

## Word of the Chairman

### Dear Friends

Warm Greetings from GSGF!

We are happy to present the new GSGF newsletter to all our esteemed readers. As you may have noticed GSGF has expanded its presence to five continents and the new format of GSGF newsletter portrays our global vision and coverage of Smart Energy developments from around the globe.

GSGF charter has recently been revised to include new category of members such as utilities as Utility Members and international think tanks as Associate Members. GSGF has also appointed three Ambassadors in different continents to serve as a primary contact and to manage the GSGF relationship with relevant stakeholders and to communicate important developments and policy initiatives in their respective regions. With the membership drive focusing simultaneously on Europe, Asia and Africa, we hope and expect to welcome several new members this year. For the moment we are in contact with Singapore Power Limited, Tenaga Nasional Berhad (TNB) Malaysia, Electricity de Mozambique (EDM), Smart Grid Initiatives Indonesia (PJCI)-covering different parts of the world.

It was delightful to meet most of the GSGF members at our face to face meeting on the sidelines of the of the INNOGRID2020+ a very meticulously organized event in Brussels in May, 2018. The F2F meeting was fruitful and will certainly serve as the basis of some decisions we need to take in the near future, particularly relationship with ISGAN, expansion of GSGF membership and other activities. During F2F meeting we also invited speakers from Energy Web Foundation (EWF), European Space Agency (ESA), EPRI, ENTSOE, EDSO, Florence School of Regulations, Joint Research Centre of European Commission etc. to hear their insights on new innovations in smart grid domain.

New Working Groups on Blockchain for utilities and Electric Vehicles are being set up that will surely fuel discussion on new topics and inspire all GSGF Members. With our work, we of course hope to attract new members as well and strengthen our Federation to better serve the global community in transition towards low carbon economy.

I am also pleased to announce the launch of our new website which is more interactive and gives better access to information. You can now find us at [www.globalsmartgridfederation.org](http://www.globalsmartgridfederation.org).

I would like to invite all our members and other stakeholders to join hands to spread the awareness of new developments in smart grids that will advance the vision, mission and goals of the GSGF.

Best Regards,  
**Reji Kumar Pillai**  
Chairman

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# Global Stories on Smart Grid

## **Gridwise Alliance White Paper Explains Evs – Driving Adoption, Capturing Benefits**

The transition to a more electrified transportation system – be it the vehicles owned by individual consumers or accessed through ride-sharing, used in commercial or institutional fleets, or deployed for public transportation – offers tremendous benefits to consumers, communities, businesses and society as-a-whole. Using its holistic perspective of the electric system, the GridWise Alliance (GridWise) has published a white paper to advance the understanding of transportation electrification given the interdependent relationship between consumers, these vehicles, the grid, and charging infrastructure. In this paper, GridWise seeks to present some trends, to articulate the range of benefits EVs offer consumers and society, to describe challenges to the rapid adoption of EVs, and to propose possible approaches to overcoming these challenges.

[Read more...](#)

## **Government of Canada Funds Smart Grid Expansion to Fight Climate Change, Create Clean Jobs and Ensure Safer Power Delivery for Canadians**

Canada's Minister of Natural Resources announced a \$100-million call for proposals to fund more smart grid systems.

By increasing the hosting capacity of renewable energy, increasing resiliency and improving energy efficiency and conservation, smart grids are a key enabler for greenhouse gas mitigation. These systems will build a foundation for the next generation of innovative technologies and systems, supporting more customer-owned energy generation and service options and leading to entirely new applications.

The funding was provided as part of the Budget 2017 commitment of \$21.9 billion for green infrastructure in support of the Pan-Canadian Framework on Clean Growth and Climate Change.

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## **Will smart grids be vulnerable to cyber-attacks?**

Over the past few years, energy networks have been gradually transforming into smart grids.

While increased connectivity is helping optimize energy reliability and performance, it has also led to a heightened vulnerability to cyberattacks, with whole systems dependent on the security of their operators and millions of electronic devices linked to critical power facilities.

However, despite growing fears, uncertainty remains in the industry over the extent of this threat, with few companies taking tangible steps to prepare for the worst.

Two companies shifting their focus to the growing need for cyber security are the European Network for Cyber Security (ENCS) and the European Distribution System Operators' (EDSO) Association for Smart Grids.

The firms' addendum to their Memorandum of Understanding (MoU) that expands and 'intensifies' their focus on areas such as security requirements, training, regulatory recommendations and validation and testing of cyber security solutions.

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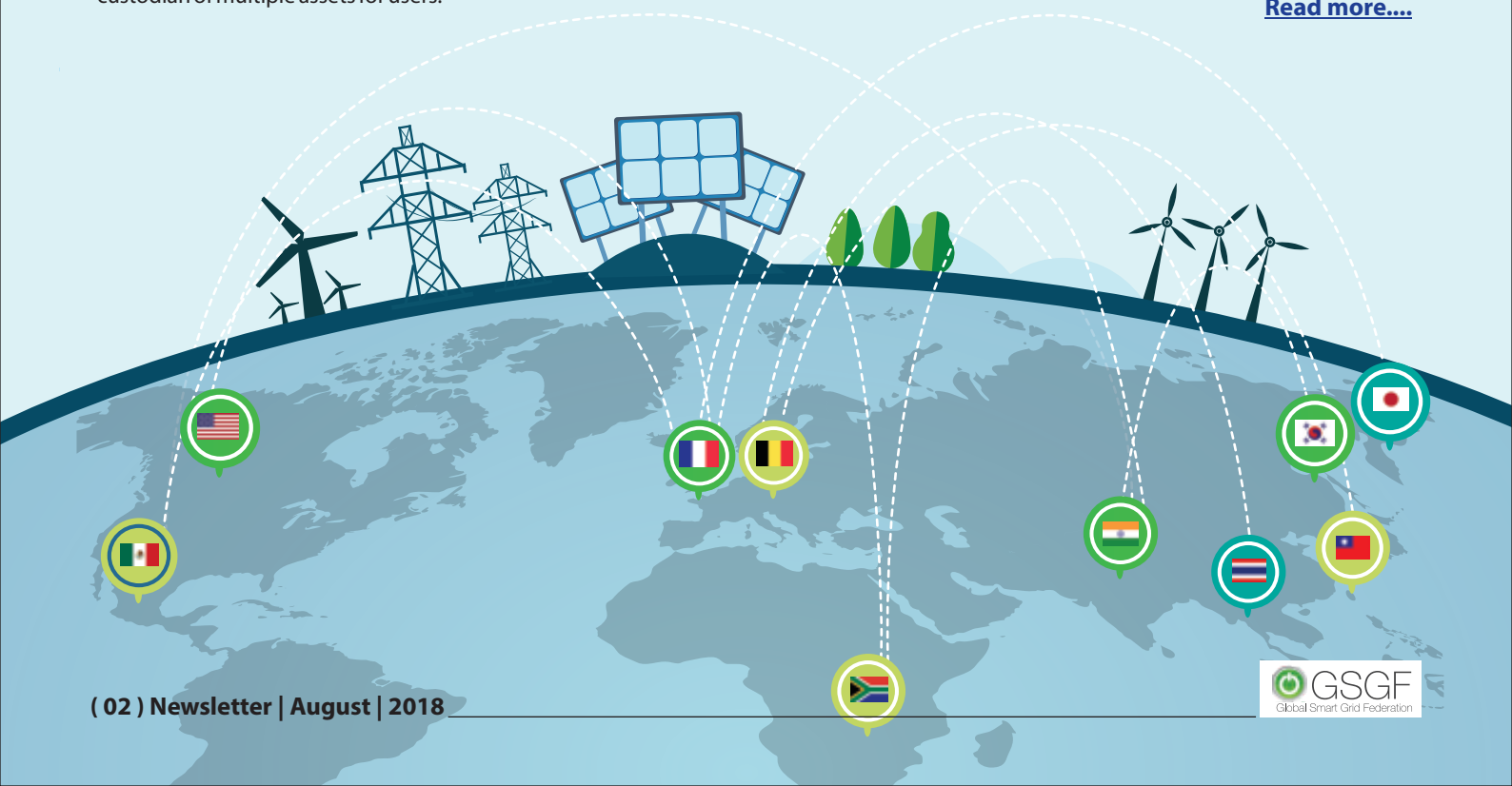
## **Blockchain Can Help Increase the Security of Smart Grids**

Blockchain is the new "hot" technology that promises to disrupt many industries.

It gains traction at a time when "smart" electrical grid management systems are automatically diagnosing problems and emergencies, and reconfiguring responses to them. Obviously, security of smart grids is critical. And, according to Benjamin Gu, founder and chairman of Daex, blockchain technology may just hold the answer to improved security standards of interconnectivity, data exchanges and permission control.

Daex is a cryptocurrency clearing solution based on distributed ledger technology that serves as a bridge connecting exchanges, and a custodian of multiple assets for users.

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# Global Stories on Smart Grid

## Smart meters to be installed in every Dutch home by 2020 to create vast country-wide smart grid

The Dutch government is rolling out smart meters to every household in the Netherlands, with a view to forming a vast Internet of Things (IoT) smart grid. Regional grid operators have been tasked with the smart meter rollout.

At present 900,000 smart meters have been installed in one region of the Netherlands alone, by operator Enexis Netbeheer.

The company plans to install 2.8 million electricity smart meters and the same in gas smart meters by 2020, according to Verdict's sister title Future Power Technology.

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## Government funding for innovation in smart energy systems and technologies

As part of this commitment, within the BEIS Energy Innovation Programme, BEIS expects to invest up to £70 million in the smart energy systems innovation theme.

Enabling a smarter, more efficient energy system is a priority for government and in the Upgrading our energy system: smart systems and flexibility plan published in July 2017, the government committed up to £70 million to smart energy system innovation. Across government, Innovate UK, Research Councils, and BEIS expect to invest around £265 million in smart systems research, development, and demonstration.

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## Building a smarter grid in the Netherlands

Grid operator Enexis Netbeheer, based in the Netherlands, is building an Internet of Things-inspired smart grid and has 900,000 connected smart electricity meters already, with more planned. Deployment of this many connected devices needs managing. Around the world, smart meter adoption is booming, as governments and individuals aim to increase electricity grid flexibility using the Internet of Things (IoT).

In 2016, about 700 million smart meters had been installed worldwide, with \$14.3bn being spent on them throughout the year.

In the Netherlands specifically, as part of its plan to upgrade its energy system to increase sustainable energy and decrease carbon emissions, the government has begun a rolling out smart meters across the whole country.

The Intelligent Grids Innovation Programme, run by the Dutch Government, is also funding 94 pilot projects aiming to improve grid technology and smart metering.

[Read more....](#)

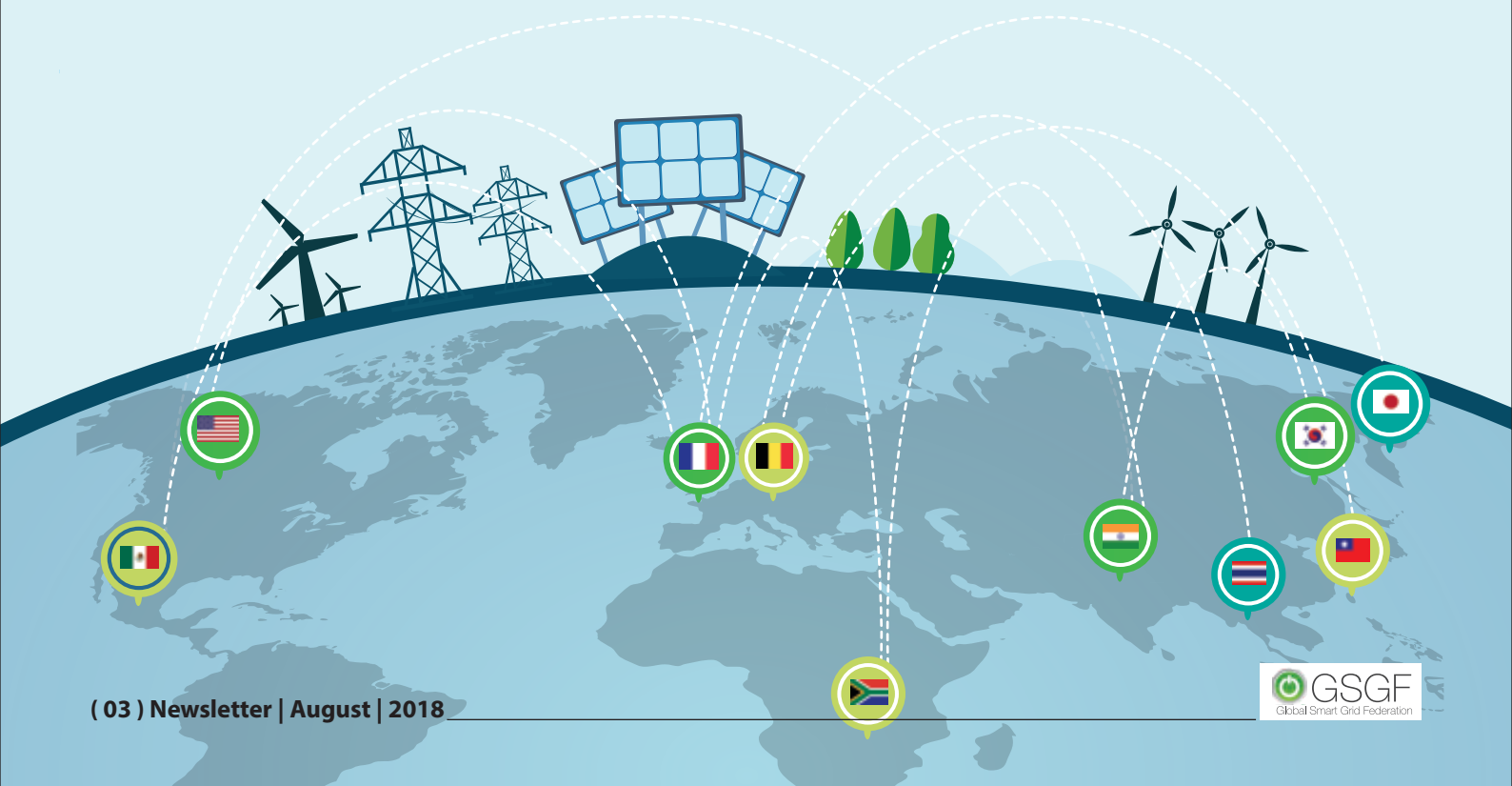
## National Grid set to tackle electric vehicle boom with 'smart charging'

There could be as many as 11 million electric vehicles on British roads by 2030 and 36 million by 2040, in what would be a major upheaval for the UK's energy system.

National Grid's latest report on the future energy system overshoots the Government's own targets which call for an end to petrol and diesel car sales by the same year.

The acceleration of the electric vehicle market will bolster demand for electricity, which is already in relatively tight supply, but the dual growth in battery storage will dramatically reduce the amount of new power generation projects which will be needed.

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# Member Updates



Smart Community Summit 2018 Panel Discussion

## Japan Smart Community Alliance co-hosts Smart Community Summit 2018 with NEDO

The Smart Community Summit 2018 focused on "Realizing the Renewable Energy Best Solution" On June 13, the Japan Smart Community Alliance (JSCA) and the New Energy and Industrial Technology Development Organization (NEDO) co-hosted the Smart Community Summit 2018 in Tokyo. Power system experts from the United States, Germany, and Japan gave lectures in the "Perspective of Renewable Energy Introduction Beyond the Limit of Grid" session, and experts in the EV and charging standards fields also shared up-to-date information and exchanged opinions through a series of lectures and a panel discussion in the "EV Values and Possibilities in the Grid" session.

# GSGF Updates

## ISGAN and GSGF reconfirm commitment to mutual cooperation

ISGAN has renewed its Memorandum of Understanding with the Global Smart Grid Federation Following their successful cooperation during the ExCo14 meeting in Belgium, and the request of the ExCo during ExCo15 in Australia, ISGAN and GSGF an organization representing the private sector of Smart Grid stakeholders, formalized their wish for further collaboration in an MoU.

This year ISGAN and GSGF have also announced the winners of the fourth annual ISGAN Award of Excellence, during a special ceremony at the Ninth Clean Energy Ministerial (CEM9) in Copenhagen, Denmark. Ibrahim Baylan, the Swedish Minister for Policy Coordination and Energy, presented the ISGAN Award to the winning projects.

## Partnered Events: Supported by GSGF



**World Microgrids Congress and Exhibition**  
September 5-7/2018, Miami



**4th Annual Grid Analytics Europe 2018,**  
September 25-27/2018, London



**EP China 2018**  
October 15-17/2018, China



**IEC 61850 Global 2018**  
October 16-18/ 2018, Germany



**India Smart Utility Week 2019**  
March 12 - 16/ 2019  
Manekshaw Center, New Delhi, india



**ICSG Istanbul 2019**  
April 25-26, 2019, Turkey

For participation in the above events  
please write to [info@globalsmartgridfederation.org](mailto:info@globalsmartgridfederation.org)

# GSGF Updates

GSGF appointed 3 Ambassadors in 3 Geographies (Americas, Europe & Africa; and Asia Pacific – including Middle East) to Serve as the primary contact and manage the GSGF relationship with relevant stakeholders in various countries in their respective region; Participate in smart grid related projects and conferences in the region on behalf of GSGF; Serve as the spokesperson for the GSGF through speaking engagements and media interaction, as required and; Serve as an Expert to disseminate knowledge and expertise upon special request.



## **Mr. Ravi Seethapathy** GSGF Ambassador – Americas

After a 35+ year career in Canadian Electric Utilities and Power Systems area, Ravi Seethapathy is now an Advisor to the Utility/Industry. He sits on the Boards of Power Transmission & Distribution (IC) Division of Larsen & Toubro, India; Smart Grid Canada, India Smart Grid Forum and Biosirus Inc. His current international technical activities include (1) International Convener CIGRE WGC6.28-Remote Islanded Grids; (2) Member, IEA PVPSTaskforce 14 – High Penetration PV in Electricity Grids; (3) CSA/Expert IECTC 120 - Energy Storage; (4) Member, CSA/SysC LVDC; and (5) Chair, WG 5 (Renewables and Microgrids), India Smart Grid Forum;



## **Mr. Marc Boillot** GSGF Ambassador –Europe & Africa

Marc started his career at Electricité de France R&D in 1980. He then worked in North America for ten years. In 1990 he opened the EDF representative office in Washington D.C. and in 1997 he became head of Gaz de France Quebec in Canada. During his career Marc was involved in more than 150 projects, in Europ (France, Belgium, the Netherlands, Austria, Italy, Spain, Germany, UK etc.), Africa (Cameroon, Nigeria, Ghana, Ivory Coast, Sierra Leone etc.), Asia (Japan, China, Malaysia, Taiwan, Laos etc.) and the Americas (the USA, Canada, Mexico, Brazil, etc.).



## **Dr. Ir. Cheong Kam Hoong** GSGF Ambassador – Asia Pacific

Dr. Ir. Cheong Kam Hoong has more than 30 years of experience in the power utility industry (TNB, which is the largest power utility in Malaysia) and 4 years in the University (University Tenaga Nasional, a wholly owned subsidiary of TNB). While in the power utility industry, he has gained vast experience in the planning, operation and maintenance of the power distribution system as well as the management of a distribution district office. He is also a registered professional engineer, a panel examiner with the Board of Engineers, Malaysia (BEM) & a paper reviewer for the IEEE Transaction on Power Delivery.

For more details visit : <http://globalsmartgridfederation.org/page/493/gsgf-ambassadors>

# GSGF at a glance

## Chartered Members



Think Smart Grids



India Smart Grid Forum



Japan Smart Community Alliance



Korea Smart Grid Association



Smart Grid Mexico



Industrial Technology Research Institute



GridWise Alliance

## Utility Members



Electricity Generating Authority of Thailand (EGAT)



Electricity Supply Commission of South Africa (ESKOM)



EDM Mozambique



Green Business Certification Inc.



Florence School of Regulation (FSR)

## Associate Members

## Current Working Groups

- Smart Grid Roadmaps:  
Chair – Smart Grid Mexico
- Smart Grids for EVs:  
Chair – Think Smartgrids, France

## Working Groups in Pipeline for 2018

- Blockchain for Utilities
- AI and Advanced Analytics for Utilities
- Robotic Process Automation for Utilities

# Contact us for more information.

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