

# **CEM** matters

Newsletter #2

December 2018

Welcome back to CEM matters!

Autumn has been a very busy time for many CEM work streams. In this issue you will find an article about work streams teaming up to offer workshops; meet Paula Estévez Weinstein, the Chilean CEM Sherpa in the inaugural portrait of our new series The CEM Family; read about the latest activities of the CEM's initiatives and campaigns; discover our new brochure; learn about the Youth Leaders Forum that will take place during CEM10 – MI-4 in Vancouver, Canada; and see what else is coming up in the next few months.

We hope you enjoy our newsletter. Please share with colleagues and do get in touch if you would like to get featured or to let us know what you think.

We would like to wish you all the best for the upcoming festive break and CEM matters will be back in the New Year.

Happy holidays, CEM Secretariat



# CEM Initiatives Team up to Host Country Focused Workshops

# **CEM Days in Brazil**

**On November 21-23, 2018**, the EPE (Energy Research Office of Brazil) hosted in collaboration with the IEA, NREL and GIZ the CEM Days Workshop on the theme Grid Integration of Variable Renewables: Challenges and Approached for Energy

Planning.



Taking advantage of the CEM framework, this two days event gathered over 180 energy decision makers, technical experts and regulators from Brazil as well as from other Latin American countries such as Chile and Uruguay as well as experts from the US and Europe. The IEA-coordinated Power System Flexibility (PSF) Campaign and NREL-operated 21st

Century Power Partnership (21CPP) and Distributed generation campaign provided significant content and expertise and the CEM Secretariat delivered the opening and closing presentations, highlighting the advantages of the CEM's multilateral model of collaboration.

The first day focused on the dominant trends, gaps and innovative approaches in the planning of power systems that have increased shares of variable renewables. Different international perspectives were used to benchmark and identify the common challenges, ongoing efforts and best practices. The participants had the opportunity to discuss a wide range of issues including market and regulatory frameworks related to energy systems planning, the increasing importance of flexibility in the power system and various strategies to secure this flexibility, distributed generation, as the well as the role of data collection and modelling.

The second day included additional technical discussions of these issues focusing on the concepts of capacity and flexibility as well as on technical issues specific to the Brazilian grid and its need to integrate more variable renewables. On the last day, participants considered the role of data and modelling tooling in addressing emerging challenges caused by the larger shares of variable renewables.

The CEM Days event held in Rio de Janeiro illustrates very successfully how the CEM framework and its network of experts can bring an international perspective to domestic clean energy issues and challenges. It also exemplifies how an integrated approach, bringing expertise from multiple CEM work streams, can bring benefits to the CEM community as a whole by promoting a constructive dialogue and experience sharing between countries and institutions.

# Joint 21CPP and LTSE workshop in China

On 20 October 2018, the 21st Century Power Partnership (21CPP) and the Long-term Energy Scenarios for Clean Energy Transition (LTES) held a joint workshop during the International Forum for Energy Transitions in Suzhou, China. The China Power System Modelling Workshop: Enabling Transformation –was an opportunity to demonstrate how advanced power sector modelling tools can support the transition to clean electricity systems. This one-day event was attended by policymakers, government representatives, power system operators, researchers and representatives of international organisations and strengthened the knowledge

exchange between the modelling community and policymakers.

The summary is available here.

# The CEM family

Welcome to our new section: the CEM family, introduced in the form of a Q and A, we interview colleagues who are working on CEM issues. In this instalment, we present:



Paula Estévez Weinstein, Chile's CEM Sherpa

# Can you tell us about your professional background and your involvement with the CEM?

My professional background is in civil engineering, and I hold a Master of Science in Earth Resources Engineering from Columbia University, NY. I have been interested in science since childhood, but I discovered the field of renewable energy through courses at Columbia University. While I was working on my degree, I also had the opportunity to collaborate on post-doctoral work on wind and solar energy in New York and Madagascar.

When I returned to Chile, I began working in the private sector at an energy company. However, I made the decision to work in government because I want to contribute to my country's public policies and to social wellbeing. This is how I came to my current position as Head of International Affairs at the Ministry of Energy.

I was privileged to attend my first Clean Energy Ministerial in Mexico, where Chile was an observer country in 2015. This was my first introduction to the impressive work done by CEM. During our country's participation in the Clean Energy Ministerial in San Francisco, USA in 2016 we made the decision to become members and we formalized our participation soon afterwards.

### What is your vision/hope for a clean energy future?

My vision is that in the future our citizens will be able to take advantage of the clean energy sources that surround us, and that this will improve their daily lives. I imagine that in the future distributed generation will allow people to produce their own energy, that people living without electricity in remote regions will be able to generate power using renewable energy sources, that electric mobility will allow for transport with lower emissions, as well as other impacts that clean energy can make on people's daily lives.

### What is the best kept secret about Santiago or Chile?

Chile's geography is fascinating! I always tell people that it takes six hours to travel from the north of Chile to the south by airplane, while travelling from east to west only takes two hours by car. We have the world's driest desert in the north, glaciers in the south and even Antarctica. President Sebastián Piñera has said that we are a country that is poor in traditional energy sources, but we are rich in the energies of the future.

### Outside of clean energy issues, what else are you passionate about?

I am passionate about working in the public sector. And, of course, my husband and three children are the centre of my personal life.

# Reports from workstreams



# The International Smart Grid Action Network (ISGAN)

On 23 November 2018, Mission Innovation and ISGAN signed a Letter of Intent to increase cooperation and further explore opportunities to hold joint activities on strategic topics of mutual interest in the field of smart grids. The "1st CEM-MI Joint Workshop on Cooperation to Accelerate Smart Grid Market Uptake" will take place in May 2019, during CEM10 in Vancouver.



### Power System Flexibility (PSF)

The PSF network has recently welcomed new members. Following the successful, joint organisation of the Rio CEM Days, Brazil joined the Power System Flexibility Campaign. Brazil's engagement will be key in highlighting evolving practices for reliability planning for the energy transition in countries with high shares of hydropower.

On 10 December 2018, the ISGAN Academy on Smart Grids offered a webinar highlighting the winning projects of the 2018 ISGAN Awards of Excellence Competition. The webinar examined the impacts on a local distribution grid when smart homes, batteries, EV charging stations and heat pumps react to the power system, improve the flexibility of the grid and reduce customer losses from power disruptions.

ISGAN Annex 2 (Smart Grid Case Studies) has recently published its first edition of the Energy Storage Systems Case Book. It presents thirteen cases from five countries focusing on ESS applications that support stable and flexible smart energy systems. The final edition, with additional cases, will be launched at CEM10 in Vancouver in May 2019. To find out more, click here.



# Long-term Energy Scenarios for Clean Energy Transition (LTES)

On 29 November 2018, LTES campaign held a panel discussion at the Global Sustainable Technology & Innovation Conference in Brussels. The session brought together expert government planners and scenario developers to explore how LTES can mitigate the coordination risks that are created by the expansion and decentralisation of actors and technologies, and how LTES can be harmonised among national and sub-national levels actors as well as other stakeholders. To find out more, click here.



Investment and Finance Initiative

From the industry sector, Fraunhofer ISIT, Nord-Deutsche Energiewende 4.0 and NEXT Kraftwerke have joined the PSF network. Their participation will strengthen the campaign's understanding of the technical solutions for flexibility as an enabler of system decarbonisation.

Finally, the World Bank's ESMAP has also joined the PSF network, bringing expertise in direct technical assistance and focus on implementation further strengthens the campaign's ability to drive practical policy and market solutions. To find out more, click here.



Carbon Capture Utilisation and Storage Initiative (CCUS)

In October 2018, the CCUS Initiative held a meeting with ten CEM members in attendance. Reaching out to the financial community is a key leading theme for the Initiative's current work and this meeting was an opportunity to discuss with the World Bank how the financing conditions for CCUS projects can be improved. Members also took the decision to migrate the Carbon Sequestration Leadership Forum Policy Group activities to the CCUS Initiative.

The CCUS initiative, which is co-led by the US, the UK, Norway and Saudi Arabia, is fast becoming a key group, attracting new countries and increasing its collaboration with industry. Together and with the technical support of IEAGHG, the group is working to accelerate the global deployment of CCUS, lowering its cost and making CCUS more competitive. Learn more here.



In 7 December 2018, the Clean Energy Ministerial Investment and Finance Initiative held its inaugural webinar/kick-off call among country members. The call was an opportunity to discuss the initiative's work plan and provide an update on the country members' activities.

In November 2018, under the CEM IF initiative, the Overseas Development Institute (ODI) launched a report entitled "Clean energy project preparation facilities" in November, funded by the Danish Ministry of Energy, Utilities and Climate. To find out more, click here.



### **Electric Vehicle Initiative (EVI)**

On 11-13 November 2018, CEM's EVI took part in the first edition of the Paris Peace Forum. The EVI, with a membership of 15 countries active on the electric mobility front, was showcased as an example of international cooperation in the Forum's "Space for solutions". The event aimed at promoting cooperative and multilateral approaches for various global challenges, including energy and new technologies. Learn more.

On 30 November 2018, the newly established Global EV Pilot City Programme (PCP) of the Electric Vehicles Initiative, gathering close to 40 cities worldwide, held its first webinar dedicated to experience-sharing among its members and partners. The topic was *Uptake of Electric Mobility in Chinese Cities*, with a focus on the unique drivers of electric vehicle adoption in Chinese cities. Participants will reconvene in the Spring of 2019 for the second edition of the PCP webinar series. Find out more

# Regional and Global Energy Interconnection Initiative

On 19 October 2018, the Regional and Global Energy Interconnection Initiative, hosted its kick-off meeting in the margins of the 2018 Energy Transformation Forum, organised byGEIDCO, the initiative's operating agent. The meeting was an opportunity for country members to refine work plans and discuss expected outcomes and best approaches.

Participants agreed on two priorities: seeking best practices on cross-border integration from regional energy organisations; and undertaking the collection and analysis of trans-national power grid interconnection, with an aim to attract more partners. Members also suggested exploring potential common topics of interest with other CEM initiatives and thatGEIDCO should seek to organise joint events with other international organisations, such as the IEA and IRENA.

For more information about the workshop and upcoming events, please contact ruishi@geidco.org or chunyang-gong@geidco.org



Energy Management Working Group (EMWG)

New Global Database of ISO 50001 Certification Data - The EMWG is promoting a new global database of ISO 50001 management system certificates under development by the International Accreditation Forum (IAF), with several EMWG countries helping populate the database. This global database will help the market distinguish accredited certifications from non-accredited certifications. The database will also enable participating governments to track the growth of ISO 50001, recognize certified ISO 50001 facilities in their countries and measure the effectiveness of domestic ISO 50001 programs and initiatives. The database will be launched in 2019.

On 06-08 November 2018, UNIDO, the EMWG operating agent, participated in the 4th annual Green Production and Consumption Conference



### **Nearly Zero Energy Buildings Campaign**

On 19 June 2018, the directive (2018/844/EU) amending the Energy Performance of Buildings **Directive** was published. This revision introduces targeted amendments to the Directive aimed at accelerating the cost-effective renovation of existing buildings. The goal is to achieve a highly energy efficient and decarbonised building stock and to encourage the transformation of existing buildings into nearly zero-energy buildings, in particular by an increase in deep renovations. The revision also supports electro-mobility infrastructure deployment in buildings' car parks and introduces new provisions to enhance smart technologies and technical building systems, including automation.

Members have until March 10, 2020 to transpose its provisions into their national law.

# Consolidated version of the Directive (EU) 2010/31

On 26 August 2018, the first technical study on Smart Readiness Indicators (SRI) was delivered to the European Commission. This technical study investigates the definition and scope of the SRI, proposes a draft framework for the SRI and provides an initial evaluation of the potential impacts of the SRI. Work on the development of the SRI will continue to evaluate the implementation of the indicator, and further analyse its potential impacts.

### Consult the final report

The EU Building Stock Observatory monitors the energy performance of buildings across Europe tracking many different aspects including, energy characteristics of the building stock, energy efficiency levels, certification schemes, available financing measures and energy poverty levels. The Observatory also contains a database, a datamapper and factsheets.

in Foshan, Guangdong province, China and made a presentation on the **2018 updates to the ISO 50001 standard**. UNIDO also shared factors contributing to ISO 50001 success, including levels of quality support, the importance of a skilled workforce with ISO 50001 professionals, and the conveying the business case and benefits of ISO 50001 to end users.



### The Clean Energy Solutions Centre (CESC)

The CESC is partnering with the International Solar Alliance's (ISA) Technology Application Resource Centre Programme to deliver training courses and technical assistance including a free on-line training programme to build solar knowledge among ISA member governments. These targeted trainings consist of eight modules focused on building technical expertise, establishing solar policies, attracting project investors, and supporting grid integration and ongoing system operations. For more information, click here.



#### **NICE Future**

Since the launch of the Nuclear Innovation: Clean Energy Future initiative (NICE Future) launch at CEM9, six more countries have joined the US, Canada and Japan and members have engaged representatives from more than 80 organisations and individuals from more than 25 countries



Sustainable Cities and Eco-energy Towns initiative

On 5 October 2018, during the international forum "Russian Energy Week", representatives from Russia, South Korea, Saudi Arabia, and the CEM Secretariat discussed priorities actions for the Sustainable Cities and Eco-energy town initiative. In 2019, the initiative will focus its efforts on the development of environmentally friendly fuels in transport as well as the harmonisation of data collection in cities and rural areas

On 29 November 2018, in Indonesia, the Korea Energy Economics Institute and the ASEAN Centre for Energy held a joint workshop on "The Feasibility Study Eco-energy Town in Indonesia". The workshop used a similar Eco-energy Town model from Korea to analyse the feasibility of converting a landfill area in Ciangir, Tasikmalaya in Indonesia into a 4.4MW Waste-to-Energy plant that would contribute to improved energy access, environmental sustainability, as well as the socioeconomic development of this village. To find out more, click here.

worldwide.

On 13-14 November 2018, during the International Framework for Nuclear Energy Cooperation (IFNEC) annual Executive Committee and related meetings, NICE Future co-sponsored the conference "Challenges and Opportunities Facing Nuclear Energy in an Energy Transitions Context: innovation and actions to advance clean nuclear energy." Experts from around the world discussed the potential roles of nuclear energy among other clean technologies. Following the discussions, the IFNEC Executive Committee recognized the key role nuclear energy could play throughout the world as a reliable, resilient, secure, clean, and long-term source of electricity production.

On 13 November 2018, NICE Future initiative joined forces with the Millennial Nuclear Caucus and the International Youth Nuclear Congress to co-sponsor the "Nuclear Energy and Clean Energy Jobs" event in Tokyo, Japan. Attendees heard from experts from Nuclear Energy Agency, the U.S. Department of Energy, and the Tokyo Institute of Technology. However, the spotlight for the event was on millennial experts who described their roles in academia and research organisations and vision for the future. Attendees exchanged innovative ideas about nuclear energy in their home countries with participants from around the world.

# **CEM Publications**

The CEM Secretariat has published a new brochure about the CEM's unique collaborative model and the wide variety of year-round work carried out by its members and partners to accelerate the transition to a clean energy future.

The **brochure** presents the goals and objectives of each current initiative and campaign, highlights key actions as well as success stories and lists the participating countries, the operating agents and coordinators that

support the work of the CEM. You can download a copy of the brochure from the CEM's website.





# Upcoming events for 2019

# **Event in the spotlight**

## The CEM10-MI-4 Youth Leaders Forum



In May 2019, Canada will welcome fifty youth from CEM and MI countries to take part in a parallel event, the *Youth Leaders Forum* during CEM10- MI-4 in Vancouver, Canada.

Organised by Student Energy, this programme will give participants a unique opportunity to learn about the work of CEM and MI and demonstrate how young people can help accelerate the energy transition. Over several months as well as in Vancouver, participants will take part in several activities including engaging their communities on clean energy and innovation, interacting with clean energy leaders from CEM-MI

countries, and taking part in a Clean Energy hackathon and an Innovation jam.

Student Energy is accepting applications until January 6<sup>th</sup>, 2019. Participants must be between the ages of 18-30 and be a citizen from one of the CEM or MI member countries.

For more information, please contact Frederique Tsai-Klassen

# **Upcoming workstream activities**

#### LTES Webinar Series

These LTES webinars explain how long-term energy scenarios are developed and used by leading government and research institutions around the world to drive a rapid clean energy transition over the coming decades

December and January
Webinar series

#### **The 2019 Energy Management Leadership Awards**

The CEM in now accepting entries for the Energy
Management Leadership Awards. Organisations with an ISO
50001-certified energy management system have until
January 31, 2019 to enter this global competition.

Deadline: 31 January

Register here

# The Power System Flexibility campaign workshop and discussion pannel

It will be an opportunity for participants to learn more about the potentials of distributed energy resources, battery storage, and electrification for embedding flexibility in the clean energy transition.

# February 13 Paris, France

#### **Smart Grid Week in Stockholm**

the ISGAN will hold a workshop on "The future of electricity markets in a low carbon economy" as well as host a Knowledge Transfer Project event that will focus on innovative regulatory approaches to advance smart grids deployment.

### 1-5 April

Stockholm, Sweden

### **Carbon Capture Utilisation and Storage Initiative**

Following from a well-attended (200 persons) webinar on CCUS in Mexico in September, in the coming months the Initiative will be hosting further country webinars to disseminate current CCUS experiences by its member countries.

### 13-14 April

Washington D.C., USA

### 2019 EU Sustainable Energy Week

Will take place 17-21 June, 2019. This policy conference is the biggest European conference dedicated to renewables and efficient energy use in Europe. Keep track of upcoming details here.

### 17-21 June

Washington D.C., USA

### **NICE Future Countries Call (by invitation)**

The next webinar for participant countries will focus on priorities and plans to advanced nuclear systems - both electric and non-electric - including those that enable integrated energy systems, innovative applications, storage, and uses.

### 19 January

Webinar

#### **Clean Energy Solutions Centre**

For more information pleasecontact: Victoria.Healey@nrel.gov or Jordan.Cox@nrel.gov.

# January - February

Webinars

# In case you missed it...



# Entries Now Open for 2019 Global Energy Management Awards

The prestigious Energy Management Leadership Awards program for 2019 is now accepting entries. Any organisation with an ISO 50001-certified energy management system is invited to enter this global competition, now in its fourth year. Learn more here.



# UK and seven major companies join EV30@30 campaign

The United Kingdom and seven major companies today joined the EV30@30 campaign, which aims to speed up the deployment of electric vehicles and target at least 30 percent new electric vehicle sales by 2030.

# About the CEM



Watch the CEM documentary

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