

Luciano Martini, New Chairman of ISGAN



Luciano Martini, Director Transmission and Distribution Technologies, RSE has been appointed as the Chairman of the International Smart Grid Action Network (ISGAN), a technology collaboration program of the International Energy Agency (IEA) and a strategic platform to support high-level government attention and action for the accelerated development and deployment of smarter, cleaner electricity grids around the world. It is an intergovernmental body that brings together the 26 countries responsible for 90% of global investments in green technologies. Created in 2011 from a joint idea of

the United States, Korea and Italy. The appointment of new chair, Luciano Martini took place during the Executive Committee meeting held in October 2019. Martini was the former Vice Chairman, succeeded by Karin Widegren. Martini has 25+ yearlong working experience and he is actively engaged in many interesting and challenging national and international initiatives and Research & Development projects in the field of smart grids, applied superconductivity and renewable energies. Over the years he developed both technical and managerial skills collaborating in international environments as the International Energy Agency (IEA), CIGRE, CIRED and IEC working groups, and he has been repeatedly recruited by organizations as the European Commission and the US DOE as independent expert to review research proposals and publicly funded R&D projects.

Global Smart Grid Federation (GSGF) and International Smart Grid Action Network (ISGAN) launched the Award of Excellence competition ("Competition") to recognize Excellence in Smart Grid projects, policies and programs around the world. ISGAN is implementing the Award of Excellence competition in partnership with the GSGF and its Best Smart Grids Project Award. The theme for this Award of Excellence competition is "**Excellence in Smart Grids for Digitalization Enabling Consumer Empowerment.**"

The ISGAN Award of Excellence seeks to leverage leadership and innovation in smart grids to accelerate global exchange of best practice and promote replication or adaptation of proven concepts in other markets, countries, and regions. By providing a showcase for exemplars in the global smart grid community, the award also draws attention to the value offered by smart grid systems.

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Global Stories on Smart Grid

Egypt Prepares for a Renewable Energy Revolution

Mohamed Shaker, the minister of electricity and renewable energy, announced in mid-October that the country is to inaugurate the 1.4-GW Benban Solar Park by November. Located in the Aswan Governorate in Upper Egypt, the solar park has attracted some \$2bn in investment, with around 30 companies already establishing energy projects and commercial operations at the site. An important aspect of Benban's success has been the government's commitment to purchase electricity produced at the site for the next 25 years, which has helped to incentivize foreign companies. On top of attracting international investment, the project has involved more than 100 Egyptian companies, creating 640 permanent jobs and 18,000 temporary ones. The announcement of the official opening at Benban comes at a time when other renewable projects are being expanded.

Read more: <https://bit.ly/2JN88Se>

Hydrogen Microgrid Demonstrated at Thailand Botanical Park and Research Center

A botanical garden in Thailand is trying to give a boost to the hydrogen microgrid concept, an approach that is still nascent. The 600-acre Nongooch Tropical Botanical Gardens in Pattaya set up a demonstration microgrid in early October to show that hydrogen can act as an energy storage solution for local grids, one that doesn't require fossil fuels. Nongooch partnered on the project with Enapter, a manufacturer of modular hydrogen systems using AEM electrolysis. Nongooch's hydrogen microgrid isn't the first Enapter has installed. In collaboration with Electricite de France and hydrogen power systems specialists Powidiant, Enapter deployed an off-grid microgrid that has been operating since 2017 at the Cirque de Mafate caldera on Reunion Island, a French overseas territory in the southern Indian Ocean. Dubbed SAGES (Smart Autonomous Green Energy System), it provides 10-days of energy storage capacity, does not use any fossil fuels and provides electricity to several houses, a school, a workshop and medical dispensary, said Enapter co-founder Vaitea Cowan.

Read more: <https://bit.ly/2q8SF8c>

World's Largest Storage Battery — 2.5 GWh — To Replace Gas Peaker Plants in Queens, New York, USA

A site on Vernon Avenue in Queens, New York, once was home to 16 gas powered peaker plants. Only 2 remain in operation today. Soon, all of them will be demolished to make room for a 316 MW/2528 MWh storage battery that will be the largest in the world. The proposal to build the new facility was approved in the last week of October by the New York Public Service Commission.

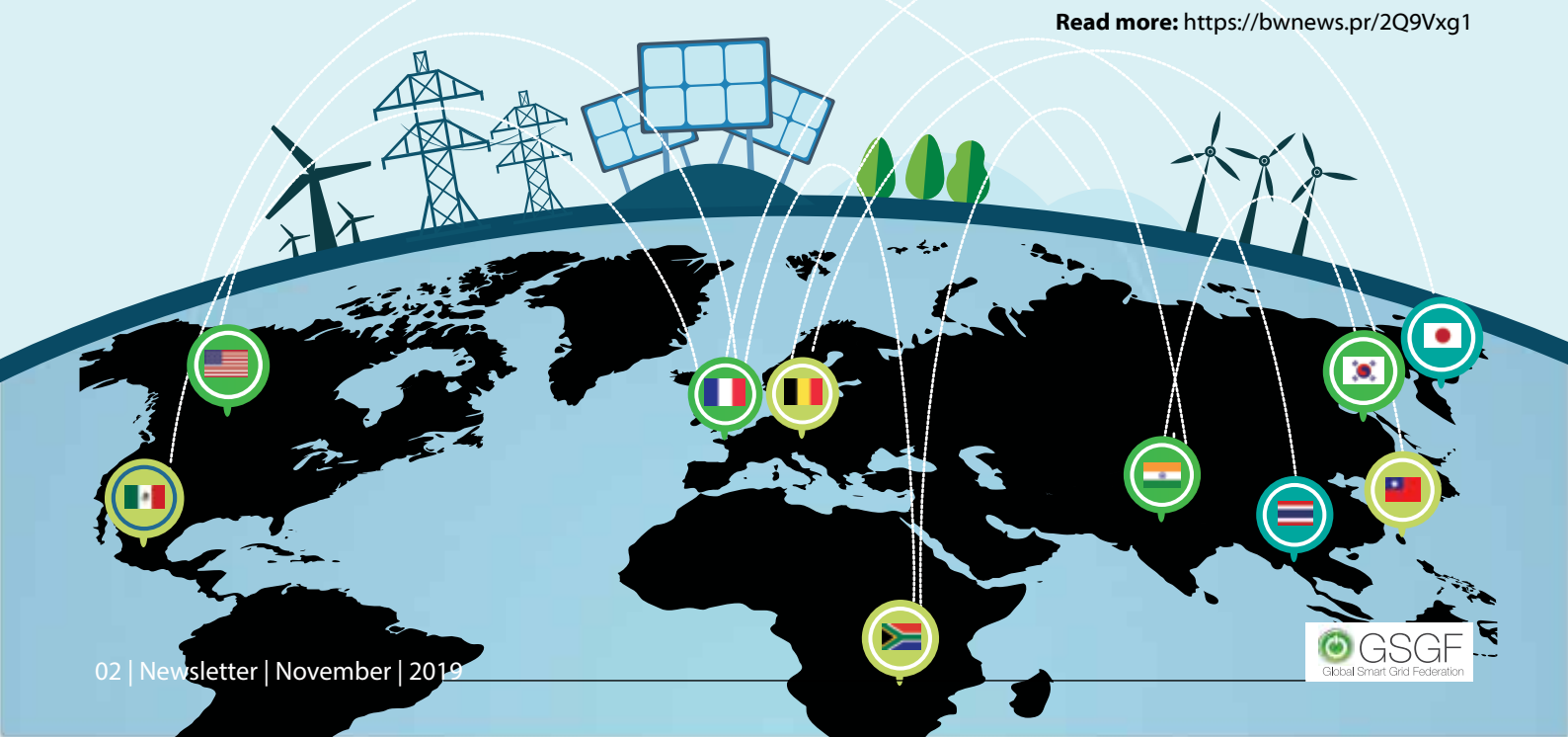
Ravenswood Development, the current owner of the peaker plants, plans to build out the project in three phases — 129 MW, 98 MW, and 89 MW. The first phase should be completed by March 2021. No timetable has yet been announced for completion of the second and third phases of the project. Once fully deployed, the 316 MW of power would meet just over 10% of the New York State's goal of 3,000 MW by 2030. The proposed storage project will consist of 136 battery storage and inverter units, 64 of which will be double stacked on the property. In the specifications submitted to the PSC, the Sunny Central Storage 2500-EV-US Inverter is listed as the inverter that will be used at the site. A study suggests that when in operation, the enormous battery will raise the noise level at the site by only 3 decibels, an important consideration because there is a residential community nearby.

Read more: <https://bit.ly/36mSdno>

Global Electric Vehicle (EV) Charging Station Market 2019-2023: 33% CAGR Projection Over the Next Five Years

The growing demand for energy-efficient automobiles is one of the major reasons for the EV charging station market growth. In a bid to reduce environmental pollution caused by gasoline and petrol vehicles, the use of energy-efficient automobiles such as EVs is being promoted by governments across the world. The adoption of EVs will help in reducing the global carbon footprint. Countries such as China, the US, and some countries in Europe are the major adopters of EVs. The technological advances in EV charging will have a positive impact on the market and contribute to its growth significantly over the forecast period. Though there is an increase in the adoption of EVs, one of the major constraints in the market happens to be the limitations in their charging infrastructure. To overcome this hurdle, some of the major companies are focusing on developing better charging technologies. The growing need for fast and convenient charging systems for various EVs has elevated the need for EV charging stations equipped with better technology. The increasing focus on reducing the charging time for EVs has increased the adoption of fast charging networks such as universal fast chargers, ultra-fast chargers, and bidirectional fast chargers. Such advances in EV charging technology will drive market growth over the forecast period.

Read more: <https://bwnews.pr/2Q9Vxg1>



Global Stories on Smart Grid

China to cut Renewable Energy Subsidy

Total subsidies for solar projects are set at 2.63 billion yuan, while wind farms will receive 2.97 billion yuan and biomass generators will get 73.39 million yuan

China will cut its renewable power subsidy to 5.67 billion yuan (806.50 million USD) in 2020 from 8.1 billion yuan in 2019. The subsidy for 2020 will be allocated to wind farms, biomass power generators and distributed solar power operators, as well as solar power projects for poverty alleviation purposes, in 11 regions across the country. Because of a decline in manufacturing costs, China has been scaling back the amount of subsidies to renewable power providers, who are expected to compete with coal-fired utilities and achieve “grid price parity”.

Read More: <https://bit.ly/2XFMvZL>

Indonesia slashes capacity charges for Industrial Rooftop Solar

A political agreement on European tyre labelling was reached between the European Parliament, the Council and the Commission. The Commission proposed the new Regulation on tyre labelling as part of the clean mobility package. The new rules make the tyre labels more visible, more future proof and more accurate. They improve enforcement and market surveillance and they update the label scales to optimise the information on the label. The new more modern design will be aligned with that of the well-known EU energy label, while maintaining its original size and pictograms that are well known by consumers.

Read More: <https://bit.ly/2qE0J1g>

Global Smart Grid Market Top Key Players are Siemens, ABB, General Electric, Itron, Schneider Electric, Belden

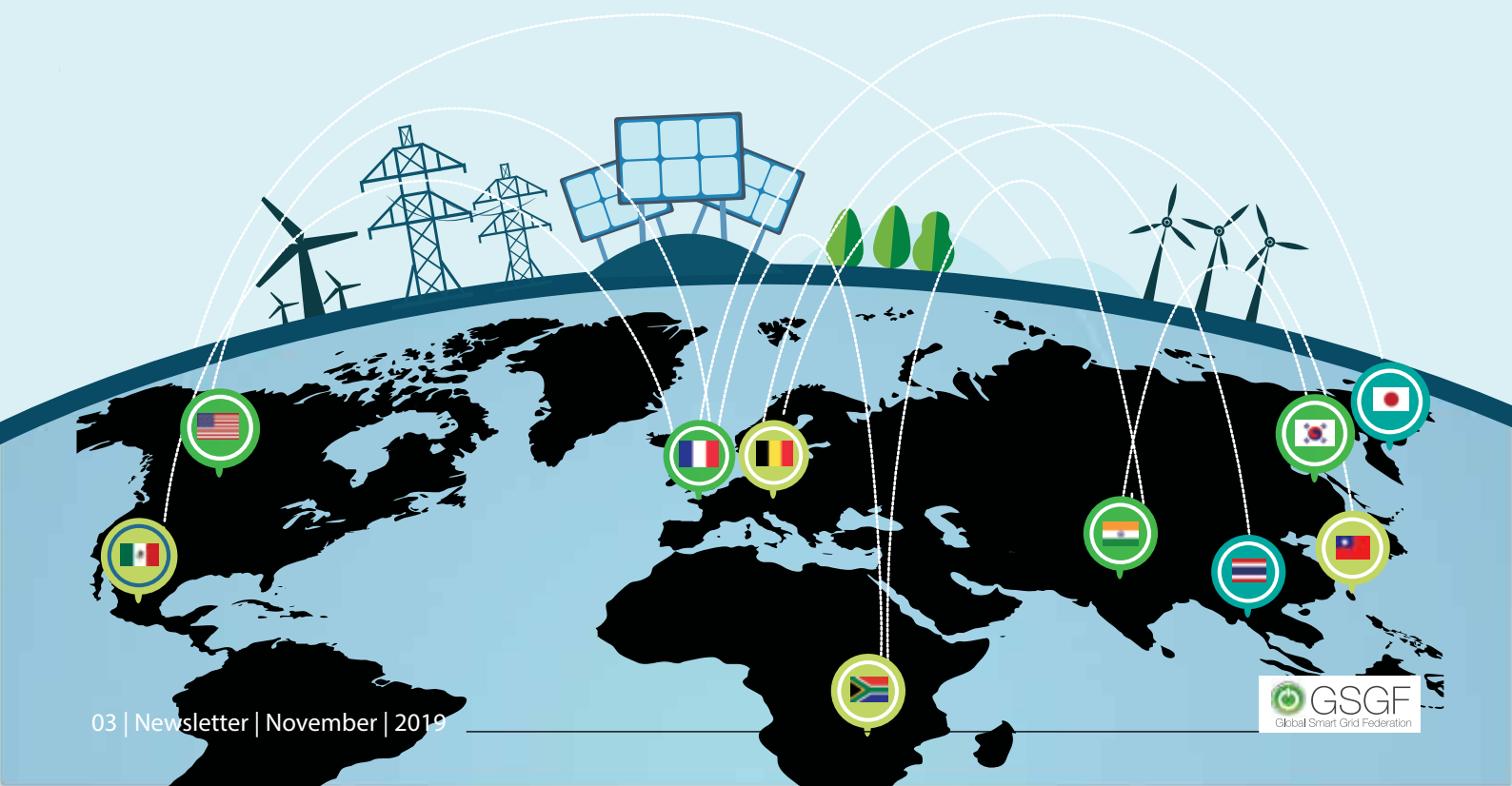
Zion Market Research “Global Smart Grid Market Set For Rapid Growth, To Reach Value Around USD 60.29 Billion By 2024” Research Report provides the newest industry data and industry future trends, allowing you to identify the products and end users driving Revenue growth and profitability. Global Smart Grid Market Report concentrates on the strong analysis of the present state of Smart Grid Market which will help the readers to develop innovative strategies that will act as a catalyst for the overall growth of their industry. This research report segments the Smart Grid Market according to Type, Application and regions. It highlights the information about the industries and market, technologies, and abilities over the trends and the developments of the industries. After deep research and analysis by the experts, they also disclosed the data about the strong contenders contributing in the market growth and expansion and challenging one another in terms of demand, supply, production, value estimation, revenue, and sales.

Read more: <https://bit.ly/339Ore6>

China launches blockchain-based Smart City ID system for Interoperability

China has launched a blockchain based smart city identification system to support interoperability between infrastructure, data and cities. The City ID code identification system was launched by the Chinese Urban Development Research Association, the Chinese Academy of Social Sciences, Zhongguancun Industry & Information Research Institute of Two-dimensional Code Technology (ZIOT) and the Global Urban Smart Engineering Technology Research (Beijing) Centre. The system developed, distributed and managed in China, is based on blockchain technology and underpinned by unified issuing rules, distributed storage analysis and ‘tamper-proof’ security. Each city, department and piece of infrastructure will be assigned a unique global digital identification code. For example, the city code of Shijiazhuang is MA.156.1301.

Read More: <https://bit.ly/2NFT0Zb>



Global Stories on Smart Grid

Smart City IoT Project Launches for New York City, US

Key Highlights: Transition Networks' PoE solution will connect and power cameras and sensors at over 10,000 traffic intersections that collect this vital information.

Transition Networks, a provider of IoT and edge connectivity solutions, recently announced the start of an intelligent transportation project with New York City's transportation agency to connect, power and manage traffic data via its hardened TAA-compliant, Power-over-Ethernet (PoE+) switches. This application is designed to deploy intelligent transportation infrastructure citywide and reinforce the relevance and timeliness of Transition Networks' strategy of developing Smart City Internet of Things (IoT) solutions. Transition Networks' PoE solution will connect and power cameras and sensors at over 10,000 traffic intersections that collect this vital information. In addition, key features on the Transition Networks' switches reportedly will save the agency time and costs associated with maintenance. Transition Networks' Auto Power Reset (APR) feature provides the ability to remotely reboot or manage Transition Networks' equipment fixing the issue within minutes and eliminating all of the lane closure requirements. The included Device Management System (DMS) software is designed to create an interactive map to see all connected devices, enabling the agency to pinpoint issues and quickly take action.

Read More: <https://bit.ly/2rKiHPV>

Indian Electricity Distributor ready to trial P2P Solar Trading

Key Highlight: Peer-to-Peer (P2P) Energy Trading through blockchain – enabled solutions

Electricity distributor BSES Rajdhani Power Limited (BRPL) has partnered with Power Ledger, a global leader in blockchain-based renewable energy trading, to install a large-scale peer-to-peer (P2P) energy trading trial in Delhi, India. BRPL is the first electricity distribution company in India to use Power Ledger's technology to trial P2P solar trading. The trial initially comprised 5-6 MW of existing solar infrastructure, servicing a group of gated communities (CGHS) in the Dwarka region.

The trial will be expanded to include blockchain-enabled solutions for group net metering, virtual net metering, electric vehicle charging and virtual power plant applications in the near future. During the trial, residents with rooftop solar infrastructure sold excess solar energy to their neighbours, rather than letting it spill back to the grid. This will enable participants access to cheaper, renewable energy and prosumers (those that own solar power infrastructure) to monetise their investment in solar assets.

Read more: <http://www.indiasmartgrid.org/viewnews.php?id=6125>

Smart Grid Events

January 6th -9th 2020, FloCon 2020, SAVANNAH, GA
<https://resources.sei.cmu.edu/news-events/events/flocon/>

January 13th – 16th, 2020: World Future Energy Summit, Abu Dhabi, <https://www.worldfutureenergysummit.com>

January 28th - 30th, 2020: DistribuTECH 2020, San Antonio, TX, USA, <http://www.distributotech.com>

March 3rd - 7th, 2020: India Smart Utility Week, New Delhi, India
<http://www.isgw.in/isuw-2020/>

April 08th – 09th, 2020: 8th International Istanbul Smart Grid & Smart Cities Congress and Fair 2020, Turkey, <https://www.icsgistanbul.com/en/#>

April 20th – 23rd 2020, IEEE PES T&D 2020, Chicago, Illinois, United States, <https://www.ieeeet-d.org/>

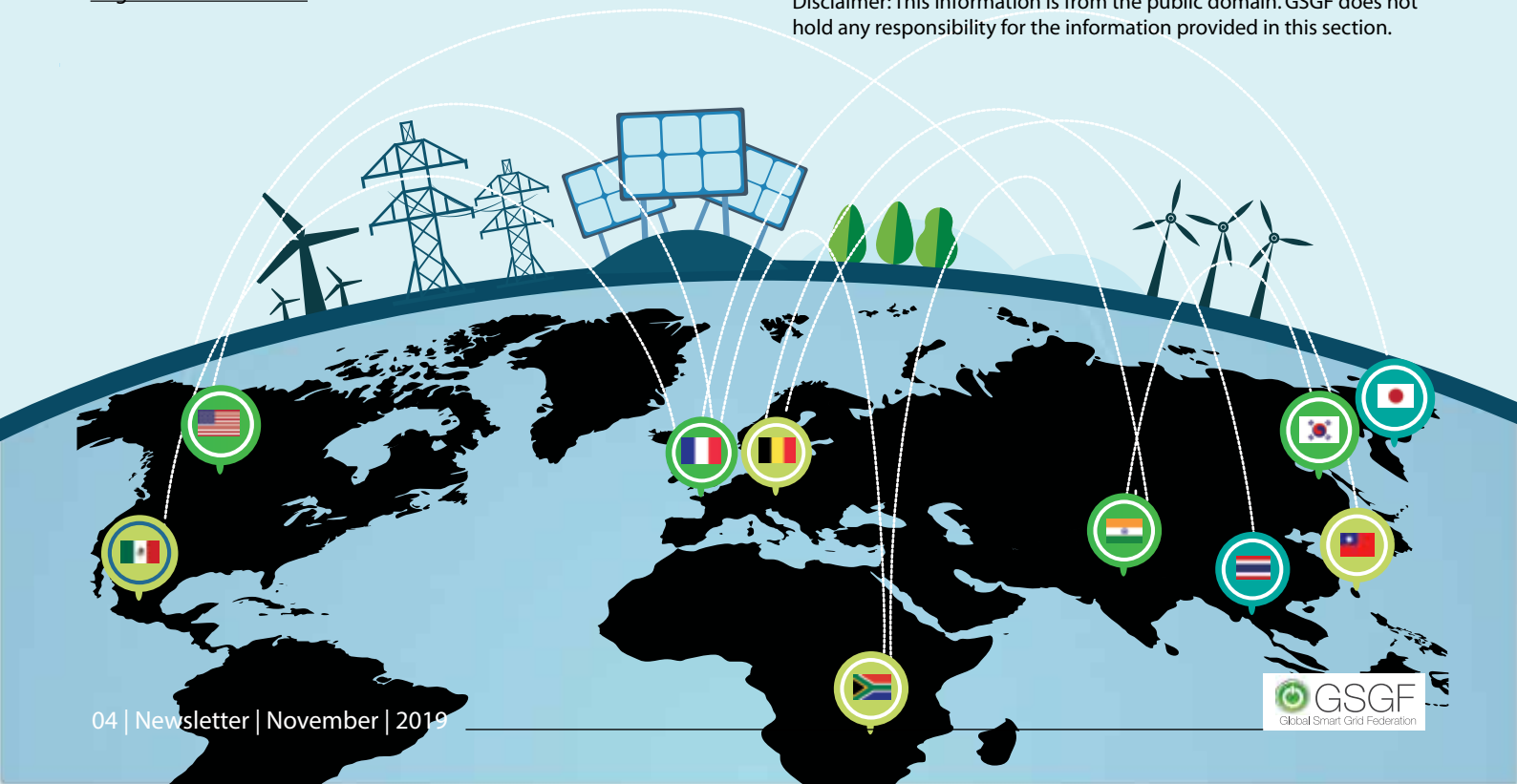
May 12th -14th, 2020: African Utility Week, Cape Town, South Africa, <https://www.african-utility-week.com/>

May 13th -14th, 2020: Innogrid 2020+ Brussels, Belgium
<https://www.innogrid2020.eu/>

June 04th - 05th, 2020: CIRED Berlin 2020 Workshop, Berlin
<http://www.cired2020-workshop.org/>

August 19th -20th, 2020: Australian Utility Week - Melbourne, Australia, <https://www.powerandutilitiesaustralia.com/>

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Member Updates



New Technologies at the service of Energy Grids

A new Study on New Technologies for Energy Grids was published by Think Smartgrids' Data and Digital Transformation Working Group, led by DCbrain and Cosmo Tech. Several of them show great promise for improving the efficiency and sustainability of our energy systems.

Think Smartgrids' Data and Digital Transformation Working Group, initiated in 2017 by two of its members, Cosmo Tech and DCbrain, had conducted a first study last year on digitalization projects carried out throughout Europe by network operators. The study made it possible to draw up an overview of the digital transformation of European utilities, as well as the opportunities and constraints it represents.

On the basis of this first study, the digitalization Working Group also identified the new technologies used by electricity grid operators. Four technologies in particular stood out and were the subject of a new study: Machine Learning, Digital Twins, Reinforcement Learning and Blockchain.

New technologies hold great promise for improving the planning, efficiency and sustainability of energy systems. These technologies build a bridge between the electrical engineering ecosystem and the IT world, which accompanies the deployment of smart grids.

These technologies, which existed ten years ago at the concept stage, are now spreading throughout Europe, first in an experimental form, and some of them already in the context of industrial deployments. Think Smartgrids' working group has thus analyzed various use cases, with the aim of enlightening energy stakeholders on the potential offered by new technologies, but also to enable them to better anticipate the ongoing revolution in our energy systems, a key issue in the fight against global warming.

Download the study: [ThinkSmartgrids_livret data_11.05.2019](#)

Events Supported by GSGF



For participation in the above events please write to info@globalsmartgridfederation.org

The nature of the power business:

Interview with Amir Hamzah Azizan, The New Chief Executive Officer of Tenaga Nasional Berhad



When the new Chief Executive Officer of Tenaga Nasional Berhad (TNB) took on the job of steering TNB into its next phase he already knew it would be an uphill task.

Datuk Seri Amir Hamzah Azizan knew that he would have to deal with the challenges arising from reforms in the power industry. He almost faced with an unexpected obstacle - a surge in complaints about "overcharged bills". The issue was amplified and made worse by viral posts shared across social media, and the utility firm had to deal with angry customers demanding explanations and refunds.

Amir, who is the son of the late former Petronas President Tun Azizan Zainul Abidin, said many lessons were learnt from the incident, which occurred hardly a month after he joined TNB.

TNB needs to improve the way it communicated with its customers and stakeholders to prepare them for such changes. One of the reasons that many customers thought they had been overcharged, was due to the accuracy of the new smart meters installed at their homes. Another factor was the scorching weather at the time of the installation of the smart meters, which resulted in higher consumption of electricity. There was also a system glitch at TNB, which resulted in the company not being able to bill some of its customers for five days.

Once the glitch was sorted out, customers had to pay for the additional five days the following month, and this naturally pushed the bill up, says Amir, who is a Liverpool football fan and father of three girls. He further added that TNB dealt with the issues in an orderly and professional manner. Amir says that seven months down the line he truly enjoys his journey with TNB. TNB needs someone to rally its people together and outline a clear direction for the company. This is what he hopes to accomplish during his time at TNB.

Link to read the interview : <https://bit.ly/2RAaokw>

Article submitted by: Dr Cheong Kaam Hoong , GSGF Ambassador (Asia & Pacific)

GSGF at a glance

Charter Members



Think Smart Grids



India Smart Grid Forum



Japan Smart Community Alliance



Korea Smart Grid Association



Smart Grid Mexico



Prakarsa Jaringan Cerdas Indonesia (PJCI)



GridWise Alliance

Utility Members



Electricity Generating Authority of Thailand (EGAT)



Electricity Supply Commission of South Africa (ESKOM)



EDM Mozambique



Tenaga Nasional Berhad Malaysia

Associate Members



Green Business Certification Inc.



Florence School of Regulation (FSR)



Energy Block Chain Consortium

Current Working Groups

- **Smart Grid Roadmaps:**
Chair-Smart Grid Mexico
- **Smart Grids for EVs:**
Chair - Think Smartgrids, France
- **Flexible Grid-Towards Customer Enablement**
Chair- Ambassador, Americas

Working Groups in Pipeline

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

Contact us for more information.

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