India Smart Grid Forum
(ISGF)
A PPP Initiative of Government of India

www.indiasmartgrid.org
A Public Private Partnership initiative of Ministry of Power, Government of India for accelerated development of smart grid technologies in the Indian power sector; Advise Governments on policies and programs for electric grid modernization.

Besides MoP, ISGF work with MNRE, MoUD, DoT, DST, DHI, CEA, CPRI, CERC, Niti Aayog, NSGM, NCIIPC; and also with State Governments, Utilities and Regulators.

Work with national and international agencies in standards development and help Utilities, Regulators and the Industry in technology selection, training and capacity building.

Platform for exchange of ideas and knowledge dissemination; conducts research studies and publishes White Papers and Technical Reports, Training Programs and Seminars, Bilateral and Multilateral collaboration Workshops.

200+ members comprising of ministries, utilities, technology providers, academia and research; Evolved as a Think-Tank of global repute on Smart Grid and Smart Cities; 6 Working groups focused on different aspects of Grid Modernization.
# ISGF – Key Contributions

| **Model Smart Grid Regulations approved by Forum of Regulators (2015)** | **Implementation Plan for Electrification of Public Transportation in Kolkata (2017)** |
| **Smart Meter Standards IS-16444 & IS 15959 (2015)** | **Smart Grid Roadmap for Bangalore Electricity Supply Company (Draft submitted)** |
| **Creation of National Smart Grid Mission (NSGM) (2015)** | **Energy Storage Roadmap for India (in progress)** |
| **BIS ETD 46 Committee for Standards for Large Scale RE-Integration to the Grid (2016)** | **Establishment of Charging Infrastructure for Deployment of Electric Buses in Kolkata (in progress)** |
| **BIS ETD 51 Committee for Electric Vehicle Charging Infrastructure (2016)** | **Smart Grid Roadmaps and EV Roadmaps for SAARC Countries (in progress)** |
| **Smart Grid Handbook for Regulators and Policymakers (2017)** | **Allocation of 7 MHz of License Free Spectrum for Smart Grid Applications by TRAI** |
ISGF – Areas of Expertise and Key Projects

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<th>Domains of Expertise</th>
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<td>Policy Advocacy</td>
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<td>Smart Water and Gas</td>
<td>Development of Standards</td>
<td>Formulation of Smart Grid Vision and Roadmap</td>
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<td>E-Mobility</td>
<td>Implementation Roadmaps</td>
<td>Supported BIS in Formulation of Smart Meter Standards IS-16444 &amp; IS 15959</td>
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<td>Energy Storage</td>
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<td>Smart Grid Roadmap for Bangalore Electricity Supply Company</td>
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<td>Smart Metering</td>
<td>Feasibility Report &amp; DPR</td>
<td>Implementation Plan for Electrification of Public Transportation in Kolkata</td>
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<td>Smart Cities</td>
<td>RFP Preparation &amp; Evaluation</td>
<td>Establishment of Charging Infrastructure for Deployment of Electric Buses in Kolkata</td>
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<td>Renewables and Microgrid</td>
<td>Research &amp; Studies</td>
<td>Energy Storage Roadmap for India</td>
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<td>Smart Grid Handbook for Regulators and Policymakers</td>
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<td>International Delegations to Smart Grid Events and Bilateral Workshops</td>
<td>Development of Roadmap for Implementation of Smart Grid: Concepts, Practices and Technologies in SAARC Region</td>
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<td>Study on Infrastructure and Enabling Environment for Road Electric Transport in SAARC Member States</td>
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KNOWLEDGE DISSEMINATION, EXCHANGE AND CAPACITY BUILDING PROGRAMS

- **INDIA SMART GRID KNOWLEDGE PORTAL**: 50%
- **INDIA SMART GRID WEEK**: 20%
- **INDIA SMART GRID BULLETIN**: 5%
- **INTERNATIONAL COLLABORATIONS**: 5%
- **WEBINARS**: 20%
ISGF MEMBERSHIP

ISGF members comprises of ministries, government institutions, regulatory commissions, utilities, industry, non-profit organizations, educational and research entities, students from renowned institutions; and eminent experts from the domain as individual and honorary members.

Following are the Membership Categories:

- Government, Institutional Members
- Mentors and Advisors
- Industry Members
- Utility Members
- Student Members
- Individual Members
- Associate Members
- Honorary Members
- Individual Members
ISGF Training Programs

• Workshop on Cyber Security for Power Systems (3 Days) in collaboration with NCIIPC – now being moved to an E-learning platform
• Foundation Course on Smart Grids (4 Days)
• Smart Grid Bootcamp for C-Level Executives and Students (1 Day)
• Smart Grid Program for Regulators (4 Days)
## Prestigious Partners/Collaboration

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<th>Ministries/Departments</th>
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<th>International Collaborations</th>
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<tr>
<td>Ministry of Power</td>
<td>Bureau of Indian Standards (BIS)</td>
<td>Global Smart Grid Federation (GSGF)</td>
<td>Shakti Sustainable Energy Foundation</td>
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<td>Ministry of New and Renewable Energy</td>
<td>Central Electricity Authority (CEA)</td>
<td>Green Business Certification Inc (GBCI)</td>
<td>India Energy Storage Alliance</td>
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<tr>
<td>Department of Telecommunications</td>
<td>NITI Aayog</td>
<td>IEC, IEEE, CIGRE</td>
<td>MacArthur Foundation</td>
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<tr>
<td>Department of Science &amp; Technology</td>
<td>NCIIPC</td>
<td>Open ADR Alliance</td>
<td>VJTI, Mumbai</td>
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<td>CERC and State Electricity Regulatory Commissions</td>
<td>Think Smart Grids, FRANCE</td>
<td>Aligarh Muslim University</td>
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<td>Utilities</td>
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<td>Wi-SUN Alliance</td>
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INDIA SMART GRID WEEK (ISGW)

- ISGF has been organizing INDIA SMART GRID WEEK (ISGW) since 2015
- Sweden been our Powered by Partner for the last 3 editions
- The event is already considered to be one amongst the top 5 events on smart grids in the world
- Fourth edition in 2018 had parallel sessions on Smart Water and City Gas Distribution
- 2019 edition in March 2019 will be held as India Smart Utilities Week with increased participation from Water and Gas Utilities
CONFERENCE THEMES

- Role of Smart Grids in the New Programs of Government of India
- 21st Century Electric Grids – Evolving Trends
- 21st Century Electric Grids – Non-Traditional Players in the Industry: Results and Success Stories
- Smart Grid Project Outcomes: Experiences and Lessons Learned – Global and India perspectives
- Amendments to the Indian Electricity Act – Separation of Carriage and Content
- Preparing for the Era of 100% Renewables
- National Smart Grid Mission (NSGM) in India
- Smart City Mission in India
- Cross Cutting Themes
### SPECIAL PLENARY SESSIONS AT ISGW 2016

1. Climate Change and Impact on Utilities
2. 21st Century Electric Grids: Disruptive Innovations and its applications for utilities
3. IEC Systems Committee on Smart Energy and Smart Cities
4. Future of Utilities and the Utility of the Future
5. Recap of RE-INVEST; and Emerging Era of 100% Renewables and Challenges

### SPECIAL WORKSHOPS AT ISGW 2016

1. Regulations for Smart Grids for Regulators from India and South and South-East Asia  
   (*Supported by USTDA* and Asian Development Bank* and European Commission*)
2. Communications, Standards and Interoperability  
   (*Supported by Wi-SUN Alliance*)
3. India – Sweden Smart Grid Workshop
4. India – Israel Smart Grid Workshop
5. India – South Korea Smart Grid Workshop
6. Smart Grids as Anchor Infrastructure for Smart Cities – Workshop with Commissioners from Smart Cities
7. Third EU – India Smart Grid Workshop
Initiatives by ISGF

- India Smart Grid Knowledge Portal launched in Jan 2013 (www.indiasmartgrid.org) – One among the most popular smart grid portal in the world today
- Smart Grid Bulletin - **Circulation: 2,500** printed copies to key decision makers in Indian power sector; > **55,000** electronic copies to power sector professionals around the world
- Regular webinars on Technical Topics
- Workshop on Cyber Security for Power Systems (3 Days) in collaboration with NCIIPC – now being moved to an E-learning platform
- Foundation Course on Smart Grids (4 Days)
- Smart Grid Bootcamp for C-Level Executives and Students (1 Day)
- Smart Grid Program for Regulators (4 Days)
- Latest Publications of ISGF:
  - Smart Grid Knowledge Paper (co-authored by BNEF and ISGF)
  - Who is Who Guide in Smart Grids and Smart Cities domains in India
  - ISGF Directory of Indian Power Sector
  - Smart Grid Projects – a global snapshot
  - Compendium of Training Programs for Power Sector Personnel
International Collaborations

• Smart Grid Workshops:
  – EU-India Smart Grid Workshops (5 editions); next in November 2018 in Florence
  – US-India Smart Grid Workshop (3 editions)
  – Sweden-India Smart Grid Workshop (3 editions)
  – Canada – India Smart Grid Workshop (2 editions)
  – France – India Smart Grid Workshop (1 edition)

• Regular Delegations:
  – CIGRE Session in Paris (since 2012)
  – DistribuTECH in USA since 2014
  – European Utility Week (EUW) since 2014
  – Istanbul International Smart Grid Congress since 2015
  – Korea Smart Grid Week in 2013 and 2015
  – Innovation for Cool Earth Summit in Japan since 2014
Thank You

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