

CEM Matters #5 October 2019



Welcome back to CEM Matters!

Welcome to the autumn issue of CEM Matters. Since our last edition in July, CEM workstreams have been very busy, focusing on advancing their technical work and the impact they have on moving forward clean energy deployment.

It has also been a time to plan ahead, with preparations for CEM11, to be hosted by Chile, gathering pace. And in the last few weeks Saudi Arabia has been confirmed as the host of the Twelfth Clean Energy Ministerial in 2021. This means the Preparatory meeting for CEM11 will take place in Riyadh in the first week of February. "Save the date" for CEM11 and the Prep meeting will be issued in due course and further details will also be available in our final 2019 issue in December.

Before you dive in to catch up on the latest <u>news</u> from across CEM workstreams and our usual <u>CEM Family Portrait</u>, we would like to make a special mention to colleagues at Natural Resources Canada, many of whom worked on preparations for CEM10, who were recently recognised at the domestic Departmental Awards for their work on gender equality and leadership in the Equal by 30 Campaign. You can read more about Equal by 30's latest achievements <u>below</u> – and please consider signing up to this campaign!

CEM event at WEC24 in Abu Dhabi





Last month, with support from the United Arab Emirates government, the CEM Secretariat hosted an event dedicated to "Energy transformation and regional integration of power systems", in the margins of the 24th World Energy Congress in Abu Dhabi. The event showcased six areas of CEM's work which focus on the transformation of power systems: 21CPP, RGEI, LTES, PSF, CCUS, and NICE-Future. During this event, CEM workstreams offered their perspectives on regional integration of power systems, each focusing on unique aspects and angles, which are central to their work.

Cross-border integration of power systems can have significant positive impact, including lower costs, increased security and lower environmental impact of operations. More recently, another driver of cross-border system integration has become more relevant: facilitation of power system flexibility to integrate increasing shares of variable renewable energy (VRE) sources. However, integration can also bring economic, security and policy challenges. This side event addressed emerging solutions to enable secure and economically sensible integration of power systems. It brought together perspectives of national governments, private sector, analytical and regional institutions on a wide range of integration issues, including system operations, long-term planning, governance, policy and market frameworks. For more information, and to access presentations from the event. Please visit our dedicated event page.

CEM Family Portrait



Mr Abhay Bakre
Director General
Bureau of Energy Efficiency (BEE)
Government of India
India's Sherpa to the Clean Energy Ministerial (CEM)

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

Since 2017 I have been heading up Bureau of Energy Efficiency (BEE) in India as its Director General. The Government of India established the Energy Conservation Act in 2001. The Act, which led to establishing the BEE in 2002, aims to develop policies and strategies with a thrust on self-regulation and market principles with the primary objective of reducing energy intensity of the Indian economy. Energy efficiency is the first fuel and a critical pillar of all clean energy discussions. My work at BEE requires a cross cutting overview of all key sectors in the economy which use energy, raising awareness about the importance of energy efficiency and developing and rolling out policies and necessary regulations to amplify its impact. Through sector specific programs such as Perform Achieve Trade (PAT) working with major industries, Energy Conservation Building Codes (ECBC) focused on commercial and residential buildings, Start Labelling Programs across different appliance categories, we are working towards enhancing energy efficiency across all major sectors. We also oversee energy efficiency auditor certification programs and incentivise innovative business models to fast track energy efficiency best practices through National Energy Conservation Awards and innovation challenges.

Being a post graduate in Electrical Engineering from IIT, Kharagpur, I have always been passionate about all aspects of energy and have been involved with a wide array of clean energy related projects and programs through my 30 years of professional life.

Prior to joining BEE, as Executive Director in the Environment Directorate of Ministry of Railways, I was closely involved in the process of developing India's Intended Nationally Determined Contributions (INDC) and also participated at the 21st and

22nd Conference of Parties (COP) in France and Morocco, respectively.

I have been closely involved in several CEM activities, particularly over the last couple of years, currently serving as India's Sherpa to the Clean Energy Ministerial. In addition to participating in several Preparatory CEM meetings, which have been extremely valuable learning opportunities, I have also been involved in co-leading work-streams such as SEAD and ACC, and participating in other initiatives such as EMWG and EVI. I also represent India on the CEM Steering Committee.

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

A clean energy future is no more a matter of wishful thinking, and I feel that the future of energy has to be cleaner than today, to be able to address the apocalyptic challenge ahead of us of an increasingly warming planet.

I feel optimistic that we are collectively taking the right steps. Over the last few years, not only have we been able to make significant strides in the development of clean energy technologies and finding new ways to make our energy use more efficient, we have been successful in bringing down costs for several clean energy solutions by taking up novel and innovative business models and approaches. However, although we are moving in the right direction, we still need to acknowledge that, even today, a significant percentage of the global population are still unable to meet their basic energy requirements to lead healthy and productive lives.

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

Apart from clean energy I have been instrumental in promoting technology in the SME manufacturing sector. A large number of SME units in India are undergoing technological transformation. The selection of appropriate technology at affordable price will be key to make this sector competitive.

In my free time, I used to play chess during my younger days as a hobby. It gave me the right kind of focus and aptitude to think strategically. I am also a keen promoter of indoor games like table tennis and badminton, which I enjoy playing with my children and that makes me joyful and healthy.

Initiatives and campaigns news



New SEAD operating agent

Since 2011, the Super-efficient Equipment and Appliance Deployment (SEAD) Initiative has developed tools, conducted technical analyses, and provided member governments with access to high-quality research and expertise around a variety of product areas and market transformation activities. SEAD activities and the voluntary collaboration among governments have been facilitated by an Operating Agent and significant funding from the U.S. government. Since the expiration of the remaining core

funding for the Operating Agent in June, SEAD has entered a transitionary phase. CLASP has served as the SEAD Operating Agent since its inception, and has now transitioned this role to the International Energy Agency (IEA). The IEA has been a key partner of the Initiative, and will now take up essential management activities to keep SEAD active until further funding can be identified, with CLASP continuing as a Partner. SEAD Members and the IEA look forward to the future of the Initiative and its continued collaborative efforts to turn knowledge into action to advance global market transformation for energy efficient appliance, lighting, and equipment.

SEAD webinars:

The IEA will propose a series of webinars and master classes and continue to carry out and share synthesis of work and lessons learned from appliance and equipment policies, programmes and initiatives. Suggestions on topics and activities from members and partners are welcome. For more information and to share suggestions, please contact vida.rozite@jea.org.

Updates from SEAD Member Countries:

- In China, new standards for room air conditioners have been submitted to WTO these cover fixed and variable speed appliances.
 Plans are in place for future additions. <u>Access</u> it here.
- In early October, the European Commission adopted 10 eco-design measures and other requirements for the following product groups: refrigerators, washing machines, dishwashers, electronic displays including televisions, light sources and separate control gears, external power supplies, electric motors, refrigerators with a direct sales function (e.g. fridges in supermarkets, vending machines for cold drinks), power transformers, welding equipment. The Commission estimates that these measures, together with the energy labels adopted on 11 March, will deliver 167 TWh of final energy savings per year by 2030. More information can be found here.



The Long Term Scenarios for the Energy
Transitions Campaign has a new technical
partner: Gestore dei Servizi Energetici (GSE)

partner: Gestore dei Servizi Energetici (GSE)
from Italy, a semi-state company whose main
mission is supporting the development of
renewable energy sources and energy efficiency
and monitoring their growth in order to reach EU
targets. GSE has also been coordinating the



Equal by 30 fast approaching 125 Signatories

The Equal by 30 Campaign is fast approaching its 125th signatory. The Campaign, launched in May last year, works to enable greater gender diversity in clean energy professions.

We strongly encourage getting involved in this campaign, which is open to governments, organisations and the private sector. This is an excellent way to demonstrate your commitment to advancing gender equality and showcasing the work that you are already doing or goals that you have set for the future. Please contact the CEM Secretariat for more information and we will connect you with the campaign

leads. Find out more here: Equal by 30.



Equal by 30 recognised with Canada's

Departmental Achievement Award for
innovation and leadership - for advancing
gender equality in the energy transition.

Huge congratulations to all colleagues at NRCan
for their continuous leadership and drive to make

this campaign a success.

elaboration of the Italy's National Energy and Climate Plan and is interested in contributing to and benefiting from LTES activities.

The Campaign held a side event at the
World Energy Vehicles Congress in China
in July, focused on "New Energy Vehicles:
A potential asset for the energy systems
of the future" which included a session on
"Integration issues of EVs and their role in
Long-term energy scenarios". It also
organised a side event on "The
Relevance of Long-Term Energy
Scenarios to Climate Policy Making and
NDC Target Setting in Latin America and
the Caribbean" during the Latin American
and Caribbean Climate Week in Brazil in
August.



Nominations are now open for the sixth ISGAN Award of Excellence competition, sponsored by the International Smart Grid Action Network (ISGAN), in partnership with the Global Smart Grid Federation (GSGF). The award will recognise excellence in innovation, integration, and transformation of smart grid systems.

ISGAN has chosen "Smart Grids for Digitalization Enabling Consumer Empowerment" as the theme of the 2020 Award of Excellence. Any projects employing digitalized smart grid technologies to enable consumers to take more energy control are invited to participate. The submission deadline is 15 November 2019. To find out more, click here.



Upcoming events by the C3E Initiative:

 13-15 November 2019: C3E Executive Meeting in Helsinki, Finland



<u>Power System Flexibility Campaign - upcoming events:</u>

- On 25th November PSF and EPE will be organising an expert workshop on system integration of renewables in Rio de Janeiro, Brazil. The main The event will feature a set of national and international panellists in two deep-dive sessions on Demand Response and Digitalisation.
- On 6th and 7th February 2020 PSF will be hosting its Annual Expert Workshop at the IEA Headquarters in Paris. On the first day the discussions will be structured around the three main-blocks of this year's workplan: Digitalisation, Market Design for Demand Side Solutions and Sector Coupling for Electrified Transport. A final agenda will be sent around in the coming weeks and participation to this event is open to all PSF and CEM participants. For more information please email Enrique.gutierrez@jea.org



<u>India to host international workshop on Cooling under the auspices of SEAD.</u>

The Indian Bureau of Energy Efficiency (BEE) together with the IEA will organise an international workshop on cooling under the auspices of SEAD on 12 – 13 December, 2019 in Delhi. The workshop will bring together policy makers, experts and industry to discuss how policy can stimulate innovation and deployment of efficient technologies and systems in space cooling, mobile (transport) cooling and cold chain. The workshop is an opportunity to share best practices from SEAD member countries and beyond. A SEAD member and partner meeting is planned for 12 December in Delhi in conjunction with the workshop, For more information about the workshop, please contact vida.rozite@iea.org

The C3E's 5th Executive Committee (ExCo) meeting will be hosted by Finland in the margins of the Strategic Energy Technology Planning (SET Plan) conference which will take place under Finland's Presidency of the EU. This will be an excellent opportunity to advance the work of C3E and Equalby30 with Finland also organising technical visits and a 'fishbowl' discussion on education and empowerment as part of the programme. A number of observer countries and organisations will also attend. Please contact the C3E Chair, Annette Hollas (Annette.hollas@canada.ca) for more information.

 5 December: Women in Energy: Advancing Equal Participation for a Clean Energy Future

The IEA is organising a dedicated side-event to the role of women in clean energy in the margins of the IEA Ministerial in December. This will be an opportunity to confirm and demonstrate the commitment of governments and industry to ensure adequacy of skills, training and gender-diversity at a time when the energy sector is undergoing major changes. The event will include both a high-level segment for Ministers and CEOs and a working level segment to help shape the work of C3E and Equalby30. Please contact the C3E Chair, Annette Hollas (Annette.hollas@canada.ca) or the IEA coordinator Per-Anders Widell (peranders.widell@iea.org) for more information.



Global ISO 50001 Certification Database under development under EMWG

The U.S. Department of Energy is supporting an EMWG collaboration with the International Accreditation Forum (IAF) for an effort to develop a database of ISO 50001 certifications. The ISO 50001 certificate information will draw from the larger IAF database of management system certifications and certificate data are still being submitted for the database. The EMWG project will access more specific ISO 50001 information to track uptake of ISO50001 by country and identify and recognize certified organizations. The data will help answer questions shared among EMWG members:

 Which companies are certified to ISO 50001 in my country?



Check out the latest publications by the 21st
Century Power Partnership Initiative:

Status of Power System Transformation 2019: Power System Flexibility: Annual report jointly produced by NREL and IEA focusing on the latest in power system transformation and flexibility.

Innovative Utility Offerings at the Distribution

Edge: Case Studies from Around the Globe: 10

case studies from around the globe on utility
innovation in product and service offerings to
distribution customers.

10 Principles for Power Sector Transformation in Emerging Economies: The paper presents findings from dialogues with stakeholders of the 21st Century Power Partnership, and reflects experience directly supporting emerging economy power system transformation efforts through the 21st CPP's numerous in-country technical assistance programs.



It has been a busy few months for the NICE Future Initiative who organised several workshops, side events and webinars recently, details of which you can find out in NICE Future's autumn newsletter.

We also want to inform you about two upcoming events:

- 8 November Nuclear Energy in Clean Energy Planning in Latin America (in Spanish). The next topical webinar will be co-sponsored with the International Framework for Nuclear Energy Cooperation (IFNEC) and will feature perspectives from Latin American countries and invited experts. REGISTER here. To find other NICE Future webinars, visit: nice-future.org/webinars
- 13-14 November, Washington IFNEC
 Ministerial Conference The NICE Future
 Initiative will be spotlighted at the
 upcoming IFNEC Ministerial Conference
 titled "bringing the World of SMRs and
 Advanced Nuclear". Click here for more
 details.

 How many ISO 50001 certifications are there in my country?

The Database is expected to be launched at the end of October at

<u>https://www.iafcertsearch.org</u>. For more information please reach out to:

pdelosreyes@energetics.com



The 2nd Global EV-Pilot City Forum (EV-PCF) will be hosted by Guangzhou, China on 15th November, 2019 in the margins of the 2nd International Smart and Shared Mobility Congress.

This Forum is the annual meeting of the <u>EVI</u>
<u>Global EV Pilot City Program</u> network under EVI, with the <u>first edition</u> having been hosted by Helsinki, Finland in 2018.

The Pilot City Forum will be a great opportunity to get insights from China, but also for participants to learn from and share experiences among partner cities and a wide range of stakeholders from many global regions in shaping tomorrow's urban transport. The event will also constitute an opportunity to kick-start the work for the 2020 Cities Casebook, a practical policy guide for decision makers in cities with regards to electric mobility deployment. Pilot City Forum participants will be invited to provide their initial guidance and inputs for this work.

This PCF will be preceded by the 2019 autumn EVI Advisory Board Meeting scheduled to take place on 13th November, 2019. For participation and other queries, please contact:

Till.BUNSEN@iea.org



Energy Management Leadership Awards 2020 Launched

The Clean Energy Ministerial invites organisations to compete for a prestigious global award by sharing their experiences in implementing energy management strategies



Smart Cities and Eco-energy towns Initiative carried out outreach for future partnerships during the 2019 Russian Energy Week. During the event, representatives from Russia and Korea and experts from the United Nations Industrial Development Organization (UNIDO) and International Partnership for Energy Efficiency Cooperation (IPEEC) held a working level meeting. At the meeting, Russia and Korea briefly introduced Sustainable Cities and Ecoenergy Towns (SCET) Initiative and discussed potential opportunities for future collaboration with UNIDO and IPEEC.

Most recently, during the International Renewable Energy Conference on 22 October in Seoul, Korea SCET partnered with UNIDO to organise a joint seminar entitled "Smart Mobility for Smart Cities: Digital technologies Driving Low-Carbon Transport in Cities".

Upcoming event:

 SCET Initiative plans to hold a webinar on smart mobility in citites. The webinar is planned for late November and the exact date will be confirmed soon.



ccus initiative governments and key industry members announced their intention to collaborate to drive forward strategic investment in Ccus projects around the world. CEM Ccus Initiative countries and OGCI member companies will explore opportunities to support the commercial development of Ccus through the various stages of development. See the joint declaration here. This will notably include sustained dialogue on policy and regulatory frameworks, aiming for commerciality

through ISO 50001.

Organisations from around the world submit case studies that describe their ISO 50001 implementation and results.

The case studies are evaluated by a committee of international EnMS experts.

- Benefits: Recognition on a global scale by energy ministers:
 - Demonstrate commitment and leadership to customers, investors, employees, etc.
 - Affirmation of leadership by trusted third parties on their behalf: governments, press, international organisations, etc.
 - Each organisation receives award for contributing a quality case study

Eligibility: Organisations from around the world in the industrial, commercial, or public sector certified to ISO 50001 are eligible to participate. ISO 50001 certificates must be issued by an accredited, third-party certification body.

Submission Deadline: 11 February 2020 (Early submission by 28 January strongly encouraged). For more information reach out to: EMWG@energetics.com



ISGAN's Executive Committee (ExCo) had a successful meeting in Montreux Switzerland in early October. Following the reitrement of a longtime presidium chair Karin Widegren, Luciano Martini was elected as a new chair of the ExCo. The Committee discussed ISGAN's programme of work and strategic direction for each of ISGAN Annexes. Ellina from the CEM Secretariat participated in these discussions and presented outcomes from CEM10 as well as priorities and next steps in the CEM. ISGAN ExCo also discussed approaches to kick off the CEM horizontal accelerator on sector coupling/power system integration of Electric Vehicle infrastructure that would bring together the work of ISGAN, 21CPP, EVI and PSF. The decision was made to launch a new Knowledge Transfer Project (KTP) on sector coupling as part of the program of work of Annex 2. It would be implemented in collaboration and coordination with 21CPP, EVI and PSF.

> In early October. the Swiss Federal Office of Energy SFOE and Research Center for

of identified hubs and projects. This could also consider, as appropriate, mechanisms for risk management at each operational phase, knowledge sharing, storage appraisal activities, corporate and project finance and engagement with civil society.



Over the summer, the CESC published a blueprint guide on creating gender sensitive policies. This guide has been developed to help support the policy-making process in countries interested in pursuing a more gender-inclusive energy sector and builds on the work done on the development of the first-ever policy on gender mainstreaming for energy access which was adopted in 2017 by Heads of State in ECOWAS Member States. It distills key elements from the ECOWAS process and methodology used by the ECOWAS Centre for Renewable Energy and Energy Efficiency (ECREEE) in driving the development and adoption of the policy. According to the authors, governments may seek to replicate or adapt the ECOWAS process in the context of their own countries or regions. The guide can be found here. In addition, the CESC is also running a series of webinars on gender over the coming months and details will be circulated to CEM Members as they become available.

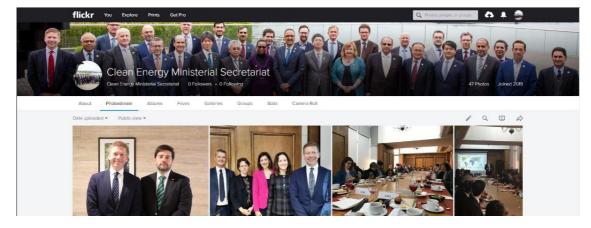


- The Netherlands join Carbon Capture
 Utilization and Storage Initiative. The
 Netherelands have joined the CCUS
 initiative as its eleventh member country
 in July 2019. With new attention given to
 the role of CCUS in the country's climate
 strategy, the Netherlands will be able to
 benefit from dialogue with other Initiative
 Members and the platform the Initiative
 provides for collaboration with industry
 and finance sector.
- In September CCUS Initiative launched its own Newsletter - please contact juho.k.lipponen@outlook.com to be added to the mailing list.

Energy Networks - ETH Zürich, in cooperation with ISGAN Annex 6 hosted a public workshop on needs, challenges and opportunities of TSO-DSO coordination. The workshop attracted various stakeholders from both the research and industry community and facilitated discussions on current and anticipated interaction between the TSO and DSO. An introduction to the workshop demonstrated how there has been a paradigm shift in the electrical supply industry, where the traditional characteristics of centralized generation, fixed loads, and uni-directional power flow have transformed into systems which are decentralized, controllable and incorporate bi-directional power flow. This shift toward distributed and renewable electricity poses as a challenge to both the TSO and DSO and thus there has been an increasing awareness relating to the needs, challenges and opportunities associated with the implementation of the necessary solutions. Successful TSO-DSO coordination requires the consideration of various perspectives of the technical, market and regulatory aspects in order to maximize the potential benefits provided by DERs, this includes congestion relief, reactive power and voltage control and frequency reserves.

- As part of the June 2019 Asia Clean Energy Forum, hosted by the Asian Development Bank in Manila, the Initiative contributed to organising a deepdive workshop on CCUS. The workshop gathered government and industry officials from ADB Members, both regional recipient countries, key donor country experts as well as representatives from international organisations. Several countries in the ADB region are very interested in CCUS, and some are taking first steps forward. "Centers of Excellence" sponsored by ADB have enabled key stakeholders to unite in a number of countries in the region, such as China and Indonesia. In Indonesia, the center is a key driving force behind the country's first pilot project at Gundih. A Center of Excellence is in the process of being established in India, too. The CCUS gatherings also discussed the role that multilateral development banks (MDBs) can have in driving CCUS forward.
- In September, the governments of United Arab Emirates and the Kingdom of Saudi Arabia hosted a CEM CCUS Initiative workshop on carbon capture, utilisation and storage experience and prospects in the Gulf Region. With strong reliance on fossil fuel exports and industry experience, the Gulf Region has strong strategic interest in developing CCUS as part of a solution for a more sustainable energy future. A key outcome was the call by countries in the region to work more closely together to develop and deploy CCUS. A regional work process will be formed. Saudi Arabia and Bahrain also announced their plan to host an international CCUS conference in Riyadh, as part of Saudi Arabia's G20 Presidency energy agenda.

Don't miss - CEM FLICKR account



We have a Flickr account!

The Clean Energy Ministerial now has its own Flickr account, where we upload photographs from Ministerial meetings, side events and other events throughout the year. Click here to access our page.

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