



CEM Matters #4 July 2019



Welcome back to CEM Matters!

In this issue of our quarterly newsletter [we look back at the Tenth Clean Energy Ministerial and its key outcomes](#), [highlight a story written by Student Energy – co-organisers of the first ever Youth Forum](#), catch up with [Aaron Hoskin from Natural Resources Canada as part of our CEM Family Portrait](#) series and [feature news from CEM Initiatives and Campaigns](#). We hope you enjoy the newsletter and look forward to your feedback and suggestions. We wish you all a good summer break and CEM Matters will return in September.

CEM10 Highlights

CEM10 by results

2149 Participants

Took part in CEM10-M14 to advance clean energy through private-public roundtables, plenary discussions and over 50 side-events.

26

25 countries and the European Commission took part in this year's Ministerial meeting and affiliated events.

Over
100
signatories

for the Equal by 30 Campaign to close the gender gap in the clean energy sector.

10th

This was the tenth Clean Energy Ministerial meeting, building on a decade of collaboration and exchange of best practices.

 **CLEAN ENERGY MINISTERIAL**
Advancing Clean Energy Together

2 New workstreams

Dedicated to deployment of hydrogen, and the role of flexible nuclear in modern energy systems.

60 Youth delegates

From nearly all CEM countries, participated in the inaugural Youth Forum, which included an innovation jam, Ministerial debates, a policy hackathon, and other events.

847

Innovation Showcase Exhibitors from 12 countries.

666

News stories generated globally about the Ministerial meeting.

41

Global companies recognised for their work in Energy Management and Smart Grid projects in annual CEM awards.

1155

Global private sector companies took part in this year's meeting, providing input and expertise through roundtables, side events and the Innovation Showcase.

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The Tenth Clean Energy Ministerial (CEM10) took up four universal, key themes central to advancing clean energy:

Clean Power, Smarter Use of Energy, Sustainable Clean Energy Financing, and Workforce and Communities.

Ministers called for greater ambition to advance the clean energy transitions, to recognise the value brought about by a diverse workforce, and to take action in the face of growing global energy demand and emissions despite a rise in renewable energy capacity.

The Clean Power/Electric Future session highlighted **the need to transform power systems to make them modern, flexible and resilient**, with a focus on system integration of energy supply and demand, renewables, flexibility and electrification.

CEM Members noted the need to recognise a variety of national approaches to charting a course forward. CEM Members discussed renewable energy as an important source of electricity, regulatory frameworks and market design and **frameworks to ramp-up investment in clean energy** and associated

infrastructure.

The Smarter Energy Use session called on CEM Members to **double-down on energy efficiency with a focus on products with the highest mitigation potential and hardest to abate sectors (such as heavy industry and heavy duty transport)**. Energy efficiency policies, processes and tools to accelerate adoption of new technologies and reduce overall energy demand were discussed **through a lens of urban communities, with a focus on improving efficiency in buildings and transportation among others**. CEM Members recognised the potential for energy efficiency to fast track the global clean energy transition, highlighted their work to **advance global market transformation for energy efficient products** (e.g. space conditioning, equipment and appliances), and discussed increased collaboration to share best practices and lessons. The need to mobilise private sector capital to accelerate energy efficiency across sectors and standardise approaches to smaller scale financial transactions were also discussed.

The Workforce and Communities: **A just and inclusive transition session saw CEM Members highlight the importance of energy transition implications for workforces and communities, and share information to create economic opportunities**. There was a shared understanding of the importance of job creation and opportunities for all, including youth education programmes and **closing the gender gap by accelerating gender diversity and equality**. The World Bank agreed to develop a compendium of best practices to capture experiences of CEM Members on this topic.

As part of its hosting legacy, **Canada tabled gender principles for consideration by future CEM hosts**, which were endorsed by Chile as incoming CEM11 host. The Women in Clean Energy Breakfast celebrated **the Equal by 30 campaign achieving over 100 signatories**.

Launch of a new Hydrogen Initiative co-led by Canada, Japan, the European Commission, Netherlands, and the United States, will advance one of the most promising energy carriers of tomorrow.

Launch of a new nuclear campaign, co-led by Canada, United Kingdom and the United States, will promote highly flexible, next generation nuclear technologies. Canada's focus on people, including youth, gender, Indigenous, and workers resonated with countries; the first ever CEM/MI youth program brought global clean energy leaders together at the Youth Forum, **empowering young people as change agents in the clean energy future**. 60 youth delegates, from nearly all CEM Member countries, participated in the Youth Forum, which included an innovation jam, a policy hackathon, Ministerial debates and panel discussions.





[Youth Leadership Debut at the 10th Clean Energy Ministerial](#)

The first-ever young leaders forum took place at this year's Clean Energy Ministerial in Vancouver bringing the power of youth innovation and collaboration to help achieve clean energy objectives. [Watch this video](#) to see how it all happened.

Led by [Student Energy](#), the inaugural Youth Leaders Forum at CEM10 brought together a distinguished cohort of 60 youth delegates from each member country to participate in the program. Student Energy delivered impactful and engaging programming aimed at showcasing the innovations and valuable contributions that global youth share to advance a clean energy future. The Youth Leaders Forum created a collaborative space for intergenerational partnerships and the integration of young people's voices in the clean energy discussion, as well as showed their dynamism through a number of activities, including the CEM Run Club.

The inaugural Youth Leaders Forum at CEM10 proved to be a great success and is already laying the foundations to bring more youth into the energy conversation. The work of the youth delegation continues after CEM10, with a youth-written [position statement paper](#) to harmonise their recommendations for the world's energy leaders to accelerate the transition to a low carbon future and calling for further inclusion into future iterations of the Clean Energy Ministerial.

CEM Family Portrait



Meet Aaron Hoskin, Ph.D.

Senior Manager, Intergovernmental Initiatives
Transportation and Alternative Fuels Division
Office of Energy Efficiency
Natural Resources Canada

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

I have been involved in transportation and alternative fuels for the government of Canada for almost 15 years. I initially was involved in innovation and R&D programming, specifically focussed on hydrogen and fuel cells. For 5 years I represented Canada on the IEA Hydrogen TCP, contributing to a working group focused on wind-energy and hydrogen integration. I have also been involved in Canada/ US collaboration on the development and alignment of codes and standards for alternative fuelled vehicles and refuelling infrastructure.

For the last 8 years, the scope of my work has broadened, to focus on policies and programs to facilitate greater production and use all alternative fuels (e.g. hydrogen, electrification, natural gas) for transportation. These efforts led to my current position, where I am responsible for all intergovernmental initiatives on low carbon transportation, within the Transportation and Alternative Fuels Division at Natural Resources Canada. For the last three years, this has included supporting Canada's co-chair role in the CEM Electric Vehicle Initiative, as well as developing and launching the new CEM Hydrogen Initiative, which was launched at an event attended by more than 200 people at CEM10 in Vancouver.

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

My vision of a clean energy future is one built on a foundation of energy diversification. I think it is essential that we, as policy makers, realize that we are on the cusp of a global energy transition. One in which deep decarbonisation is essential, across all aspects of the global economy. Fortunately, technologies have advanced to the point that they are ready to support and enable this transition; there

are low carbon technologies, available and economically feasible today, for all sectors of the economy. But, to continue this transition, ever more stringent global climate change policies continue to be required, and strong international collaboration, through CEM and other international fora play an essential role in realizing this clean energy future.

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

As a chemist by nature (and by formal education) I am passionate about cooking (which is essentially just an extension of chemistry). I enjoy travelling with my family, experiencing new foods, and cuisines, and then trying to replicate those experiences when I get back home to Canada.

Initiatives and campaigns news



[Launch of a global initiative on Hydrogen at CEM10.](#)

The 10th Clean Energy Ministerial (CEM10) saw the launch of a new global Hydrogen Initiative (H2I) under the co-leadership of Canada, the European Commission, Japan, the Netherlands and the United States, with participation of several other CEM Member countries. The Initiative aims to advance commercial scale hydrogen and fuel cell related deployment across all sectors of the economy, via policies, programs and projects while highlighting the role that hydrogen and fuel cell technologies can play in the global clean energy transition.

Drawing on the recommendations from the Hydrogen Energy Ministerial Meeting in 2018 in Japan, this cross-country collaboration aims to build on the successes of other global collaborations on hydrogen such as the Hydrogen Challenge under Mission Innovation, the ongoing work through the International Partnership for Hydrogen and Fuel Cells in the economy (IPHE) and global analysis carried out by the International Energy Agency (IEA). The IEA has also been identified as the coordinator for the initiative.

The Initiative will aim to address barriers and identify opportunities for hydrogen in the global



Global Environment Facility (GEF) Council approves multi-million dollar e-Mobility programme with the CEM's Electric Vehicle Initiative (EVI).

In June 2019 the GEF Council approved the GEF-7 e-Mobility Programme with the aim of fast tracking global deployment of electric vehicles. The Programme will promote an integrated approach to support GEF countries with modular electric mobility packages to be delivered through country specific national projects. This will be complemented by a global programme building on the CEM's-Electric Vehicle Initiative which is coordinated by the International Energy Agency. This global programme would be supported by the International Energy Agency (IEA) and the UN-Environment.

Planned over the next four years and beyond, the programme is aimed to be structured around four thematic and complementary components ranging from deployment of vehicles and charging infrastructure, to investment and support platforms. The global project would aim to reduce overall costs reducing duplication of work and facilitating economies of scale. It would also aim to encourage smooth replication of best practices and sharing of lessons learnt across regions and countries. More details can be found in the [work](#) programme for GEF Trust Fund.

transformation to a clean, affordable and reliable energy sector looking at the global supply chains of this new energy vector. The Initiative will focus on how hydrogen can contribute to cleaner energy systems, while promoting sustainability, resiliency and energy security. Initial work carried out through the initiative will focus on three different areas:

1. Helping to ensure successful deployment of hydrogen within current industrial applications.
2. Enabling deployment of hydrogen technologies in transport (e.g. freight, mass transit, light-rail, marine).
3. Exploring the role of hydrogen in meeting the energy needs of communities.



Release of “Breakthroughs”: The NICE Future initiative launched its first publication, entitled “Breakthroughs”.

This book features 20 short, illustrated stories on near-term nuclear innovation happening now to enable clean, integrated energy systems of the future. Approximately 700 hard copies of the book were distributed during the week. Read the book [here](#).

Launch of the “Flexible Nuclear Campaign”: Civil society groups ClearPath, Energy for Humanity, and Energy Options Network partnered with Canada, the US, and UK to co-lead a new campaign under the NICE Future initiative that will explore the benefits of nuclear-renewables integration in a clean energy future.

Launch of IEA’s report on nuclear energy: IEA Executive Director Dr. Fatih Birol released a high-profile report on “Nuclear Energy in Clean Energy Systems”

(<https://www.iea.org/publications/nuclear/>). This is the first report by IEA exclusively focused on nuclear energy in 20 years, which emphasizes the importance of investment in nuclear energy refurbishments and new builds to meet global clean energy targets.’

CEM nuclear side events: The NICE Future initiative was profiled in two official CEM side events.

The first side event, “**Breakthroughs: Flexible**



On May 29th, at the Clean Energy Ministerial (CEM) in Vancouver, the first-ever international Clean Energy Education and Empowerment (C3E) Awards were presented during the signature Women in Clean Energy Breakfast event. Gender equality was a core component of the CEM agenda, and the conference featured several events focused on gender equality in the energy sector. Congratulations to the winner of the C3E Woman of Distinction Award, Dr. Elbia Gannoum. Dr. Gannoum is the CEO of the Brazilian Wind Energy Association. In addition to her leadership on clean energy development in Brazil, Dr. Gannoum has been a tireless advocate for women in the energy sector, and serves as a role model for women in Brazil and around the world. Congratulations as well to PEG Africa for winning the C3E Organizational Leadership, in recognition of their accomplishments in promoting gender equality in the West African energy sector. PEG Africa is an off-grid solar company active in Ghana, Cote d'Ivoire, and Senegal. PEG delivers Pay-As-You-Go (PAYG) asset-based financing to consumers who lack both access to reliable electricity and formal banking services.

Women in Clean Energy Breakfast:

The CEM day began on a high note with the Women in Clean Energy Breakfast, one of several signature events and discussions putting gender at the centre of the energy transformation. Delegates across the public and private sectors, academia and international organizations heard key notes from prominent

Nuclear Energy Systems in a Clean Energy World”, featured high-level remarks from the United States, Japan, Canada, and United Arab Emirates, followed by statements by IEA Executive Director Faith Birol and the Nuclear Energy Agency’s (NEA) Director-General William D. Magwood IV. The event also featured a panel of diverse and distinguished experts from across civil society, labs and research organizations, and industry.

The second side event, **“Dispatchable Clean Energy: Cutting the Cost of a Low-Emissions Future”**, was led by civil society groups ClearPath and Third Way to discuss the importance the importance of dispatchable energy systems for meeting clean energy goals.

“The New Fire” movie screening: The NICE Future initiative partnered with the Generation IV International Forum and the US Department of Energy’s “Atomic Wings” series to co-host the Canadian premiere of the film “The New Fire” (<https://www.newfiremovie.com/>). This documentary features innovations driven by young entrepreneurs around the globe to advance nuclear energy’s vital role in clean energy solutions. This event also featured a panel discussion with the film’s director and leading experts.

Launch of a new NICE Future website: This website serves as a platform for outreach and engagement on the NICE Future initiative. Find out more [here](#).



Efforts to ensure the deep decarbonisation of industry will require innovative and disruptive new approaches, processes and products. This was the sentiment echoed by CEM10 participants at a side event to discuss the role of the CEM in tackling decarbonisation. Member states and the private sector shared their experiences and strategies that have already helped to create an enabling environment to fast-track decarbonisation efforts. In setting the scene, UNIDO gave an overview of the different opportunities that lie before countries to help transition the hard-to-abate industry sector towards a low carbon pathway.

thought leaders calling for greater action. Canada highlighted its “inclusive by design” principles for hosting the Ministerial and set a new precedent for gender equality, diversity and inclusion, a concept that Chile wholeheartedly agreed to take up as the next CEM/MI hosts. Other key deliverables included the inaugural C3E awards ceremony, and the release of two reports: the second C3E women in clean energy data report and the Equal by 30 success stories booklet **Balance Means Business**, which celebrates a selection of Equal by 30 Signatories. Norway, HATCH inc, and SE4ALL announced joining Equal by 30 on the spot, bringing total signatories well over the 100 mark.

Find out more here: [C3E Data Report](#) and [Equal by 30 - Balance Means Business](#).



CEM work-streams come together in China to discuss how New Energy Vehicles could become a potential asset for energy systems of the future. The Chinese Ministry of Science and Technology (MoST), China Association for Science and Technology (CAST) and China Society of Automobile Engineers (SAE-China) organized in collaboration with several Clean Energy Ministerial (CEM) work-streams, an event titled **“New Energy Vehicles (NEVs): A potential asset for the energy systems of the future”** on 1st July, 2019 in the margins of the [World New Energy Vehicle Congress \(WNEVC\)](#), in Hainan, China.

Spread across three sessions, ranging from deployment of NEVs to their integration challenges and opportunities in the new energy systems, the event saw interventions from experts from China and across the world. This was also an opportunity to both bring forward lessons from and inform the various CEM work streams such as the Electric Vehicle Initiative (EVI), 21st Century Power Partnership (21CPP), Long Term Energy Scenarios campaign (LTES), Power System Flexibility (PSF) campaign, and Regional and Global Energy Interconnection (RGEI) initiative among others. Several of the organisations supporting these work streams, such as the International Energy

Discussants highlighted certain broad areas of focus for the CEM namely policy, technology and sectoral solution sets as way to categorize future work. Specifically, benchmarking and target setting resonated as critical policy instruments that would need support. Industry participants also agreed that the electrification of processes, the growth in the renewable energy generation coupled with the increased development and adoption of digital technologies provides a combined potential for significant decarbonisation.

It was agreed that these transformative strategies and actions could assist countries and industrial companies through the mechanism of the CEM and that further refinement of these focal areas will be needed in the coming months.



SEAD published the [Global Appliance Testing Costs Catalogue](#), a living compendium of global information on appliance energy efficiency testing prices and testing laboratory costs for common energy consuming products. The purpose of the catalogue is to make it easier for governments, industry, and energy efficiency practitioners to evaluate where and how to test products in accordance with appliance standards and labeling programs, and ultimately make better-informed decisions about how best to allocate their limited resources.

The *Catalogue* addresses a key barrier to building financially sustainable S&L programs, a lack of accessible data on the costs of building and operating testing laboratories and testing prices. The catalogue provides indicative cost estimates for establishing and operating appliance testing laboratories, as well as estimated per unit testing prices, for five common sets of appliance technologies. For each appliance type, the catalogue includes observed differences in lab costs, testing fees, regional trends, and notes from the field. The catalogue also features a series of case studies on best practices for minimising the need for extensive check testing, making use of existing testing capacity and sharing resources, and

Agency (IEA), International Renewable Energy Agency (IRENA), United Nations Industrial Development Organisation (UNIDO), Global Energy Interconnection Development and Cooperation Organization (GEIDCO) participated in the event.



On May 29, 2019, ISGAN, in partnership with the Global Smart Grid Federation (GSGF), announced the winners of the fifth annual ISGAN Award of Excellence, during a special ceremony which was held with the Clean Energy Ministerial (CEM)/ISGAN - Mission Innovation (MI) IC1 Forum at the CEM10/MI4 in Vancouver, Canada. Ms. Amanda Wilson, the Director General of Natural Resources Canada and Mr. Youngjoon Joo, the Korean deputy Minister for Trade, Industry and Energy, presented the ISGAN Award to the winning projects.

The ISGAN Award of Excellence international competition showcases leadership and innovation in smart grid projects around the world. The 2019 ISGAN Award of Excellence recognized exemplars in the field of smart grids with a special focus on “**Local Integrated Energy Systems (Smart Grids)**” that advance smart grids by sustaining a reliable and resilient grid through the integration of energy systems and allowing for customer participation in the electricity enterprise.

The “Winner” of 2019 ISGAN Award of Excellence was awarded to Korea Electric Power Corporation (KEPCO)’s **Open Microgrid Project**.

Rural Intelligent Grid (RIGRID) by ELECTRUM SP. Z O.O. from Poland was recognized as the “Runner-up”.

Six other projects were also honored with the title “Honorable Mention”: **City of Summerside Mypowernet** (The City of Summerside), **Solar Energy Management Systems Smart Grid Pilot** (Oshawa Power & Utilities Corporation Energy Service), from Canada, **MASERA:**

strengthening regional collaboration on testing and market surveillance.



Global EV Outlook 2019

Scaling-up the transition to electric mobility



Electric Vehicle Initiative launches the Global EV Outlook 2019

The International Energy Agency launched the 2019 edition of the [Global EV Outlook](#), the flagship publication of the [Electric Vehicles Initiative \(EVI\)](#). The launch was announced at the [expert panel on the electrification of transport](#) that discussed the deployment of EVs on heavy duty vehicles, including freight and mass transit, the roll-out of charging infrastructure and challenges and solutions related with the battery supply chain, and provided indications for CEM governments on policies that can drive transitions towards electric mobility.

The full report of the Global EV Outlook 2019 is available for free download [here](#) and features analysis on the performance of electric cars and competing powertrain options in terms of greenhouse gas emissions over their life cycle. It also discusses key challenges in the transition to electric mobility and appropriate solutions including vehicle and battery cost developments, supply and value chain sustainability of battery materials, implications of electric mobility for power systems, government revenue from taxation and the interplay between electric, shared and automated mobility options.

Microgrid for Affordable and Sustainable Electricity in Remote Areas (EDF R&D), from France, **Local Island Power Supply with Renewables in Case of Large-Scale Blackouts** (LEW Verteilnetz), from Germany, **Community Grids - Smart Virtual Microgrids** (Smart M Power Company), from Ireland, and **IoT-Based Campus Microgrid Project at Seoul National University** (LSIS), from Republic of Korea. ELECTRUM's **Rural Intelligent Grid (RIGRID)** was also honored with the GSGF Best Smart Grid Project Award, which recognized its excellence of replication.

Meanwhile, ISGAN chose the theme “Excellence in Smart Grids for Digitalization Enabling Consumer Empowerment” for the sixth award competition, and it is expected to be launched during August 2019 on [ISGAN website](#).



Upcoming CEM meeting in the margins of the World Energy Congress meeting in Abu Dhabi, UAE, in September.

At the invitation of the United Arab Emirates government, the CEM Secretariat is working with multiple CEM work streams to organise a CEM side event at the World Energy Congress in Abu Dhabi in early September. We have been offered a slot in the afternoon of September 11 at the WEC venue and the UAE government is taking care of all the logistics and costs. The side event will showcase the CEM work where UAE is actively engaged, including regional integration of power systems and other forms of power systems flexibility, featuring nuclear energy and its interconnection with renewable energy, role of CCUS in decarbonising energy sector, as well as the importance of long term planning and energy scenarios in guiding the associated policy development. For more information, please contact Ellina.Levina@cemsecretariat.org.



The Future for Accelerating Clean Investment CEM10 featured a high level event dedicated to investment and finance and the CEM Investment and Finance Initiative (CEM-IF).

Governments of Denmark, Germany as well as many high level representatives discussed their priorities and the focus of the initiative during the event. The many high-level stakeholders present included Thorsten Herdan, Director of the General Energy Policy Department for the German Federal Ministry for Economic Affairs and Energy, Michelle Patron, Director of Sustainability Policy at Microsoft and Mafalda Duarte, Director of Climate Investment Funds (CIF).

Michelle Patron discussed Microsoft's commitment to renewable energy, including their goal of running on 70% renewable energy by 2023, while Mafalda Duarte explained the importance of strong and stable environments for scaling-up clean energy investments and CIF's efforts in both mid- and low-income countries.



The third coordination meeting of the CEM power systems work streams took place in the margins of CEM10.

Key summary points:

1. It was agreed that there are multiple benefits from coordination of related CEM work streams events and that opportunities for such collaboration should be further explored. Both CEM work streams lead countries and work streams coordinators find coordination of meetings and discussions helpful and beneficial for their CEM engagement.
2. The first opportunity for a coordinated effort after CEM10 presented itself in [Hainan](#) at the World New Energy Vehicle Congress at the

Date : Wednesday, 11 September 2019

Timing : 3:00 pm - 7.00 pm

Venue : Capital suite 7 at ADNEC (venue of the 24WEC)

[The World Energy Congress](#), with over 150 countries represented, is the world's largest energy event covering all aspects of the energy agenda, taking place between 9-12 September 2019.



2019 Energy Management Leadership Awards were announced at CEM10 to 32 organisations for both using and promoting effective energy management systems (EnMS).

Four organisations received top honours, the Award of Excellence in Energy Management: 3M (Global), Areej Vegetable Oil & Derivatives (Oman), JK Tyre & Industries Ltd. (India), and PT Pupuk Kalimantan Timur (Indonesia). The CEM also congratulates the 28 other organisations that earned the Energy Management Insight Award for raising global awareness of energy management and its benefits.

The CEM awards programme highlights the clear energy, environmental, and business benefits achieved by the diverse types of organisations that invest in energy efficiency. To qualify for these awards, one or more facilities within each organization established an energy management system and had it certified to the global ISO 50001 standard; summarised the process and resulting benefits; and submitted a structured case study for analysis. Winners are selected by an independent panel of international experts. The ISO 50001 standard is proven to be business-friendly, globally relevant, and transformational, as it embeds best practices into any organisation and provides a global benchmark for clean energy action.

[Learn more](#) about awards program, the 2019 award recipients, and their stories of success.

suggestion of the Chinese government representatives in the CEM.

3. Another opportunity to leverage an international meeting and bring several CEM work streams together will be at the [World Energy Congress in early September in Abu Dhabi](#). The UAE Sherpa expressed interest and encouragement for the CEM work streams to meet in the margins of the WEC and have first discussions reflecting the outcomes of the CEM10. Several CEM work streams have already indicated their interest in contributing to a possible CEM session at the WEC.

4. Several CEM work streams are also considering organising CEM events in the margins of the International Renewable Energy Conference in Korea in October as well as at the COP25 in Chile in December. CEM Secretariat will be happy to receive expressions of interests for organising CEM events at these occasions and will help facilitate a coordinated CEM effort.

5. Both IEA and IRENA have indicated that organising CEM events in the margins of their ministerial meetings may be possible but could be difficult as arrangements need to be made well in advance.

6. CEM Secretariat will also continue facilitating collaboration on regional and/or in-country CEM events that can bring several CEM work streams together. CEM Secretariat encourages CEM governments and CEM work streams coordinators/operating agents to get in touch as early as possible so that collaboration opportunities can be identified.



The Power System Flexibility (PSF) campaign is showing great momentum, with the official announcement of Sweden as the new campaign co-leader and with an initial expression of interest from India once the post-election arrangements are clarified. This is combined with strong support from current co-leads and new industry participants. Recognising strong diversity across countries, it was proposed to identify and cluster case studies and share lessons learnt.



Government officials, industry CEOs and representatives and key thought leaders gathered at a side-event organised by the CEM CCUS Initiative at the 10th Clean Energy Ministerial (CEM) meeting in Vancouver, Canada. Some 150 CEM government delegates as well as other CEM participants were in attendance. The following five points are highlighted as key take-away messages from the event. These can serve both the wider CEM community, placing CCUS in the clean energy context, and also the CCUS Initiative to ensure our focus on action:

1. Our energy mix has hardly changed over the past 30 years. The panel and the participants were reminded of a striking energy fact: thirty years ago our energy supply was 81% from fossil fuels – and today their share remains exactly at the same level, despite the strong growth of renewable energy. With a higher level of attention on CCUS, there is cause for more optimism than in recent years.

2. Carbon capture, utilisation and storage technologies are not new. Panellists from both government and industry stressed the fact that carbon capture technologies exist and can be deployed today. While technologies exist, it was of course stressed by several panellists that further cost reductions are needed, and these can come about by both replication (deployment) and further R&D on next generations of technology.

3. Stable government policy is key to underpin investable projects. Markets alone cannot drive most CCUS projects and therefore clear and stable policy drivers are required. The 45Q tax credit mechanism being enacted in the United States was mentioned as one interesting model. Various incentive mechanisms such as CO2 offtake agreements were also stated.

4. Banks are ready to play their role. This requires consistent regulations and incentives by governments and clear commitments by industry. In this context, Bank of America Merrill Lynch highlighted their recent commitment to mobilise USD 300 billion by 2030 to low-carbon business. For the financial sector it is important that the

definition of clean energy is broad and that CCUS projects are included.

5. Collaboration between government, industry and the finance sector is absolutely vital. A strong consensus on this issue served as a great backdrop to the announcement made at the event that the CCUS Initiative and the Oil and Gas Climate Initiative will cooperate in accelerating CCUS projects. More on the statement can be found [here.](#)

Don't miss – CEM10 Youth Forum video



CEM10 Youth Forum video.

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