



Introduction to the Clean Energy Transitions Programme (CETP)

February 2022

International
Energy Agency

Approach

About the Clean Energy Transitions Programme



- Created in 2017, the Programme leverages IEA Members' clean energy commitment and the IEA's unparalleled, across-the-board energy expertise to help accelerate progress towards the goal of **realising global net zero through a secure and people-centred transition**, particularly in emerging and developing economies.
- Provides **cutting-edge technical support to governments** whose energy policies will significantly impact the speed of, and prospects for, a global transition toward more sustainable energy production and use, including reductions in greenhouse gas emissions in line with the objectives of the Paris Agreement.
- Builds upon **existing IEA collaborations with major emerging economies**, including the Energy Efficiency in Emerging Economies (E4) programme, the Grid Integration of Variable Renewables (GIVAR) programme, various Clean Energy Ministerial work streams, and a wide variety of other IEA training and capacity-building activities.
- Supports the **consolidation and enhancement of IEA activities** through a larger, more stable, and multi-year voluntary contribution package, drawing in large part on ODA-applicable finance.

Strategic Framework to Deliver Global Net Zero



Turning targets into action: realising global net zero through a secure and people-centred transition

Accelerating national transitions

Supporting emerging and developing economies to develop and implement strategies for achieving national clean energy transition goals in line with the Paris Agreement temperature goals and sustainable development objectives

Strengthening multilateral coordination

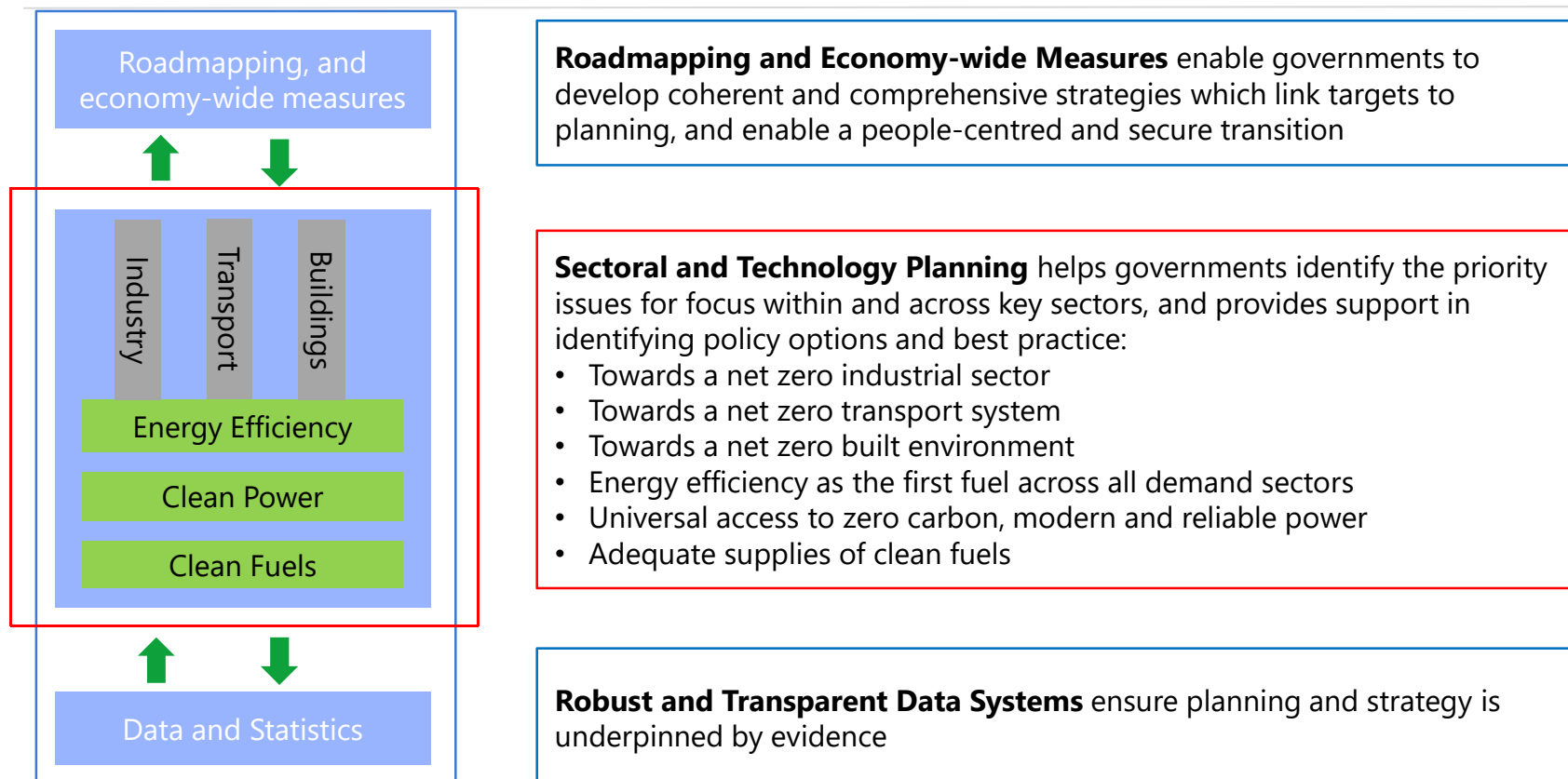
Facilitating international collaboration to scale up innovation and deployment of clean energy sources and technologies, energy efficiency and transition demand sectors as well as tracking progress towards global clean energy objectives, including in partnership with other relevant initiatives and platforms

Informing global energy dialogue

Developing greater international understanding of barriers and environmentally sustainable solutions for the development and deployment of clean energy technologies, unlocking related investment as part of a secure and people-centred transition

Underpinned by globally leading data driven analysis

How we support clean energy transitions



Who's at the table?



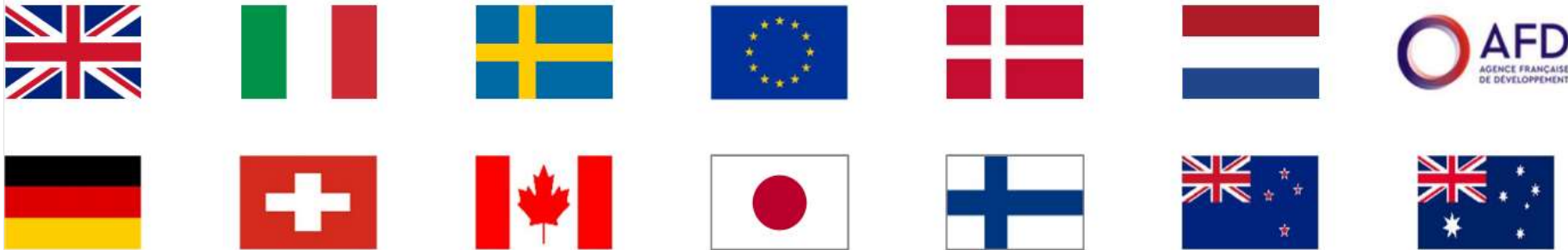
Priority countries



Priority regions



Supporters



Programme highlights

Accelerating National Transitions

- Countries aiming to reach net-zero emissions now account for around 70% of global energy-related CO₂ emissions.
- This growing political consensus is a significant step along the way to achieving the goals of Paris. The CETP aims to support countries in turn commitments into practical actions that decouple growth from growth in greenhouse gas emissions.
- In the first phase of the CETP, the Agency was tasked to prioritise engagement with eight countries and three regions: Brazil, China, Indonesia, India, Mexico and South Africa; Latin America, Southeast Asia, and Africa.



Accelerating National Transitions: China

China has announced an aim to become carbon neutral by around 2060. The IEA supports the energy policy process by working with a wide range of energy institutions.



Technical exchanges

Economy wide measures

- collaboration with Energy Foundation China and Tsinghua University to develop *An energy sector roadmap to carbon neutrality in China*.
- Supporting the design and implementation of China's Emissions Trading Scheme.

Power

- Supporting the design of the national power sector reform & advising on the country's power markets to facilitate renewables integration and a smooth transition towards decarbonised and reliable power systems
- Exchanges with NEA on China's 14th Five-Year Plan on Renewable Energy Development:

Energy efficiency

- Priorities agreed with the National Development and Reform Commission have included digitalisation, energy efficiency data and indicators, and providing recommendations on energy efficiency for the 14th Five-Year Plan

Accelerating National Transitions: India



Collaboration with the Indian government is well established. Cooperation is largely at the national level, but given the devolved nature of energy regulation, the IEA is also supporting the regional policy development – specifically with the states of Gujarat, Karnataka, Maharashtra.



Technical exchanges

Power

- policy support for incentivising rooftop PV in collaboration with Ministry of New & Renewable Energy (MNRE)
- Renewable energy integration roadmap for three India states – Maharashtra, Gujarat and Karnataka, and policy support to overcome the barriers in renewables integration.

Clean fuels

- Work with MNRE and Niti Aayog on bioenergy and biofuels

Energy efficiency

- Work on introducing energy efficiency solutions into recovery packages
- Sectoral work on buildings and textile sectors



Accelerating National Transitions: Indonesia



The IEA- Indonesia Energy Transition Alliance is the largest single country programme in the CETP by resource allocation. Over the past two years, the Agency and the Ministry of Energy and Mineral Resources (MEMR) of Indonesia have substantially scaled up cooperation across a variety of priority areas.



Technical exchanges

Economy wide measures

- The IEA and MEMR are collaborating on an Indonesia Net Zero Energy Sector roadmap.

Energy efficiency

- Work with the MEMR on the energy efficiency in industrial processes to review and redesign its industry energy management reporting system,

Transport

- Supporting the development of regulations for electric vehicles, a land-based transport roadmap, and the development of regulation on public electric vehicle charging stations.



Attracting private investment to fund sustainable recoveries: The case of Indonesia's power sector
World Energy Investment – Country focus

Accelerating National Transitions: Brazil



The IEA has regular technical exchanges with the Brazilian Ministry of Mines and Energy, the Energy Research Office (EPE), and the National Electric Energy Conservation Program.



Technical exchanges

Power

- Supporting the design of the national power sector reform & advising on the country's power markets to facilitate renewables integration

Energy efficiency

- Contributing to benchmarking exercise (“Atlas of EE in Brazil”) produced by planning agency EPE as well as follow-up actions
- Capacity building effort in buildings sector (MOOC)

Economy wide measures

- Supporting Brazil in setting up a data collection system for investments in energy R&D (“Energy Big Push” project)
- Exchanges on carbon pricing



Accelerating National Transitions: Regional Outreach



Alongside country programmes, the IEA is engaged in outreach activity in Asia, Latin America, and Africa. These are the three regions of the world where energy demand is set to grow most rapidly and where the choices around energy systems development will be most critical for determining the pace at which global GHG emissions can be brought to net-zero.

The aim of the Agency's regional outreach is to bring together like-minded countries to enhance cooperation and knowledge exchange, and ensure Agency analysis and expertise is available to support policy adoption by a wider range of interested governments.



Clean Energy Transitions
in North Africa



Strengthening Multilateral Coordination



Global transitions happen faster through international collaboration - when learning is shared, and when actions are coordinated to accelerate innovation and the diffusion of technologies through global markets.



The IEA directly supports multilateral coordination and collaboration across energy supply and demand sectors as well as supporting activity led by other multilateral fora

Informing Global Energy Dialogue



Since the start of the CETP, the IEA brought together governments from across the international community to focus attention on the issues that matter through the transition – from methane to employment, and from finance to gender.



Underpinning all work is the IEA's world-class analytic outputs & data



Over 120 reports produced or enhanced with support of the CETP, including flagship IEA analysis and demand-driven policy support

Workstream highlights

Roadmapping and Economy Wide Measures

- **Objective:** Support [strategic policy planning](#) for clean energy through the development of [tailored analytical tools](#) that help decipher challenges and opportunities
- **Examples of activities:**
 - Agenda setting for global energy system transition: the Net Zero by 2050 Roadmap
 - 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



Zero carbon, modern and reliable power

- **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



Energy efficiency as the first fuel

- **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



Sectoral and Technology Planning

- **Objective:** Support tailored [analysis and technical co-operation](#) on specific sectors and technologies, such as industry, transport and bioenergy
- **Examples of activities:**
 - 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 electro-mobility 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



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



