

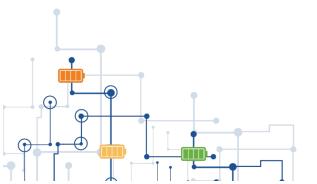
#### **WESD REGIONWISE SCHEDULE**

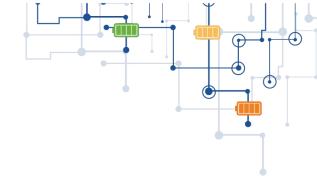












#### **WESD PARTNERS**

#### **Presenting Partner**



#### **Platinum Partners**





**Gold Partner** 







**Bronze Partner** 





India Partners







**Country Partner** 



Australian Trade and Investment Commission

Legal services Partner



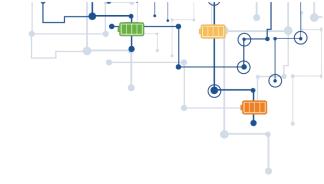
Expo Partner



Organised by







#### **Supporting Partners**



































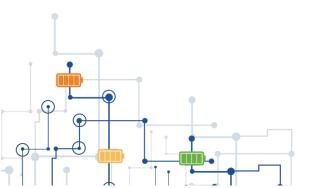














#### **POLICY & ADVOCACY**

IESA Leadership Council working group members continuously work with state and central government authorities to create energy storage policies for India. It has also help its member companies in policy intervention and support.

#### **PROJECTS**

IESA supports various tender authorities to create energy storage tenders in India and also works with private parties to create the business cases for energy storage projects.

#### **PROGRAMMES**

IESA organizes various capacity building workshops, seminars and webinars for its members throughout the year. It also organizes three national level conference called as EV Conclave, India Energy Storage Policy Forum and Energy Storage Technology Summit. In addition to this, IESA also organizes Energy Storage India (www.esiexpo.in), an annual International Conference and Exhibition

IESA outreach channels include Weekly Newsletters, Emerging Technology News (ETN) magazine, Emerging Tech Radio podcast and various Industry reports. IESA has strategic alliances with 20+ global and national associations including China National Energy Storage Alliance (CNESA), Energy Storage Association (ESA), California Energy Storage Alliance (CESA), Germany Energy Storage Alliance (BVES), Energy Storage Canada (ESC), Australian Energy Storage Alliance (AESA) and many more.

Powered by:





## **E©**NERGY







## **Energy Storage Systems**

- Commissioned a 2.8MW, 8.4 MWh solar hybrid Energy Storage System built using Amara Raja batteries in Ebonyi on Aug 2, 2019.
- First solar hybrid power project under the Energizing Education Programme (EEP) at the Ebonyi State University.
- The Energy Storage system was built using Amara Raja's "Amaron Volt" advanced Lead Acid Batteries.
- 40MWh, they would be among the largest Lead Acid Based Energy Storage systems in the world.
- The project is expected to serve 7,700 students and 1,819 faculty staff at FUNAI and will help them access clean reliable energy from the university's 2.8MW solar hybrid power plant. This project also provides energy for 7.2Km of Street Lighting. The annual carbon dioxide emission savings are expected to be 8.2 Million Lbs.
- The Energy Storage Systems helps bring "light" and "development" to the remote corners of the world and to the needy people.

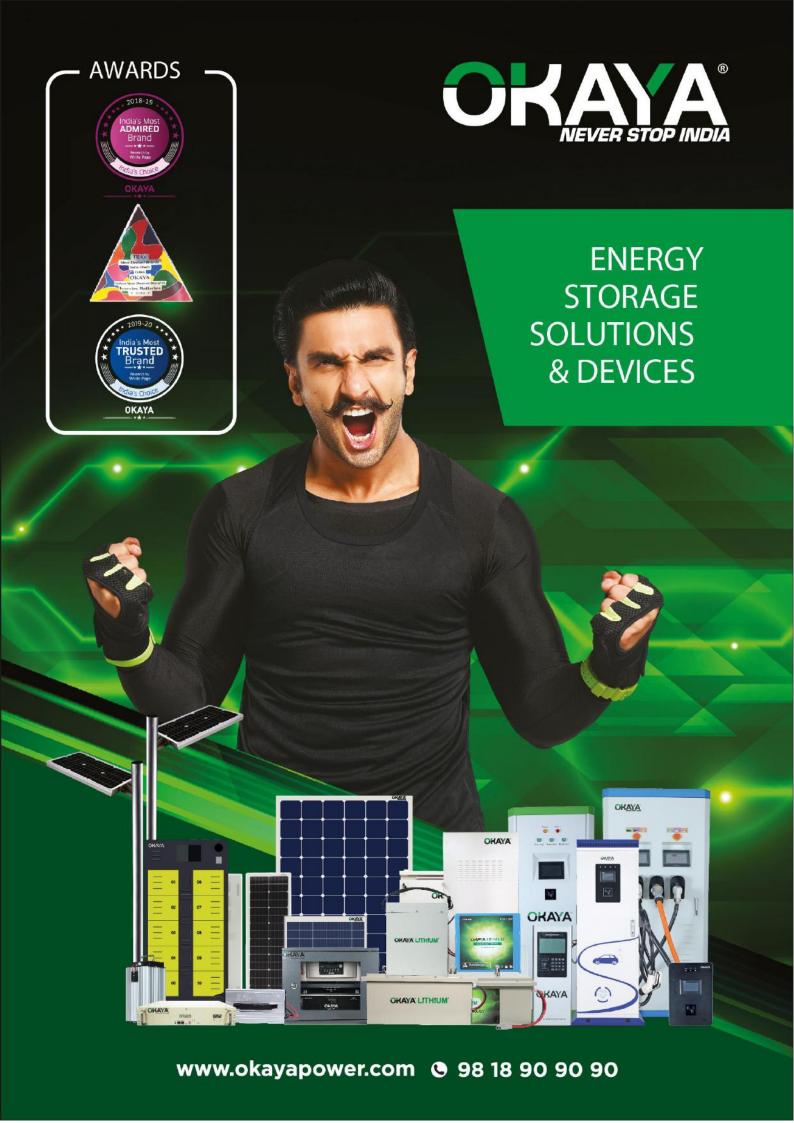




## Giving you the freedom to GO ELECTRIC!



Home chargers, Fast DC Chargers and Charger Management System





Your future is also ours.

Our innovations help cities use less energy, make the air we breathe cleaner and turn electric transport into a practical reality. That's why at BASF, we're optimistic about the future.

Find more information

#### **Email:**

brieux.boisdequin@basf.com

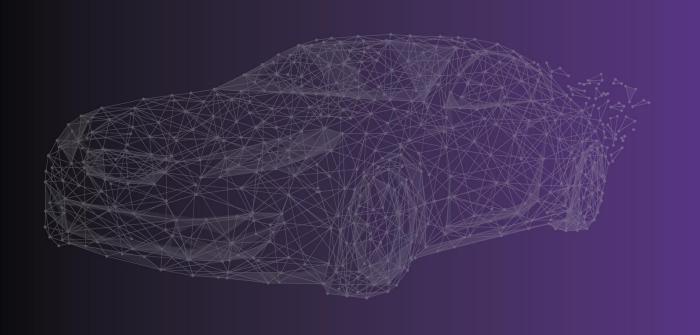
#### Web:

wecreatechemistry.com



■ BASF
We create chemistry

# ACCELERATING AUTOMOTIVE INNOVATION YOU DREAM. WE TEST.









#### E-MOBILITY

- Complete power ecosystem test
- Emulate EV chargers & vehicles
- Battery cell, module, & pack test
- Charging infrastructure test

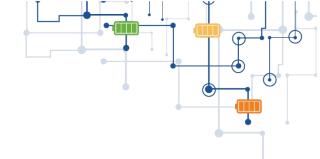
#### **AUTONOMOUS DRIVING**

- Advanced radar simulation
- 24 GHz/76-81 GHz radar test or design & production
- Wireless communication test for Advanced Driver Assistance Systems

#### CONNECTED CAR

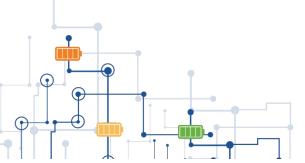
- Cellular V2X
- Dedicated Short-Range Communication (DSRC)
- Automotive Ethernet
- eCall validation

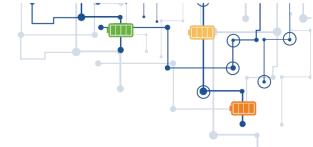




## **WESD AGENDA**

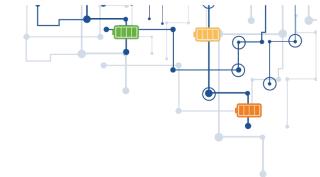
R1 (Austra	R1 (Australia & New Zealand, Singapore, Philippines, Indonesia, Japan, China,		
South Korea)			
	11:00 - 15:30 ACST    10:30 - 15:00 JST & KST    9:30 - 14:00 CST, Singapore		
Time (ACST)	Hall 1		
11:00 - 12:30	Opening Plenary Session on Policy and Government Initiatives		
	Dr. Rahul Walawalkar, Chairman, GESA (Moderator)		
	Dr. Gabrielle Kuiper, DER Strategy Specialist – Energy Security Board (ESB)		
	Steve Blume, President, Smart Energy Council, Director, Australian Institute of Energy, Director, Global		
	Solar Council, Chair, Steering Committee, APVIA		
	Yoshiro Kaku, Chief Representative, New Energy and Industrial Technology Development Organization (NEDO)		
	George Dudley, International Engagement and Research Manager, China Energy Storage Alliance (CNESA)		
	David Morgado, Senior Energy Policy Specialist, Asian Infrastructure Investment Bank (AIIB)		
12:30- 14:00	Stationary Energy Storage Session		
	Dr. Gustav H. Beerel, Country Head, Customized Energy Solutions, Japan (Moderator)		
	Simon Brooker, Executive Director, Clean Energy Finance Corporation		
	Dr. Yu Tack Kim, Team Lead, R&D planning, Korea Battery Industry Association & KORBA		
	Paul Gleeson, Managing Director-Energy, Resources & Water, Aurecon Group		
	Isao Hasegawa, Environment & Energy Business Division, Mitsubishi Research Institute, Inc.		
	Austin R. Bryan, Senior Director – Innovation, CLP Holdings Limited		
	Dr. Avishek Kumar, Co-Founder & CEO, VFlow Tech Pte. Ltd.		
14:00 - 14:30	NETWORKING BREAK		
14:30 - 15:30	eMobility Session		
	Harsh Thacker, Director (Strategy), CES India (Moderator)		
	Beejay Kim, Country Representative-Korea & Japan, EV Volumes		
	Nathan Dunlop, Head of Market Strategy, Tritium		
	Kaushik Burman, VP (NBD, Supply Chain, Policy & Advocacy), Gogoro		
	Srinivasa Venu Uppuluri, Vice President, SB Energy		
	Dr. Anshuman Tripathi, Programme Director, Future Mobility Solutions (Electromobility), Energy Research Institute, NTU*		





	R2 (India & SAARC Region)
	10:00 - 14:30 IST
Time (IST)	
10:00 - 11:15	Opening Plenary Session on Policy and Government Initiatives
	Welcome address by Debi Prasad Dash, Executive Director, India Energy Storage Alliance
	Opening Remarks by Shri Amitabh Kant, CEO, NITI Aayog
	Keynote talk by Prof. Stanley Whittingham, 2019 Nobel Laureate in Chemistry
	Special Address by H.E. Shri Upendra Tripathy, Director General, International Solar Alliance
	Shri Ghanshyam Prasad, Joint Secretary, Ministry of Power
	Theme Talk: Dr. Rahul Walawalkar, Founder & President IESA, MD – CES India
	Vote of Thanks: Ashok Thakur, Chief Editor, ETN, Customized Energy Solutions
11.15 12.20	Chatianama Francisco Chamana Caraina
11:15 - 12:30	Stationary Energy Storage Session  Note: Walawalker Director CES India (Moderator)
	Netra Walawalkar, Director, CES India (Moderator)
	Dr. Y. Bharath Kumar Reddy, GM-Solar, Solar Energy Corporation of India (SECI)
	Rohit Modi, Country Head & President of India Business, SB Energy (SoftBank Group)
	Praveer Sinha, MD & CEO, The Tata Power Company Limited
	Rajendra Shrivastav, President and Market Business Leader, AES India Anant Nahata, Managing Director, EXICOM Tele-systems
	Anant Nanata, Managing Director, Exicolar rele-systems
12:30 - 13:00	NETWORKING BREAK
12.30 13.00	NETWORKING BREAK
13:00 - 14:15	eMobility Session
	Avanthika Satheesh, Sr. Analyst & Head of Research, Customized Energy Solutions (Moderator)
	The state of the s
	Saurabh Kumar Executive Vice Chairperson FESI Group (Session Chair)
	Saurabh Kumar, Executive Vice Chairperson, EESL Group (Session Chair) Vikram Gulati, Country Head, Toyota Kirloskar Motors
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	R3 (Europe, Russia, UK, MEA (Middle East, Africa)
11:30 -	16:00 CEST    11:30 - 16:00 SAST    12:30 - 17:00 MSK    13:30 - 18:00 UAE    11:30- 16:00 BST
Time (CEST)	10.00 CEST    11.50 - 10.00 SAST    12.50 - 17.00 MISK    15.50 - 10.00 GAE    11.50 - 10.00 BST
11:30 - 12:30	Opening Plenary Session on Policy and Government Initiatives
11.50 - 12.50	Debi Prasad Dash, Executive Director, IESA, Customized Energy Solutions (Moderator)
	Tudor Constantinescu, PhD, Principal Adviser, European Commission, Directorate General for
	Energy
	Brittney Elzarei, Policy Manager, European Association for Storage of Energy (EASE)
	Dr. Andreas Hauer, Head of the Energy Storage division, Bavarian Center for Applied Energy
	Research, BVES
	Cornelius Matthes, Sr. Vice President, Dii Desert Energy, (MENA Hydrogen Alliance)
	Szilvia Doczi, Economics lead, System Integration Of Renewables, International Energy Agency
12:30 - 13:30	Stationary Energy Storage Session
	Vinayak Walimbe, CFA, VP – Emerging Technologies, Customized Energy Solutions (Moderator)
	Giuseppe Cicerani, Head - BD, Generation Integrated Storage, Enel Green Power
	Mikhail Nikomarov, Chairman, South Africa Energy Storage Association (SAESA), Co-Founder,
	Bushveld Energy
	Chandrasekar Govindarajalu, Lead Energy Specialist, The Climate Finance, The World Bank
	Bryan Pellerin, Senior Researcher, Smart Innovation Norway (FLEXGRID project)
	Frank Burke, Technical Advisor, Irish Energy Storage Association
13:30 - 14:00	NETWORKING BREAK
14:00 - 15:00	eMobility Session
	Awadhesh Jha, Vice President – Charge & Drive and Sustainability, Fortum Charge & Drive (Moderator)
	Helge Tryti, Commercial Counsellor, Royal Norwegian Embassy in India and Director, Innovation Norway
	Martin Zierer, Application Manager, Schaltbau GmbH
	Kumail Rashid, EV Charging Solutions Lead, Asia Pacific, ABB
	Phinergy*
15:00 - 16:00	Energy Access Session
	David Lecoque, CEO, Alliance for Rural Electrification (ARE) (Moderator)
	Manoj Sinha, Founder and CEO, Husk Power Systems
	William Brent, Chief Campaign Officer, Power for All
	Nathan Adams, Director of Technology and Business Development, Hitachi ABB Power Grids
	Nitin Akhade, Manager, MICRO, Customized Energy Solutions
	Davide Coppola, Downstream Business Applications Department, European Space Agency (ESA)





11:00 - 15:30 EDT    10:00 - 14:30 CDT    8:00 - 12:30 PDT    11:00 - 12:00   Opening Plenary Session on Policy and Government Initiatives   Kelly Speakes Backman, CEO, Energy Storage Association (Moderator)   Dr. Imre Guyk, Director, Energy Storage Research, Office of Electricity, US Department of Energy (DoE)   Emanuele Taibi, Power Sector Transformation Strategies, IRENA Justin Wahid Rangooni, Executive Director, Energy Storage Canada Janice Lin, President, Founder and CEO, Green Hydrogen Coalition, Strategen Edwin Antonio Malagon, Energy Specialist, Inter-American Development Bank    12:00 - 13:00   Stationary Energy Storage Session		P4 (USA Canada Latin America (Brazil Chile Argentina)
Time (EDT)   Opening Plenary Session on Policy and Government Initiatives		R4 (USA, Canada, Latin America (Brazil, Chile, Argentina)
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		Prof. Arumugam Manthiram, Professor, University of Texas, Austin
Danny Kennedy, Chief Energy Officer, New Energy Nexus		Abhijeet Sathe, President, Soft Bank Energy, USA
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#### **WESD SPEAKERS BY SESSION**

## SESSION I - OPENING SESSION ON POLICY AND GOVERNMENT INITIATIVES

## 1. Dr. Rahul Walawalkar, President, India Energy Storage Alliance (IESA); Managing Director, Customized Energy Solutions (India)



Rahul is the Founder and President of India Energy Storage Alliance (IESA) and Managing Director of Customized Energy Solutions India Pvt. Ltd. He leads the Emerging Technologies practice for Customized Energy Solutions globally with focus on energy storage, renewables, demand response and smart grid technologies as well as international markets. He served as a member of the Board of Directors of Energy Storage Association (ESA) in the US during 2009-15 and was elected as Secretary in 2013. Rahul served as the Vice Chair for Global Energy Storage Alliance (GESA) during 2014-18 and currently serves as the Chairperson of GESA from November 2018.

#### 2. Dr Gabrielle Kuiper, DER Strategy Specialist, Energy Security Board (ESB)



Dr Gabrielle Kuiper is the DER Strategy Specialist with the Energy Security Board. Dr Kuiper is an energy, sustainability and climate change professional with over twenty years' experience in the corporate world, government, non-government organizations and academia. She has held senior executive or senior advisory energy and climate-related positions in the Office of the Australian Prime Minister, at the Public Interest Advocacy Centre (PIAC) and in the NSW Government. In late 2018, she travelled to North America, the UK and Europe as a Churchill Fellow investigating the regulation of clean, smart, customer-centric energy networks.

#### 3. Steve Blume, President, Smart Energy Council



Steve Blume is the President of the Australian Solar Council. He is also the Chief Executive Officer of NoCarbon Pty Ltd., where he creates partnerships to plan, design and deliver large-scale commercial and community solar and renewable energy projects.

Steve is a former political adviser and private sector senior executive, policy creator, change management consultant, business manager and public servant. Steve's mantra for solar and other renewables is "deployment, deployment, R&D, deployment! We have the means to build a 100% renewables future, we simply need the will!"

## 4. Yoshiro KAKU, Chief Representative of NEDO (New Energy and Industrial Technology Development Organization)



Yoshiro KAKU, is the Chief Representative of NEDO (New Energy and Industrial Technology Development Organization) Branch Office, New Delhi. NEDO is a national R&D agency of METI (Ministry of Economy, Trade and Industry, Government of Japan). The representative office plays an important role in coordination, information exchange and consultation for promoting India/Japan collaborative projects in such fields as energy management and saving, renewable energy, e-mobilities.

He has worked at METI for almost 20 years. Prior to the position, he was engaged in policymaking regarding technological innovation such as the revision of Japan's Information Technology (IT) Strategy and Roadmap for UAVs (Unmanned Aerial Vehicles) including drones. In addition, he contributed to rule amendment for effectively protecting trade secrets critical for strengthening industrial competitiveness.

He has also been involved in environment and energy related policies. He was a member of the study team for drafting Japan's long-term strategy under the Paris Agreement. Moreover, he was in charge of policies for promoting waste disposal and recycling, and securing natural resources including rare metals, for which Japan depends on other countries. Besides above, he was engaged and have experience in reconstruction of the area affected during March 2011 Great East Japan Earthquake. Mr. Kaku has graduated from the University of Tokyo, Faculty of Law, and earned LL.M. (Master of Law) from the University of Pennsylvania Law School. He was also a visiting scholar at the Berkeley Center for Law and Technology.

## 5. George Dudley, International Engagement and Research Manager, China Energy Storage Alliance (CNESA)



George Dudley is International Engagement and Research Manager at the China Energy Storage Alliance (CNESA), a Beijing-based industry association dedicated to promoting the development of commercial energy storage technologies for the low-carbon energy transition.

#### 6. David Morgado, Senior Energy Policy Specialist, Asian Infrastructure Investment Bank (AIIB)



David Morgado is a Senior Energy Policy Specialist at the Asian Infrastructure Investment Bank (AIIB). He is responsible for supporting the implementation of AIIB's Sustainable Energy Strategy, identifying investment opportunities, and assisting with project preparation. Previously David worked at the International Energy Agency (IEA) on scaling up energy efficiency policies in Brazil, India, and

on scaling up energy efficiency policies in Brazil, India, and Mexico. He also worked for the International Institute for Energy Conservation (IIEC) providing technical assistance to governments, utilities and international development agencies including the ADB, World Bank, IFC, UNDP, UNEP, and APEC. His work covered energy efficiency, demand-side management and renewable energy across Asia-Pacific and Africa.

#### **SESSION 2 - STATIONARY ENERGY STORAGE SESSION**

#### 1. Dr Gustav H. Beerel, Country Head, Customized Energy Solutions, Japan

Dr. Gustav Beerel joined CES in 2013 as Vice President of Market Development. His focus is on business and process development of scalable, comprehensive retail and wholesale energy service delivery platforms both

in the US and internationally.

Gustav is the founder/President of Emission Information, Inc. He was co-founder/CEO of EnvaPower, Inc, (known as Genscape Analytics). He was a founding member of New Energy Ventures and Corporate S.V.P. of AES NewEnergy, (known as Constellation NewEnergy). He spent a decade in the chemical industry, has an MBA from Harvard Business School and a Ph.D. in Chemical Engineering & Mathematical Optimization.

### 2. Dr. YU TACK, KIM - Team Leader, KBIA(Korea Battery Industry Association) & KORBA(Battery R&D Association of Korea)



Dr. Yu Tack, Kim obtained PhD degree in new materials engineering in YONSEI University. He joined KORBA (Battery R&D Association of Korea) and KBIA (Korea Battery Industry Association) in2011. In association, he managed battery R&D planning and industry support. He has been a member of initial ESS program working group. He has project leader of international standard of battery for ESS, EV in ISO, IEC. He has been conducting research and development of 2nd life battery for electric vehicle batteries since 2016.

Since 2019, he has been in charge of the project evaluation center construction project that can process 1,000 EV batteries (25MWh) per year in Naju, Jeollanam-do.

#### 3. Paul Gleeson, Managing Director - Energy, Resources & Water, Aurecon Group



Paul was previously General Manager for Parsons Brinckerhoff's (PB) Asia Pacific power engineering group where he was responsible for the management and performance of multiple business units and teams.

A mechanical engineer with 18 years of experience on major power generation projects in Australia, New Zealand and Asia including many projects in Queensland, Paul has acquired considerable local knowledge and expertise through managing multidisciplinary teams across all project stages, from project development to feasibility studies, concept and detailed design, construction, and commissioning.

As project director for PB's role on the AUD 63 million Leichhardt Power Station in Mount Isa, Paul managed the design deliverables for Leighton Contractors as part of the engineering, procurement, and construction contract. From 2006 to 2010, Paul was heavily involved in the 140 MW Condamine Power Station in the Surat Basin, managing the project during the development stage, and directing the project during the delivery stages in an owner's engineer capacity. Paul has also led a number of large-scale solar projects through development and feasibility stages for both private and public sector clients.

#### 4. Isao Hasegawa, Environment & Energy Business Division, Mitsubishi Research Institute, Inc.



Isao Hasegawa is a renewable energy and energy storage expert who has been working with the Mitsubishi Research Institute Tokyo, Japan for over 13 years.

#### 5. Austin R. Bryan, Senior Director – Innovation, CLP Holdings Limited



Austin R. Bryan joined CLP Holdings in May 2016 as Senior Director – Innovation, leading the Group's efforts to develop innovative business models and build collaborative partnerships as decarbonization and digitalization open up new opportunities in the global energy market. A proven pioneer of new services and value creation in the digital media sector, Austin is a globally-recognized leader in transforming business activities in the financial and telecommunications sectors.

His experience spans the creation of the first direct banking activities in Germany in the early 1990s, the introduction of virtual customer service platforms for American Express and creation of the first 3G multi-media mobile network in Australia with "3 Mobile". Most recently he was Vice President of Strategic Innovation at Singtel Optus, where he led the acquisition of major digital media projects and created a US\$1 billion digital media business developing and implementing new digital products and services.

#### 6. Dr Avishek Kumar, Co-Founder & CEO, V-Flow Tech



Dr Avishek is co-founder and CEO of V-Flow Tech Pte Ltd. V-Flow Tech is building next-generation vanadium-based smart energy storage solution for stationary applications. Avishek holds MS degree in Microelectronics from Technical University of Munich, Germany, and a Doctorate degree (PhD) in Electrical and Computer Engineering from National University of Singapore. Avishek has deep background in PV manufacturing and had detailed domain knowledge of renewable energy industry. Dr Avishek is one of the pioneers in PERC Mono technology and has played key role in the commercialization of Half cut PERC Mono module for REC solar.

He is actively involved in consultation and development of solar plus energy storage projects across the region and has consulted over 600 MW of solar projects.

#### **SESSION 3 - E-MOBILITY SESSION**

#### 1. Harsh Thacker, Director, Consulting Services, Customized Energy Solutions



Harsh Thacker joined CES in November 2014. He has been involved in providing consulting and market research services to utilities, OEMs, regulation-makers and other clients of Customized Energy Solutions and India Energy Storage Alliance on energy storage, renewable energy and other power sector related emerging markets in India. Harsh has over 10 years of experience in energy sector with a specialization in market research, process improvement and strategy consulting.

His research experience focuses power generation and T&D equipment, power sector investments, renewable energy development, energy storage systems and power utilities best practices. He has also advised companies on the areas of market analysis and forecasting, organizational development, stakeholder management.

Harsh holds a Master of Business Administration degree in General Management from Leeds University Business School, United Kingdom; a Bachelor of Technology in Electrical Engineering from the Visvesvaraya National Institute of Technology, Nagpur, India, and Diploma in Management Consulting, certified by CMI, UK. He had a short stint as a Consulting Intern with a couple of small organizations in Johannesburg, South Africa.

#### 2. Beejay Kim, Country Representative of Korea, EV Volumes, Battery Market Analyst



Beejay Kim has a wide-ranging experience in market research and consulting. Mr Kim served as a Consultant, Director of SNE Research based in Seongnam, Gyeonggi-do, Korea.

Prior to SNE Research, he worked at Samsung Electronics (Korea & Taiwan) for close to 13 years in various engineering and project management positions. His areas of expertise include battery/xEV, display and semiconductor.

#### 3. Nathan Dunlop, Head of Market Strategy, Tritium



Nathan Dunlop is the head of Marketing Strategy at Tritium a leading provider of DC fast chargers based in Queensland, Australia. Tritium designs and manufactures electric vehicle chargers and high quality, innovative power electronic components for electric vehicle systems.

Mr Dunlop is responsible for driving growth at Tritium to electrify all forms of transport. He has a background in strategic consulting with a focus on the future of utilities and energy.

#### 4. Kaushik Burman, VP (NBD, Supply Chain, Policy & Advocacy), Gogoro



Kaushik Burman is an experienced business leader with a broad depth of experience across leadership roles in Europe, North America, and Asia. His sector experience ranges from transport, energy and fintech verticals – with focus on leading P&L, driving innovation and managing disruption. He is currently with Gogoro, which is world's largest electric scooter and battery swapping network provider - responsible for business development and strategic partnerships for international expansion.

Prior to Gogoro, he worked in Shell across Europe, Americas and Asia, across five different countries, leading diverse teams in sales, marketing and operations. At Shell, he evangelized digital adoption in the logistics and supply chain verticals and led policy & advocacy efforts at European

commission and the prestigious World Economic Forum (WEF- Davos) on topics of global warming and climate change. He has also worked in Fortune 500 companies such as Nestle, Citibank and Tata group in sales, marketing, and strategy functions.

Kaushik holds an INSEAD MBA, accorded Blue Ocean Strategy scholar as well as degrees from FMS-Delhi and BE (Distinction) in Mechanical engineering from India. He is also INSEAD certified coach for executive programs on strategic disruption & digital with clients such as Schneider Electric, J&J.

#### 5. Srinivasa Venu Uppuluri, Vice President, SB Energy



Srini has 27+ years of professional experience in automotive & RE industries. Held senior executive roles in Research & Development, product marketing, strategy, and business development.

His passion lies in the arena of e-mobility and studying the incorporation of renewable energy into the EV eco system. Srini holds master's degree in engineering, Master's degree in management. (M Tech & MBA)., Pre- PhD, C. ENGG., FIE.

### 6. Dr. Anshuman Tripathi, Programme Director, Future Mobility Solutions (Electromobility), Energy Research Institute, NTU



Anshuman joined NTU in November-2012 and leads the Electromobility and Grid connectivity areas of RD&D in the Energy Research Institute at NTU (ERI@N). Before joining ERI@N he has spent close to 10 years in the industry. From July 2004 to August 2007 at GE, he formed electrical machine design competence in GE-global research delivering machine-converter solutions to GE transportation and GE healthcare systems. He also worked on wireless power transfer solutions for GE healthcare and GE-NBC. He then joined Vestas wind power systems in September-2007 where he was instrumental in creating a 2 MW and 3 MW converter design group comprising of hardware, software and control groups. This group delivered solutions for V-90, V-112 and V-164 turbine platforms of Vestas.

## SESSION 4 - OPENING PLENARY SESSION ON POLICY AND GOVERNMENT INITIATIVES

#### 1. Debi Prasad Dash, Executive Director- India Energy Storage Alliance (IESA)



Debi Prasad Dash is currently working as the Executive Director, India Energy Storage Alliance (IESA) at Customized Energy Solutions. He has been involved in techno-commercial feasibility, financial modelling & analysis and consulting in emerging technology areas like energy storage, renewable integration, smart grid, electric vehicle infrastructure and microgrids. He is involved in policy recommendations for the energy storage roadmap for India, manufacturing policy for advanced energy storage technologies and development of ancillary markets in India. He is taking the lead in new strategic partnership, membership, and day-to-day operations of IESA. He is currently part of BIS Energy Storage Standards Committee (ETD-52).

Debi has over 10 years of industry experience and has worked with over 100+ clients in various capacities. Debi is a part of other industry associations like IEEE, IEEE-Smart Grid Working Community, PES, SESI, ISGF, IGEF (Subgroup 4). Debi holds an MBA degree in Finance from Symbiosis International University and Postgraduation Diploma in Renewable Energy from TERI University.

#### 2. Amitabh Kant, CEO, NITI Aayog



Mr. Amitabh Kant is presently CEO of National Institution for Transforming India (NITI). He is a member of the Indian Administrative Service, IAS (Kerala Cadre: 1980 batch). He is the author of Branding India - An Incredible Story. Mr. Kant has been a key driver of the "Make in India," "Startup India," "Incredible India" and "Kerala - God's Own Country," initiatives that positioned India and the State of Kerala as the leading manufacturing and tourism destinations. These campaigns have won several international awards and embraced a host of activities infrastructure development, product enhancement, private-public partnership and positioning and branding based on extensive market research. Mr. Kant also conceptualized the "Atithi Devo Bhavah" (Guest is God) campaign to train taxi drivers, tourist guides, immigration officials and make them stake holders in the tourism development process. Mr. Kant was also the National Project Director of the Rural Tourism Project of UNDP which made a paradigm shift in spreading tourism to Indian villages which had core-competency in handicrafts, handloom and culture.

In his capacity as Secretary (Industries) Govt. of India, Mr. Kant drove the "Ease of Doing Business," initiative and ranking of States on outcome parameters. He is the Chairman of the Committee to implement digital payment in India.

Mr. Kant has been the recipient of Economic Time Policy Change Agent of the Year Award, the Bloomberg TV Personality of the year Award, the NDTV Administrator of the year Award and the Distinguished Fellowship of the Institute of Directors. He is the recipient of One Globe Award-2016 for leadership in Transforming Governance for the 21st Century. He is a Member of the Steering Board of "Shaping the Future of Production Systems" of World Economic Forum. He is also the recipient of Sir Edmund Hillary Fellowship award by the Prime Minister of New Zealand. He is also the recipient of Golden Peacock Award for leadership in Economic Transformation - 2017.

Mr. Amitabh Kant has worked as CMD – ITDC, Joint Secretary – Ministry of Tourism, Government of India, Secretary – Tourism, Government of Kerala, Managing Director, Kerala State Industrial Development Corporation, District Collector, Kozhikode and Managing Director, Matsyafed. During his tenure in Kerala, he structured the Calicut Airport as a private sector project based on user's fee and developed the BSES Power Project and Mattanchery Bridge under Private Public Partnership. He was also responsible for introducing new technology (fiberglass crafts and outboard motor) in the fisheries sector and launching beach level auctions which substantially enhanced returns to traditional fishermen.

Mr. Amitabh Kant did his schooling from Modern School, Delhi, graduation in Economics (Hons) from St. Stephens, Delhi University, and MA from Jawaharlal Nehru University. He is a Chevening Scholar.

#### 3. M. Stanley Whittingham, Chemistry Department, State University of New York at Binghamton



M. Stanley Whittingham is a SUNY distinguished professor of chemistry and materials science and engineering at SUNY Binghamton and the 2019 Chemistry Nobel Laureate. He received his BA and D Phil degrees in chemistry from Oxford University, where he is an honorary Fellow of New College. He has been active in Li-batteries since 1971 when he won the Young Author Award of the Electrochemical Society for his work on the solid electrolyte beta-alumina. In 1972, he joined Exxon's Corporate Research Laboratory and discovered the role of intercalation in battery reactions, which resulted in the first commercial lithium rechargeable batteries that were built by Exxon Enterprises. In 1988, he returned to academia at SUNY Binghamton to initiate a program in materials chemistry.

He initiated graduate program in Materials Science and Engineering. He was awarded a JSPS Fellowship in the Physics Department of the University of Tokyo in 1993. From 1993-1999, he was Vice-Provost for Research. In 2004, he received the Battery Division Research Award. He is presently Director of the NECCES EFRC based at Binghamton. In 2012, he received the Yeager Award of the International Battery Association for his lifetime contributions to battery research; in 2015 he received the Lifetime Contributions to Battery Technology award from NAATBaaT, in 2017 the Senior Research Award from Solid State Ionics, and in 2018 was elected a member of the National Academy of Engineering and received the Turnbull Award from MRS. He is a Fellow of both the Electrochemical Society and the Materials Research Society. He is Vice-Chair, Board of Directors of the New York Battery, and Energy Storage Technology Consortium (NYBEST).

#### 4. H.E. Upendra Tripathy, Director General, International Solar Alliance



Mr. Upendra Tripathy, former Secretary to the Government of India in the Ministry of New and Renewable Energy, has made exceptional and outstanding contribution towards achieving 175 GW target and for ushering in policies that transformed India's renewable energy sector between 2014 and 2016. In ex-officio capacity, he has headed Solar Energy Corporation of India (SECI), National Institute of Solar Energy and National Institute of Wind Energy, National Institute of Bio Energy, Association of Renewable Energy Agencies of States (AREAS) and International Solar Alliance (ISA). Mr. Tripathy galvanized both the Ministry of Renewable Energy and the Solar Energy Corporation through a plethora of new and imaginative policy measures.

His institution building abilities and innovations got reflected in building of Hassan Kalamandir (1989), Center for infrastructure, Sustainable Transportation and Urban Planning (CiSTUP) in Indian Institute of Science (2009), Environmental Management Policy Research Institute (EMPRI) (2003), Akshar Foundation (2001), turnaround of Bangalore Metropolitan Transport Corporation (BMTC) (2003-2008) and institution of Nrupathunga Award in Karnataka (2008). For these achievements, and for all his work in transforming a city transport undertaking in Bangalore into a profit-making one, the Prime Minister of India bestowed the PM's Award for Excellence in Public Administration on Mr. Tripathy in 2009. Some of the other notable awards conferred on him include, Extra-Ordinary Citizens Award from Rotary International-2008, Central Board of Irrigation and Power (CBIP) Award (2016) for outstanding contribution to India's Renewable Energy Sector, 10th Enertia Life Time Achievement Award (2016) and UBM (2016) as Crusader of the Year for Renewable Energy.

What helps Mr. Tripathy in being an outstanding administrator is his 36 years of diverse experience across related sectors- land administration, rural development, agriculture, education, social inclusion, environment, petroleum and natural gas, and transportation. He has worked in federal, provincial sand local administrations in India.

#### 5. Ghanshyam Prasad, Joint Secretary, Ministry of Power, Government of India



Ghanshyam Prasad is presently working as Joint Secretary in Ministry of Power, Government of India. His present assignment is Reforms and Restructuring (R&R) in Electricity Sector and Operation and Monitoring (OM) of electricity grid. He is responsible for the amendment of the Electricity Act, Tariff Policy, Bidding guidelines for solar and Wind etc. He is also responsible for the smooth operation of the Electricity Grid in the country, activities related to Disaster Management related to power sector and schemes under Power System Development Fund (PSDF). Earlier, he worked as Chief Engineer (Distribution) in Central Electricity Authority and Director (Transmission and OM) in Ministry of Power. As CE (Distribution), CEA, he initiated the First Draft Distribution Plan.

He has experience in the areas of Power System Operation at Regional Load Despatch Centres, long term generation planning, performance monitoring of all the power stations, monitoring of coal supplies to all the power plants, cross border power trade with neighbouring countries, Distribution etc. He also worked as Director (Transmission) in Ministry of power and carried out some of the major reforms as ease of process in commissioning of transmission lines and substations. He has also served for around six years in Haryana Electricity Regulatory Commissions and has looked after various reforms in electricity in India. He is presently also steering the development of power market in the country. He has visited various countries like Canada, USA, UK, Japan, Turkey, Australia, Norway, Germany, Spain, France, Belgium, Thailand, Singapore, Srilanka, Bangladesh, Nepal on various electricity sector assignments.

## 6. Dr. Rahul Walawalkar, President, India Energy Storage Alliance (IESA); Managing Director, Customized Energy Solutions (India)



Rahul is the Founder and President of India Energy Storage Alliance (IESA) and Managing Director of Customized Energy Solutions India Pvt. Ltd. He leads the Emerging Technologies practice for Customized Energy Solutions globally with focus on energy storage, renewables, demand response and smart grid technologies as well as international markets. He served as a member of the Board of Directors of Energy Storage Association (ESA) in the US during 2009-15 and was elected as Secretary in 2013. Rahul served as the Vice Chair for Global Energy Storage Alliance (GESA) during 2014-18 and currently serves as the Chairperson of GESA from November 2018.

#### 7. Ashok Thakur, Chief Editor, ETN



Ashok Thakur has rich experience of 14 years in media industry. He has expertise in new product development, media management, networking, key accounts and building a dialogue with government authorities for various projects.

He joined Customized Energy Solutions in February 2018 as the Chief Editor of Emerging Technology News (ETN) magazine and is responsible for developing premium media for emerging technologies in renewable, e-mobility and energy storage sector. He has developed ETN publication and events division under his leadership. He has interviewed industry stalwarts and major technology disruptors.

With a rich experience in B2B media, managing international publications and events he held the positions of Director at KCI, Publishing Director and General Manager Sales and Marketing in Vogel Business Media Group headquartered in Würzburg, Germany and has done various consulting projects with international media house and exhibition companies. Throughout his career, he has worked across several industries and developed new products and media across renewable sector, logistics-supply chain, chemical engineering to manufacturing technologies, oil & gas, process engineering, and others.

He was part of the Show Daily team of 2015 Hannover Messe when India was a partner country and Hon. Prime Minister of India was the Chief Guest. He was also appointed as exclusive media partner for NITI Aayog's MOVE Global summit, 2018 and RE-INVEST, 2018, and more recently he collaborated with the Earth Day Network for Earth Day Network's 50-year anniversary. Well connected with media, manufacturing, and technology companies, he makes a known face in media.

Ashok holds an MBA degree in Marketing from Mumbai University and bachelor's degree in physics. He is trained in journalism with a diploma in media and journalism.

#### **SESSION 5 – STATIONARY ENERGY STORAGE SESSION**

#### 1. Netra Walawalkar, Director - India Markets, Customized Energy Solutions



Netra is a founding member of Customized Energy Solutions' India operation which began in 2010. She has a cross functional experience across multiple functional areas at CES. She also manages strategic partnerships of India Energy Storage Alliance (IESA), an initiative by Customized Energy Solutions.

Netra leads CES's participation in the Indian Energy Exchange & other trading activities since 2010. She is involved in helping commercial & industrial consumers manage their energy portfolio by strategic sourcing planning, energy contract support & execution, market analysis, renewable advisory & RPO management. She has good understanding of Indian energy market.

Netra was involved in analysis of various commercial projects for energy storage in the US markets, understanding technical capabilities of energy storage technologies for determining eligibility in electricity market participation. She had developed optimization programs to maximize profits of energy storage systems by participation in energy, capacity, and ancillary service markets.

Netra holds an MBA degree from Drexel University, Philadelphia, USA, and an Electronics Engineering degree from Mumbai University.

#### 2. Dr. Y. Bharath Kumar Reddy, GM-Solar, Solar Energy Corporation of India (SECI)



Dr Bharath Reddy Yellasiri is currently the GM-Solar at Solar Energy Corporation of India (SECI). He has vast experience in solar PV with storage projects on account of nine years of experience working with SECI. At SECI, he previously served as the Additional General Manager and Deputy General Manager.

Before joining SECI, Dr Reddy worked in managerial positions at Sujana Energy Limited, Moserbaer Photovoltaic Ltd and also worked as a Research Fellow at the National University of Singapore and as a Project Associate at IIT-Madras.

Dr Reddy holds Master's in Physics degree from Sri Venkateswara University and PhD in Thinfilms and Solar Cells. The focus of his doctorate studies was on the development of CulnAlSe2 thin films by co-evaporation for solar cells.

#### 3. Rohit Modi, Country Head & President of India Business, SB Energy – SoftBank



Rohit has more than three decades of experience across government and private sector, infrastructure and public-private partnerships, solar and renewable energy, financing and development, project development and project execution.

Prior to joining SB Energy as Country Head & President of India Business, Rohit served as CEO of Infrastructure & Utilities Businesses of Essel Group for two years. Before Essel, he held various roles at Suzlon Energy, including President-India Business (2008-2009), CEOIndia Business & Emerging Markets (2012-2014), CEO-International Operations & New Business (2014-2016) and CEO-Solar Business (2015-2017).

Before taking leadership responsibilities in the Renewable Energy Sector, Rohit worked in Public Private Partnerships & Infrastructure Sector for over a decade. Earlier in his career, he served as Deputy Secretary, Department of Economic Affairs for India's Ministry of Finance as an officer belonging to the Indian Administrative Service (IAS).

Rohit holds a MA in Economics from the Delhi School of Economics and a BA (Honours) in Economics from the Sri Ram College of Commerce in Delhi. He has also completed the Advanced Management Program from Harvard Business School.

#### 4. Praveer Sinha, CEO & Managing Director, Tata Power Company Limited



Praveer Sinha is the CEO & Managing Director of the Tata Power Company Limited (TPC, Mumbai), India's largest power Integrated company with a significant international presence. The company has its presence in all the segments of power sector viz. Fuel & logistics, Generation, Transmission, Distribution and Trading.

Mr. Sinha has nearly 34 years of experience in Generation and Distribution sector. He has been responsible for developing and setting up Greenfield and Brownfield Power plants in India and abroad. Apart from this, he has actively contributed in bringing about huge socioeconomic development and empowerment programs for youth and children in these project sites Under Mr. Sinha's leadership, TATA Power-DDL has also embarked upon its solar journey through the promotion of distributed energy resources including rooftop solar projects, energy storage programs, automated demand response and electric vehicle charging systems, applicable both in the urban and rural environment.

#### 5. Rajendra Shrivastav, President and Market Business Leader, AES India



Currently, President and Market Business Leader of AES India and CMD of Agilion – a JV between AES and Mitsubishi Corp. He has worked with Alstom, EDF in the past for over two & half decades and has experience of 40 years in power sector on large projects including development, construction of the nuclear and thermal power plants, and development of renewable sector in India. Leading the AES Crop in India for large scale adoption of the energy storage and renewable energy through applications of innovative technology. AES is keen to support and contribute to the decarbonizing of the electricity business in India.

Mr. Shrivastav holds a B. Tech in Mechanical Engineering (NIT Bhopal) and M Tech in Nuclear Engineering and Technology (IIT Kanpur).

#### 6. Anant Nahata, Managing Director, Exicom Power Systems



Anant Nahata is Managing Director of Exicom, a company that specializes is in the field of designing, engineering, manufacturing of various kinds of energy & DC power solutions for critical infrastructure for various vertical markets such as Telecom, IT, renewable and more recently electric vehicles. Under his leadership, Exicom has scaled up indigenous R&D efforts and supported Make in India program by investing in large-scale manufacturing setups. His experience also spans in financial services industry having worked in Credit Suisse, Singapore & New York for about two years where he worked in the Investment Banking division primarily catering to global clients in the industrial sector.

#### **SESSION 6 – E-MOBILITY SESSION**

### 1. Avanthika Satheesh, Sr. Analyst & Head of Research, Emerging Technologies, Customized Energy Solutions



Avanthika has a decade long experience in the energy sector, having started her career as a Design Engineer of Electrical Substations with Larsen & Toubro ECC Ltd. Later, she joined Frost & Sullivan as a Senior Research Analyst in Energy & Power Systems and specialized in market research and strategy consulting for the leading OEMs, utilities and other clients in Southeast Asia and India.

Her research expertise are power generation, T&D equipment, renewable energy, smart grid and energy storage. She leads the research team at Customized Energy Solutions, responsible for tracking the changing trends, policy changes and competitive landscape in the emerging technologies such as energy storage, electric vehicle, EV charging infrastructure markets in India.

She holds a Master of Engineering degree in Power Systems from Anna University, Bachelor of Technology in Electrical Engineering from Kerala University and has a Post Graduate Diploma in Business Administration from Symbiosis International University, Pune.

#### 2. Saurabh Kumar, Executive Vice Chairperson, EESL group of Companies



Mr. Saurabh Kumar is Managing Director at Energy Efficiency Services Limited (EESL), which is under the administrative control of Ministry of Power, Government of India. Under Mr. Kumar's leadership, EESL has implemented the globally lauded Unnat Jyoti by Affordable LEDs for All (UJALA) programme and Street Light National Programme (SLNP). Mr. Kumar and his team has also been successfully implementing several demand-side measures including agriculture, public buildings, and transformative initiatives like e-mobility, smart meters, trigeneration and decentralised solar power plants.

#### 3. Vikram Gulati, Country Head, Toyota Kirloskar Motors Pvt. Ltd



Vikram Gulati is a postgraduate in Chemistry from St Stephen's College, Delhi University and holds a management degree from Management Development Institute, Gurgaon, Haryana, India. Earlier while serving as a Civil Servant (IRPS: 1992 batch), he has a rich and varied experience of over 22 years of working in the Government in various capacities. This includes working in Department of Heavy Industry (DHI) wherein one of the areas of responsibility was the automotive sector and, in that capacity, he was involved actively in shaping the electric mobility initiative and framing of the National Electric Mobility Mission Plan 2020.

#### 4. Vijayanand Samudrala, Chief Executive Officer, Amara Raja Batteries Ltd



Vijayanand Samudrala is the senior member of the Corporate Management Council at Amara Raja Group.

He joined Amara Raja Group in 1992 and has been part of the Group's growth story for well over 27 years. He has held various positions in the organization in the areas of business leadership, strategic planning, new business development initiatives, technology development, project management etc. An active proponent of adoption of new and emerging technologies in the field of renewable energy and alternative battery chemistries he has been National Committee member in Confederation of Indian Industry (CII) and chaired various subcommittees on electric mobility.

He obtained B. Tech Degree in Chemical Engineering from SVU college of Engineering, Tirupati and M. Tech in Chemical Engineering from Indian Institute of Technology, Mumbai.

#### 5. Brieux Boisdequin, Vice President- Automotive & Materials, BASF India



Dr. Brieux Boisdequin is the Vice President, Automotive & Materials. BASF India Ltd., Mumbai. He holds a BS in Management Science, MA in Business and Commerce (Corporate Strategy) and an Executive MBA in Business Management/ Strategy from INSEAD (SG). He currently lives in Mumbai with his wife and two sons.

#### 6. Anshul Gupta, Director, Okaya Power



Anshul Gupta holds a bachelor's degree in Civil Engineering from the University of Bath, UK. He started his career in 2015 as the Managing Director of Microtek Infrastructures. Since then, he has been one of the growth catalysts and has infused productive energy in Okaya.

He is currently heading Lithium, Institutional, Government Business, and Real Estate projects portfolio for Okaya.

#### 7. Priyank Agarwal, Vice President, Head - Business Development & Strategy, EXICOM



Priyank Agarwal is currently spearheading efforts towards establishing Exicom as the catalyst for change in the space of electric mobility, as the head of Strategy & Business Development (mobility). Prior to this role, he led Strategy & Business Development at Royal Philips in India. As a member of the India Angel Network, he is an active investor and mentor in start-ups. He is a chapter member for North India for the Akshaya Patra organization and associated with the Ek Soch Sandbox.

Priyank is an alumnus of the Wharton School of Management, IIM-Ahmedabad (class of '98) and IT-BHU (class of '96).

### **SESSION 7 - INNOVATION SESSION**

#### 1. Jitendra Kulkarni, Vice President Innovation, SB Energy (Softbank Group)



Jitendra Kulkarni has more than 25 years of experience spanning various organizations in Energy sector specializing in system level Innovations & product R&D.

In his current role, he is working with SB Energy (Softbank Group) as Vice President Innovation, bridging the gap from idea to reality & driving long term strategy for world leading renewable projects.

In his earlier roles, he was associated with leading organizations like Legrand, GE, Schneider Electric and SunEdison. He holds several patents to his credit.

## 2. Dr. Sanjay Bajpai, Head (Technology Mission Division: Energy, Water & All Others), Department of Science & Technology, Ministry of Science & Technology



Dr. Sanjay Bajpai graduated in Mechanical Engineering from Malaviya National Institute of Technology (MNIT), Jaipur, Rajasthan (India) and has pursued master's in business administration (MBA) from University of Rajasthan Ajmer (India). He has done his doctoral research in energy studies from Indian Institute of Technology Delhi. He has over 30 years of industrial and R&D management experience. He is a fellow of Indian National Academy of Engineering (INAE).

He has specialized in management of technology development, demonstration and commercialization programmes as well as socio-economic programmes requiring application of Science & Technology.

He has conceptualized, crafted and implemented research, development, and demonstration programmes in energy and water domain for accelerated innovations. He is currently Head of Technology Missions Division (Energy, Water, and all others) of Department of Science and Technology (DST), Ministry of Science and Technology, Government of India.

#### 3. Dr. N. Kalaiselvi, Director, CSIR- Central Electro Chemical Research Institute (CECRI)



Dr. N. Kalaiselvi is the Director, CSIR- Central Electro Chemical Research Institute (CECRI). Dr. Kalaiselvi has a research experience of 25 years with specialization in Electrochemistry, Energy, Materials Chemistry, Organic Chemistry, Nanomaterials Chemistry & Electrochemical power sources.

Known for her strong academic bent of mind, she topped school and bagged Gold Medal (10th Std.); 30th rank in the State of Tamil Nadu; 13th rank in Madurai Kamaraj University (B.Sc.); One among the top 10 Rank holders of the University (M.Sc.)

#### 4. Dr. Satyajit Phadke, Sr Manager - R&D, IESA



Dr. Satyajit Phadke joined CES in January 2015. His focus is on consulting services in energy storage and conversion technologies for various applications such as automotive, stationary power, portable power, and grid scale storage. Additionally, he assists with evaluation, validation and competitive bench marking of technologies.

Satyajit has in depth understanding of various energy storage technologies owing to his many years of involvement in the research and development of novel battery chemistry and materials for fuel cells. He obtained his PhD from University of Florida in the year 2010 where his research was focused on development of novel materials for hydrogen fuel cells. Thereafter, he has worked on various battery chemistries as a post-doctoral associate at Massachusetts Institute of Technology (MIT) and Princeton University.

In 2015, he received the prestigious Le Studium Research Fellowship sponsored by the European Union to work in France on Lithium Sulphur batteries for three years. He holds three licensed patents in batteries and is the author of several technical articles in the field of energy storage.

#### 5. Sandeep Tandon, National Programme Manager, FLCTD, UNIDO



Mr. Sandeep Tandon has over 31 years of professional experience, and 23 years' experience in management of projects, strategy development, consulting and evaluation of clean energy, energy efficiency projects and Clean Technology Innovation program.

Leadership position in managing the implementation of complex first-of-its-kind projects in Clean Energy and Energy Efficiency, he led the development of strategies oriented towards market-based solutions and financial risk-sharing mechanism. He has served as Project Officer with the United States Agency for International Development (USAID) Mission to India in New Delhi and managed the largest USAID project on Climate Change - US\$40 million Greenhouse Gas Pollution program which helped to avoid over 100 million tons of CO2 emission from energy activities in India.

Mr. Tandon has created partnerships among academic institutions, electric utilities, regulatory agencies, appliance manufacturers to develop programs on demand-side management, improve energy security and build local capacity to reduce greenhouse gas emissions. He has also been involved in the mid-term and terminal evaluations of energy efficiency and clean energy projects of UNDP-GEF, in Bangladesh, Bhutan, India, Mongolia, Nepal and Thailand.

He has led preparation of strategy on the Sustainable Energy for All (SE4All) strategy development for the UN Country Team in India and the UN Country Team with advocacy of SE4All.

#### 6. Sidharth Choudhary, AGNIi AVP and Lead Technology Management



Sidharth Choudhary works as AVP and Lead Technology Management on the AGNIi program housed at Invest India. Accelerating Growth of New India's Innovations or AGNIi is the National Technology Commercialization Program led by the Office of the Principal Scientific Adviser to the Government of India.

Before joining Invest India, Sidharth worked as a Project Manager at Fraunhofer Center for Sustainable Energy (CSE) in Boston, Massachusetts. He worked on a wide array of projects, ranging from energy efficiency interventions in commercial buildings, tightly integrated solar-storage systems, and next-gen plug-and-play rooftop solar PV systems. He has worked on several demonstration projects funded by the US Department of Energy.

Prior to Fraunhofer CSE, Sidharth obtained a MS in Energy Science, Technology and Policy from Carnegie Mellon University, Pittsburgh. While at Carnegie Mellon, he also worked at the Department of Electrical & Computer Engineering designing power flow algorithms for electrical networks.

## SESSION 8 - OPENING PLENARY SESSION ON POLICY AND GOVERNMENT INITIATIVES

#### 1. Debi Prasad Dash, Executive Director- India Energy Storage Alliance (IESA)



Debi Prasad Dash is currently working as the Executive Director, India Energy Storage Alliance (IESA) at Customized Energy Solutions. He has been involved in techno-commercial feasibility, financial modelling & analysis and consulting in emerging technology areas like energy storage, renewable integration, smart grid, electric vehicle infrastructure and microgrids. He is involved in policy recommendations for the energy storage roadmap for India, manufacturing policy for advanced energy storage technologies and development of ancillary markets in India. He is taking the lead in new strategic partnership, membership, and day-to-day operations of IESA. He is currently part of BIS Energy Storage Standards Committee (ETD-52).

Debi has over 10 years of industry experience and has worked with over 100+ clients in various capacities. Debi is a part of other industry associations like IEEE, IEEE-Smart Grid Working Community, PES, SESI, ISGF, IGEF (Subgroup 4). Debi holds an MBA degree in Finance from Symbiosis International University and Postgraduation Diploma in Renewable Energy from TERI University.

## 2. Dr Tudor Constantinescu, PhD, Principal Adviser, European Commission, Directorate General for Energy



Dr Tudor Constantinescu is Principal Adviser to the Director General for Energy in the European Commission since March 2011. He is an engineer and economist by education. Before joining the Commission, he set up as Executive Director the Buildings Performance Institute Europe.

He was the president of the Romanian Agency for Energy Conservation and for the period 2008-2009 he ensured the presidency of the EnR network of European Energy Agencies. Between 1996-2007, he coordinated the energy efficiency and related environmental activities of the Energy Charter Secretariat in Brussels.

#### 3. Brittney Elzarei, Policy Manager, EASE (European Association for Storage of Energy)



Brittney Elzarei is Policy Manager at EASE, the European Association for Storage of Energy. Since joining EASE in 2016, she has supported the association's advocacy efforts and activities across a range of topics: energy storage technologies, applications, business cases, R&D needs, storage in the EU electricity network codes, and the 'Clean Energy for All Europeans' Package. Prior to joining EASE, she worked in a Brussels-based public affairs consultancy on projects in the agri-food and pharmaceutical sectors. She obtained her degree in Political Science from the Free University of Berlin in 2012.

## 4. Dr. Andreas Hauer, Head of the energy storage division, Bavarian Center for Applied Energy Research



Dr. Andreas Hauer is head of the energy storage division at the Bavarian Center for Applied Energy Research (ZAE Bayern). Research and development for heat storage and transformation, electrochemical conversion, and storage as well as system analysis are the focus of the department. The ZAE Bayern is characterized by the combination of basic research and applied industrial research. The areas of competence are energy efficiency, energy storage and renewable energies.

#### 5. Cornelius Matthes, Senior Vice President, Dii Desert Energy MENA



Cornelius is a well-respected leader and investor in the renewable energy industry and has built several successful clean energy businesses and start-ups within Middle East and Africa. He has extensive board-level experience from 10 years in Deutsche Bank (among others, youngest board member in Deutsche Bank Italy Group) and several leading renewable energy organizations and associations via pro bono work as well as different startup companies. By building the international shareholder and partner network of Dii (Desertec Industrial Initiative), he was at the forefront of the renewable energy revolution in North Africa and the Middle East.

A keen entrepreneur and investor in emerging markets with recognitions such as "Solar Pioneer 2015" for the Middle East, he is lecturing at several universities including St. Gallen and is a regular speaker at international conferences. He holds an MBA (Dipl. Kaufmann) from University of Passau, and speaks German, English, Italian, French and Russian.

## 6. Szilvia Doczi, Economics Lead – System Integration of Renewables, International Energy Agency (IEA)



Szilvia Doczi, is the Economics Lead, System Integration of Renewables in International Energy Agency (IEA) 33 member countries and involved in supporting Clean Energy Transition in IEA Association countries of Brazil, China, India, Indonesia, Morocco, Singapore, and Thailand.

She has over 12 years of experience in the infrastructure, energy, electricity, water and utilities space in 20+ power, gas and water projects valuing \$10+ billion. Prior to IEA, Szilvia worked as member of Editorial Advisory Board at Materials Research Society and before that she also worked in senior managerial roles at Arup and Ofgem.

She served as the IEA lead of CEM Power System Flexibility Campaign.

### **SESSION 9 - STATIONARY ENERGY STORAGE SESSION**

#### 1. Vinayak Walimbe, CFA, VP – Emerging Technologies, Customized Energy Solutions



Vinayak joined Customized Energy Solutions in August 2011. He currently leads Emerging Technologies consulting practice in North America with focus on energy storage and renewable integration. He is a Chartered Financial Analyst with extensive experience in financial modeling and advisory in the US and international markets. His focus is on technocommercial analysis of energy storage projects, strategy consulting and investment analysis of emerging technologies.

Previously, Vinayak was Manager at Boston-based private-equity firm that invested in natural gas plants in Middle East and North Africa. Prior to that Vinayak was involved in aircraft securitization and risk analysis of

structured finance products in aircraft industry. Vinayak holds a Master of Science from Georgia Institute of Technology, Atlanta, a Master of Engineering from V.J.T.I. Mumbai, and an undergraduate degree in Electrical Engineering from Walchand College of Engineering, Sangli, India.

#### 2. Giuseppe Cicerani, Head of Business Development Generation Integrated Storage, Enel Green Power



Giuseppe Cicerani is the Head of Business Development Generation Integrated Storage of Enel Green Power and Enel's Global Power Generation business line. He is in charge of development activities at global level of utility scale in-front-of-the-meter energy storage projects, integrated within Enel generation fleet. He joined the Enel Group in 2012 and has held several roles in Enel's Group Risk Management, Global Trading business line and Enel Green Power.

Giuseppe lives in Rome and holds a Master's degree with honors in Corporate Finance from LUISS Guido Carli University of Rome.

#### 3. Mikhail Nikomarov, Co-founder, Bushveld Energy



Mikhail Nikomarov is an entrepreneur and African energy leader committed to resolve the continent's electricity shortage. He cofounded Bushveld Energy to provide large-scale energy storage solutions across the African continent. Working with numerous partners, the company develops energy storage projects and is also localizing manufacturing of vanadium redox flow batteries in South Africa. Previously, Mikhail consulted on power plant operations, energy policy and sector strategy to electric power utilities and governments in Russia and across Africa. Mikhail also serves as the Chairman of the South African Energy Storage Association (SAESA) and currently chairs the Energy Storage Committee for Vanitec, the global organization of vanadium producers. He holds an MBA from INSEAD, a Diploma from the London School of Economics and two undergraduate degrees in History and Economics from the University of Massachusetts.

#### 4. Chandrasekar Govindarajalu, Lead Energy Specialist, Energy Climate Finance, The World Bank



Chandra Govindarajalu leads the global battery storage program at the World Bank. The World Bank has made commitment to accelerate deployment of battery storage in the developing world with an aim to finance 17.5 GWh of new battery storage in developing countries by 2025.

He also leads the energy climate finance team which is responsible for mobilizing climate finance from Climate Investment Funds (CIFs), Green Climate Funds (GCF) and other sources for the Energy and Extractives Practice at the World Bank. He has over 20 years of experience working at the World Bank and International Finance Corporation (IFC) on energy efficiency, energy access and renewable energy across 15 countries in South Asia, East Asia as well as Middle East and North Africa.

Chandra holds a PhD in Energy and Environmental Policy from the University of Delaware, USA.

#### 5. Bryan Pellerin, Senior Researcher, Smart Innovation Norway



Bryan Pellerin is a Senior Researcher at Smart Innovation Norway, where he specializes in business development, new business models, and commercial exploitation within international research & innovation projects. His areas of interests include smart energy, smart grids, energy storage and flexibility.

Bryan holds a double MSc degree in Energy Engineering for Smart Cities from KU Leuven and the Polytechnic University of Catalonia (UPC). He also holds a B.Eng. in Mechanical Engineering from ÉTS Montreal, Canada. He also has previous experience in engineering projects in oil & gas and aerospace.

#### 6. Frank Burke, Technical Advisor, Irish Energy Storage Association



Frank Burke is a Technical Advisor to Irish Energy Storage Association (IESA). He has worked for 45 years in the electricity industry in Ireland (38 years in ESB) and has extensive experience in electricity generation and supply and also electricity markets including system services. He has assisted Schwungrad Energie Ltd. in building a dynamic energy storage demonstration project to provide system services to EirGrid. He is now assisting Lumcloon Energy which is developing 200MW of Battery Energy Storage Plants. He is a fellow of the Institute of Engineers of Ireland. He holds an honors degree in electrical engineering from University College Dublin.

### **SESSION 10 – E-MOBILITY SESSION**

#### 1. Awadhesh Jha, Vice President, Fortum India



Mr. Awadhesh Jha is the Vice President – Charge & Drive and Sustainability, Fortum India. He has been working with Fortum since July 2014. Prior to Fortum, he worked with Ministry of Water Resources for 15 years followed by six years in Hindustan Power Projects Private Ltd where Awadhesh was instrumental in securing concession of hydro projects and its development.

Awadhesh has over 28 years of experience in the energy industry spanning across the government and private sector. A Civil Engineering Graduate, Awadhesh also holds a Master's in Business Administration for Working Managers from IIM- Lucknow.

### 2. Helge Tryti, Commercial Counsellor, Royal Norwegian Embassy in India and the Innovation Norway Director of the Mumbai and New Delhi office.



Helge Tryti is for the last seven years Commercial Counsellor at the Royal Norwegian Embassy in India and the Innovation Norway Director of the Mumbai and New Delhi office. During his career, Helge has held several management positions, nationally and internationally, focusing on business development in companies like Xerox, IBM, KPMG, Storebrand and Eika Group. He holds an MBA in International Management from Thunderbird Global School of Management and Master of Business and Marketing from BI Norwegian Business School.

#### 3. Martin Zierer, Application Manager, Schaltbau GmbH



Martin Zierer works as Application Manager at Schaltbau GmbH, a leading global supplier of DC switchgear. At his role within the Business Development Unit "New Energy / New Mobility", he is supports global customers in terms of safe and reliable DC switching.

With his practical background in PV and PV-Hybrid systems (qualified electrician) in Germany and Sub-Saharan Africa and a Bachelor's Degree in Renewable Energies from the University of Applied Science in Ingolstadt, he combines theoretical and practical knowledge in those new, energy storage based, dynamic markets.

#### 4. Kumail Rashid, EV Charging Solutions Lead, Asia Pacific, ABB



Kumail is the Electric Vehicle Charging Solutions Lead for ABB in Asia Pacific, based in Singapore. Having joined ABB in 2008, Kumail has held numerous senior roles across engineering, sales, and regional business development.

For the last five years, he has been instrumental in supporting the development of the Electric Vehicle (EV) industry in New Zealand and Singapore, working alongside government and industry organizations to set the direction in EV strategy and policy.

Kumail has been invited to deliver keynote speeches on the trends and applications of EV charging for vehicles, public transport, and heavy vehicles at global and Asia Pacific conferences.

Kumail holds conjoint bachelor's degrees in Engineering (Electrical and Electronic Engineering) and Commerce (Marketing) from the University of Auckland, New Zealand.

### **SESSION 11 – ENERGY ACCESS**

#### 1. David Lecoque, Chief Executive Officer ad interim at the Alliance for Rural Electrification (ARE)



David leads the Alliance for Rural Electrification (ARE), the biggest global business association for the rural electrification sector, delivering on clean energy access across Africa, Asia and Latin America.

Prior to this, David headed ARE's Policy & Business Development department since 2013, providing business services to 150+companies and stakeholders, as well as advising governments and development partners on how to achieve SDG7 and broader sustainability.

Prior to ARE, David practiced and qualified as a lawyer at the Brussels Bar, dealing principally with energy and environmental matters in top-tier European law firms.

David (born in Belgium in 1987) holds an LL.M in European Law from the College of Europe and a Master of Laws from the Free University of Brussels. He also graduated from the IBI International Trade Executive Programme and is a certified project management expert (PRINCE2 Practitioner). He speaks English, French, Dutch and German.

#### 2. Manoj Sinha, Founder and CEO, Husk Power Systems



Manoj is the Founder and CEO of Husk Power Systems – a pioneering rural utility that provides decentralized renewable energy to off-grid and underserved communities. He cofounded Husk Power Systems in 2008, which designs, installs, and operates 25-250kW mini-power plants provide affordable electricity to people in rural India and East Africa. Manoj is currently leading a global team of 350 employees and by 2022, he aims to provide affordable, renewable and reliable power to over one million people in rural areas of India and Africa. Manoj has raised equity and debt capital for the amount US \$40 million from investors around the world.

Previously, Manoj worked as a Senior Director at S&P Global (erstwhile McGraw-Hill Financial) in New York City, USA. He led a team of financial analysts to develop and launch risk management analytics for financial institution professionals.

Prior to this, he worked as a Senior Design Engineer at Intel Corp in Austin, Texas where he designed next generation microprocessors for mobile devices. He holds seven U.S. patents in semiconductor industry for circuit design. Manoj completed his MBA from Darden GSB at University of Virginia, MS in Electrical and Computer Engineering from University of Massachusetts Amherst and B.Tech from IIT Varanasi.

#### 3. William Brent, Chief Campaign Officer, Power for All



William Brent is a climate solutions evangelist and entrepreneur, working to promote renewable energy and other cleantech solutions through his deep experience in branding, digital media, community engagement, content, and advocacy. As Chief Campaign Officer at Power for All, he oversees campaigns, external communications and strategic partnership for this international NGO working to end energy poverty. Prior to that, he was a senior executive and head of the cleantech practice at Weber Shandwick, an award-winning global marketing services agency and part of NYSE: IPG. He also co-founded several media and content focused companies. He began his career as a foreign correspondent and editor in China. A native of the United States, William has deep experience working globally, having spent nearly 20 years living in Asia and Europe.

#### 4. Nathan Adams, Director of Technology and Business Development, Hitachi ABB Power Grid



Nathan Adams is Director of Technology and Business Development for Hitachi ABB's Grid Edge Solutions Business, which focuses on energy storage and generation control systems for island power systems. Nathan's team helps island power systems maintain stability of operations while integrating large amounts of renewable energy.

Previously, Nathan was Vice President of Strategy and Development for Green Mountain Power, where he developed solar and microgrid projects for the utility. Before that, he led corporate development at Puget Sound Energy, where he developed wind, solar, natural gas, and energy storage projects.

#### 5. Nitin Akhade, Manager, MICRO, Customized Energy Solutions



Nitin is working with emerging technologies team providing consulting in market linkages and technology mapping for economic development of rural communities. Nitin has over nine years of experience in energy sector with a specialization in areas of energy access, developing sustainable business models and market linkages for enhancing the livelihoods of rural communities. He also manages the initiative called MICRO (Microgrid Initiative for Campus and Rural Opportunities) for scaling minigrid operation in India.

His research experience focuses in areas of renewable energy powered end use applications and appliances, formulation of standards and benchmarks for productive end use applications for BoP segments and clean cooking solutions for reducing emission hazards for women and children in the developing world.

He holds a dual master degree in Nuclear Engineering from University Polytechnic Catalonia, Barcelona, Spain and Grenoble Institute of Technology, France; Executive Energy Management degree from Grenoble Ecole de Management, France; a Bachelor in Technology in Electrical Engineering from Dr. Babasaheb Ambedkar Technological University, Raigad, India. He had previously worked with Clean Energy Access Network (CLEAN) on managing the activities related to technology development and market linkages for decentralized renewable energy eco-system in India. He also had a short stint with Lloyd's Register Consulting, Mumbai on safety assessment of nuclear power plant.

#### 6. Davide Coppola, Downstream Business Applications Department, European Space Agency (ESA)



Davide Coppola has been working at ESA since 2007. He has a long-standing experience as project manager and he has been in charge of more than 30 projects in various domains, including Energy, Health, Maritime & Offshore, Safety & Security, etc., lately with focus on renewable energy, smart grids and breakthrough technologies.

# SESSION 12 - OPENING PLENARY SESSION ON POLICY AND GOVERNMENT INITIATIVES

#### 1. Kelly Speakes-Backman, Chief Executive Officer, Energy Storage Association



Kelly Speakes-Backman is the first CEO of the Energy Storage Association. Kelly has spent over 20 years working in energy and environmental issues in the public, NGO, and private sectors, including United Technologies, SunEdison and Alliance to Save Energy. She is a former Commissioner of the Maryland Public Service Commission where she also served as Chair of the Board of Directors of the Regional Greenhouse Gas Initiative, co-vice chair of the NARUC Committee on Energy Resources and the Environment, and member of the EPRI Energy Efficiency & Grid Modernization Public Advisory Group. She serves on the Board of Directors at the Northeast Energy Efficiency Partnerships (NEEP) and on the External Advisory Board of Georgia Institute of Technology's Strategic Energy Institute. In 2019, Kelly was named The Cleanie Awards Woman of the Year.

## 2. Dr. Imre Guyk, Director, Energy Storage Research, Office of Electricity, US Department of Energy (DoE)



Dr. Imre Gyuk is the Director of Energy Storage Research in the Office of Electricity, where he directs the energy storage research program at the U.S. DOE which funds research and work on a wide-ranging variety of technologies such as advanced batteries, flywheels, supercapacitators and compressed air energy storage.

Dr. Gyuk completed his B.S. from Fordham University and his graduate studies in superconductivity, elementary particle theory at Brown University where he worked as a research assistant to Nobel Laureate Leon Cooper. He received his Ph.D. in Theoretical Physics from Purdue University.

#### 3. Emanuele Taibi, Power Sector Transformation Strategies, IRENA



Emanuele Taibi is an Italian engineer and an international civil servant. Mr Taibi holds a PhD in energy technology and a master's degree (laude) in management engineering. He has worked in private sector, research, and for the last 12 years, as an international civil servant. He has served with the United Nations (UNIDO) in Vienna, with a regional organization for the Pacific in Pohnpei, Micronesia, and since 2013 he has been associated with International Renewable Energy Agency (IRENA) in Bonn.

His areas of expertise: renewable energy, energy policy, energy technologies including hydrogen and storage, power systems optimisation (e.g. PLEXOS, FlexTool, HOMER Pro), system dynamics modeling, energy systems integration and energy planning. Mr. Taibi is committed to making a difference in addressing climate change through the replacement of fossil fuels with renewable energy.

#### 4. Justin Wahid Rangooni, Executive Director, Energy Storage Canada



Justin is a lawyer with over a decade experience in the energy sector starting with being a Senior Policy Advisor for the Ontario Minister of Energy and then as a the Ontario Policy Lead for the Canadian Wind Energy Association, and most recently, Vice President, Policy and Government Affairs at the Electricity Distributors Association.

Justin holds a Honours BA in Economics & Political Science from the University of Toronto as well as a Law Degree from the University of Western. He also currently sits on the board of the York Children's Aid Society.

#### 5. Janice Lin – Founder and CEO of Strategen



Janice Lin is the Founder and Chief Executive Officer of Strategen. Janice has over than two decades of experience in clean energy strategy, market development, and corporate strategy. Janice uses the Strategen platforms of consulting, association management, and events to achieve measurable global impact in growing the clean energy sector. Through Association Management, she has distinguished herself as a leading clean energy changemaker. Janice co-founded and for a decade served as Executive Director of the California Energy Storage Alliance, where she helped create the world's most robust energy storage market. Janice is an internationally recognized thought leader in energy storage and grid decarbonization and won the 2019 Cleanie Award for Entrepreneur of the Year. In 2019 Janice launched the Green Hydrogen Coalition, an educational non-profit dedicated to facilitating policies and practices to advance the production and use of green hydrogen in all sectors where it will accelerate the transition to a carbon free energy system.

#### 6. Edwin Antonio, Energy Specialist, Inter-American Development Bank (IDB)



Edwin works as Energy Specialist at the Inter-American Development Bank (IDB) at Buenos Aires, Argentina, where he is responsible for IDB's energy projects. He joined IDB in 2014 at Washington DC and before that he worked for nine years at the power distribution company ENEL- CODENSA in Bogotá. Edwin has experience in the areas of electricity markets, hydroelectric generation projects, power distribution, regulation, and energy policy. He obtained a bachelor's degree in Electrical Engineering from the National University of Colombia, a postgraduate degree in Economics from the Andes University (Colombia) and a master's degree in Environmental Studies and Sustainability Science from Lund University (Sweden).

### **SESSION 13 - STATIONARY ENERGY STORAGE**

#### 1. Stephen Fernands, Founder and President, Customized Energy Solutions



Stephen Fernands is the Founder and President of Customized Energy Solutions. Since Customized Energy Solutions founding in 1998 it has helped thousands of companies understand wholesale and retail electric and natural gas market and implement solutions through its hosted software platforms. INC magazine ranked Customized Energy Solutions as one of the fasted growing companies in the United States from 2005 through 2015 and in 2008 it was the 15th fastest growing private company in the energy industry. Stephen has led the expansion of Customized Energy Solutions from a Mid-Atlantic based energy services firm to one that provides comprehensive solutions throughout the US, Canada, Mexico, India, and Japan.

#### 2. Dr Carla Peterman, Senior Vice President Regulatory Affairs, Southern California Edison



Carla Peterman is senior vice president of Strategy and Regulatory Affairs at Southern California Edison (SCE), one of the nation's largest electric utilities. She is responsible at the national and state levels for the company's Regulatory Affairs, Energy and Environmental Policy, Strategic Planning, and Resource and Environmental Planning and Strategy organizations, overseeing regulatory strategy and operations and environmental affairs.

Previously, Dr Peterman served a six-year term on the California Public Utilities Commission (CPUC), from 2013 to 2018. She led several CPUC clean-energy initiatives, including the adoption of the nation's first electric utility energy storage mandate, approval of \$965 million of utility investments in electric vehicle charging infrastructure, adoption of utility energy-efficiency goals, and the continued implementation of California's Renewables Portfolio Standard.

#### 3. John Zahurancik, Chief Operating Officer, Fluence Energy



As Chief Operating Officer, John Zahurancik directs the Fluence teams that create and deliver storage solutions and services to leading customers around the world. Working with progressive power system players, John and his teams create valuable business use cases for grid-scale storage, educate storage users in these benefits, manage the deployment of new systems, and help service these systems throughout their complete lifecycle.

John was a cofounder of AES Energy Storage in 2007, a recognized market leader, and led AES' team in pioneering nearly 500MW of utility-scale applications of battery-based energy storage projects in the U.S., Chile, the Netherlands, Northern Ireland, the Philippines, and the Dominican Republic.

His accomplishments include the deployment of the world's largest grid-connected lithium-ion battery (five times), the first power purchase agreement for energy storage at the 100MW Alamitos Power Center, and the first multi-megawatt scale storage systems approved in six countries.

John is a regular industry speaker on energy storage, innovation, and leadership and is often quoted on these topics in mainstream and industry journals. Prior to energy storage, John worked at AES in retail power and fiber telecommunications, and as a consultant and market analyst to the telecommunications industry.

John holds a master's degree in public policy from the University of Michigan and a bachelor's in economics and social science from Florida State University.

#### 4. Dr. Judy Jeevarajan – Research Director- Electrochemical Safety, Underwriter's Laboratories Inc.



Dr. Judy Jeevarajan is the Research Director of Electrochemical Safety for Underwriters Laboratories (UL). With over 23 years of experience in the area of batteries and a primary focus on the lithium-ion chemistry she specializes in battery safety research including safety trends in aged li-ion cells and modules, thermal runaway propagation in lithium battery systems, fire suppressants for li-ion battery fires, and consumer battery safety.

Dr. Jeevarajan serves in the Technical Working Group for standards organizations such as Underwriters Laboratories, Society of Automotive Engineers (SAE), International Civil Aviation Organization/Society of Aerospace Engineers (ICAO/SAE), Radio Technical Commission for Aeronautics (RTCA), International Electrotechnical Commission (IEC), American National Standards Institute (ANSI) and is currently leading an effort under Aerospace Industries Association of America (AIAA) to develop a space safety standard for battery systems. Dr. Jeevarajan was recently invited to be a member of the Energy Advisory Council at Case Western Reserve University.

Dr. Jeevarajan completed UL's Global Leadership Program (GLP) in 2016 and the Executive Leadership Program (ELP) in 2019. She was inducted into the William Henry Merrill Society as a Distinguished Members of Technical Staff (DMTS) in 2016.

Dr. Jeevarajan is a published contributor on battery safety. She has made more than 125 presentations at conferences and has won numerous NASA awards with the NASA Exceptional Service Medal and the NASA-NESC Engineering Excellence Award. In August 2019, she won the AIAA Aerospace Power Systems Award and a recognition in April 2020 by the India Energy Storage Alliance (IESA) as one of the leading women in the energy storage and electric vehicle industry.

Dr. Jeevarajan earned her Ph.D. in Chemistry (Electrochemistry) from the University of Alabama in Tuscaloosa (1995) and holds a MS in Chemistry from the University of Notre Dame (1991).

#### 5. Ricardo Estefano Rosa, Critical Power & ESS, WEG



Ricardo Estefano Rosa currently leads the WEG team responsible for the development of the Battery Energy Storage Systems business in Brazil.

He has a post-graduate degree in Renewable Energies from Centro Universitário Internacional (UNINTER) in Curitiba, Brazil and was previously the Head of Critical Power Systems Engineering at WEG from 2013 to 2017.

Ricardo has over 20 years of experience in developing products and businesses for critical power systems and has been working on the introduction of battery energy storage systems in Brazil since 2015.

### **SESSION 14 – E-MOBILITY SESSION**

#### 1. Pramod Kulkarni, Senior Consultant, Customized Energy Solutions



Pramod joined the Customized team in January 2013. He is a Senior Consultant in the Emerging Technologies Group that focuses on regulatory, technology and market developments that create opportunities for clients in emerging technologies sector, including energy storage. Pramod brings 30+ years of experience. Prior to joining Customized, Pramod worked at the California Energy Commission for 23 years where he managed programs that provided funding for development and demonstration of renewable energy, energy storage, demand response and industrial energy efficiency. Before joining the Energy Commission, Pramod worked in the private sector that included working for a Fortune 100 company as a financial analyst, with an energy consulting company, an angel investor and a startup. Pramod has a BS and MS from India and an MBA from the US.

#### 2. Roger Kranenburg, Vice President, Strategy and Policy, Eversource



Roger Kranenburg joined Eversource in 2017 and is responsible for developing the company's long-term clean energy and growth strategy and policies along with the transportation electrification and battery storage initiatives.

Prior to joining Eversource, Mr. Kranenburg was with IHS Markit (formerly CERA or Cambridge Energy Research Associates) advising the top electric utilities and power sector owners/operators and suppliers in North America, Europe, and globally on energy sector transformation, investment, and operations. Clients included the major global petroleum, automotive and technology companies.

In addition, in his innovation and technology role, he led the application of data analytics to power sector data and information.

Prior to IHS Markit, he was at the Edison Electric Institute where he led strategy, policy development, analysis, and advocacy for the electric utility industry in the areas of energy supply and taxation. At the Edison Electric Institute, he was instrumental in the passage of the Energy Policy Act of 2005 and the making permanent of the Bush-era tax cuts on dividends.

Earlier in his career, he led the development and deployment of wireless telecommunications infrastructure joint ventures in multiple European countries at Teligent. Prior to Teligent at Siemens (formerly Ansaldo-Finmeccanica), he led the development and deployment of automation and power electronics systems targeted in the power generation and other heavy-industry sectors. He has done research and published in the areas of high-temperature superconductors, high-performance electric drive systems and high frequency telecommunications.

A CFA charterholder, Mr. Kranenburg holds a BSc and an MSc (plus PhD course requirements) in electrical engineering/ applied physics and an MBA from the University of Houston. In addition, he has completed the Leadership for Senior Executives program at the Harvard Business School and serves on the Board of Directors for the Woodwell Climate Research Center.

#### 3. David Schlosberg, VP, Energy Market Operations & Policy, Global Energy Services, e-Mobility, enelX



As Vice President of Energy Market Operations, David Schlosberg leads the company's energy market strategy, program design and operations. He provides industry leadership on electric vehicles, vehicle-grid integration and

distributed energy resource management in regulatory and legislative forums. Previously, David was Principal, Energy Market Analysis, within Google's Access & Energy division, where he was responsible for regulatory activities as well as related business development initiatives with utilities, energy management providers and renewable energy companies. Before Google, David held regulatory and government affairs roles with BrightSource Energy, a provider of large scale solar thermal power plants.

David received his BS in Economics from the University of Pennsylvania's Wharton School of Business and an MBA from UC Berkeley's Haas School of Business.

#### 4. Chris King, Senior VP, eMobility, Siemens



Chris is an international business leader with deep experience in taking new technologies to market and creating businesses centered on decarbonization. He is currently SVP – eMobility, driving market development for the Siemens businesses that provide EV charging infrastructure, grid automation solutions, and software managing a full range of distributed energy resources from EVs to renewables to microgrids.

Chris founded/co-founded and was senior executive in three software start-ups, with one IPO and one successful sale to Siemens. He helped raise over \$200 million in venture funding. His roles have spanned corporate development and finance, including M&A, contract negotiation, strategic partnering, and company IP management and protection.

Chris is and has been a Board Member for private companies and leading industry associations, as well as a frequent international speaker and prolific author. He holds three patents in advanced energy technology.

His leadership has included executive guidance of consulting engagements with utilities and governments, implementation of new technology pilot programs, and committee chair in numerous regulatory proceedings, such as the Cost-Benefit Committee for the California PUC when the Commission was evaluating (and then approved) utility deployment of 20 million smart meters.

Chris has testified before the U.S. Congress and international regulatory bodies and co-hosted the U.S. Congressional delegation at the UN Climate Summit in Copenhagen, Denmark.Chris is licensed to practice law in California.

#### 5. Jackson Salovaara, Vice President Strategy & Investments at SB Energy



Jackson Salovarra is the VP Strategy & Investments at the SB Energy (SoftBank Group) where he focuses on developing utility-scale solar and storage projects as well as cleantech investing. Prior to SB Energy, Mr. Salovarra worked as an Engagement Manager at McKinsey & Company serving electric power and cleantech clients.

He has completed a joint graduate degree in engineering at Stanford (MS) and law at Yale (JD) and holds an undergraduate degree at Harvard in Applied Math.

Before graduate school (Stanford), he worked as a Business Analyst at McKinsey where he served utilities, cleantech companies, governments, and NGOs on strategy and sustainability projects.

### **SESSION 15 – INNOVATION**

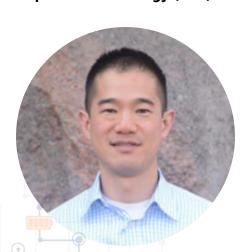
#### 1. M. Stanley Whittingham, Chemistry Department, State University of New York at Binghamton



M. Stanley Whittingham is a SUNY distinguished professor of chemistry and materials science and engineering at SUNY Binghamton and the 2019 Chemistry Nobel Laureate. He received his BA and D Phil degrees in chemistry from Oxford University, where he is an honorary Fellow of New College. He has been active in Li-batteries since 1971 when he won the Young Author Award of the Electrochemical Society for his work on the solid electrolyte beta-alumina. In 1972, he joined Exxon's Corporate Research Laboratory and discovered the role of intercalation in battery reactions, which resulted in the first commercial lithium rechargeable batteries that were built by Exxon Enterprises. In 1988, he returned to academia at SUNY Binghamton to initiate a program in materials chemistry. He initiated graduate program in Materials Science and Engineering.

He was awarded a JSPS Fellowship in the Physics Department of the University of Tokyo in 1993. From 1993-1999, he was Vice-Provost for Research. In 2004, he received the Battery Division Research Award. He is presently Director of the NECCES EFRC based at Binghamton. In 2012, he received the Yeager Award of the International Battery Association for his lifetime contributions to battery research; in 2015 he received the Lifetime Contributions to Battery Technology award from NAATBaaT, in 2017 the Senior Research Award from Solid State Ionics, and in 2018 was elected a member of the National Academy of Engineering and received the Turnbull Award from MRS. He is a Fellow of both the Electrochemical Society and the Materials Research Society. He is Vice-Chair, Board of Directors of the New York Battery, and Energy Storage Technology Consortium (NYBEST).

## 2. Eric Hsieh, Director, Grid Components and Systems, Office of Electricity, Advanced Grid R&D, U.S. Department of Energy (DoE)



Eric Hsieh is the Director of Grid Systems and Components for the Department of Energy (DoE) Office of Electricity. This group delivers grid modernization through technology innovation. The portfolio includes transformers, power electronics, robotics, and energy storage.

Mr. Hsieh has over 15 years of experience in advancing energy delivery technology at several organizations, including A123Systems and the Federal Energy Regulatory Commission. Mr. Hsieh received his MPP in Public Policy from the University of California, Berkeley

## 3. Venkat Viswanathan, Associate Professor in the Department of Mechanical Engineering, Carnegie Mellon University



Venkat Viswanathan is an Associate Professor of Mechanical Engineering at Carnegie Mellon University. He received his PhD at Stanford University in 2013 and subsequently spent a year as a postdoctoral researcher at MIT. At Carnegie Mellon, he leads an interdisciplinary group comprising of about 30 researchers working on technologies that can accelerate the transition to sustainable transportation and aviation. He is a recipient of numerous awards including the Office of Naval Research (ONR) Young Investigator Award, Alfred P. Sloan Research Fellowship in Chemistry, National Science Foundation CAREER award and MIT Technology Review Innovators Under 35.

He has broad expertise in materials related to Li-ion batteries, next-generation technologies such as solidstate batteries, Li-air batteries. He is also an expert on the topic of synergies between autonomous vehicles and electric vehicles. He has been technical consultant for several startups.

#### 4. Prof. Arumugam Manthiram, Professor, University of Texas, Austin



Arumugam Manthiram is currently the Cockrell Family Regents Chair in Engineering and Director of the Texas Materials Institute and the Materials Science and Engineering Program at the University of Texas at Austin (UT-Austin). He received his Ph.D. degree in chemistry from the Indian Institute of Technology Madras in 1981. After working as a postdoctoral researcher at the University of Oxford and at UT-Austin with 2019 Chemistry Nobel Laureate Professor John Goodenough, he became a faculty member in the Department of Mechanical Engineering at UT-Austin in 1991. Dr. Manthiram's research is focused on materials for batteries and fuel cells. He has authored more than 800 journal articles with 68,000 citations and an h-index of 130. He has provided research training to more than 265 students and postdoctoral fellows, including the graduation of 62 Ph.D. students and 26 M.S. students. He co-founded three startup companies: ActaCell, TexPower, and Vulcan Alloys.

Dr. Manthiram is a Fellow of Materials Research Society, Electrochemical Society, American Ceramic Society, Royal Society of Chemistry, American Association for the Advancement of Science, and World Academy of Materials and Manufacturing Engineering. He is an elected Academician of the World Academy of Ceramics. He received the university-wide (one per year) Outstanding Graduate Teaching Award in 2012, Battery Division Research Award from the Electrochemical Society in 2014, Distinguished Alumnus Award of the Indian Institute of Technology Madras in 2015, Billy and Claude R. Hocott Distinguished Centennial Engineering Research Award in 2016, Honorary Mechanical Engineer of the ME Academy of Distinguished Alumni Award in 2019, Henry B. Linford Award for Distinguished Teaching from the Electrochemical Society in 2020, and International Battery Association Research Award in 2020. He is a Web of Science Highly Cited Researcher in 2017, 2018, and 2019. He delivered the 2019 Chemistry Nobel Prize Lecture on behalf of Professor John Goodenough in Stockholm.

#### 5. Abhijeet Sathe, President, SB Energy USA



Abhijeet Sathe is the President at SB Energy USA, leading a large-scale solar business in the United States. He has over 25 years of experience in engineering, operations, and R&D in renewable energy and MEMS businesses. Before joining SB Energy, he was the Vice President of Global Design and Engineering at SunEdison, heading a global team for commercial / DG and utility businesses. Prior to this, he worked at SunPower Corporation and General Electric Corporation. Abhijeet holds an MS Degree in Electrical Engineering and is a certified Six Sigma Master Black Belt.

#### 6. Danny Kennedy, Chief Energy Officer, New Energy Nexus



Danny Kennedy is the Chief Energy Officer at New Energy Nexus an international network of clean energy accelerators and incubators providing the support global startups need to succeed. The global platform at present has chapters in the US, China, Indonesia, Vietnam, Thailand, the Philippines, Uganda, and India with partnerships in Australia and Cambodia.

A clean-technology entrepreneur, Mr Kennedy also serves as the Managing Director of the California Clean Energy Fund. This includes overseeing the CalSEED.fund of \$25m for very early stage companies driving innovation and building equity in the California economy. He is an adviser to Young Greentech Entrepreneurs in China with the Asia Society. Kennedy also serves as President of CalCharge, a public-private partnership with DoE National Labs, universities in California, unions, and companies, that work to advance energy storage.

### **WESD STAKEHOLDERS**

#### Presenting Partner

1. Customized Energy Solutions is one of the fastest growing energy consulting & services companies, operating in North America for the past 16 years. Customized is working with over 400 clients across the value chain of electricity industry globally. We started our India operations as Customized Energy Solutions India Pvt. Ltd in 2010. We work with commercial and industrial customers to help reduce their energy costs through better utilization of the energy markets and emerging technologies. We have helped bring innovative energy services such as demand response to India. We are pioneering in exploring integration of latest technologies such as energy storage, microgrids as well as smart grid maturity model to Indian consumers.

Unlike most consulting companies, we help clients from the feasibility study through implementing solutions as well as offer services to optimize operations. We work with our clients to improve communication and metering, integration of renewable generation as well as other emerging technologies, and active management of resources through utilization of our 24\*7 operations center.

Logo:



Contact: Ashok Thakur

contact@indiaesa.info

Website: <a href="https://ces-ltd.in/">https://ces-ltd.in/</a>



#### Platinum Partner

1. Amara Raja Group - Amara Raja is amongst India's leading business conglomerates with interests spanning verticals from the production of lead-acid batteries (AMARON brand), power conversion products, sheet metal products, plastic molding, precision components, electronic manufacturing services, Infrastructure Development, industrial services to food processing. Amara Raja Group of companies with their flagship company Amara Raja Batteries Ltd are one of the largest manufacturers of Automotive and Industrial batteries in India. Amara Raja Group employs a workforce of more than 16,000 people.

Logo:



Contact: Abdul Hameed
Business Development Manager

aha@amararaja.com | 9686664235

Website: www.amararaja.com/

2. Exicom Tele-Systems- Exicom Tele-Systems Limited designs, develops, and deploys innovative energy solutions for a sustainable future. From industrial level power solutions powered by Lithium ion batteries to future-ready ecosystem for electric vehicles, Exicom has been working for past 26 years to help build the right skills, capabilities, and manufacturing prowess for a self-reliant India.

Logo:



Contact: Aastha Bansal

Assistant Manager

aastha.bansal@exicom.in

Website - exicom-ps.com/index.html

#### Gold Partner

1. Okaya Power Group – Okaya is a multi-billion conglomerate has been a symbol of trust since its inception in 1980. All these years it has made its presence felt in the field of power backup and emerged as one of the biggest emerging consolidated energy devices and solution company in India. OKAYA made an impact in the Indian Lead Acid Battery domain with batteries for applications like Inverter, Solar, VRLA and SMF; Lithium batteries for various applications Like Solar, Street light, E-rick, EV, ESS, swapping stations and took a leap with best in class EV chargers and charging stations also RO water purifiers, Air purifiers and t automatic hand sanitizer machines.

Okaya has emerged as one of the biggest player in EV chargers domain with best in class public chargers, bagged prestigious order Pan India from GOI, Mini Ratna, Maha Ratna, National Highways, Private Majors, further augmented its kitty with swapping stations, charging stations, ESS units and support for telecom solutions.

Time and tide has helped Okaya achieve a global leader position. Group imbibes integrity, innovation, trust, and customer relationship as core values. Okaya has nine state-of-the-art manufacturing plants spread over 1.7 million square feet area, 2 central warehouses and 31 regional warehouses catering to 29 states of the country. Carrying forward the legacy

Microtek, the group company, always been a pillar of strength augmenting the legacy with innovative power electronic product range, always termed as a perfect combo with Okaya batteries.

Group's other ventures Okaya Infocom in software development, IT solutions creating ripples globally, Microtek Infra creating landmarks in the real estate premium home, commercial and projects segment.

Okaya Power Group truly believes that success doesn't happen overnight and it surely doesn't happen alone. The group credits the success to all its stake holders, employees, customers, channel partners and vendors.

Logo:



Contact - Mr. Akshay Dewan
Sr. Manager - ESS [Sales]
<a href="mailto:akshay.dewan@okayapowerltd.com">akshay.dewan@okayapowerltd.com</a> | +91 9810291211</a>

Website link- www.okayapower.com/



#### Silver Partner

1. Underwriters Laboratories – Underwriters Laboratories (UL) is a nonprofit organization dedicated to advancing the UL public safety mission through the discovery and application of scientific knowledge. We conduct rigorous independent research and analyze safety data, convene experts worldwide to address risks, share knowledge through safety education and public outreach initiatives, and develop standards to guide safe commercialization of evolving technologies. We foster communities of safety, from grassroots initiatives for neighborhoods to summits of world leaders. Our organization employs collaborative and scientific approaches with partners and stakeholders to drive innovation and progress toward improving safety, security, and sustainability, ultimately enhancing societal well-being.

Logo:



Contact - Dr. Judy Jeevarajan,
Research Director, Electrochemical Safety, UL
NFP.BatterySafety@ul.org

Website link- www.ul.com/



#### Bronze Partner

BASF - At BASF, we create chemistry for a sustainable future. We combine economic success with
environmental protection and social responsibility. More than 117,000 employees in the BASF Group work
on contributing to the success of our customers in nearly all sectors and almost every country in the world.
Our portfolio is organized into six segments: Chemicals, Materials, Industrial Solutions, Surface
Technologies, Nutrition & Care and Agricultural Solutions. BASF generated sales of €59 billion in 2019.
BASF shares are traded on the stock exchange in Frankfurt (BAS) and as American Depositary Receipts
(BASFY) in the US.

Logo:



Website link- www.basf.com

<u>Contact - Nakul Mahajan</u> Global Business Management - Cellasto <u>nakul.mahajan@basf.com</u>

2. Keysight- Keysight Technologies, Inc. (NYSE: KEYS) is a leading technology company that helps its engineering, enterprise and service provider customers optimize networks and bring electronic products to market faster and at a lower cost. Keysight's solutions go where the electronic signal goes, from design simulation, to prototype validation, to manufacturing test, to optimization in networks and cloud environments. Customers span the worldwide communications ecosystem, aerospace and defense, automotive, energy, semiconductor and general electronics end markets. Logo:



Contact: Amit Roy Marcom Representative +91 7428987006

Website link: www.keysight.com



1. The Schaltbau Group - The Schaltbau Group is among the world's leading suppliers in the fields of rolling stock, rail infrastructure, automotive and the capital goods industry. Furthermore, our technical safety products are integral parts in applications such as buses, electric vehicles, photovoltaic power plants and wind turbines. As an expert in DC engineering Schaltbau GmbH is a major supplier of reliable, long-lasting electromechanical components and customer specific solutions for railway and various industrial applications.

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Contact: Saurav Patwal
Application Manager
<u>saurav@schaltbauindia.in</u> |+91 - 9958501663
Website - <u>www.schaltbau.com</u>



#### Legal Service Partner

1. CURTIS – Environmental and energy lawyers Charles, CURTIS Howland helps clients develop and implement creative, cost-effective strategies for working with regulatory agencies and private parties to best advance their particular goals under the U.S. federal and state, foreign, environmental, health and safety and energy-related statutes, regulations and policies.

Logo:



Contact: Charlie Howland chowland@ces-ltd.com
Website - www.curtis.com

#### Country Partner

1. Government of Australia- The Australian Government is the federal government of Australia, a parliamentary constitutional monarchy, and is the first level of government division. It is also referred to as the Federal Government and the Commonwealth Government. Like many other Westminster-style systems of government, the Australian Government is made up of three branches: the executive (the prime minister, the ministers, and government departments), the legislative (the Parliament of Australia), and the judicial.

Logo:



**Australian Government** 

**Australian Trade and Investment Commission** 

Website link- www.australia.gov.au/

#### India Partners

1. Department of Science & Technology (DST)- was established in May 1971, with the objective of promoting new areas of Science & Technology and to play the role of a nodal department for organising, coordinating and promoting S&T activities in India country.

Logo:



Website link- <a href="https://dst.gov.in/">https://dst.gov.in/</a>

2. NITI Aayog- The NITI Aayog (National Institution for Transforming India) is a policy think tank of the Government of India, established with the aim to achieve sustainable development goals with cooperative federalism by fostering the involvement of State Governments of India in the economic policy-making process using a bottom-up approach. Its initiatives include "15-year road map", "7-year vision, strategy, and action plan", AMRUT, Digital India, Atal Innovation Mission, Medical Education Reform, agriculture reforms (Model Land Leasing Law, Reforms of the Agricultural Produce Marketing Committee Act, Agricultural Marketing and Farmer Friendly Reforms Index for ranking states), Indices Measuring States' Performance in Health, Education and Water Management, Sub-Group of Chief Ministers on Rationalization of Centrally Sponsored Schemes, Sub-Group of Chief Ministers on Swachh Bharat Abhiyan, Sub-Group of Chief Ministers on Skill Development, Task Forces on Agriculture and up of Poverty, and Transforming India Lecture Series.

Logo:



Website link- <a href="https://niti.gov.in/">https://niti.gov.in/</a>

3. Invest India - As the national investment promotion and facilitation agency, Invest India focuses on sector-specific investor targeting and development of new partnerships to enable sustainable investments in India. In addition to a core team that focuses on sustainable investments, Invest India also partners with substantial investment promotion agencies and multilateral organizations. Invest India also actively works with several Indian states to build capacity as well as bring in global best practices in investment targeting, promotion, and facilitation areas. Invest India, set up in 2009, is a non-profit venture under the Department for Promotion of Industry and Internal Trade, Ministry of Commerce and Industry, Government of India.

Logo:



Website link- www.investindia.gov.in/

#### Media Partner

1. Emerging Technology News - Emerging Technology News (ETN) is a leading B2B magazine on renewable energy, energy storage, electric vehicles, and emerging technologies. Published by Customized Energy Solutions Pvt Ltd, India, the flagship magazine provides rigorous analysis and fresh updates on renewable energy, advanced energy storage, electric vehicles, energy innovations, and more.

Logo:



Website link- indiaesa.info/magazine

2. Battery Industry- Batteryindustry.tech is a news channel dedicated to the global cell and battery manufacturing industry.

Logo:



Website link-

https://batteryindustry.tech/

3. Energy Storage News- News, analysis, and opinion on energy storage technologies by PV Tech and Solar Power Portal.





Website link- www.energy-storage.news/



### **WESD Supporting Partners**

1. Alliance for Rural Electrification (ARE)- ARE- Alliance for Rural Electrification is an international business association that promotes a sustainable decentralized renewable energy industry for the 21st century, activating markets for affordable energy services, and creating local jobs and inclusive economies.

Logo:



Website link- www.ruralelec.org/

2. ASSOCHAM – The Associated Chambers of Commerce and Industry of India (ASSOCHAM) is one of the apex trade associations of India. The organization represents the interests of trade and commerce in India, and acts as an interface between issues and initiatives. The goal of this organization is to promote both domestic and international trade, and reduce trade barriers while fostering conducive environment for the growth of trade and industry of India.

Logo:



Website - www.assocham.org

3. Australian Energy Storage Alliance (AESA)- is an information hub for the energy storage industry and was founded in 2014 with the mission of advancing the role of safe, clean, and cost-effective energy storage in Australia and New Zealand.

Logo:



Website link- energystoragealliance.com.au/

4. California Energy Storage Alliance (CESA)- The California Energy Storage Alliance (CESA) is a 501c(6) membership-based advocacy group committed to advancing the role of energy storage in the electric power sector through policy development, education, outreach, and research. CESA's mission is to make energy storage a mainstream energy resource that enables a more efficient, reliable, affordable, and secure electric power system for all Californians.

Logo:



Website link- www.storagealliance.org/

5. China Energy Storage Alliance (CNESA)- The China Energy Storage Alliance is a non-profit industry association dedicated to promoting energy storage technology in China.

Logo:



Website link- http://en.cnesa.org/

6. Clean Energy States Alliance (CESA)- CESA works with state leaders, federal agencies, industry representatives, and other stakeholders to develop clean energy programs and inclusive renewable energy markets. CESA members—mostly state agencies—include many of the most innovative, successful, and influential public funders of clean energy initiatives in the country.

Logo:



Website link- www.cesa.org/

7. Dii Desert Energy- Launched in 2009 as an industry initiative in Germany (initially called 'Desertec Industrial Initiative') for exploring the potential of renewables in the desert areas of Northern Africa and the Middle East, improving market conditions and examining the synergies to be captured through connecting the European and MENA power markets. In 10 years' time, Dii Desert Energy has grown from a rudimentary 'Desertec Vision', initially mainly concentrated on power from the deserts for Europe, (Desertec 1.0) via a focus on the conditions of renewables in the local markets (Desertec 2.0) toward a highly recognized market enabler for 'green electrons' and 'green molecules' from the deserts of MENA for MENA's own population, and for MENA to become a 'Power House' for the world markets (Desertec 3.0). Today, Dii Desert Energy are looking at the entire power system starting with various forms of Renewable Energy (RE) generation, grids, new technologies & innovations, energy storage, e-mobility, smart cities, towards the long-term objective of 'energy without emissions'.





Website link- <a href="https://dii-desertenergy.org/">https://dii-desertenergy.org/</a>

8. Energy Storage Canada – Energy Storage Canada is the only national voice for energy storage in Canada today. We focus exclusively on energy storage and speak for the entire industry because we represent the full value chain range of energy storage opportunities in our own markets and internationally.

Logo:



Website link- energystoragecanada.org/

9. European Association for Storage of Energy – The European Association for Storage of Energy (EASE) located in Brussels, Belgium, is the leading member-supported association representing organizations active across the entire energy storage value chain. EASE supports the deployment of energy storage to support the cost-effective transition to a resilient, climate-neutral, and secure energy system.

Logo:



Website link- ease-storage.eu/

10. German Energy Storage Association (BVES)- The German Energy Storage Association represents the interests of companies which have the common goal of development and marketing as well as the operation of energy storage in electricity, heat, and mobility.



Website link- www.bves.de/

11. Green Hydrogen Coalition (GHC)- Founded in 2019, the Green Hydrogen Coalition (GHC) is a fiscally sponsored project of Community Initiatives, a 501c3 non-profit organization. Strategen is the exclusive grantee to Community Initiatives in executing the programs and initiatives of the GHC. The GHC focuses on building top-down momentum for scalable green hydrogen projects that leverage multi-sector opportunities to simultaneously scale supply and demand. The work of the GHC is supported by annual charitable donations.

Logo:



Website link- ghcoalition.squarespace.com/

12. Indo German Energy Forum (IGEF)- The Indo-German Energy Forum (IGEF) provides a dialogue platform for high-level policy makers, financial institutions, industry and research organizations to deepen and enhance the bilateral cooperation for the energy transition in Germany and India.

Logo:



Website link- www.energyforum.in/home

13. Innovation Norway- Innovation Norway promotes nationwide industrial development to both the business economy and Norway's national economy and helps release the potential of different districts and regions by contributing to innovation, internationalization, and promotion.

Logo:



Website link- <a href="https://www.innovasjonnorge.no/en/start-page/">https://www.innovasjonnorge.no/en/start-page/</a>



14. IMCI – Institute of Management Consultants of India (IMCI) is an apex body of management consultants in India and it is the only registered institute of established management consultancy firms and practicing individuals in the country. IMCI was constituted in 1991 and was formerly known as Management Consultants/Association of India (MCAI). MCAI was founded in 1963.

In 1989, MCI became the first Asian organization to be accepted for membership of the International Council of Management Consulting Institutes (ICMCI), the global apex body of management consulting institutes. The Executive Secretariat of IMCI is in Mumbai. The institute has regional chapters in Ahmedabad, Bangalore, Calcutta, Chennai, Delhi, Hyderabad, Mumbai, and Pune.

Since its inception in 1963, IMCI has grown manifold with leading consulting firms as well as experienced individual consultants as members. The current membership is 498, with 486 individual consultants and 12 consulting firms of which 220 are Certified Management Consultants (CMCs). Please visit the website below to learn more about membership details.

Logo:



Website - www.imcindia.co.in/

15. Irish Energy Storage Alliance (IESA)- - IESA represents the interests of the energy storage sector on the island of Ireland, by influencing policy decisions and implementation details through engagement with CRU, UR, SEM Committee, EirGrid, ESBN, Government Departments, EU and European energy bodies (for example in developing the Network Code).

Logo:



Website link- https://www.iesa.ie/

16. International Solar Alliance (ISA)- ISA was conceived as a coalition of solar-resource-rich countries (which lie either completely or partly between the Tropic of Cancer and the Tropic of Capricorn) to address their special energy needs. The ISA will provide a dedicated platform for cooperation among solar-resource-rich countries, through which the global community, including governments, bilateral and multilateral organizations, corporates, industry, and other stakeholders, can contribute to help achieve the common goal of increasing the use and quality of solar energy in meeting energy needs of prospective ISA member countries in a safe, convenient, affordable, equitable and sustainable manner.

Logo:



Website link- <a href="https://isolaralliance.org/">https://isolaralliance.org/</a>

17. SAESA- South African Energy Storage Association (SAESA) is an energy storage association, setup to guide policy, allow for accessibility of the energy storage industry and to advocate for the advancement of the energy storage industry in South Africa.

Logo:



Website link- saesa.org.za/

18. European Battery Alliance (EBA) - The European Battery Alliance (EBA) was launched in October 2017 by European Commission Vice President Maroš Šefčovič. The purpose is to ensure that all Europeans benefit from safer traffic, cleaner vehicles, and more sustainable technological solutions. All this will be achieved by creating a competitive and sustainable battery cell manufacturing value chain in Europe.

Logo:



Website link- www.eba250.com/

19. ESMAP- ESMAP is a partnership between the World Bank and 18 partners to help low and middle-income countries reduce poverty and boost growth through sustainable energy solutions. ESMAP's analytical and advisory services are fully integrated within the World Bank's country financing and policy dialogue in the energy sector. Through the World Bank Group (WBG), ESMAP works to accelerate the energy transition required to achieve Sustainable Development Goal 7 (SDG7) to ensure access to affordable, reliable, sustainable and modern energy for all. It helps to shape WBG strategies and programs to achieve the WBG Climate Change Action Plan targets.

Logo:



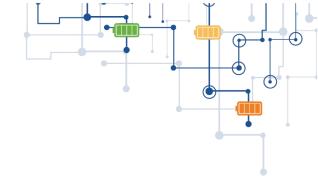
Website link- www.esmap.org/

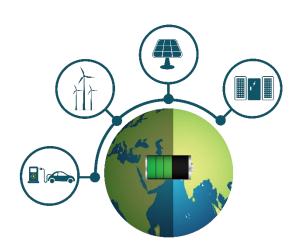
20. Energy Storage Association (ESA)- The Energy Storage Association (ESA) is the national trade association dedicated to energy storage, working toward a more resilient, efficient, sustainable, and affordable electricity grid – as is uniquely enabled by energy storage. With more than 160 members, ESA represents a diverse group of companies, including independent power producers, electric utilities, energy service companies, financiers, insurers, law firms, installers, manufacturers, component suppliers and integrators involved in deploying energy storage systems around the globe.

Logo:



Website link- <a href="https://energystorage.org/">https://energystorage.org/</a>





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