderless) for the Implementation of Electric Vehicle Charging Infrastructure in Singapore Phase 1: Design and Development and MTI Award (Innovation) for the Development of TR25 EV Charging System Standard. He also received the Ministry of Education's Service to Education Award (2012, 2017) for his service to Stamford Primary School. During his career, he was selected by ExxonMobil in 2001 and DNVGL in 2013 to join the leadership programs conducted by INSEAD and in 2009, to join the 9th Government Leadership Program following the nomination by the Energy Market Authority.