

Smart grid and Power Electronics Consortium Singapore (SPECS)

* Background

- The Smart Grid and Power Electronics Consortium Singapore (SPECS) was announced at SIEW 2018 and was officially launched at the Energy Grid 2.0 Forum on 9th April 2019;
- SPECS is set up to provide a platform for companies to access the latest technologies developed by IHL/RI, and to translate them into commercially-viable products and services;
- It is a 3 years programme (1st Dec 2018 – 30th Nov 2021) supported by NRF, EDB and EMA, and hosted at ERI@N for its operation;
- A Management Board and Technical Committee are set up to provide strategic and technical guidance needed for the SPECS programme;
- Membership includes representatives from the IHLs, RIs and industry from the Smart grid and Power Electronics eco-system;
- A fixed sum of budget from Energy Grid 2.0 programme has been set aside for pre-competitive or “seed projects” identified and supported by SPECS.

* Value Proposition for MNC/LLE/SME

SPECS Core Competency

End Users



Industry Alignment Fund

Pre-Positioning Programme
(IAF- PP)

Industry Collaboration
Projects
(IAF- ICP)

Internationalization



* Value Proposition for SME/Start-up

Value-added by Partners

Institute of Higher Learning



Centres of Innovation

Energy



Electronics & IoT



Marine & Offshore



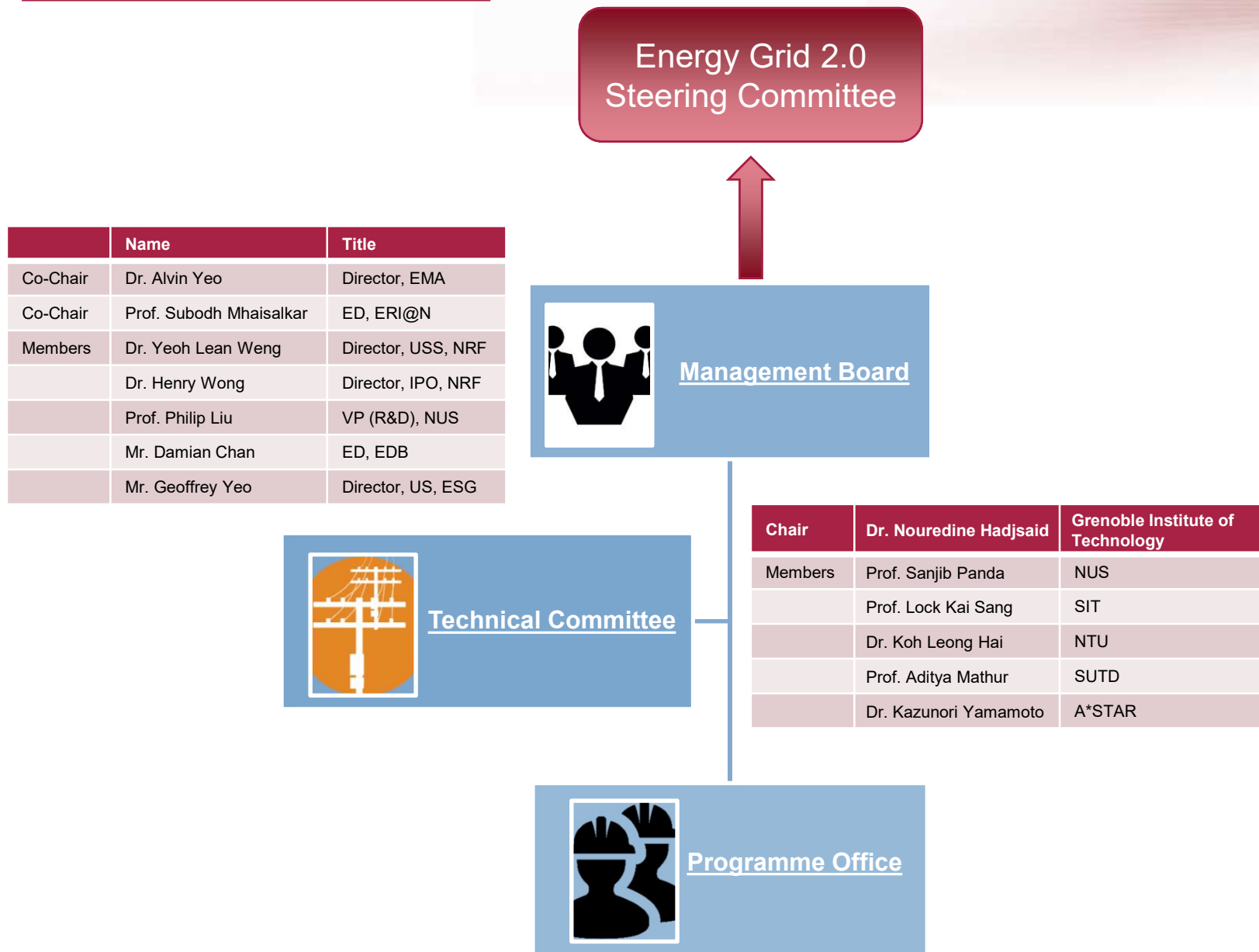
Materials



IP Commercialisation



* SPECS Governance



* An Example of Ongoing Project

Project Title: Internet of Energy with Advanced Analytics, Modelling, Optimization and Digitization for ESS and Renewable Energy Sources

Industrial Collaborator: Sembcorp Industries

Government Agency: Housing & Development Board (HDB)

PI: Dr. Koh Liang Mong, ERI@N

Co-PI: Dr. Li Ang, Sembcorp

Grant: SEETP, 2 years project duration



* Industry Members

MNC: 5



LLE: 3



sembcorp



SPgroup



ST Engineering

SME: 7



durapower



APECUS
Power solutions for all



Start-up: 8



CONNECTING ASSETS AND KNOWLEDGE



Lite Unite
PRIVATE LIMITED



VORTEC



Total: 23

* SPECS Technology Primer Exercise

This primer is developed via a consultative process that involves academics, industry members and policy makers. These experts are engaged via interviews, focus group discussions and workshops conducted between March to October 2019.

The objectives of this primer:

- Identify priorities, gaps, and development timelines of smart grid and power electronics technologies;
- Identify and prioritise industry challenges and opportunities to accelerate development and deployment of available technologies;
- Provide a clear pathway for R&D investments.



* SPECS Events Calendar 2019

	2019												2020
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Workshop	★ 25 Jan							★ 23 Aug					
Networking				★ 9 Apr							★ 25-28 Nov		
SIEW Conference										★ 31 Oct			
Management Board					★ 29 May							★ 5 Dec	
Technical Committee		★ 22 Feb					★ 12 Jul			★ 1 Nov			★ 9 Jan

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