Electric Vehicle Initiative (EVI)
What it does & where it is going

Sarbojit Pal, Manager of Partnerships
CEM Secretariat

Indian Transport Sector: Marching towards Sustainable Mobility

COP-23 Side Event, November 14, 2017
India Pavilion, Bonn, Germany
CEM: Unique ministerial platform on clean energy... and not just for two days a year

Year round initiatives and campaigns
It’s member countries give CEM global significance

Accelerating deployment of solar and wind by sharing best practices

90% Clean energy investments
75% Global CO₂ emissions

CEM Countries

Initiatives and campaigns have global market shaping potential

Accelerating energy-efficient equipment and appliances markets - global deployment

Accelerating deployment of solar and wind by sharing best practices
Yearly Ministerial hosted by different member countries

- CEM1 - 2010 United States
- CEM2 - 2011 United Arab Emirates
- CEM3 - 2012 United Kingdom
- CEM4 - 2013 India
- CEM5 - 2014 Korea
- CEM6 - 2015 Mexico
- CEM7 - 2016 United States
- CEM8 - 2017 China
- CEM9 - 2018 EU
- CEM10 - 2019 Canada
Next CEM Ministerial
Co-hosted by the EU and the Nordics

CEM9/MI-3
Energy Integration and Transition
Copenhagen/Malmö – the Öresund Region | 23-24 May 2018
The Ministerial is coupled with year-round technical work
Increasingly reflecting the fast changing world of energy

| Participation in Clean Energy Ministerial Initiatives and Campaigns | Australia | Brazil | Canada | Chile | China | Denmark | European Commission | Finland | France | Germany | India | Indonesia | Italy | Japan | Korea | Mexico | Netherlands (observer) | Norway | Russia | Saudi Arabia | South Africa | Spain | Sweden | United Arab Emirates | United Kingdom | United States |
| Appliances (SEAD) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Electric Vehicles (EVI) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Energy Management (EMWG) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| 21st Century Power (21CPP) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Energy Access (Global LEAP) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Smart Grids (ISGAN) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Solar and Wind | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Clean Energy Policy (Solutions Centre) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Women in Energy (C3E) | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Advanced Cooling Challenge | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Corporate Sourcing of Renewables | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Energy Management | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Global Lighting Challenge | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| EV 30@30 | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Advanced Power Plant Flexibility | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Sustainable City/Eco-Energy Town Initiative | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| Nearly Zero Energy Buildings | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● | ● |

- ●: Lead  ●: Participant
- * to be confirmed
- US participation and leadership are under review

Non-CEM countries, non-governmental organisations, and private businesses also participate in selected activities and campaigns.
Electric Vehicle Initiative (EVI)

Government-to-government forum comprising 13 countries

Currently co-chaired by Canada and China, and coordinated by the IEA

Released several analytical publications (Global EV Outlook, City casebook)

Engaged stakeholders in high-level roundtables (CEM8 and Pilot City Forum in Beijing, June 2017)

Instrumental to mobilize action and commitments (Paris Declaration on Electro-Mobility and Climate Change at COP21, Government Fleet Declaration at COP22)

➢ Just launched the EV30@30 Campaign (aim for a 30% market share for EVs by 2030)
Global EV Outlook 2017

• Annual EVI report drafted at IEA
  ➢ Data reporting (EV stock, sales, EVSE, battery costs)
  ➢ Policy analysis and TCO assessment
  ➢ CO\textsubscript{2} impact and role of EVs in low carbon scenarios (2030 timeframe)
  ➢ Insights on grid integration

• (next reports: Nordic EV Outlook, Global EV Outlook 2018)
The global electric car fleet reached 2 million units in circulation last year, but sales growth went from 70% in 2015 to 40% in 2016, suggesting an increasing risk of falling off track.
New electric car registrations reach 750K units in 2016

Electric car sales, market share, and BEV and PHEV sales shares in selected countries in 2010-16

95% of global electric car sales in 2016 took place in 10 countries, and 6 countries had a market share above 1%: Norway, Netherlands, Sweden, France, United Kingdom, China
Changes in electric car incentives, especially for vehicle purchase, can have an immediate and sizeable impact on electric car sales and steer the market towards either BEV or PHEV preference.
E-mobility is also gaining ground in non-car modes; China leads the way

Electric 2-wheelers: > 200 million, mainly in China.
Other countries: ~200 000 in India, ~30 000 in the Netherlands, ~1 000 in the UK

Low-speed electric vehicles: ~4 million in China

Electric buses: 350 000 in China.
In Europe: deployment stage and ambitious procurement plans
Goal: at least 30% of new road vehicle* sales across all EVI countries to be electric** by 2030

Implementing actions on:

- Deployment of **chargers and fueling infrastructure**, public procurement and private sector deployment of **fleets**, expanding **research (policy focus)** to improve the understanding of best practices on EV policy support, providing resources for **capacity building** to disseminate these best practices

- Establish **Global EV Pilot City Programme**, aiming to achieve 100 EV-Friendly Cities over five years

  - Commitments open to all interested stakeholders: Governments, businesses, partner organizations, companies, research institutes, local authorities, association, NGOs, non-profit organizations

Current supporting NGOs and IGOs:

* Including passenger cars, light commercial vans, buses, and trucks; excluding 2- and 3-wheelers

** Including battery-electric, plug-in hybrid, and fuel cell
• Goal: Achieve 100 EV-Friendly Cities over five years

• Support greater **dialogue** with and provide **support** to municipal governments
  – Topics: urban planning, infrastructure and charging technology, mass transit (including electric buses) and mobility as a service (including car and ride sharing)
• Identify **good practices** and facilitate their **replication** and improvement
• Engage in the organization of the **Pilot City Forum**

- Exchange event allowing to facilitate **networking** and **communication** across interested stakeholders, to be held alternatively in China in odd years and in another country in even years
• **Monitor and report** progress: data and information sharing among PCP members
India is uniquely placed to benefit from the EVI

• There is a significant domestic and global momentum on EVs that India could leverage
• EVI could provide the critical link between the domestic needs and the global transition
• EV30@30 and the Pilot Cities Program (PCP) could give India the opportunities to learn from global best practices
• Take the opportunity to also share best-practices from the country in this era of shared leadership