



www.globalsmartenergy.org



Introduction

Global Smart Energy Federation (GSEF) is a global stakeholder organization of national smart grid associations, forward-looking utilities, and think tanks from around the globe working in the domains of energy transition and clean transportation. By linking the major public-private stakeholder initiatives of participating countries, thinktanks and progressive utilities, the federation shares practices, identifies barriers and solutions, fosters innovation, and addresses key technology standards and policy issues. The activities of GSEF help member organizations and their member utilities in their energy transition and grid modernization initiatives that enhance access to affordable clean energy and increase the security, flexibility and resiliency of the power systems while reducing the emissions. GSEF has 16 members

including members from Africa, America, Asia and Europe; and has close relationships and MoUs with International Smart Grid Action Network (ISGAN) and the Association of Power Utilities of Africa (APUA), an inter-governmental organization in Africa comprising 56 utilities from 46 African countries. European Distribution System Operators (E.DSO), an organization promoted by European Commission and CARILEC, the association of 33 electric utilities in the Caribbean Islands are also members of GSEF. Besides, GSEF has a close working relationship with IRENA and the International Solar Alliance (ISA).

The Global Smart Energy Federation (GSEF) is registered as Global Smart Grid Federation, a 501(c)(3) nonprofit Corporation in Washington, D.C., United States of America.

GSEF Mission

Facilitate the collaboration of national and international Smart Grid non-governmental and governmental organizations from around the world to conduct and foster research in the application of Smart Grid Technologies

Support rapid implementation of Smart Grid Technologies by establishing itself as the global center for competency on Smart Grid Technologies and policy issues

Foster the international exchange of ideas and best practices on energy issues, including reliability, efficiency, security, and climate change

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Create avenues for dialogue and cooperation between the public and private sectors in countries around the world on issues relating to the deployment of Smart Grid Technologies



Facilitate member organizations initiate changes to their countries, electric systems to enhance security, increase flexibility, reduce emissions, and maintain affordability, reliability, and accessibility



Establish GSEF as a global centre of excellence to support rapid energy transition, grid modernization, digitalization, e-mobility and vehicle grid integration through collaborations and partnerships.



Foster international exchanges on groundbreaking ideas, innovation and case studies on smart energy, smart grid, hydrogen economy, e-mobility and emerging technologies such as Artificial Intelligence, Machine Learning, Robotics, Blockchain etc.

GSEF BOARD



Reji Kumar Pillai

Chairman

Reji is the Chairman of GSEF since November 2016 and also the President of India Smart Grid Forum since its inception in 2011. He is an internationally renowned expert with over three decades of experience in the electricity sector in diverse functions covering the entire value chain and across continents.

LinkedIn: http://www.linkedin.com/in/rejipillai

GSEF AMBASSADORS



Ravi Seethapathy

Ambassador - Americas

Ravi Seethapathy has had a 31-year career in Hydro One/Ontario Hydro, a leading Utility in Canada. He is now an Advisor to Utility/Industry.

LinkedIn: https://www.linkedin.com/in/ravi-seethapathy-697436b7



Valerie-Anne Lencznar

Ambassador for Europe and Francophone Africa

Valerie-Anne is a senior executive at RTE, the national transmission company in France; and former Managing Director of ThinkSmartGrids, France.

LinkedIn: https://www.linkedin.com/in/valerie-anne-lencznar-6327961



Nick Singh

Ambassador for Anglophone Africa

Nick Singh has been at Eskom Research Testing and Development since Jan 1998, specializing in Smart Grids and Control Systems. He leads a team of engineers and scientists.

LinkedIn: https://www.linkedin.com/in/nick-singh-70495165/



Eddie Widiono

Ambassador – Asia Pacific

Eddie Widiono has worked in the Indonesian Power Sector mainly with PT PLN for more than 18 years. He was the President Director of PT PLN (PERSERO) and also acted as Director, Marketing and Distribution and Head Network Operations and Logistics for PT PLN (PERSERO).

LinkedIn: linkedin.com/in/eddie-widiono-soewondho-b1393841

GSEF CAPABILITIES & ADVISORY SERVICES

GSEF CAPABILITIES

- Expertise and Experience Sharing
- White Papers, Technical Reports and Newsletters

GSEF ADVISORY SERVICES

- Policy and Regulatory Workshops for Senior Leadership in Countries
- Country Roadmaps
- Training and Capacity Building Initiatives

GSEF REPORTS



Electromobility in Smart Grids: State of the Art and Challenging Issues



Microgrids Working Group



Flexibility Working Group



Cyber Security Working Group



Power Grid Electrical Energy Storage Work Group



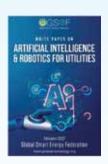
Grid Connectivity Of Distributed Generation (GCDG)



Interfaces Of Grid Users/ Focus On EV And Local Storage (GUII)



Interoperability And Standards (IWG)



Artificial Intelligence and Robotics for Utilites

COLLABORATIONS & PARTNERSHIPS

MoU WITH ISGAN

- ISGAN is a government to government forum in the framework of the International Energy Agency (IEA) Technology Collaboration Program
- ISGAN has 27 countries as members
- They hold Executive Committee (ExCo) Meetings twice a year

GSEF Relationship with ISGAN

- GSEF and ISGAN executed an MOU for mutual collaboration in 2013, which is being extended periodically
- GSEF conducts workshops on select topics during ISGAN ExCo Meetings
- GSEF provides the expert jury for selection of ISGAN Award of Excellence – for past 7 years
- Assists each other in expanding the horizon of knowledge and memberships

MoU WITH APUA

- APUA is the Association of Power Utilities of Africa, formerly known as UPDEA (Union of Producers, Conveyors and Distributors of Electrical Energy in Africa)
- APUA has 56 member utilities from 46 counties in Africa
- Non-profit, Non-Governmental Continental
 Organization headquartered in Abidjan

GSEF Relationship with APUA

- GSEF and APUA executed an MOU to build a long term partnership to develop and implement cooperation programs between members
- GSEF and APUA jointly conduct studies on grid modernization, renewable energy and microgrids to provide affordable and reliable energy access in Africa
- Organize inter-regional congress and seminars on relevant topics
- Cooperate in the capacity building and the training programs
- Assists each other in expanding the horizon of knowledge and membership

GSEF MEMBERS

GSEF has 16 members including members from Africa, America, Asia and Europe; and has close relationships and MoUs with International Smart Grid Action Network (ISGAN) and the Association of Power Utilities of Africa (APUA), an inter-governmental organization in Africa comprising 56 utilities from 46 African countries. European Distribution System Operators (E.DSO), an organization promoted by European Commission and CARILEC, the association of 33 electric utilities in the Caribbean Islands are also members of GSEF. Besides, GSEF has a close working relationship with IRENA and the International Solar Alliance (ISA).

Charter and Regular Members





Think Smart Grids www.thinksmartgrids.fr **France** India Smart Grid Forum https://www.indiasmartgrid.org/



Korea Smart Grid Association https://www.ksga.org/eng/index.do Korea

> ELECTRIC POWER RESEARCH INSTITUTE

EPRI

Electric Power Research Institute

https://www.epri.com//

California, United States of America

Green Business Certification Inc.

http://www.gbci.org/

Washington DC, United States of America



Prakarsa Jaringan Cerdas Indonesia (PJCI) https://www.pjci.id/ Indonesia sqi

Smart Grid Ireland www.smartgridireland.org Ireland

Utility Members



Botswana Power Corporation https://www.bpc.bw// Botswana

Associate Members



Caribbean Electric Utility Services Corporation https://www.carilec.org// St. Lucia Eastern Caribbean



Florence School of Regulation http://fsr.eui.eu/ **Florence Italy**



European Distribution System Operators https://www.edsoforsmartgrids.eu/ Belgium



ESKOM https://www.eskom.co.za/ South Africa



Tenaga Nasional Berhad https://www.tnb.com.my/ **Malaysia**



Energy Blockchain Consortium https://energy-blockchain.org/ Florida, United States of America

> TEXAS STATE

Texas State University https://www.txst.edu/ Texas, United States of America

GSEF MEMBERSHIP CATEGORIES AND BENEFITS

Membership Categories

Category	Rights	Remarks
Charter Member	Can hold Board Positions; have voting rights; can chair Working Groups	Smart Grid Associations from countries (one from each country)
Regular Member	No Board Positions and Chair of Working Groups; but enjoy voting rights and representation in Working Groups	Smart Grid Associations from countries (one from each country)
Utility Member	No Board Positions and Chair of Working Groups; No voting rights; but represents in Working Groups	Lead Utility from a country where there are no Smart Grid Associations
Associate Member	No Board Positions and Chair of Working Groups; No voting rights; but represents in Working Groups	International Institutions and Think Tanks



Connect With **GSEF**

Meet GSEF at

- India Smart Utility Week
- Enlit Asia
- DistribuTECH
- Asia Clean Energy Forum
- Enlit Europe
- Innovation for Cool Earth Forum

<u>Secretariat</u>



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