

# CLEAN POWER & NEW ENERGY 2024

# TRIPLING RENEWABLE POWER & DOUBLING ENERGY EFFICIENCY BY 2030

**25**<sup>TH</sup>**-27**<sup>TH</sup> **JUNE 2024** M RESORT HOTEL, KUALA LUMPUR



Dato' Ir. Ts Razib Dawood Chief Executive Officer Energy Commission





Datuk Ir. Megat Jalaluddin Megat Hassan President / Chief Executive Officer Tenaga Nasional Berhad





Tan Sri Che Khalib Mohamad Noh Group Managing Director MMC Corporation Berhad





Dato' Hamzah Hussin Chief Executive Officer SEDA Malaysia







### **EVENT OVERVIEW**

Welcome to the Clean Power & New Energy 2024 conference, where we converge to drive the transformation towards a sustainable energy future. With the theme of "Tripling Renewable Power & Doubling Energy Efficiency by 2030," this event serves as a rallying point for leaders, innovators, and changemakers in the energy sector.

The Clean Power & New Energy 2024 conference isn't just a gathering; it's a pivotal moment in our journey towards a cleaner, greener world. Over the course of 2 days, we will embark on a comprehensive exploration of the latest innovations, strategies, and collaborations shaping the clean energy landscape. From cutting-edge renewable energy technologies to innovative financing models and regulatory frameworks, every aspect of the transition to cleaner, more sustainable energy systems will be scrutinized and celebrated.

Clean Power & New Energy 2024 (CPNE 2024) is poised to be the premier forum driving the transition towards cleaner and more sustainable energy solutions. As the region's leading event in the energy transition space, CPNE 2024 offers unparalleled access to government and industry leaders spearheading transformative initiatives in Asia and beyond. Returning for its third edition, CPNE 2024 will once again bring together international ministers, energy CEOs, policymakers, and technical experts to dissect critical trends shaping the energy landscape. Through insightful analysis and innovative discussions, CPNE 2024 aims to drive forward solutions that pave new pathways in the transition to net zero emissions.

Additionally, the event will focus on fostering partnerships that are essential in making clean energy accessible, secure, and affordable for all.







Governments, ministers & policy makers



NECs/IECs



National utilities & IPPs, SPPs



EPCs, engineering firms



Natural gas & LNG companies



Hydrogen & Ammonia companies



Renewable energy companies



Climate Technology Specialists



Transmission & distribution



Grid infrastructure & equipment



OEMs, power generation tech



Financiers, banks, multilateral banks



Maritime & Supply Chain Companies



Digitalisation, software companies



Legal / Law firms

# BRINGING IN THE WHOLE ENERGY VALUE CHAIN



### **ATTENDEES BY JOB FUNCTION**



### **CLEAN POWER KEY HIGHLIGHTS**







### SUSTAINABILITY DIGITAL TRANSFORMATION PARTNER



Benchmark Gensuite ties the proven capabilities of Gensuite EHS, Quality, Operational Risk and Compliance digital applications, with pioneering solutions for Sustainability, Disclosure Reporting, ESG Data Management and Advanced Technology and Al Solutions: organically-developed, natively-integrated and seamlessly interfaced on a single platform. We are passionately committed to pushing boundaries and enabling cross-functional success, in collaboration with our subscriber champions! We are honored by your interest in our story and invite you to join us, as a subscriber, partner, champion, team member – and friend of Benchmark Gensuite!













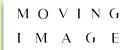
















































### **EVENT SPEAKERS**



Dato' Ir. Ts Razib Dawood Chief Executive Officer Energy Commission



Datuk Ir. Megat Jalaluddin Megat Hassan President / Chief Executive Officer Tenaga Nasional Berhad



Tan Sri Che Khalib Mohamad Noh Group Managing Director MMC Corporation Berhad



Dato' Hamzah Hussin Chief Executive Officer SEDA Malaysia



H.E Nineta Bărbulescu Ambassador of Romania to Malaysia & Brunei Darussalam Embassy of Romania in Malaysia



Ts. Syed Saggaf Ahmad <u>President</u> Malaysian Oil, Gas & Energy Services Council



Dr Nuki Agya Utama
Executive Director
ASEAN Centre for
Energy (ACE)



Ir.Ts. Shamsul Bahar Mohd Nor Group Chief Executive Officer MGTC



Davis Chong President MPIA



Rosman Hamzah Managing Director ROSERGY Consulting



Mathieu Geze Director, Asia, HDF Energy



Nicolas Leong Energy Business Director North & Southeast Asia Wartsila



Utpal Chakraborty Gartner Ambassador - Data & Analytics Peer Community Gartner



Datuk Kamarul Redzuan Group Chief Executive Officer Uzma Group



Narendran Maniam Chief Executive Officer Indah Water Konsortium (IWK)



Naveen G.V Global Development Officer & Managing Director Benchmark Gensuite



### **EVENT SPEAKERS**



Idzqandar Abu Bakar Group CHSE & Sustainable Development Officer Prasarana



Narendra Asnani General Manager Contractual Services Asia GE VERNOVA



Scott Badger President, Clean Energy Transition Keppel Ltd.



Narsingh Chaudhary President, APAC & India Black & Veatch



Anand Ramakrishnan
Group Managing Director & CEO
Investenergy



Arina Kok Climate Change Advisory Leader EY Asia Pacific



Camilo Morales Secretary Genera Naturgas



Dan Barbulescu Director Energy Storage Rights



Rolf Richard Keil Commissioner Alpha Environmental Group



Khairulanwar Zakaria Secretary General Malaysia Gas Association



Rami Qasem SVP & Chief Commercial Officer Beyond Limits



Matt Gleeson Vice President, Energy Transition Oracle



Dr. Ahmet Ozemre Senior Sustainability Consultar Kale Care Chemicals Kimyevi Maddeler. A.Ş



Keith Kee
President
Corrosion Association
Singapore



Megat Ardian Wira Mohd Aminuddin Senior General Manager Strategy Malaysia Airports



Dr. Endry Lim Zhen Wen Research Director Youth For Energy, Southeast Asia



### **EVENT SPEAKERS**



Nancy Nguyen
Director of Consulting
Operations
Asia Clean Energy Partners



Ilanur Elyssa Bart Research Analyst Karbon Hero



AR. (DR.) Serina Hijjas Council Member Climate Governance Malaysia



Jean-Philippe EL KHOURY Vice President, Grid Software Asia Siemens



Vidal Fernández Equity Partner & CEO BeeSolar



Prof Dr Michaela Kendall Chief Executive Officer Adelan Limited



Dato' Dennis Chuah <u>President</u> Electric Vehicle Association Malaysia



Ravi Krishnaswamy Senior Vice President - Advisory Head of Energy, Sustainability & Industrial Practice Frost & Sullivan



Nurlin Mohd Salleh Managing Director & Partner Boston Consulting Group



Dr. Allen Wang Senior Director APAC Power & Renewables S&P Global



Saiful Hakim Abdul Rahman Director, Strategic Planning Division SEDA



Dr. Zainal Arifin Executive Vice President Renewable Energy PT PLN (Persero)



Dr. Henri Paillere Head of the Planning & Economic Studies Section International Atomic Energy



Mark Lister
Co-Founder, Co-CEO, & CFO
Asia Clean Energy Partners



Tindaro Danze President & CEO Siemens Malaysia



Kamarul A Muhamed Founder & Group CEO Aerodyne Group





### DAY 1

8:30 AM	REGISTRATION & WELCOMING TEA
9:00 AM	OPENING NOTE BY THE CHAIRPERSON
	THEME 1: THE ENERGY WORLD IS SET TO CHANGE SIGNIFICANTLY BY 2030
9:15 AM	SPEAKING SLOT: SUSTAINABLE SURGE: ESG-DRIVEN DIGITAL TRANSFORMATION EMPOWERING RENEWABLE POWER FOR THE 2030 ENERGY REVOLUTION
	SPEAKER: Naveen G.V. Global Development Officer & Managing Director, Benchmark Gensuite
	SPEAKER: Naveell 6.1, Global Development Officer & Managing Director, Benchmark Gensalte
9:45 AM	<ul> <li>PANEL DISCUSSION: RENEWABLE POWER ON COURSE TO SHATTER MORE RECORDS AS COUNTRIES AROUND THE WORLD SPEED UP DEPLOYMENT</li> <li>How much will investment in clean energy technology grow in 2024—and in the years to come?</li> <li>The average capital expenditure costs for clean power and new energy are expected to continue declining in the near term. Where are the growth opportunities?</li> <li>Oversupply is driving solar and storage manufacturers into a price war. What impacts will that have on the market?</li> <li>How will the soaring interest in low-carbon hydrogen drive the cleantech market?</li> </ul>
	MODERATOR: Rosman Hamzah, Managing Director, ROSERGY Consulting PANELLISTS:  Priyantha Wijayatunga, Chief of Energy Sector Group, Asian Development Bank (Invited)  Rolf Richard Keil, Commissioner, Alpha Environmental Group  Ts. Syed Saggaf Ahmad, President, Malaysian Oil, Gas & Energy Services Council
10:15 AM	DIAMOND SPEAKING SLOT
10:45 AM	OPENING REMARK SESSION
	<b>SPEAKER: YAB Dato' Sri Haji Fadillah Bin Haji Yusof,</b> Deputy Prime Minister & Minister of Energy Transition & Water Transformation (PETRA) (Invited)
11:05 AM	MORNING TEA BREAK
11:20 AM	PANEL DISCUSSION: RENEWABLE ENERGY COULD POWER THE WORLD BY 2050. HERE'S WHAT THAT FUTURE MIGHT LOOK LIKE  Driving energy technology innovations  Accelerating energy access  Designing the future of power systems  Building energy system resilience  Grid integration initiatives  MODERATOR: Davis Chong, President, Malaysia Photovoltaic Industry Association (MPIA)  PANELLISTS:
•	<ul> <li>Datu Haji Sharbini Suhaili, Group CEO, Sarawak Energy (Malaysia) (Invited)</li> <li>Datuk Ir. Megat Jalaluddin Megat Hassan, President / Chief Executive Officer, TNB</li> <li>Tan Sri Che Khalib Mohamad Noh, Group Managing Director, MMC Corporation Berhad</li> <li>Dato' Hamzah Hussin, Chief Executive Officer, SEDA Malaysia</li> </ul>
	THEME 2: WHAT IS THE RENEWABLE ENERGY ROADMAP FOR MALAYSIA 2030: GREEN ENERGY NOW

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	THEME 2: WHAT IS THE RENEWABLE ENERGY ROADMAP FOR MALAYSIA 2030: GREEN ENERGY NOW
12:20 PM	<ul> <li>SPEAKING SLOT: WHEN TECHNOLOGY IS NOT ENOUGH ENGAGING THE HUMAN FORCE TO REACH NET ZERO</li> <li>Demonstrate the potential for consumers to have a 3x faster impact on GHG emissions.</li> <li>Consumers can play a direct role in achieving Net Zero by engaging in demand response and behavioral load shifting.</li> <li>Greater consumer engagement can alleviate pressure on existing energy networks while satisfying rising energy demand.</li> <li>Research from international agencies will highlight the impact of deeper consumer engagement on network load.</li> <li>Showcase the nexus between demand response options, behavioral load shifting, and consumer engagement.</li> <li>This approach fosters greater advocacy between consumers and utilities toward the mutual goal of Net Zero.</li> </ul> SPEAKER: Matt Gleeson, Vice President, Energy Transition, Oracle
12:50 PM	PLATINUM SPEAKING SLOT
13:15 PM	LUNCHEON & NETWORKING





### **EVEN**

### DAY 1

### 14:30 PM

### **LOCALISTS PANEL CHIT CHAT:** AN EVALUATION OF MALAYSIA RENEWABLE ENERGY PATH TO CARBON NEUTRALITY TOWARDS

Renewable energy systems create abundant energy by utilizing resources such as the sun, wind, earth, and plants. The demand for renewable energy is increasing, despite power scarcity, pollution, and climate change posing challenges to long-term development in the country.

- Solar PV :
- Wind Energy :
- Hydropowei
- Geothermal:
- Bioenergy

### MODERATOR: Ilanur Elyssa Bart, Research Analyst, Karbon Hero

- Ir.Ts. Shamsul Bahar, CEO, Malaysian Green Technology & Climate Change Corporation (MGTC)
  Davis Chong, President, Malaysia Photovoltaic Industry Association (MPIA)
  Dato' Ir. Ts Razib Dawood, Chief Executive Officer, Energy Commission
  Arina Kok, Climate Change Advisory Leader, EY Asia Pacific

#### 15:10 PM

### PLATINUM SPEAKING SLOT

#### 15:30 PM

#### ROUNTABLE DISCUSSION: PLUGGIN' INTO THE MALAYSIAN'S FUTURE WITH EV MOBILITY TO ACCELERATE THE EMOBILITY REVOLUTION

The EV Revolution – Moving From Oil Age to Battery Age

Overview: This panel discussion is a thought-provoking and timely event that aims to explore the transformative shift from traditional fossil-fuel-based transportation to the rapidly advancing era of electric vehicles (EVs). The panel brings together industry experts, policymakers, and environmental advocates to discuss the profound impact of EVs on our transportation landscape, energy infrastructure, and the global effort to combat climate change.

### MODERATOR: Rafael Jeffry Anwar Sani, Co-Founder Ecosystem Value Chain EV & Mobility, EMC2 Indonesia

- Matt Gleeson, Vice President, Energy Transition, ORACLE Dato' Dennis Chuah, President, Electric Vehicle Association Malaysia
- Idzgandar Abu Bakar, Group Chief Health, Safety, Security, Environment & Sustainable Development Officer, Prasarana

### THEME 3: CLEAN ENERGY & DECARBONIZATION IN SOUTHEAST ASIA: OVERVIEW, OBSTACLES & OPPORTUNITIES

### 16:05 PM

### **SPEAKING SLOT: ASEAN'S ENERGY TRANSITION CHALLENGES**

- Restricted green financing ecosystem
- Conflicting priorities to enable growth of renewable energy and low carbon energy solutions
- Continued subsidy of fossil fuels
- Underdeveloped power grid capacity for renewable energy integration
- Protecting and supporting affected communities

SPEAKER: Dr. Nuki Agya Utama, Executive Director, ASEAN Centre for Energy (ACE)

### 16:35 PM

### **EVENING COFFEE BREAK**

### 16:50 PM

- ASEAN PANEL CHIT CHAT: Faster Deployment of Clean Power Such as Solar, Wind and EVs Can Enable India, Korea, Thailand, Australia (4 SEA Countries) to Peak Emissions Before 2030

  1. India, Korea, Thailand, Australia (4 SEA Countries is already making progress on power sector decarbonization India, Korea, Thailand, Australia (4 SEA Countries electricity generation remains the country's largest source of emissions finding that maximizing deployment of solar and wind, supplemented by additions of nuclear, energy storage and carbon capture and storage (CCS) for thermal power plants, is the cheapest way for India, China, Thailand, Australia (4 SEA Countries to increase electricity access while decarbonizing its power supply.
- India, Korea, Thailand, Australia (4 SEA Countries transition to a net-zero economy is an investment opportunity amounting to at least \$12.7 trillion
- Hydrogen and CCS will be critical to tackling growing industrial emissions Green hydrogen and CCS will be key in decarbonizing the industrial sector and eliminating those emissions.

### **MODERATOR: TBA**

- Nancy Nguyen, Director of Consulting Operations, Asia Clean Energy Partners
  Prof Dr Michaela Kendall, Chief Executive Officer, Adelan Limited
  Dr Allen Wong, Senior Director APAC Power & Renewable, S&P Global

### 17:20 PM

### **END OF CPNE DAY 1**





### **EVENT AGENDA**

### DAY 2

8:15 AM	REGISTRATION & WELCOMING TEA
8:30 AM	<ul> <li>FIRESIDE CHAT: ASEAN AT COP28, AFFIRMING THE NET-ZERO COMMITMENT</li> <li>ASEAN's Climate Commitments: Post-COP 28, ASEAN affirms its dedication to sustainable energy and climate action, with member states like Malaysia, Singapore, Cambodia, and others setting ambitious goals, including net-zero emissions, and increased renewable energy capacity.</li> <li>National Strategies at COP 28: Member states presented high-level statements at COP 28 outlining their commitments and strategies for energy transition and climate resilience. Examples include Malaysia's 45% reduction in GHG emissions and Singapore's net-zero emissions target by 2050.</li> <li>Global Collaboration: ASEAN plays a prominent role in global climate dialogue, participating in pledges such as tripling renewable energy capacity to 11TW by 2030 and joining initiatives like the Global Cooling Pledge to reduce emissions from refrigeration and air conditioning.</li> <li>Coal Transition Initiatives: Indonesia and Malaysia joined initiatives in Coal Transition Accelerator and Powering Past Coal Alliance, focusing on just transitions from coal to clean energy through funding strategies and risk evaluation.</li> <li>Path Forward for ASEAN: a multifaceted approach for ASEAN's climate initiatives is needed, emphasizing elements in regional cooperation, innovation, technology investment, capacity building, public awareness, and ensuring an inclusive and just transition. Success depends on effective implementation, with ASEAN aiming to lead global climate efforts.</li> </ul>
<b>©</b>	MODERATOR: Nurlin Mohd Salleh, Managing Director & Partner, Boston Consulting Group PANELLISTS: • Camilo Morales, Secretary General, Naturgas
	THEME 4: GLOBAL IMPACT ON ENERGY EFFICIENCIES, CLEAN POWER, GRIDS & ELECTRIFICATION
9:20 AM	PANEL DISCUSSION : MOBILIZING COLLABORATIVE ACTIONS TO DELIVER A RAPID AND RESPONSIBLE ENERGY TRANSITION
•	<ul> <li>New clean power, grids and other related infrastructure must be deployed at an unprecedented speed and scale to reach net-zero targets, address energy security and create an affordable and just economy for the future.</li> <li>This is necessary not only to meet current electricity demand but also the growing supply requirements from electrification of transport, buildings, and industrial sectors, and to provide the electricity needed to decarbonize hard-to-abate sectors via green hydrogen and clean fuels.</li> <li>Existing electricity infrastructures should be expanded and modernized to create a new energy system fit for renewables</li> <li>We must rapidly mobilise public and private finance to triple renewable power capacity and double energy efficiency</li> </ul>
	<ul> <li>MODERATOR: Ar. (Dr.) Serina Hijjas, Council Member, Climate Governance Malaysia</li> <li>PANELLISTS:</li> <li>H.E Nineta Bărbulescu, Ambassador of Romania to Malaysia &amp; Brunei Darussalam, Embassy of Romania in Malaysia</li> </ul>
	<ul> <li>Narendra Asnani, General Manager - Contractual Services Asia, GE VERNOVA</li> <li>Jean-Philippe EL KHOURY, Vice President, Grid Software Asia, Siemens</li> </ul>
10:10 AM	PLATINUM SPEAKING SLOT
10:40 AM	<ul> <li>SPEAKING SLOT: ENERGY EFFICIENCY IN ASEAN: GROWING CHALLENGES OF FUTURE ENERGY DEMAND IN ASEAN</li> <li>Shaping schemes: taking ASEAN's energy efficiency schemes into the future</li> <li>2024 saw big decisions about improving residential energy performance and embracing electrification. Energy</li> </ul>
	<ul> <li>efficiency schemes are slated to do a lot of the heavy lifting, but are they up to it? And are they the solution to an equitable transition?</li> <li>Weathering change: building resilience in a warming world</li> <li>The importance of energy efficient buildings for cutting the ASEAN region emissions is well known. But what about their role in helping the regions adapt to a changing climate? This session will focus on the less-discussed but critical role for energy efficient buildings in supporting the energy system -the population- to adapt to more extreme climate conditions.</li> <li>SPEAKER: Tindaro Danze, President &amp; CEO, Siemens Malaysia Sdn Bhd</li> </ul>

11:10 AM

MORNING TEA BREAK



### **EVEN**

### DAY 2

### 11:25 AM

### PANEL DISCUSSION: MULTIPLE PATHWAYS TO 100% CLEAN ELECTRICITY BY 2035 THAT WOULD PRODUCE SIGNIFICANT BENEFITS EXCEEDING THE ADDITIONAL POWER SYSTEM COSTS

- Technology Deployment Must Rapidly Scale Up Significant Additional Transmission Capacity also added in many locations, mostly to deliver energy from wind-rich regions to major load centers Climate and Health Benefits of Decarbonization Offset the Costs
- Dramatic acceleration of electrification and increased efficiency in demand
- New energy infrastructure installed rapidly throughout the country Expanded clean technology manufacturing and the supply chain

### MODERATOR: Ravi Krishnaswamy, Senior Vice President - Advisory, Frost & Sullivan PANELLISTS:

- Narsingh Chaudhary, Vice President & Managing Director, Asia Pacific, Black & Veatch Dan Barbulescu, Director, Energy Storage Rights Saiful Hakim Abdul Rahman, Director, Strategic Planning Division, SEDA

12:10 PM

**GOLD+ SPONSOR SLOT** 

#### THEME 5: WHAT WOULD THE FUTURE HOLDS: NET ZERO EMMISSIONS AS THE BRIDGE BETWEEN THE RACE TO RESILIENCE & RACE TO ZERO

#### 12:40 PM

### SPEAKING SLOT: COMMITMENT TO ACCELERATING CLIMATE ACTION THROUGHOUT THEIR HUMANITARIAN OPERATIONS THROUGH THESE FOLLOWING STEPS

- Measuring the carbon footprint of all and setting up an integrated monitoring system
- Adopting a decarbonization trajectory that takes into account the latest scientific warnings and aspires to align with the objectives of the Paris climate agreement – namely a reduction of the organisation's carbon footprint by 50 percent by 2030
- Developing institutional and operational solutions to their environmental footprint while strengthening its social mission
- Integrating the climate and environmental issues into the organization's programmatic approach

SPEAKER: TBA

### 13:10 PM

#### **LUNCHEON & NETWORKING**

### 14:30 PM

### PANEL DISCUSSION: INTEGRATING AI AND BIG DATA IN CLEAN ENERGY MANUFACTURING

- Enhanced Efficiency in Renewable Energy Systems: Al's ability to process and analyze massive amounts of data is being leveraged to boost the efficiency of renewable energy systems

  Operational Improvements in Energy Sector. Companies are using Al to automate and improve operational
- processes. For example, virtual inspections of power lines with drones and AI are making maintenance processes safer and more efficient
- Predictive Analysis and Forecasting: Machine learning algorithms play a critical role in forecasting wind power
- output and other renewable energy sources. They allow for more accurate predictions of energy availability, which is vital for integrating renewable sources into the grid efficiently

  Digital Twins and IoT in Energy Systems: Cooperate and experience are developing digital twins of their renewable energy models, running and programment of energy systems.
- monitoring and management of energy systems, leading to better-informed decisions and strategies

  Platform as a Service (PaaS) for Energy Management: Al-driven platforms are offering PaaS solutions for energy
  management, connecting various components like sensors, grids, and electric vehicles

### MODERATOR: Dato' Kamarul Redzuan, Founder & Group CEO, UZMA

- Vidal Fernández, Equity Partner & CEO, BeeSolar Kamarul A. Muhamed, Founder & Group CEO, Aerodyne

14:50 PM

15:15 PM

SPEAKING SLOT: PROSPECTS FOR NUCLEAR ENERGY TO SUPPORT CLEAN ENERGY TRANSITIONS

SPEAKER: Dr. Henri Paillere, Head of the Planning & Economic Studies Section, International Atomic Energy Agency



### **EVENT GENDA**

### DAY 2

15:45 PM

PANEL DISCUSSION : C-LEVEL VISIONARIES - TACKLING NEW CHALLENGES & BUILDING THE "HYDROGEN BRIDGE" IN THE APAC REGION AND GLOBALLY AND FACING MALAYSIA'S GROWING HYDROGEN INDUSTRY

- A virtuous circle in the APAC with geographic advantage The importance of collaboration across sectors and regions: resources, experts and innovations
- Market entry opportunities and managing risk Strategic plans for hydrogen energy over the next five years

**MODERATOR: TBA PANELLISTS** 

Mathieu Geze, Director, Asia, HDF Energy (Indonesia)

16:30 PM

**EVENING COFFEE BREAK** 

16:40 PM

FIRESIDE CHAT: CLOSING REMARK SLOT OF CPNE 2024, PREPARATION FOR CPNE 2026

- What are the global trends in the Clean Power New Energy market in all segment and industries? Would the market witness an increase or decline in the demand in the coming years?
- What are the projection of Global Clean Power new Energy considering Capacity, Production and Production Value? What will be the estimation cost and profit? What will be the market Share, Supply and Consumption? Which are the recent industry trends that can be implemented to generate additional revenue streams?
- What Should Be Entry Strategies, Countermeasures to Economic Impact, and Marketing Channels for Clean Energy for **Utility Industry?**

**MODERATOR: TBA PANELLISTS:** 

TBA

17:10 PM

**END OF CPNE 2024** 





### **EXECUTIVE MASTERCLASS**

### ARTIFICIAL INTELLIGENCE: ENABLING CLEAN POWER AND TRANSFORMING NEW ENERGY

















### AI IN RENEWABLE ENERGY

The next industrial transformation will be driven by the innovation in energy. The grid operators, developers and consumers are harnessing artificial intelligence (AI), paving a path for a smooth transition to a greater use of renewables. Supported by otheremerging technologies, such as the internet of things (IoT), sensors, big data, blockchain technology, AI has the ability to unlock the vast potential of renewables. However, failure to embrace it would leave the renewable energy sector falling behind.

According to Precedence Research, the global artificial intelligence (AI) in renewable energy market size was valued at USD 10 billion in 2022 and it is expected to surpass around USD 114.87 billion by 2032 with a noteworthy CAGR of 27.70% from 2023 to 2032.

The Asia Pacific artificial intelligence (AI) in renewable energy market size reached USD 4.84 billion in 2023 and is projected to hit around USD 44.34 billion by 2032, expanding at a double-digit CAGR of 27.90% from 2023 to 2032.

Renewable energy and AI are key themes of PM Anwar Ibrahim's administration to wean Malaysia off its reliance on its depleting oil reserves. Al's ability to provide better prediction capabilities is enabling improved demand forecasting and asset management, while its automation capability is driving operational excellence – leading, in turn, to competitive advantage and cost-savings for stakeholders.

The most successful AI programs start with pilots, where business cases and results can be thoroughly tested using specific data. Although the energy operators highlight cost reduction as the biggest driver, a significant number of organizations have also

identified operational excellence, asset management, demand response planning and forecasting, energy trading and explorations as key opportunities of AI. To support continuing and increasing efforts of AI initiatives in clean power and new energy, our executive masterclass aims to empower senior management, digital and functional leaders with the necessary know-how, insights, and tools to achieve and accelerate the overall AI vision.





### **MASTERCLASS OUTCOME**

The masterclass will help to improve power and energy professionals' know-how as practitioners and change agents to make insightful and right decisions and lead the Al initiatives in their business and functional areas with clear actionable plans in collaboration with the digitalization team and partners. This executive masterclass will make them aware of the following key topics to drive successful Al activities:



**WHY AI//** How to align the AI definition, & communication across the organization. Current State to Future State of AI journey in power and energy sector.

**WHAT AI//** How to identify the operational gaps, evaluate, analyze, prioritize use-cases to craft a short, mid, long -term AI roadmap, enabling clean energy and transforming energy.





HOW AI// How to demystify the complexity of various technology layers in AI, system integration, data strategy to address use cases, such as Energy Efficiency, Asset Health Management, Health & Safety, Operational Efficiency, Finance and Procurement

**WHO AI//** How to build a collaborative AI team structure, and partner ecosystem accelerating and scaling your ideas to industrialization.







### **MASTERCLASS AGENDA**

### **MORNING SESSIONS**

BRIEF DESCRIPTION	KEY TOPICS
	9:00 am - 10:30 am
Understanding the AI and Digitalization. How to plan AI journey in the power and energy sector.	Define What, So What, Now What of Al and its importance in the Power and Energy sector.  • Demystifying Al /ML.  • The Al Landscape, trends, challenges, and opportunities.  • Global initiatives of Al in Power and Energy sector.
Al journey starts by asking "Why".  Understanding how to define KPIs and align organizational structure with a digital mindset.	<ul> <li>Building a successful AI Strategy in Power and Energy (Why)</li> <li>Holistic approach to AI Strategy.</li> <li>Organizational behavior and mindset.</li> <li>Business KPIs and objectives, AI maturity assessment.</li> <li>Current state to future state AI roadmap. As-is, to-be.</li> </ul>
10:30 am - 10:45 am (Morning Tea Break)	
Understanding pain points and needs in the power and energy sector.  How to identify, evaluate, and prioritize the use cases to create your short, mid and long-term Al roadmap.	<ul> <li>Al Roadmap. Use-cases in Power and Energy (What)</li> <li>Gap analysis and assessment methods.</li> <li>Gap evaluation, mapping and prioritization.</li> <li>Convergence of Sustainability and Al.</li> </ul>
Understanding end-to-end AI technology stack  Data Sense to Data Visualization  Evaluating the right AI solutions.	<ul> <li>Al Solution and Applications (How)</li> <li>Understanding end to end Al tech stack, from capturing the data to making decisions.</li> <li>Principles of Al/GenAl.</li> <li>Applications of Al, IoT Blockchain, Smart Contracts in Energy Efficiency, Asset Health</li> <li>Management, Health &amp; Safety, Operational Efficiency, Finance and Procurement.</li> </ul>
12:3	0 pm - 1:30 pm Lunch Break







### **MASTERCLASS AGENDA**

### **AFTERNOON SESSIONS**

BRIEF DESCRIPTION	KEY TOPICS	
1:30 pm - 3:00 pm		
Understanding the data strategy to enable the development of AI solutions.	<ul> <li>Al in Action with Collaboration</li> <li>Data strategy for building the right Al Solutions.</li> <li>Collaboration between operational, and Al team.</li> <li>Case studies of Al solutions in Power and Energy.</li> <li>Al Collaborative use cases in Power and Energy Ecosystem.</li> </ul>	
Understanding Cyber risks Data Privacy, Governance Ethical and responsible Al.	<ul> <li>Cyber Risks, Data Privacy in Power and Energy</li> <li>Cybersecurity gaps, threats in critical infrastructure.</li> <li>Targeted attacks in power generation, grids, transmission and distribution.</li> <li>Data privacy and governance.</li> <li>Ethical and responsible AI.</li> </ul>	
3:00 pm - 3:15 pm Afternoon Tea Break		
Addressing the right capabilities and talent to accelerate Al initiatives.	<ul> <li>Building an Al-Powered Organization (Who?)</li> <li>Al Skills, Al team structure.</li> <li>Digital project management office.</li> <li>Al partners ecosystem development.</li> </ul>	
Long-term transformation strategy.	Return on Investment (RoI)	
Al-Enabled Power and Energy.	<ul> <li>Quantifying the Business Value of Al.</li> <li>Group discussion, assessment, Q&amp;A.</li> </ul>	
5:00 pm End of Masterclass		









#### C K Vishwakarma

Founder/ CEO- AllThingsConnected, Singapore.

- Adjunct Professor- MAIB, S P Jain School of Global Management.
- Associate Faculty, SIT Singapore & SUSS Singapore
- Extensive international experience with specialization of Singapore/ASEAN markets (Living in Singapore and operating in ASEAN, South Asia since 2003).
- Managed complex multi-tech, multi-vendor projects as big as US\$ 50 million at a given time (In high-tech industries, including Aviation, Oil & Gas, Airports, Manufacturing, Broadcast & Media).
- Regularly researches, analyzes trends, and speaks at leadership forums (Presented at 130+ events).
- Founder- IoTSG, biggest IoT Ecosystem in Southeast Asia. (7000+ professionals, as of Dec 22).
- ASEAN Leader- AloT User Group of enterprises, an initiative by Bosch, ANSYS, Microsoft, Dassault Systemes (50+ large enterprises engaged as of Dec 2022).
- Expert knowledge of innovation ecosystem and venture building (Evaluated 200 + Startups, scaleups, against their role, value and play in the digital ecosystem).
- Managed multi-cultural and location projects and team size of 50+ professionals.
- Developed digitalization strategy, conducted leadership workshops, created blueprints for global organizations (Including Schaeffler Group, Kudelski Group, Yokogawa, HP, UTac, Pepperl + Fuchs, SICK, Subex, Cyviz).
- Established multiple Digital Project Management Offices (DPMOs) and best program management practices to help organizations be profitable, accelerate, and scale new initiatives.
- Leading voice in Singapore/ASEAN on Digital Transformation, Emerging Technologies, & Industry 4.0.



AllThingsConnected

AllThingsConnected is a Digital Transformation and AloT Strategy & Solutions Organization based in Singapore with active focus in ASEAN, India.

We help our customers and partners to transform their businesses, solutions sales strategy with our unique and proven approach of end-to-end value chain mapping, operational excellence, and emerging digital technologies such as Internet of Things, Artificial Intelligence, Automation. We also work with Institutionsof Higher Learnings (IHLs) in Singapore/ region to drive industry collaboration.

### **EDUCATIONS**



IIT, Roorkee, India (B.Tech in Electrical Engineering, 2002)



NUS & TU/e (Master of Technological Design in Mechatronics, 2005)



**PMI USA** PMP, 2008, RMP, 2013

### ACADEMIC AND PROFESSIONAL ASSOCIATIONS



**S P Jain School of Global Management** Adjunct Professor- MAIB



SIT, Singapore Associate Faculty- Smart Nation & Digital Supply chain



Associate Faculty – IoT **Republic Polytechnic**,



SUSS, Singapore



AloT User Group ASEAN Leader











**IIT Alumni Association Singapore** Executive Committee Member

**Project Management Institute** Professional Member, Global & Singapore Chapter

**Technical Committee Member**Building Facilities and Services

Institution of Engineers, Singapore Technical Committee Chairman -IoT & Intelligent Systems

**German Accelerator SEA**Industry X.0 Startups Mentor





### **DELEGATES REGISTRATION FORM**





Please complete this form and send it back to: darweena@cteventasia.com | +60 17 300 7881

CONFERENCE PACKAGES	PRICES	<b>\</b>
Standard Package	MYR 3,776 / PAX	
Group Booking (6 pax & Above, Fully HRDF Claimable)	MYR 2,600 / PAX	

MASTERCLASS PACKAGES	PRICES	<b>✓</b>
Standard Package (Fully HRDF Claimable)	MYR 1,299 / PAX	
Standard Package (non-HRDF Claimable)	MYR 1,099 / PAX	

### MARKETING TEAM

. Name:	3. Name:
Position:	Position:
Email:	Email:
Mobile:	Mobile:
2. Name:	4. Name:
Position:	Position:
Email:	Email:
Mobile:	Mobile:
Organization Details	Authorization
Name:	Signature:
Point of Contact Name:	
Point of Contact Number:	
Email Address:	Position:
Address:	Name:
	Mobile :
	Date:
Nature of Business:	
Country:	This booking is invalid without a signature or company stamp. Authorisation signatory must be authorised to sign on behalf of contracting organisation

CT Event Asia Sdn Bhd Shall hereinafter be referred as CT Asia

- Fees are inclusive of program materials. Event program contents, although confirmed at the time of publishing are subject to change without notice.
- Payment Terms: An invoice will be issued upon CT Asia receipt of the duly completed registration form. Full payment must be made within three (3) working days from the date of receipt of invoice. A receipt will be issued upon full payment whereupon registration is confirmed.
   PLEASE NOTE: Full payments must be received prior to the date of event. CT Asia reserves its right to refuse admission if payment is not received on time.
- 3. **Substitution:** Provided that full payment is made, substitutions at no extra charge up to fourteen (14) days before the event are allowed. Substitutions between fourteen (14) days and the date of the event will be allowed subject to an **SST Tax of 8% of the total fee that is to be paid.**
- 4. Cancellation by Participant(s): Once registration is confirmed, no cancellations is allowed. There shall be no refund for cancellations. All SST, services charges and other statutory charges shall not be refundable. Non-payment or non-attendance does not constitute cancellation. Cancellation, Postponement and Changes by CT Asia In the event that permanently cancels the event for any reason whatsoever and provided that the event is not postponed to a later date or merged with another event, the participant(s) shall be given a credit note for the amount that the participant(s) has/have paid towards such permanently canceled event and such credit note shall be valid for up to twelve (12) months ("the Validity Period") and must be used by the participant(s) for another CT Asia event during the Validity Period.
- 5. Intellectual Property: Copyright: All materials produced and/or distributed by CT Asia in connection with the event are protected by copyrights owned by CT Asia and/or third parties. Any unauthorized duplication, publication and/or distribution of such materials are prohibited. Trademarks: All trademarks, service marks and logos used and displayed by CT Asia in connection with the event are registered and unregistered marks of CT Asia and/or third parties.

- **Data Protection:** By signing this Form, the participant(s) confirm(s) that it/he/she/they has/have requested and consented to CT Asia collecting, processing and retaining the participant(s)' information on CT Asia group companies' database and to be used by CT Asia companies and disclosed to selected third parties to assist in communicating products and services which may be of interest to the participant(s). The participant(s) also agree(s) that all phone calls made to CT Asia may be recorded for training and security purposes.
- Reservation of Rights: While every reasonable effort will be made to adhere to the published or advertised package, CT Asia reserve its rights to change the venue of the event, cancel or postpone the event, change the date of the event or merge the event with another event by notification to all participants of the event thereof AND/OR omit or vary event features and make such changes as deemed necessary with or without notice due to any essential change in circumstances relating to the event which includes, but not limited to, Force Majeure, as defined hereinafter, and/or breach of agreement by any of CT Asia business partners who has an important role in the event.
- **Agreement:** The participant(s) hereby acknowledge(s), confirm(s) and agree(s) that:
  - i. The signing of this form by the participant(s) constitutes a binding valid and enforceable agreement between the participant(s) abd CT Asia ("this Agreement");
  - The participant(s) has/have no basis to claim that any payment required under this Agreement is at any time improper, disputed or unauthorized in any way;
  - The participant(s) has/have read and understood all the terms and conditions herein instead.
  - **Governing Laws:** This Agreement shall be governed and construed in accordance with the laws of Malaysia. However, CT Asia is entitled to the exclusive right of submitting to the jurisdiction of the courts in which the participant is domiciled or located.



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