



CLEAN ENERGY

M I N I S T E R I A L

Advancing Clean Energy Together

September 2023

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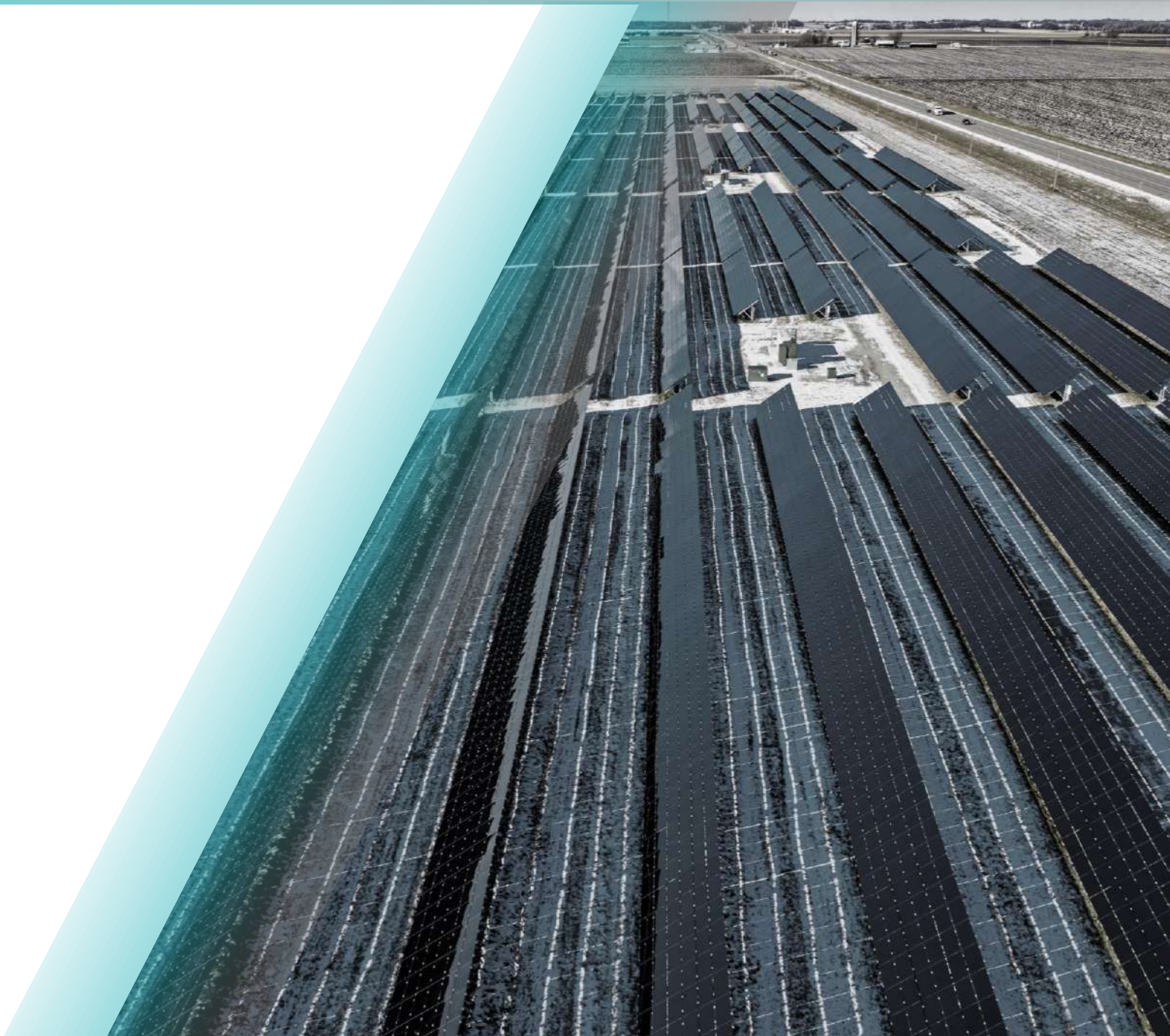
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CEM IN QUOTES



H.E. Alexandre Silveira, Minister of Mines and Energy, Brazil

The dynamism of the Preparatory Meeting in Rio De Janeiro in March and the parallel events held in the days preceding this ministerial evidence CEM and MI's capacity of engagement and delivery. When ministers are mobilized and point the way, they pave a way to effective results and this is what we will pursue throughout 2024 in Brazil. The structuring and implementation of different initiatives and missions shows that we have established a powerful community, capable of dialogue, collaboration and cooperation for common objectives that is able to deliver concrete actions and impacts.



H.E. Kadri Simson, Commissioner for Energy, European Commission

"I welcome the decision to extend the mandate and raise the ambition of the CEM. I was pleased to take part in the launch of the Global Hydrogen Ports Coalition and to join and lead together with Canada and the US a new Initiative on Empowering People. These and other CEM workstreams will make a difference in this decade. We must all use the next more ambitious phase of CEM for turning our goals into real action and tangible results."



H.E. Raj Kumar Singh, Minister of Power, New and Renewable Energy, India

"At this [*14th CEM Ministerial*] Conference, we will discuss the problems we face in our role to address climate change, the problems that lie ahead on our path to energy transition, and how we will overcome these problems."



H.E. Joe Biden, President, United States

"We will closely align our efforts with the work of forums like the CEM13 and the MI-7— both of which I am proud to say the United States will chair."



H.E. Dr Fatih Birol, Executive Director, International Energy Agency

"The IEA is proud to both host and be a key partner of the CEM. The CEM is a proven and popular forum for important practical work that accelerates our clean energy adoption, and we work closely together to build impactful global coalitions of countries companies and our international experts to accelerate clean energy transitions around the world."



ABOUT THE CLEAN ENERGY MINISTERIAL (CEM)



CEM MISSION

The world is undertaking the fastest and most far-reaching energy transition in history.

The CEM brings together a powerful **COMMUNITY** of the world's largest and leading countries, companies, and international experts to achieve one mission – **ACCELERATE CLEAN ENERGY TRANSITIONS**.

CEM members have agreed that it should work to supercharge **THREE CRUCIAL SHIFTS** this decade:

SCALE

Clean energy adoption this decade must far outpace the last, moving from niche- to mass- to massive-scale deployment.

SECTORS

Clean energy action must grow from the power sector to every sector, and from energy ministries to every ministry.

SOCIETY

An inclusive, whole-of-society approach must look from governments and companies to consumers and citizens.

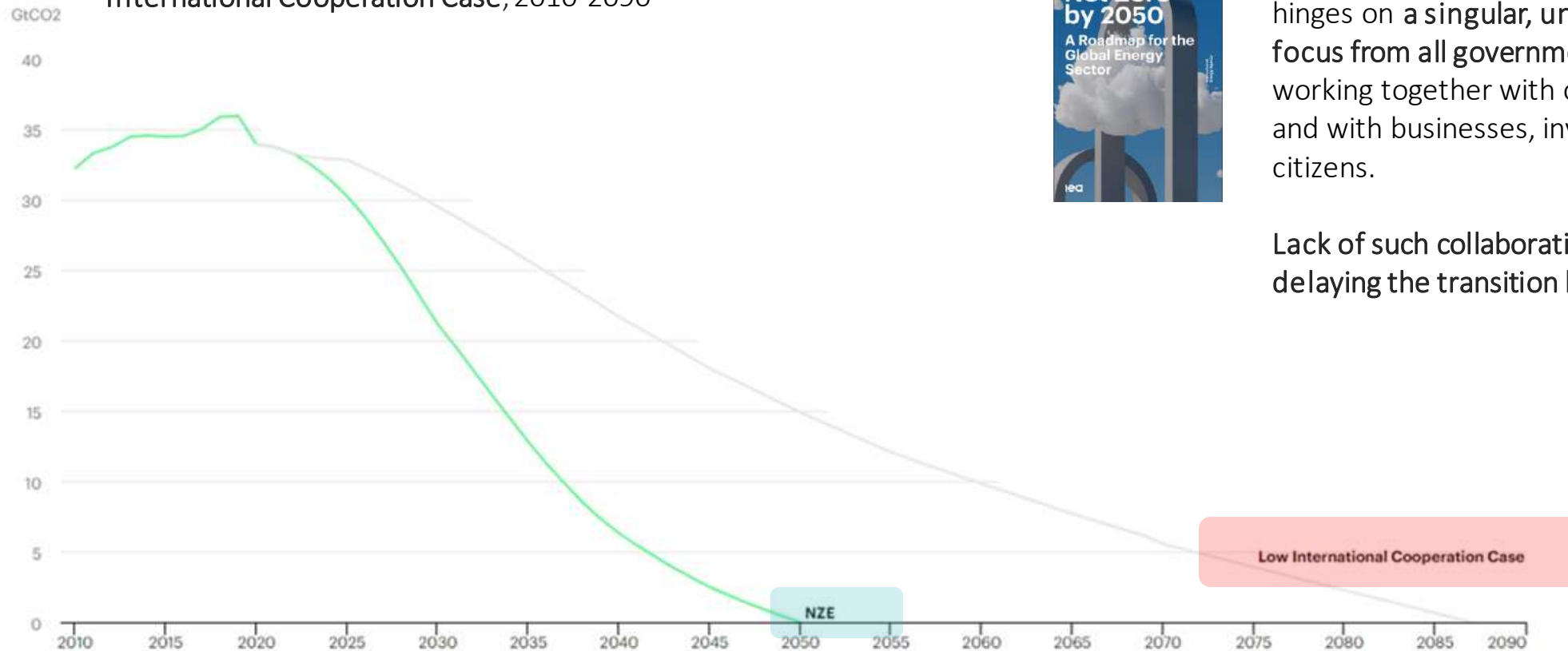
NET ZERO REQUIRES STRONG INTERNATIONAL COLLABORATION

Global energy-related CO₂ emissions in the Net Zero Pathway and Low International Cooperation Case, 2010-2090



Achieving net zero emissions hinges on a **singular, unwavering focus from all governments** – working together with one another, and with businesses, investors, and citizens.

Lack of such collaboration risks delaying the transition by decades.



● Low International Cooperation Case ● NZE

Source: IEA (2021), Net Zero by 2050, IEA, Paris

CEM'S 29 MEMBERS



26 PARTICIPANTS



KEY PARTNERS



KEY PARTNERS



OBSERVERS



CEM VALUE PROPOSITION



GLOBAL LEADERSHIP

CEM Members represent 90% of installed RE power generation capacity, 80% of global RE investments & the majority of public R&D.



SINGLE MISSION

Accelerate clean energy transitions around the world.



FLEXIBLE APPROACH

Members can form or join clean energy workstreams in line with their priorities.



OPEN PLATFORM

Many leading international organisations, companies, think tanks, foundations.



ACTION COALITIONS

Activities are in a state of constant renewal, with action coalitions coming together to design and deliver new workstreams.



CEM COMMUNITY

The CEM community consists of the world's best international organisations and most influential actors.

CEM VALUE PROPOSITION

Stronger global **RECOGNITION** and **POSITIONING** of the CEM as an **ACTION AND IMPLEMENTATION PLATFORM**



An increasingly **IMPACTFUL AND AMBITIOUS WORK PROGRAMME**, delivering on CEM members' priorities

POWER	TRANSPORT	INDUSTRY	BUILDINGS	CROSS-SECTORAL	ENABLING ENVIRONMENT
21st Century Power Partnership - Nuclear Innovation - International Smart Grid Action Network - Regional & Global Interconnection - Transforming Solar RISE³	- Electric Vehicles Initiative - EV30@30 Campaign - Commercial Vehicles Drive to Zero Campaign - Clean Energy Marine Hubs	- Carbon Capture, Utilization, & Storage - Industrial Deep Decarbonisation - Green Public Procurement Campaign	Super-Efficient Appliance & Equipment Deployment	- Hydrogen Initiative - Biofuture Platform - Biofuture Campaign	- Empowering People - Equality In Energy Transitions - Equal by 30 Campaign - Long-Term Energy Scenarios - Investment & Finance - Clean Energy Solutions Center

An **ENERGISED AND COMMITTED GLOBAL COMMUNITY** at the heart of the CEM





HOW DOES THE CEM WORK?

The CEM builds **Global Action Coalitions** to achieve clean energy goals and advance their transitions. The CEM operates through **three key pillars**:

- **CEM Ministerial:** An annual meeting of its ministers, partners and community.
- **CEM Work Programme:** A combination of international campaigns and initiatives spanning the clean energy spectrum.
- **CEM Secretariat:** a small, flexible team that serves the ministerial, all workstreams and members.

CEM SECRETARIAT

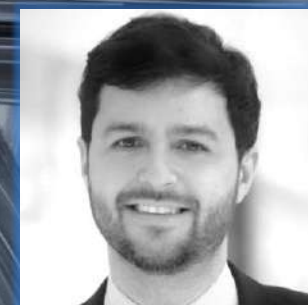
The CEM Secretariat is a small and agile team, as diverse as the CEM membership itself. Its functions include:

- Support the delivery of Ministerial Meetings, CEM Initiatives and Campaigns, partnerships and engagement.
- Coordinate CEM work and connect the strategic direction.
- Respond to the priorities of Members.
- Facilitate CEM Steering Committee and sub-group meetings.
- Manage communications and disseminate CEM insights.
- Manage governance and funding mechanisms.

Website: www.cleanenergyministerial.org

Social Media: [LinkedIn](#), [Twitter](#)

Email: Secretariat@CEMSecretariat.org



CEM IN QUOTES



H.E. Yasutoshi Nishimura, Minister of Economy, Trade and Industry, Japan

“CEM and MI have a tremendous to role to play in the decarbonisation of the world, through sharing experiences and facilitating international collaboration and innovation in the various areas of green energy. Let’s work together towards a more sustainable future of the world.”

UNIDO Director General Gerd Müller

“The collaboration between the CEM and UNIDO brings together emerging and advanced economies to accelerate industrial decarbonization. The Industrial Deep Decarbonization Initiative, coordinated by UNIDO, is accelerating the decarbonization of energy-intensive industries like steel, cement and concrete. This will drastically reduce industry emissions and help us meet our climate goals. At last year’s Global Clean Energy Action Forum, UNIDO announced new international targets to cut emissions from public construction projects, with three CEM governments agreeing to pilot the targets in their domestic procurement efforts. Collaborative efforts such as these are essential to bring green products to market and are key to international industrial decarbonization.”



HRH Prince Abdulaziz bin Salman Al Saud, Minister of Energy, Saudi Arabia

“The Kingdom of Saudi Arabia believes in the importance of Clean Energy Ministerial and Mission Innovation events as powerful global vehicles to drive the advancement of innovation and policies in clean technologies. The variety of such technologies under the CEM and MI umbrellas makes them very effective enablers to achieve our climate ambitions.”



Bloomberg

H.E. Michael Bloomberg, UN Special Envoy for Climate Ambition and Solutions. Founder and CEO of Bloomberg L.P

“The work CEM does is critical to driving the global transition to clean energy. That is why so many of the world’s major economies are represented here. CEM has an opportunity to advance the fight against climate change while at the same time spurring economic growth and innovation.”

Damilola Ogunbiyi, CEO, Sustainable Energy For All

“I plead to include the energy access story, as it is a key part. The energy transition must take place in an equitable, just and inclusive manner. And as we talk about the energy transition, we truly cannot forget about the global South and leaving no-one behind.”





CEM Ministerial Meetings



CEM MINISTERIAL



CEM10 – 2019
Vancouver, Canada



CEM1 – 2010
Washington DC,
United States



CEM7 – 2016
San Francisco,
United States



CEM13 – 2022
Pittsburgh,
United States



CEM6 – 2015
Mérida, Mexico



CEM15 – 2024
Brazil



CEM12 – 2021
Chile

CEM9 – 2018
Copenhagen,
EC & Nordic countries



CEM3 – 2012
London,
United Kingdom

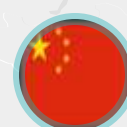
CEM2 – 2011
Abu Dhabi, UAE



CEM11 – 2020
Saudi Arabia



CEM8 – 2017
Beijing, China



CEM4 – 2013
New Delhi, India



CEM14 – 2023
Goa, India

CEM5 – 2014
Seoul, South Korea



NEXT MINISTERIAL MEETING

CEM 15 will take place in Brazil
in 2024.



CEM MINISTERIALS 2010-2014

CEM1

Washington DC, US

- Members: Australia, Brazil, China, Denmark, EC, Finland, France, Germany, India, Indonesia, Italy, Japan, Korea, Mexico, Norway, Russia, South Africa, Spain, Sweden, UAE, UK, US (Belgium as visiting member)
- Launch of 11 new Initiatives such as SEAD, Global Superior Energy Performance Partnership, ISGAN, EVI, CESC, CCUS, MSWWG, Sustainable Development of Hydropower Initiative, Multilateral Bioenergy Working Group, Solar and LED Energy Access Program, C3E

CEM2

Abu Dhabi, UAE

- Ministerial meeting focused on 3 themes: smart policies for clean energy supply, energy efficiency, and strategic deployment of public finance.
- 4 public-private Roundtables on Renewable Energy Scale Up, Sustainable Cities, Technologies and Business Models for Energy Efficiency, Utility Scale Energy Efficiency)
- Public forum that highlighted women's contributions to clean energy and female leaders in clean energy

CEM3

London, UK

- Launch of 5 new workstreams: Global LEAP, 21st Century Power Partnership, Global sustainable cities network (GSCN), 21CPP and Global Sustainable Cities Network (GSCN)
- Meeting co-located with the High-Level Group of the Sustainable Energy for All (SE4All) initiative of United Nations. Secretary-General Ban Ki-Moon addressed the ministers via telephone



CEM4

New Delhi, India

- 6 public-private Roundtables held on solar PV: Reducing Soft Costs, Clean Vehicle Adoption, Power Markets in Emerging Economies, Renewable Policy and Finance, Energy Management Systems and Mini-Grid Development
- 3 side events on innovation showcase pavilion featuring 40+ industry booths, C3E Women in Clean Energy event, SEAD Award
- 1st SEAD Global Efficiency Medal Competition for energy-efficient flat-panel televisions

CEM5

Seoul, Korea

- KSA joins the CEM as an observer, alongside other organisations such as the IEA, IRENA, and the International Partnership for Energy Efficiency Cooperation.
- The CEM focuses on four key areas: energy supply, energy efficiency, integration and human capacity.
- Ministers announce consideration of 3 additional workstreams: the market accessibility of clean energy products, clean energy finance, and the energy-water nexus.
- Youth: a unique feature of this year's Ministerial was the Model CEM programme.

CEM MINISTERIALS 2015-2019

CEM6

Merida, Mexico

- KSA joins the CEM
- Former US President Obama announces the hosting of CEM7 by the US
- CEM's 2nd phase (CEM 2.0) in process
- Launch of 3 new workstreams: Global Lighting Challenge, Power System Challenge, Evolution of the Clean Energy Solutions Center
- Awards: SEAD Global Efficiency Medal Award; ISGAN Award of Excellence for "Grid4EU" .

CEM7

San Francisco, US

- Chile joins the CEM.
- Agreement to establish a new multilateral CEM Secretariat at the IEA.
- Launch of corporate sourcing of renewables, energy management campaign, and advanced cooling challenge
- Highlights: Announcement of USD 1.5 billion in commitments to accelerate clean energy deployment and access. US-President Obama gives Keynote address. Public-Private Action Summit. Startups and Technology Showcase with 100+ companies from 6 continents, 1st C3E Symposium on Women in Clean Energy.

CEM8

Beijing, China

- Chile joins the CEM,
- Netherlands joins as observer
- First Ministerial meeting since establishment of new CEM Secretariat
- Technology and Innovation theater showcases innovators, scientists, and entrepreneurs
- Launch of: Investment and Finance Initiative; Long-term Energy Scenarios Campaign; Equal by 30 Campaign; CCUS Initiative; Power System Flexibility Campaign; Distributed Generation Campaign

CEM9

EC, Denmark, Sweden, Norway, Finland, Nordic Council

- Major Technology Exhibition and Innovation Theater
- Corporate Sourcing of Renewables Report
- Canadian G7 Presidency sees all countries sign up to CEM's Equal by 30 Campaign
- Launch of NICE Futures Initiative
- Graduation of Global Lighting Challenge, which far surpasses USD 4 bn high efficiency, affordable lighting products with over USD 14 billion sold

CEM10

Canada

- Launch Hydrogen Initiative and Flexible Nuclear Campaign
- Equal by 30 Campaign exceeds 100 signatories and gender principles tabled
- First Youth Forum held at CEM
- Nearly 850 exhibitors at Innovation Showcase and participation from nearly 1,200 companies
- First CEM-MI joint event on accelerating market uptake of smart grids

CEM MINISTERIALS 2020-2024

CEM11

Saudi Arabia

- Launch of Biofuture Platform Initiative and
- Drive to Zero Campaign
- Energy Management Campaign achieves the goal of 50,000 ISO50001 certifications
- C3E international ambassador program
- 2nd LTES International forum convenes 700+ virtual participants from 83 countries
- 9 awards announced; 4 major new reports launched
- 7,400 delegate registrations

CEM12

Chile

- CEM members reaffirm CEM's ambitious, next phase (CEM3.0)
- Launch of 4 new work streams: Industry Deep Decarbonisation Initiative, Ports Coalition, Empowering People Initiative and Biofuture Campaign
- 40+ Clean Energy Side Events (featuring 250+ high-level speakers from 40+ nations)
- Launch of 10 major clean energy reports
- 150,000 participants from 100+ countries
- [CEM12 Outcomes Report](#) / [CEM12 YouTube channel](#)

CEM13

United States

- CEM Action Fund launched
- Transforming Solar workstream launched
- Research Impacts on Social Equity and Economic Empowerment (RISE3) launched
- Industry workstream expands; green public procurement pledges made
- Public-private partnership on CCUS for cement
- Release of high-level statement on sustainable bio-based fuels, chemicals, and materials
- CEM14 and CEM15 hosts announced, both alongside the G20 Energy Ministerial
- Climate Works announced funding to CEM
- [CEM PITTSBURGH ACTION PACT](#)

CEM14

India

- Official launch of new Clean Energy Hubs Initiative
- Launch of new International Hydrogen Trade Forum
- Release of the [CEM Impact brochure](#)
- Benchmark of 60 members reached by CEM Biofuture Platform
- Industrial Deep Decarbonisation Initiative and Green Public Procurement Campaign impact reports
- New Policy Toolkit released by the Empowering People Initiative
- [CEM14 Factsheet](#)

CEM15

Brazil

- September 2024 (*more information will be shared soon*)





14TH CLEAN ENERGY MINISTERIAL & 8TH MISSION INNOVATION MEETINGS (CEM14/MI-8), 19-22 July, Goa, India



14TH CLEAN ENERGY MINISTERIAL & 8TH MISSION INNOVATION MEETINGS (CEM14/MI-8)

ATTENDANCE

- 3500+ participants from 50+ countries
- Ministerial participation from 26 member states and high-level representation from 10 international organisations
- Mixed pool of participants from government, multilateral institutions, workstreams, industry, non-profit sector and academia

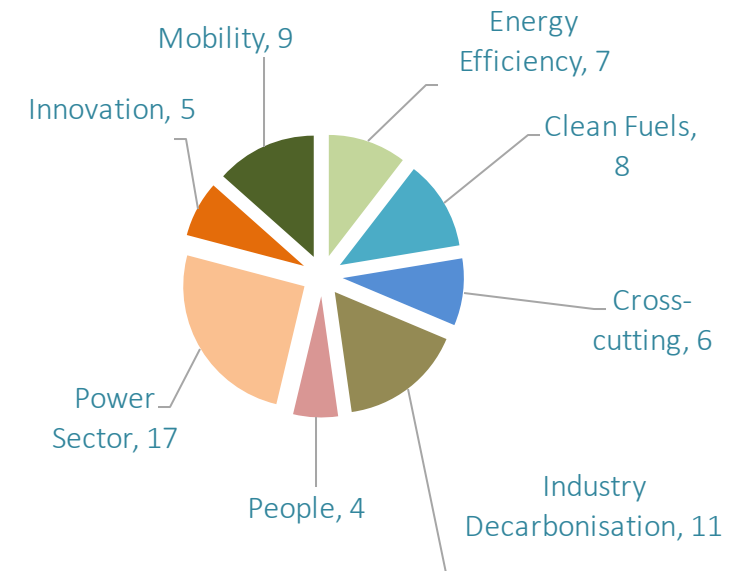
PROGRAMME

- 80+ side events across 8 different sectors
- 8 Minister-CEO dialogues/roundtables
- 100+ national & international organisers
- 40+ Clean Energy Technology Exhibits and a Zero Emission Truck Showcase
- EV Rally organised on 22 July 2023

IMPACT

- 20+ [Announcements/Launches](#)
- Ministerial Meeting hosted back to back with G20

CEM14 SIDE EVENTS



CEM IN QUOTES



H.E. Jennifer Granholm, Secretary of Energy, United States

"We need every single country, every single business and every single city and every single institution to do everything they can to deploy, deploy, deploy clean energy and it's that challenge that brings us to [the CEM Ministerial in] Goa today along with our counterparts at the G20 so that the meetings we have this week will either further cement this community as the centre of gravity for clean energy ambition and innovation and deployment."

H.E. Francesco La Camera, Director General, International Renewable Energy Agency



"IRENA is the operating agent of the CEM's Long-Term Energy Scenario Campaign, working with the co-leads Denmark and Germany. We are leveraging our global membership to create a network of experts to tackle the challenges of the 1.5 degree pathway ahead of us."



Dr. Ajay Mathur, Director General, International Solar Alliance (ISA)

"ISA has been working with the CEM since COP26 in Glasgow as part of our mission to increase financing and deployment of solar energy by 2030. Through this partnership, ISA helped five CEM governments launch the Transforming Solar Initiative last year to develop resilient solar PV manufacturing value chains and foster linkages between global trading partners. Through this partnership, we hope to support the development of solar manufacturing to achieve the required 950-1900 GW of additional capacity by 2030 and help meet climate and clean energy goals."



Eng. Suhail Mohamed Al Mazrouei, Minister for Energy and Infrastructure, United Arab Emirates

"The UAE is delighted to co-chair the IHTF with the Netherlands, creating a coalition of first mover governments committed to fostering global trade in hydrogen and derivatives through international cooperation and public-private action. The mission of the IHTF is well-aligned with our National Hydrogen Strategy and the key priorities for COP28 Presidency, including unlocking cross-border hydrogen trade corridors and identifying priority actions for governments and industry to advance from announcements to implementation on the ground Ministerial."



H.E. Wang Zhigang, Minister of Science and Technology, China

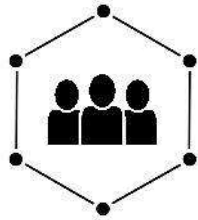
"We will deepen cooperation and exchanges with other CEM members in the fields of new energy vehicles, smart grids, hydrogen, etc. and draw on best practices to jointly promote global clean energy development and build a cleaner, better planet."



CEM WORK PROGRAMME

CEM WORKSTREAMS

INITIATIVE



- Convene a **Coalition** to collaborate and accelerate clean energy deployment.
- Focuses on **Coalition, Collaboration, Change, Communication**.
- Consists of Member leads (2-3), Coordinator, and CEM Secretariat.
- Engages with the **right coalition** to best serve the goals.
- Last **3+ years**.
- **Success Metrics:** Engagement/Activity metrics (active coalition participation.); Delivery metrics (delivery of work programme outputs to time, cost, quality); Output and Outcome metrics (expert meetings, analytical reports, project collaborations, regulatory alignment/coherence).

CAMPAIGN



- Inspire **Global Action** towards a **specific ambitious clean energy goal**.
- Focuses on **Communication, Community, Commitments**.
- Consists of Member leads, Campaign Manager, and CEM Secretariat.
- Engages with a **broad audience** and seeks to grow a **powerful community** that can generate impactful commitments.
- Lasts **1-2 years**.
- **Success Metrics:** Awareness metrics (events, viewers, participants); Engagement metrics (followers, subscribers, amplification); Impact metrics (signatories and commitments).

CEM WORKSTREAMS: Examples from the Transport Sector

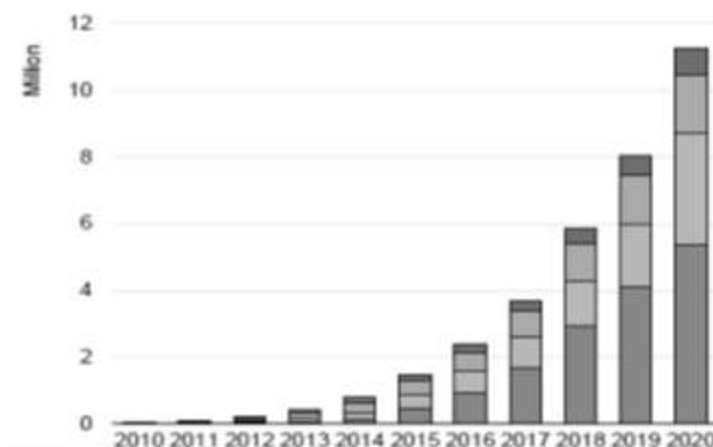
ACTORS

ACTIONS

OUTCOMES



- Government Fleet Declaration
- EV Pilot City Programme and Forum
- EVI Call to Action on Closing the Gap
- COP26 Global MoU on Zero Emission Trucks
- Support the GEF7 Global E-Mobility Programme
- Global EV sales are taking off...



CEM WORKSTREAMS

*All CEM workstreams are **voluntary**, have a **bottom-up approach** and a strong **focus on action**. Member countries decide the initiatives to join, set the goals and drive the activities to reach concrete deliverables to accelerate the clean energy transition.*



POWER

- 21st Century Power Partnership
- Nuclear Innovation
- RISE³
- International Smart Grid Action Network
- Regional & Global Interconnection
- Transforming Solar



TRANSPORT

- Electric Vehicles Initiative
- Commercial Vehicles Drive to Zero Campaign
- Clean Energy Marine Hubs



INDUSTRY

- Carbon Capture, Utilization, & Storage
- Industrial Deep Decarbonisation
- Green Public Procurement Campaign



BUILDINGS

- Super-Efficient Appliance & Equipment Deployment



CROSS-SECTORAL

- Hydrogen Initiative
- Biofuture Platform
- Biofuture Campaign



ENABLING ENVIRONMENT

- Empowering People
- Equality In Energy Transitions
- Equal by 30 Campaign
- Long-Term Energy Scenarios
- Investment & Finance
- Clean Energy Solutions Center



MISSION

Advance power system transformation by facilitating collaborative research, information-sharing, and capacity-building among power system practitioners. Promote integrated policy, regulatory, financial, and technical solutions for the deployment of clean energy in combination with large-scale energy efficiency and smart grid deployment.

GOALS

The 21st Century Power Partnership conducts activities in four focus areas, which each represent an opportunity to achieve better global coordination along the path to clean, reliable, cost-effective energy systems:

- Develop and share knowledge on key topics related to the transformation of the electricity sector
- Strengthen and disseminate technical tools to accelerate the transition to a more modern electricity sector
- Bolster the capacity of experts needed to advance the policies, programs, and practices required to transition toward a clean and efficient power sector
- Apply the knowledge, tools, and capacity developed through this effort to improve national and subnational policies and regulations

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Argentina, China, Denmark, Finland, Mexico, South Africa, Spain

PARTNERS

CSIR (South Africa), Danish Energy Agency, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ GmbH), Edison Electric Institute, ENERGINET, International Energy Agency (IEA), International Renewable Energy Agency (IRENA), Regulatory Assistance Project, The Nature Conservancy, USAID, World Bank (WB), World Resources Institute (WRI)



AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL

MISSION

Foster new collaborations to explore the potential for nuclear energy's uses, innovations, and clean energy systems integration to bring rapid solutions to today's climate and energy security imperatives. Inform decision-making on technical options, investment, research, financing, and valuation. Enable clean energy solutions that will uplift global economies and quality of life in local communities

GOALS

- Include nuclear energy in holistic discussions on clean, integrated, flexible, and reliable energy options at both the ministerial and working levels.
- Support just energy transitions planning, clean energy systems design, nuclear-renewables integration, and research and investment decisions involving nuclear energy.
- Pool the experiences of leading experts on nuclear innovation, potential near-term deployments, and electric and non-electric applications. Share technical, analytical, and communications tools and approaches.
- Advance social equity and economic empowerment.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Argentina, Brazil, France, Ghana, Jordan, Kenya, Poland, Romania, Russia, United Arab Emirates, United Kingdom

PARTNERS

American Nuclear Society, ClearPath, Électricité de France (EDF), Energy for Humanity, Energy Options Network, Fastest Path to Zero (University of Michigan), Generation IV International Forum, Good Energy Collective, International Atomic Energy Agency (IAEA), IEA, International Framework for Nuclear Energy Cooperation (IFNEC), International Youth Nuclear Congress, Nuclear Energy Institute, Nuclear Industry Council, OECD Nuclear Energy Agency (NEA), Third Way, TerraPraxis, Women in Nuclear Global, World Nuclear Association



MISSION

To provide an understanding of the economic and social equity benefits of nuclear innovation as a key pillar of countries clean energy blueprints as they transition to clean and just energy economies

GOALS

RISE3 will support and track community transformation with a focus on how unabated coal site conversation options with nuclear and or renewables yield economic and job impacts. It will provide modelling case studies, knowledge sharing, and technical advice on how to develop markets to inform decision making with equity and economic benefits in mind.



LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Brazil, France,
Kenya, Poland

PARTNERS

Fastest Path to Zero (University of Michigan), Gateway for Accelerated Innovation in Nuclear (GAIN), Good Energy Initiative, International Atomic Energy Agency, Idaho National Laboratory, OECD Nuclear Energy Agency, National Renewable Energy Laboratory, North American Youth Generation in Nuclear, TerraPraxis, Third Way

ISGAN INTERNATIONAL SMART GRID ACTION NETWORK

AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL

MISSION

Accelerate the development and deployment of smarter electricity grids worldwide, enabling increased demand response and energy efficiency. It focuses on five principal areas: policy standards and regulation, finance and business models, technology system development, workforce skills and knowledge, user and consumer engagement.

GOALS

ISGAN is an international platform for the development and exchange of knowledge and expertise on smarter, cleaner, and more flexible and resilient electricity grids ("Smart Grids"). ISGAN provides an important channel for the communication of experience, trends, lessons learned, and visions in support of global, national and regional clean energy objectives as well as new flexible and resilient solutions for Smart Grids.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Australia, Austria, Belgium, Canada, China, Denmark, European Commission, Finland, France, Germany, Ireland, Israel, Japan, Mexico, Netherlands, Norway, Russia, Singapore, South Africa, South Korea, Spain, Sweden, Switzerland, United Kingdom

PARTNERS

European Technology and Innovation Platform Smart Networks for Energy Transition (ETIP SNET), Global Smart Energy Federation (GSEF), International Energy Agency (IEA), India Smart Grid Forum (ISGF), Mission Innovation (MI)





REGIONAL & GLOBAL ENERGY INTERCONNECTION

AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL

MISSION

Accelerate the regional electricity grid and power market integration in order to maximise the use of cost-efficient clean energy sources available at the country level and regionally. Facilitate the development of sustainable, secure, and affordable regional electricity systems while contributing to economic growth, climate change mitigation, and decarbonisation of energy systems.

GOALS

- Facilitate the transition of energy systems to more interconnected, and electrified modern energy systems, and maximise the use of renewable energy. Facilitate policy discussions on the regulatory and market frameworks for electricity system integration.
- Support the development of sustainable, secure and affordable regional electricity systems to contribute to climate change mitigation and decarbonisation of energy systems.
- Increase the understanding of policy and regulatory issues regarding regional electricity interconnection. Address concerns on the security and reliability of large-scale interconnection.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Chile, Finland,
South Africa, South
Korea, United Arab
Emirates

PARTNERS

China Southern Power Grid,
ESKOM, Korea Electric Power
Corporation (KEPCO), State
Grid Corporation of China
(SGCC)





MISSION

Increase resiliency and diversity of solar supply chains, including raw materials, polysilicon, ingots, wafers, cells and modules, and associated equipment (eg. Glass, frames, EVA).

GOALS

Transforming solar will support member and non-member countries in diversifying supply chains, fostering innovation and promoting harmonization of standards and transparency along all stages of the solar manufacturing supply chain. This will include dedicated knowledge sharing workshops, and engagement with trade associations, manufacturers, and nongovernmental organizations.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Australia,
Brazil,
Germany,
India, United
Arab Emirates

PARTNERS

European Solar Manufacturing Council (ESMC), SolarPower Europe, Ultra Low-Carbon Solar Alliance, Institute for Essential Services Reform (IESR)





MISSION

Accelerate the global deployment of electric vehicles worldwide through analytical reports, policy recommendations, technical workshops and study tours, multilateral dialogues and technical assistance to regions or member countries.

GOALS

- Strengthen the understanding of the opportunities offered by electric mobility to meet multiple policy goals.
- Improve awareness of the drivers of EV deployment, supporting country-level policy and regulatory implementation.
- Outline a vision for the future of electric mobility, building consensus on policy goals (e.g. EV30@30) and benchmarking success.
- Bolster policy action and improve the visibility of national policy efforts in publications, such as the Global EV Outlook
- Mobilize targeted policy action and strengthening the impact of specific measures.
- Accelerate the geographical coverage of policy deployment on electric mobility through capacity building and sharing knowledge and experiences, accelerating learning, and specific activities such as the EVI Global Pilot Cities Program.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Chile, Finland, France, Germany, India, Japan, Netherlands, New Zealand, Norway, Poland, Portugal, Sweden, UK, US

PARTNERS

CALSTART, C40 Cities, ChargePoint, E.On, Enel X, Energías do Portugal, FIA Foundation, Fortum, Global Fuel Economy Initiative (GFEI), Hewlett Foundation, Iberdrola, International Council on Clean Transportation, International Zero Emission Vehicles Alliance, Low-Carbon Transport, Natural Resource Defense Council, Renault-Nissan Mitsubishi Alliance, REN21, Schneider Electric, The Climate Group, Tokyo Electric Power Company, UN-Environment, UN-Habitat, Vattenfall, WRI, WBCSD



MISSION

Promote greater deployment of zero- or near-zero emission levels for commercial, medium and heavy-duty vehicles (MHDVs) – including mass global transit – and bring together governments and leading stakeholders to work collaboratively on requirements, policies, and programs that support the electrification of commercial vehicles.

GOALS

- By 2025, near- and zero-emission MHDVs are commercially viable and cost-competitive in first-success applications (also referred to as “beachhead” applications) in target global markets. By 2040, zero-emission MHDVs dominate in their segments.
- Gather commitments and pledges from EVI member and non-member governments, stakeholders and industry while encouraging, supporting and informing those that are undecided.
- Entities who take the pledge commit to taking actions that support achieving the aspirational target(s) within the identified timelines and sharing their experience and progress.
- Member and non-member countries would have an opportunity to work directly with CALSTART to build their own domestic Drive to Zero Programs. More info MoU: <https://globaldrivetozero.org/mou-nations/>

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Aruba, Austria, Belgium, Chile, Croatia, Curacao, Denmark, Dominican Republic, Finland, Germany, Ireland, Japan, Liechtenstein, Lithuania, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Sweden, Switzerland, Turkey, UK, Ukraine, Uruguay, US





RATIONALE

- By **2050**, the shipping industry is expected to transport at least **50% of all traded zero-carbon fuels**.
- Currently almost **no active projects** that demonstrate this practically; for example, just one ship in the global fleet is able to carry liquefied hydrogen.

OBJECTIVE

Establish a **cross-sectoral public-private initiative** to raise awareness and become a platform where governments and industry across the energy-maritime value chain can share **knowledge, best practices, provide recommendations** and **data** from their Clean Energy marine Hubs. Hubs for Exporting, storing or distributing with other countries or regions, helping de-risk investments towards deployment, transport and use of low-carbon fuels via shipping.

CO-LEAD COUNTRIES AND COORDINATOR



PARTNERS

Co-led by a taskforce of CEOs, aiming to accelerate the production, export and import of low-carbon fuels across the world.

OUTCOMES

Green Shipping Challenge launch event at the world leader's summit of COP27 (led by the United States and Norway, the Green Shipping Challenge aims to bring together governments, ports, maritime carriers, shipowners and cargo owners to find decarbonisation solutions for the industry)



MISSION

To increase momentum on the deployment of CCUS as a viable CO₂ mitigation option in a suite of clean energy technologies. It fosters strategic partnerships to accelerate both near and longer-term investment in CCUS and to advance deployment by making CCUS more competitive.

GOALS

- Ensure the spectrum of clean energy technologies under CEM includes CCUS.
- Create a platform for governments, the private sector, and investment community to engage and accelerate CCUS deployment.
- Facilitate identification of both near and longer-term investment opportunities.
- Disseminate emerging best practice in CCUS policy, regulatory frameworks and project development

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Australia, Canada, China, European Commission, Japan, Mexico, Netherlands, Nigeria, South Africa, United Arab Emirates

PARTNERS

Asian Development Bank, Carbon Sequestration Leadership Forum, Global CCS Institute, International Energy Agency, Oil and Gas Climate Initiative, World Bank, IEAGHG (operating agent), Global Cement and Concrete Association



MISSION

A global coalition designed to stimulate global demand for low carbon industrial materials. In collaboration with national governments, IDDI works to standardise carbon assessments, establish ambitious public and private sector procurement targets, incentivise investment into low-carbon product development and design industry guidelines.

GOALS

- Encourage governments and private sector to buy low carbon steel and cement: IDDI advocates for governments to set procurement targets for the purchasing of decarbonised steel and cement.
- Source and share data for common standards and targets. Develop key definitions, tools, guidelines and publicly accessible data, enable industry to conduct rigorous reporting and industry benchmarking comparisons, define common methods and understandings of what constitutes decarbonised steel and cement products.

LEAD GOVERNMENTS



COORDINATOR

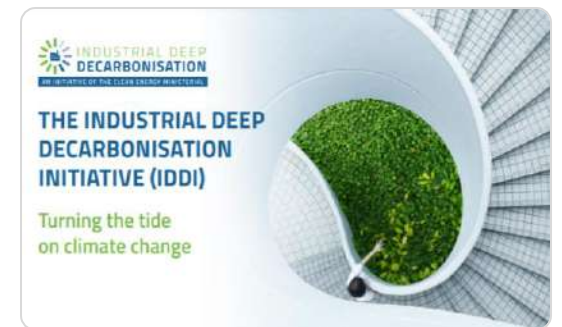


PARTICIPANTS

Canada, Brazil,
Germany, Japan,
Saudi Arabia,
Sweden, United
Arab Emirates, US

PARTNERS

Mission Possible Platform,
Steel Zero Campaign, The
Climate Group, The
Leadership Group for the
Industry Transition (LeadIT),
IRENA, The World Bank



GREEN PUBLIC PROCUREMENT

A CAMPAIGN OF THE CLEAN ENERGY MINISTERIAL

MISSION

Public procurement of steel and cement represent very high shares of domestic markets for such materials across most major economies. The Green Public Procurement Campaign is an effort by participating members to drive the global decarbonisation of heavy industries such as steel and concrete by creating a market demand for near-zero carbon concrete and steel through public procurement.

LEAD GOVERNMENTS



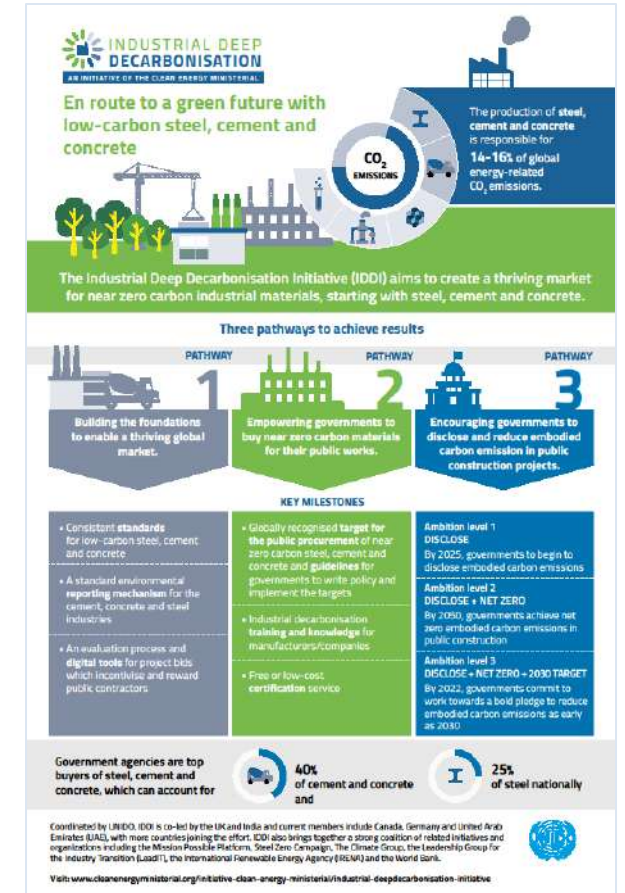
COORDINATOR



PARTNERS

The Green Public Procurement Campaign brings together a strong coalition of over 60 related initiatives and organizations across the private sector, civil society, intergovernmental organizations, trade associations, and leading experts from academia and think tanks to tackle carbon intensive construction materials such as steel and cement.

These organizations include the Mission Possible Partnership of the World Economic Forum, the Rocky Mountain Institute, the Climate Group, the Leadership Group for the Industry Transition (LeadIT), Building Transparency, and Agora Energiewende.





MISSION

The Energy Management Leadership Awards recognize leading organizations for their energy management achievements and raise the profile of the ISO 50001 energy management system as a proven, broadly applicable solution to global energy and climate challenges.

PARTICIPATING GOVERNMENTS



COORDINATOR



WINNERS

Each year companies around the world apply for consideration on three awards: CEM Award of Excellence in Energy Management; National Energy Management Awards; and Energy Management Insights Awards.

The 2023 winners are:

Awards of Excellence:

- Coop Danmark A/S, Denmark,
- PT Semen Tonasa, Indonesia



SEAD SUPER-EFFICIENT EQUIPMENT & APPLIANCE DEPLOYMENT

AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL

MISSION

To address urgent global energy challenges and promote the manufacture, purchase, and use of energy-efficient appliances, lighting, equipment in buildings worldwide. The SEAD Initiative fosters information exchange on policies and activities, driving increased ambition and action, allowing participants to take advantage of best practices and lessons learned by other countries, and identifying opportunities for bilateral and multilateral cooperation.

GOALS

- Increase partner participation and engagement by providing the knowledge and tools needed to help impact standards and labelling, procurement, and incentives policy change
- Highlight the benefits and urgency of energy-efficient equipment and appliance policies among participating governments through technical analysis
- Increase awareness among manufacturers of the value of producing super-efficient appliances and among retailers of the value of stocking such appliances through regional and global awards competitions

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Argentina, Australia, Brazil, Canada, Chile, China, Colombia, Denmark, Germany, Ghana, Indonesia, Japan, Mexico, Nigeria, Russia, Saudi Arabia, South Africa, South Korea, Turkey

PARTNERS

Asia-Pacific Economic Cooperation, CLASP, EBRD, ECOWAS Centre for Renewable Energy and Energy Efficiency, Kigali Cooling Efficiency Program, UN Environment Programme, IEA Technology Collaboration Programme on Energy Efficient End-Use Equipment (4E), Lawrence Berkeley National Laboratory, United For Efficiency





MISSION

Raise international ambition and advance long-term, commercial-scale clean hydrogen and fuel cell-related deployment globally, across all sectors. Achieve this via analysis, policies, programs, and projects that would make hydrogen a key enabler in the clean energy transition.

GOALS

- Help ensure successful deployment of hydrogen within current industrial applications.
- Enable deployment of hydrogen technologies in transport (e.g. freight, mass transit, light-rail, marine).
- Explore the role of hydrogen in meeting the energy needs of communities.



LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Australia, Brazil, Chile, Finland, Germany, India, New Zealand, Norway, Portugal, Saudi Arabia, South Africa, South Korea, Sweden, United Arab Emirates, United Kingdom

PARTNERS

Advanced Fuel Cells Technology Collaboration Programme, Hydrogen Council, Hydrogen Technology Collaboration Programme, International Partnership for Hydrogen and Fuel Cells in the Economy, International Renewable Energy Agency, Mission Innovation, World Economic Forum



MISSION

To lead global actions to **accelerate development, scale-up, and deployment of sustainable bio-based alternatives to fossil-based fuels, chemicals, and materials.**

GOALS

- Foster consensus on biomass sustainability, availability, and governance
- Promote policy best practices and convergence
- Enable supportive financing mechanisms
- Promote cooperation on policy, regulations, and technologies.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Argentina, China, Denmark, Egypt, Finland, France, Hungary, Indonesia, Italy, Morocco, Mozambique, Paraguay, Philippines, Portugal, South Africa, United Kingdom, Uruguay

PARTNERS

IEA, IEA Bioenergy TCP, International Renewable Energy Agency, Food and Agriculture Organization, Global Bioenergy Partnership, United Nations Conference on Trade and Development, United Nations Industrial Development Organization, Sustainable Energy for All



MISSION

Enable the reduction of GHG emissions and foster a circular economy by showcasing pathways by which countries, companies, and consumers can substitute sustainable bio- and waste-based Fuels, Chemicals, and Materials for their fossil equivalents

SUBSTITUTION CHALLENGE

To foster ambition and catalyse action, the Biofuture Campaign will develop and implement the Bio-based Substitution Challenge, whose signatories aspire to substitute bio- and waste-based Fuels, Chemicals, and Materials for 10% of their fossil carbon equivalent in relevant sectors and products by 2030, relative to a 2019 baseline.

LEAD GOVERNMENTS



COORDINATOR

Biofuture Workshop &



PARTICIPANTS

Finland, United Kingdom

PARTICIPANTS

IEA Bioenergy TCP, FAO, Global Bioenergy Partnership, IRENA, Braskem, Rainzen, Canadian Fuels Association, Enkern, Maersk, Novozymes, Staraenso, Praj, Low Carbon Fuels Coalition, Studio Gear Up





MISSION

Convene the right people and partners – including those from underrepresented and marginalized voices – to bring forward the novel approaches and diverse perspectives needed to move the needle on achieving a just and equitable transition for a clean energy future.

GOALS

- Share lessons on needed and successful policies that support just clean energy transitions;
- Highlight different policy mixes to support workers and communities with models that meet the unique needs and circumstances of different member countries, industrial sectors and stakeholder communities;
- Advocate for diversity and inclusiveness in HR policies, working conditions and corporate governance; address the needs of youth, gender equality, including pay equity, retention of diverse staff, the promotion of inclusive culture, among other measures that would serve to marshal and develop all available talent to strengthen the global energy sector.

LEAD GOVERNMENT



COORDINATOR

Ms. Laure Jeanne Davignon

PARTICIPANTS

Chile, Denmark

PARTICIPANTS

International Energy Agency (IEA), International Labour Organization (ILO), LinkedIn, SDG7 Youth Constituency, the World Bank, World Energy Council



MISSION

Develop energy policies and regulatory frameworks that help mobilise investment and financing to the clean energy sector at scale, particularly from private sources. It aims to create a unique partnership, bringing together energy ministers, other government agencies, private companies, and financial institutions.

GOALS

- Create a forum for peer-to-peer exchange of lessons learned and best practice across the clean energy investment and finance value chain;
- Conduct robust analysis and monitoring that advance understanding of investment and financing trends in clean energy and provide a benchmark for policy development;
- Build and/or disseminate state-of-the-art analytical tools and resources that support policy design, and investment facilitation within and across countries;
- Synthesize international experiences and best practice for creating the enabling conditions to support investment and innovative solutions to stimulate financing;
- Respond to requests from CEM member countries on specific investment-related cooperation. Acting as an agent for country-level engagement, including by “connecting the dots” and brokering support provided by a range of partners for policy design, technical assistance and capacity building.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Brazil, India, Netherlands, New Zealand, United Kingdom

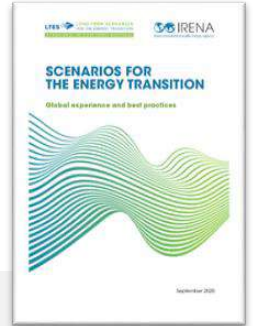
PARTICIPANTS

Imperial College London, World Bank Energy Sector Management Assistance Programme (ESMAP), Climate Investment Funds Technical Assistance Facility for Clean Energy Investment and Finance (CIF-TAF).



LTES LONG-TERM SCENARIOS FOR THE ENERGY TRANSITION

AN INITIATIVE OF THE CLEAN ENERGY MINISTERIAL



MISSION

Promote wider adoption and improved use of energy planning models and scenarios to help countries accelerate their transition to clean energy. Long-term energy scenarios are important tools that can identify options, assess risks, evaluate the roles of different energy technologies in energy systems, and help governments adopt the best policies for a cost-effective and sustainable transition.

GOALS

- Integrating scenarios into decision making: Demonstrating how governments can use energy planning scenarios to ensure better policy making. And exploring how scenarios can be made more relevant to private investors.
- Improving scenarios for the clean energy transition: Examining how long-term energy scenarios can be strengthened to better account for potentially transformational changes to the energy system.
- Identifying capacity building requirements: Analysing where long-term energy scenario development can be improved, and how “best practices” can be shared to enhance institutional scenario planning capacity.

LEAD GOVERNMENTS



COORDINATOR



28 PARTICIPANTS

Bosnia and Herzegovina; Brazil; Canada; Chile; Colombia; Costa Rica; Cyprus; Denmark; Dominican Republic; El Salvador; Finland; Ghana; Italy; Japan; Kenya; Latvia; Lithuania; Mexico; Kingdom of the Netherlands; Peru; Philippines; Portugal; Saudi Arabia; United Arab Emirates; United Kingdom of Great Britain and Northern Ireland

12 PARTICIPANTS

Energy Research Institute of the Russian Academy of Sciences (ERI RAS); Joint Institute for Strategic Energy Analysis (JISEA) at NREL; World Resources Institute; Ricerca Sistema Energetico (RSE); GET.transform; World Energy Council; International Energy Agency (IEA); China National Renewable Energy Centre (CNREC) European Commission; European Commission Joint Research Centre (JRC); State Grid Corporation of China (SGCC); IEA ETSAP Technology Cooperation Programme; The World Bank



MISSION

Advance gender diversity in clean energy professions, recognizing that the transition to a clean energy future will only succeed if we harness all talent. The Equality In Energy Transitions Initiative is also an IEA Technology Collaboration Programme (TCP).

GOALS

The Equality In Energy Transitions Initiative (formerly C3E Initiative) aims to advance women's participation in clean energy by creating opportunities and closing the gender gap across four focus areas:

- Data Collection, Knowledge Building and Policies
- Awards and recognition
- Career development/mentorship, including the International Ambassadors Programme
- Dialogue and communications

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Australia, Austria, Chile, Czech Republic, European Commission, Finland, Germany, Italy, Sweden, United Kingdom

PARTICIPANTS

International Energy Agency (IEA)



MISSION

Provide policymakers with free resources and advisory support on clean energy policies, regulations, and financing mechanisms to help governments reach their clean energy and development objectives quickly and cost-effectively. A source of high-quality clean energy policy and deployment information, providing expert assistance, peer forums, and training, bringing together a network of policymakers to work on clean energy solutions.

GOALS

Serve as a clearinghouse of high-quality clean energy policy and deployment information and to provide in-depth expert assistance, peer forums, and trainings through a virtual platform, bringing a broad network of policy makers together remotely to work on clean energy solutions.

LEAD GOVERNMENTS



COORDINATOR



PARTICIPANTS

Canada, China, *European Commission*, Germany, India, Indonesia, Italy, Mexico, Sweden, United Arab Emirates

PARTICIPANTS

IRENA, REN21, GWNET, CTC-N, Clean Power Hub

CEM AWARDS 2023



Hydrogen Award of Excellence

- The Hydrogen TCP Award of Excellence aims to leverage innovation in hydrogen technologies and applications. The Award of Excellence is a joint action of the IEA Hydrogen TCP and the Clean energy Ministerial Hydrogen Initiative (CEM-H2I) to recognize excellence in hydrogen technology projects around the world and provide a platform to show-case the winning projects. This year's theme is "Integrating electrolysis with wind, solar and/or nuclear energy". For more information, [click here](#).



ISGAN Awards of Excellence

- Sponsored by the International Smart Grid Action Network (ISGAN), in partnership with the Global Smart Energy Federation (GSEF) and the CEM Empowering People Initiative (EPI). The awards recognize excellence in innovation, integration, and transformation of smart grid systems and policy. This year's themes are "Excellence in EV Integration in Smart Grid" and "Smart Grid Workforce Development for an All-inclusive Energy Transition". For more information, [click here](#).



Equality Initiative Awards

- These awards recognise and celebrate commitment to advancing the role of women in clean energy in three distinct categories: the ***Woman of Distinction award*** for a professional woman working in the energy sector who goes beyond business as usual, an ***organisational award*** to recognise a public, private or non-profit organisation taking action to recruit, develop and retain women in the energy sector and a ***new emerging leader in renewable energy award*** for an individual who has shown outstanding promise in this area. For more information, [click here](#).



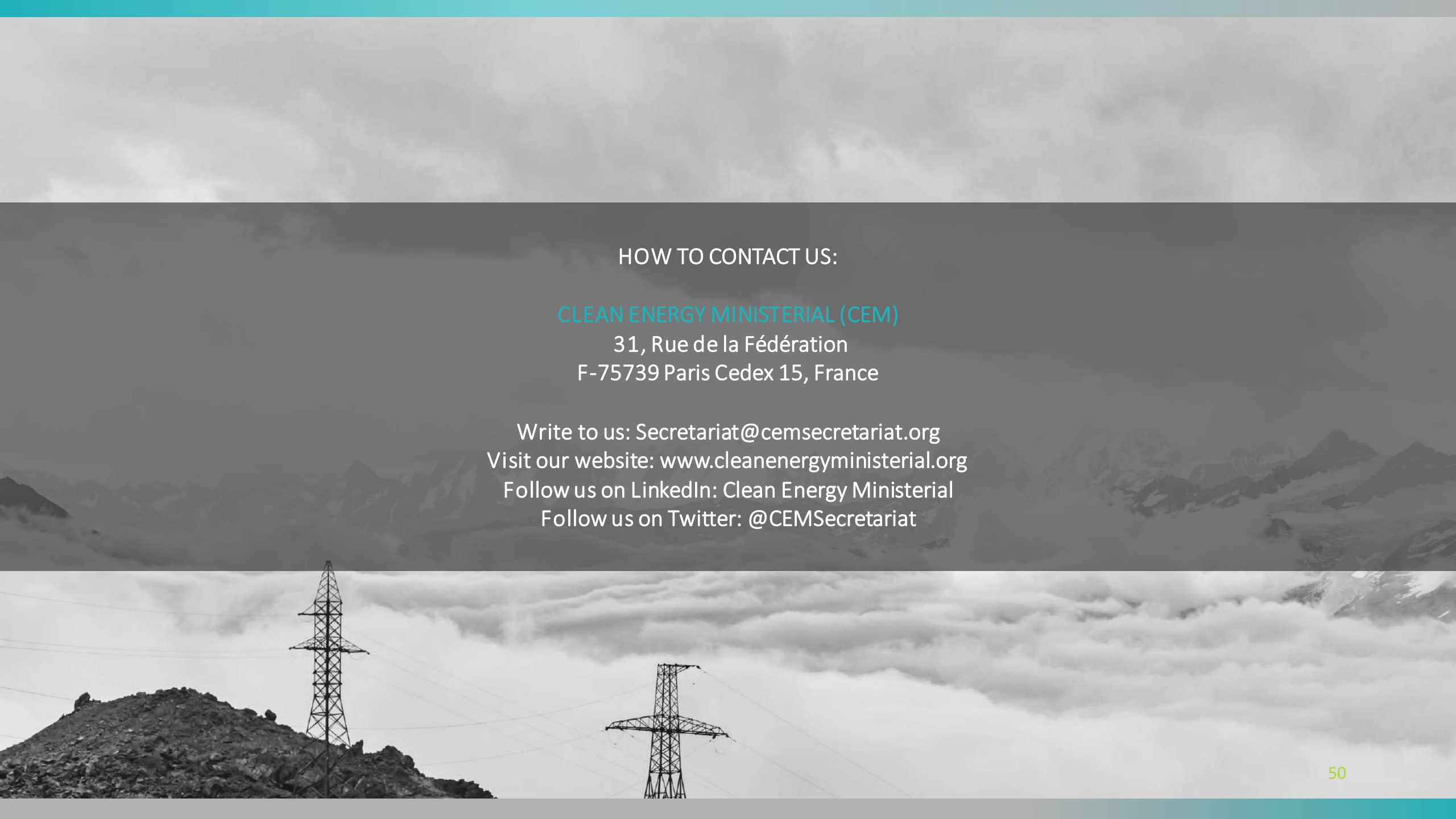
Energy Management Leadership Awards

- This prestigious award raises global awareness of ISO 50001-certified energy management systems and the many benefits they provide. Now in its seventh year, the competition has recognized achievements by over 230 organizations with certified systems in 105 countries or economies and across 50 sectors—such as cement, iron and steel, and chemical manufacturing, municipalities, retailers, healthcare systems, hospitality companies, and water/wastewater treatment facilities. For more information, [click here](#).

GRADUATED WORKSTREAMS

1. Advanced Cooling Challenge (ACC) Campaign (see [Website](#))
2. Advanced Power Plant Flexibility (see [Website](#))
3. Corporate Procurement Of Renewable Energy Sources (see [Website](#))
4. Distributed Generation in Strategic Regions Campaign (see [Website](#))
5. Energy Management Campaign (see [Website](#))
6. Energy Management Working Group (see [Website](#))
7. Global Lighting and Energy Access Partnership (LEAP) (see [Website](#))
8. Global Lighting Campaign (see [Website](#))
9. Multilateral Solar and Wind Working Group (see [Website](#))
10. Nearly Zero Energy Buildings (see [Website](#))
11. Sustainable Cities and Eco-Energy Towns (see [Website](#))
12. Power System Flexibility (see [Website](#))
13. Flexible Nuclear (see [Website](#))
14. EV30@30 (see [Website](#))





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