

# Introduction to the Clean Energy Transitions Programme

#### Who's at the table?

#### **Priority countries**















**Africa** 

Latin America Southeast Asia

#### **Supporters**

























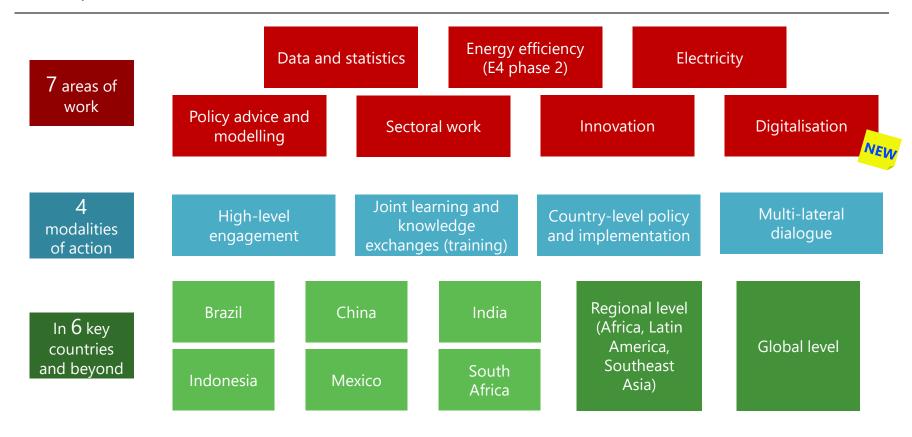




Looking to fully leverage other partners and multi-lateral or bi-lateral efforts

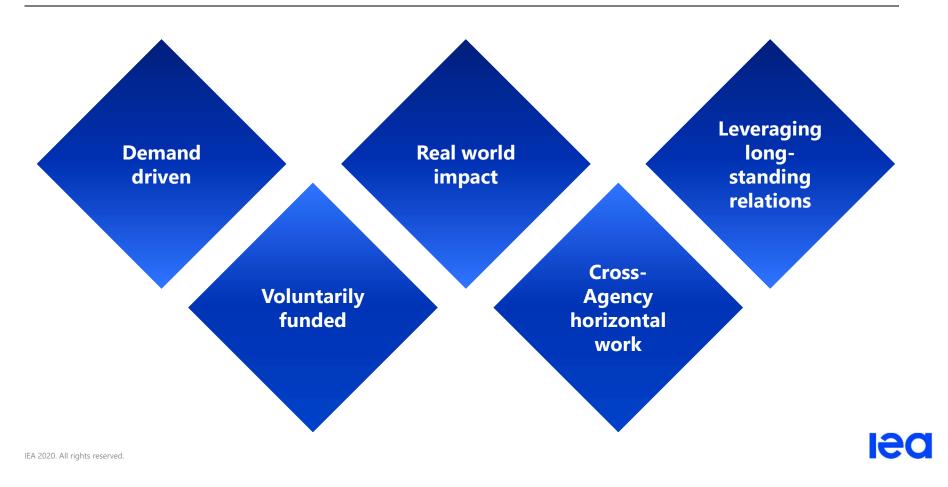


#### What, how and where?





## Why is the CETP special?



## **CETP** key 2019 numbers



Proportion of global CO<sub>2</sub> emissions from fuel combustion emitted by CETP priority countries



Exchanges with ministers and high-level officials 96

Technical exchanges in CETP priority countries



15 Capacity-building events

Participants trained



Reports produced or enhanced







#### Selected 2019 highlights

- Brazil Bringing decades of experience to help the government better track and promote clean energy innovations; including the country in the annual energy efficiency statistical report for the first time ever
- China Providing cutting-edge analysis to integrate higher shares of renewables into the power system, responsible for one-fifth of all global carbon emissions
- India Helping the government on an integrated approach to climate change, energy access and air pollution.
- Indonesia Producing a customised policy checklist to inform the development of the country's main energy efficiency regulations
- Southeast Asia Setting out a series of policy interventions that could reduce energy use for cooling by half in the region
- Africa Holding an energy efficiency training week, bringing together
  112 government staff to better harvest efficiency opportunities across 33 participating African countries

These results – and many more – are detailed in the <u>Annual Report</u>









## 1) Data & Statistics

**Objective:** Improve global energy data quality, coverage and timeliness by providing technical support and capacity building on data collection; and by developing new indicators and methods to enhance tracking capabilities.

#### • Examples of activities:

- Supporting Brazil to enhance energy data and statistics, focusing on energy efficiency indicators and RD&D data
- Co operating with Indonesia to continue improving energy data quality, coverage and timeliness
- Working closely with India to increase alignment of official statistics and balances with international recommendations
- Continuing to enhance availability and timeliness of energy data from emerging economies with an early energy statistics and balances release
- Developing new energy transition indicators
- Supporting participation of officials in IEA's Energy Statistics Courses
- Continuing to produce multimedia tools and manuals in different languages to share in-depth knowledge on several energy statistics topics









## 2) Energy Efficiency

• **Objective:** Support the scale-up of energy efficiency activities that generate economy-wide benefits

#### • Examples of activities:

- Creating opportunities for sharing best practices and learning, such as through an international workshop on energy efficient cooling in Delhi
- Deepening co operation with Brazil, producing first-ever international benchmarking chapter in the Atlas of Energy Efficiency with EPE
- Developing three Regional Roadmaps for Buildings and Construction in Africa, Asia and Latin America
- Support for policy development using a combination of analytical work, data and skills to focus on the day-to-day needs of officials
- Launching Massive Open Online Course on energy efficiency in buildings for Latin America.
- Organising three Energy Efficiency Policy in Emerging Economies Training Weeks in three continents (in Paris, Bangkok and Pretoria) with almost 400 energy efficiency professionals







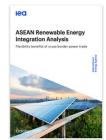


## 3) Electricity

• **Objectives:** Enhance capabilities to decarbonize the power sector through the system friendly deployment of renewable energy and the improvement of investment and financing conditions, market design and cross-border trade frameworks

#### • Examples of activities:

- Working with Brazil on its market and regulatory framework reform, and sharing best practice related to demand response and digitalisation
- Supporting China's power system transformation and market reform work
- Assessing India's clean energy investment trends and how perceived risks shape financing costs
- Assessing Southeast Asia's energy outlook, including a deep dive on current investment and financing trends and investment gaps.
- Developing new work on system integration of renewables at the state level in India
- Providing extensive support to ASEAN on regional and renewable energy integration
- Sharing best practices on distributed generation with key stakeholders in Latin America
- Continuing support for work under the Clean Energy Ministerial, including the Power System Flexibility (PSF) campaign







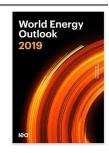


## 4) Policy Advice & Modelling

• **Objective:** Support strategic policy planning for clean energy through the development of tailored analytical tools that help decipher challenges and opportunities

#### Examples of activities:

- Supporting China on the design of its national emissions trading scheme (ETS) and its interactions with the country's power sector.
- Producing a review of India's energy policies and developing new efforts on energy policy packages to deliver climate change, air pollution and energy access objectives
- Working to better understand relevant gender-balance issues in India's rooftop solar sector
- Supporting in-house capacity to enhance air pollution and energy analysis
- Launching new work to enhance the assessment of climate impacts on energy transitions
- Supporting the participation of energy modellers from emerging economies at the 38th International Energy Workshop





India 2020





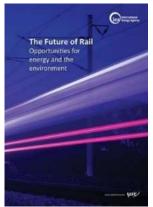


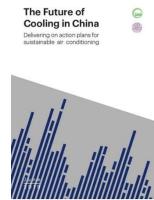
## 5) Sectoral Work

 Objective: Support tailored analysis and technical co-operation on specific sectors and technologies, such as industry, transport and bioenergy

#### • Examples of activities 2019-2020:

- Exploring trends and challenges related to cooling in China and Southeast Asia
- Analysing technologies and strategies necessary for the iron and steel sectors to pursue a sustainable pathway, particularly in India
- Expanding work and international collaboration on bioenergy after assuming the role of the facilitator of the Biofuture Platform
- Working towards launching a global programme on electromobility and obtaining the approval of the Global Environment Facility (GEF) Council for this new work
- Developing a landmark report to analyse the current state of play for hydrogen









## 6) Innovation

• **Objective:** Support governments to enhance policies and partnerships for energy technology innovation (including R&D) in line with broader clean energy policies and data.

#### • Examples of activities 2019-2020:

- Mapping India's energy innovation landscape and key policy drivers, assessing the country's strengths and areas where there may be room for improvement, and formulating priority policy recommendations
- Deepening analytical co-operation with Brazil under the Energy Big Push project to improve public R&D spending data collection and map the country's energy innovation landscape
- Supporting China's efforts to track spending on energy R&D.
- Facilitating CETP priority countries' multilateral collaboration under the IEA Technology Collaboration Programme, Mission Innovation and other innovation partnerships for global energy transitions









## Producing benefits to the entire IEA family

- Through the CETP, the IEA is helping key governments advance towards their own clean energy goals, creating benefits for all.
- The IEA family as a whole has benefited from:
  - Improved global data and statistics.
  - IEA's strengthened role as a global hub on a full range of clean energy technologies
  - Deepened relationships between an array of influential partners
  - The greater sharing of lessons from around the world





#### **2020 Planned Work**

- **Data and statistics**: develop experimental progress indicators on clean energy transitions and applying new methods to improve timeliness of estimates for key energy outcomes
- **Energy efficiency**: continue Energy Efficiency Policy in Emerging Economies Training Weeks, extend work on indicators, advance development of national roadmaps for buildings and construction
- **Electricity**: enhance capability of emerging economies to develop and implement strategies for reliable and cost-effective integration of variable renewable energy
- **Policy advice and modelling**: assess climate vulnerability and resilience of hydropower sector, new work to evaluate interaction and impact of South Africa's carbon tax with other policies
- **Sectoral work**: analyse sustainable pathways for iron and steel sector in India, deliver global programme on electro-mobility
- **Innovation**: continue to enhance tracking of energy technology innovation metrics, conduct an in-depth analysis of the energy innovation ecosystem in China
- **Digitalisation**: develop tools and guidance on policy, regulatory and investment context needed to mobilise the grid infrastructure for the clean energy transition











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