





Day One 26 October 2022

09:00

**Welcome Remarks by Organiser** 

09:05

**Keynote Address** 

Richard Lim, Chairman, Energy Market Authority (EMA)

09:20

**Keynote Address** 

Jimmy Khoo, Chief Executive Officer, SP PowerGrid, SP Group

09:35

Platinum Sponsor Keynote Address: Future of the Grid: R&D Imperatives to Support Future Grid Development across Asia

Dr Fraser Thompson, Founder and Chief Strategy Officer (CSO), Sun Cable

09:50

**Keynote Address** 

Dr Angela Wilkinson, Secretary General & CEO, World Energy Council (WEC)

10:05

## Panel Discussion: Developing a Grid that Empowers the Future of Energy

- Trends and forecast in the evolving T&D landscape
- Key challenges in grid modernization to enable low carbon energy transition (Generation & Demand)
- Technological advancements that are key in the transformation to next generation grid
- The opportunities and challenges of interconnecting grid (e.g., ASEAN Power Grid)

# **Confirmed Speakers**

Dr Nuki Agya Utama, Executive Director, ASEAN Centre for Energy (ACE)
Pravas Kumar Singh, Member, Central Electricity Regulatory Commission (CERC)
Gurbuz Gonul, Director, Country Engagement and Partnerships, International Renewable Energy
Agency (IRENA)

Dr Aznan Ezraie bin Arifin, Chief of Strategy Officer, TNB Research

10:50 Morning Networking Break





#### 11:20

## Energy Leaders' Panel: Generation at the Crossroad, Beyond Fossil Fuel

- Future outlook of Generation Companies on the road to a cleaner power future
- Challenges in low carbon energy transition for power producers
- Policy and its importance in supporting the energy transition
- What technologies will support IPPs in their shift to a lower carbon generation system?
- How must the workforce evolve?
- The importance of regional collaboration and economic co-operation in evolving the ASEAN power sector.

#### **Confirmed Speakers**

(Moderator) Philippe Joubert, Senior Advisor, World Energy Council (WEC) Graeme York, President & CEO, Senoko Energy Eric Francia, President & CEO, ACEN Ditlev Engel, CEO, Energy Systems, DNV Michael Wong, Chief Operating Officer, Tuas Power

#### 12:05

## Panel Discussion: ASEAN Power Grid: Enabling RE Development Across ASEAN

- Understanding the potential of regional interconnection as a driver of a cleaner energy future
- Exploring successful multi-lateral power grids: What are the secrets to success?
- Examining the regulatory and political hurdles that must be overcome to ensure success
- Advancing transmission systems to prepare for greater interconnectivity and RE adoption, what needs to be done, what challenges exist, and what technologies will act as enablers?
- Discussing high and volatile costs as a barrier to driving interconnectivity and the potential solutions for this
- The importance of transparency: Developing schemes to ensure the green production of energy between regions
- Power trading: enabling x-border power trade platform(s) as a critical enabler of the APG

#### **Confirmed speakers**

(Moderator) Yatin Premchand, Managing Director – Global Advisory, Black & Veatch Georgie Skipper, Chief Corporate and Government Affairs Officer, Sun Cable Matthew Wittenstein, Chief of Section, Energy Connectivity, United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP)

Eddie Widiono, Founder & Chairman of Supervisory Board, Indonesia Smart Grid Initiatives (PJCI)
Amanda J. Van den Dool, Sustainable Energy and Safeguards Team Lead, USAID Regional
Development Mission for Asia (RDMA), Bangkok

12:50 Networking Lunch







14:00

### **Panel Discussion: Next Generation Grid Control System**

- Exploring the capabilities of next generation control systems (e.g., EMS/ADMS)
- Centralised vs decentralized control architecture
- OT-IT convergence for holistic grid constraint management
- Proactive network management with data as the key enabler

## **Confirmed speakers**

(Moderator) Ravi Krishnaswamy, Senior Vice President – Energy & Sustainability, Frost & Sullivan Gary Ang, Director for Grid Technology and Digitalisation, SP PowerGrid, SP Group Bruce Chan, Deputy Director - Smartgrid & Innovation, CLP Group Stephen Major, Industrial Specialist, Oracle Energy & Water

14:45

# Panel Discussion: RE Integration - How Grid Planning & Advancing Technology Will Ensure Greater **RE Adoption**

- Contemporary advancements with distributed energy resource management systems, how they can be optimised in the short to long term?
- Advancing energy storage infrastructure to balance RE intermission for uninterrupted power supply
- Technologies that can enable the grid to cope with RE controllable load, surplus and variability
- Guaranteeing transmission structures are robust enough to cope with RE integration
- What research and policy decisions are needed to support technological advancements

#### **Speakers**

(Moderator) Saumya Rao, Director, Infrastructure Advisory, PwC Filipa Ricciardi, Executive Vice President Client Solutions, EDPR Sunseap Dr Dante Recalde, VP, Solutions - APAC, Energy Exemplar Raul Miranda, Associate Analyst, Energy System Modelling, International Renewable Energy Agency (IRENA)

Nicolas Leong, Energy Business Director, North & Southeast Asia, Wärtsilä Energy

## 15:30 Networking Coffee Break

16:00

Opening Remarks by UNESCAP

Randi Kristiansen, Economic Affairs Officer, UNESCAP







#### 16:10

# Panel Discussion: Is the Trend for Sustainable Financing Increasing Appetite for Grid & Electrification Projects?

- Should investment priority shift away from generation to optimisation?
- Opportunities and direction for third-party investors and a look at specific assets, projects, and funding
- What is the direction of travel for ASEAN when it comes to financing? Which countries have optimised grid investment and which countries may have to play catch up?
- What are the barriers and opportunities to investment into electrification in the region?
- How can policies encourage grid investment?
- What factors contribute to making a grid project attractive for investors?

### **Confirmed Speakers**

(Moderator) Randi Kristiansen, Economic Affairs Officer, UNESCAP
Lim Wee Seng, Group Head of Energy, Renewables and Infrastructure, DBS
Hsien-Hui Tong, Executive Director- Investments, SGInnovate
Lawrence Wu, Chief Financial Officer, EDPR Sunseap
Shalabh Singhania, Chief Investment Officer, InfraCo Asia

#### 17:00

# Panel Session: Developing a Successful Asset Management Strategy to Manage Next-Gen System Demands

- Exploring successful asset renewal strategies
- Predicting asset failure and ensuring a reliable grid
- Technology advances supporting grid management in an evolving power system

## **Confirmed speakers**

Wee Cheng Tian, Vice President, SP Group

**Martin Hauske**, Head of Asset and Operational Technology, Oracle Energy and Water, Asia Pacific and Japan, **Oracle** 

17:30 End of Day 1 & SIEW CONNECT





# Day 2 27 October 2022

09:00

**Opening Keynote Address** 

Steve Lee, Chief Information and Security Officer, SP Group

09:15

Opening Remarks by IRENA [topic TBC: on EV Adoption]
Nicholas Wagner, Program Officer - Renewable Energy Roadmaps (REmap), International
Renewable Energy Agency (IRENA)

09:25

#### Spotlight Session: All Aboard the Electric Vehicle - Understanding Barriers to EV Adoption

- What are some learning points from successful significant EV adoption abroad?
- How are utilities and tech providers expanding infrastructure development, what are the barriers and how can they be overcome?
- Encouraging greater buy-in by improving infrastructure: the importance of partnerships and consumer buy-in
- Understanding the need for effective charging systems as an enabler of large-scale EV adoptions: mass and staggered charging platforms
- Educating and re-educating consumers to help address range anxiety concerns
- Exploring the strategies adopted to encourage EV adoption across the region including government programmes

## **Confirmed Speakers**

(Moderator) **Shah Nawaz Asan Gany,** Head, External Communication, Group Corporate Communications, **Tenaga Nasional Berhad (TNB)** 

Datuk Shahrol Halmi, Vice President, Zero Emission Vehicle Association (ZEVA)

Dr Tobias Massier, Principal Scientist, Energy and Power Systems, TUMCREATE

Nicholas Wagner, Program Officer - Renewable Energy Roadmaps (REmap), International Renewable Energy Agency (IRENA)

**Yeoh Eng Yew,** Director, Regional Institute for Sustainability and Energy Transition (RISE), **Bureau Veritas** 

10:10

## Panel Discussion: Let's Get Technical - What Innovations Do We Need to See for V2G

- Modelling the application scenarios where V2G is needed and would work
- Latest trials in the development of V2G technology as well as the potential and limitations of a decentralised giant battery
- Complexities of having an external party have control of your vehicle's battery. What changes must be implemented to drive assurance?

### **Confirmed speakers**







(Moderator) Pierre Lelong, Director, Head of Singapore, ENEA Consulting
Paul Welsford, Vice President, Electric Vehicle Association of Singapore (EVAS)
Dr Sanjib Kumar Panda, Associate Professor and Area Director, Power & Energy Research Group,
Department of Electrical & Computer Engineering, National University of Singapore

#### 10:55 Networking Coffee Break

#### 11:15

Panel Discussion: Grid Modernisation: Technologies & Strategies Ensuring Maximum Efficiency, Reliability in an Evolving Power System

- What are the limitations of the present grid? What evolving needs must we address?
- Understanding the complexities of an evolving power system and the steps in business development to match this
- Technologies to optimise network operation effectiveness
- Is maximising grid infrastructure the key to grid modernisation? What other steps must we take to accelerate this?

#### **Confirmed Speakers**

(Moderator) **Dr Matthew Rowe,** Director, Power Grids, Asia-Pacific, **DNV Brian Tsui,** GM for Engineering & Capability Development, SP PowerGrid, **SP Group** 

### 12:00

#### **Technology Insight: Hurtling Towards a Fully Digitised Future**

- Applying AI and other intelligent technologies to grid assets
- Case study on successful digitalisation projects when it comes to the grid
- Learning points on digitalisation from more advanced regions

#### 12:15 Networking Lunch

#### 13:45

Spotlight Session: Demand Response: Strategies Supporting Smarter Consumer Consumption

## 14:05

Panel Discussion: Power Hungry: How Energy Efficiency Will Enable the Growth of Data Centres Within an Increasingly Stressed Grid

- How are data centres working to support the lower carbon efforts of national governments globally?
- What efficiency technologies are increasingly enabling datacentres to reduce power consumption
- How are grid operators and datacentres working together to overcome the challenges posed by power-intensive buildings?
- How will energy efficiency solutions continue to evolve to support datacentres, and buildings more broadly

## **Confirmed Speakers**







Dr Poh Seng (PS) Lee, Executive Director, Energy Studies Institute (ESI), National University of Singapore (NUS)

Wong Wai Meng, Chief Executive Officer, Keppel Data Centres

Invited speakers: SP Group, AWS

## 14:50 Networking Coffee break

15:30:

**Case Study: Cybersecurity** 

15:50

## Panel Discussion: The Need for an Ever-Evolving Cybersecurity Landscape to Ensure A Secure **Future Grid**

- The broad outlook on accelerated cybersecurity issues alongside with energy transition, contemporary solutions and direction for further protection
- The IOT revolution, IT, and OT as new frontiers of energy
- The challenges of developing a common security standard to ascertain privacy and security in the age of digitalisation
- Protecting digital system by increasing network visibility, isolating problem and identifying the missing components from OT and substations.
- Using cyber threat intelligence IOC to locate threats on dashboard and mitigate supply chain risk management especially when third parties are involved

## **Confirmed speakers**

(Moderator) Simeon Tan, Co-founder, Protos Labs

Abdul Aziz Patail, Grid Operation Technology Management Chief Engineer, Sabah Electricity Sdn Bhd (SESB)

Neo Boon Kai, Director, Security Architecture & Engineering, SP Group Azril Rahim, Senior Manager, Cyber Security, Tenaga Nasional Berhad (TNB)

16:35

## Panel Discussion: Upskilling: Creating the Energy Workforce of the Future

- Why there is a need for change in the contemporary energy sector
- The value of fluid digital skills in an increasingly digitised future for the energy sector
- Creating a digital workforce: outlining the technologies that are changing the shape of the work place and the competencies needed to thrive
- How does the industry address the need for workers to have transferable skills to mitigate against both a manpower and skills shortage issues?

### **Confirmed speakers**

(Moderator) Dr William Hickey, Professor of Management, GDUFS, Canton, Senior Energy Advisor Dr Mak Met, Senior Vice President, Human Resources, Sarawak Energy Berhad Ir. Ts. Bibi Hazrina, Alli Rahman, Head of Strategic Asset and Safety Governance, TNB Integrated **Learning Solutions Sdn Bhd** 







17:05 End of Day 2 & SIEW CONNECT