



Accelerating the clean energy transitions and mobilizing investment

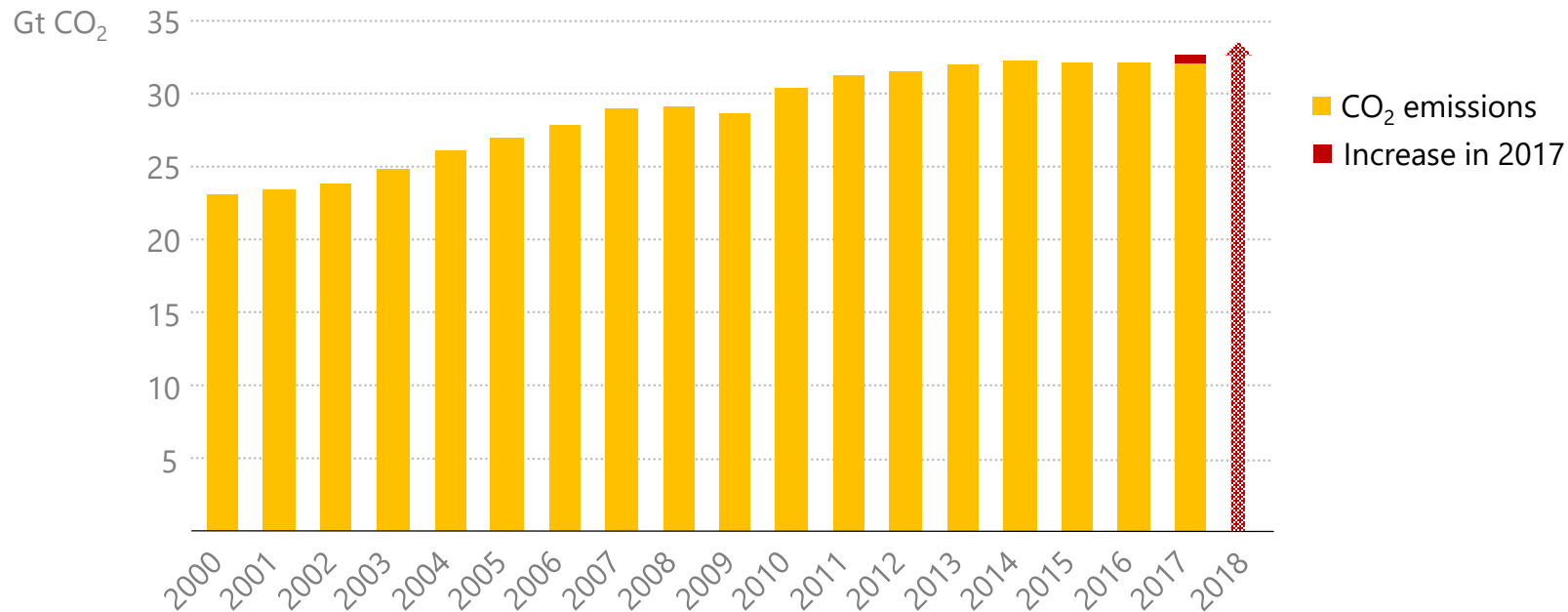
Dave Turk, Head of Strategic Initiatives Office, IEA

12 December 2018 – COP24

- **The IEA Family of countries now covers almost 75% of global energy demand**
- **The IEA, a global clean energy hub, helps countries and companies to better achieve their clean energy transitions**
- **The IEA offers unparalleled data, rigorous analysis and real-world solutions across all fuels and all technologies**
- **IEA analysis is key to tracking progress of global energy transitions**
 - *Assessing progress on energy transitions, under the Talanoa Dialogue and beyond*
 - *Helping to drive further NDC ambition*

Global emissions are on the rise again

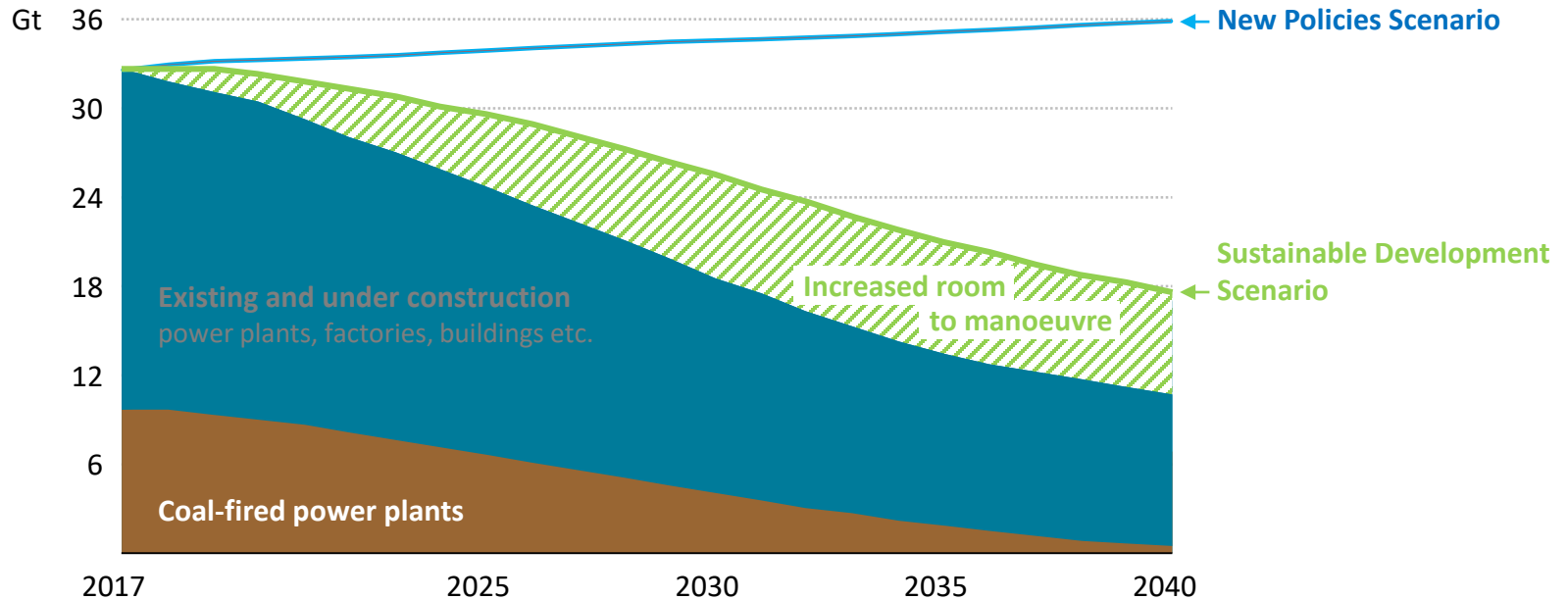
Global energy-related CO₂ emissions



Global emissions are set to increase in 2018 - again
The world is not moving towards the Paris goals, but rather away from them

Can we unlock a different energy future?

Global energy-related CO₂ emissions



Coal plants make up one-third of CO₂ emissions today and half are less than 15 years old; policies are needed to support CCUS, efficient operations and technology innovation

Tracking Clean Energy Progress

Informing Energy Sector Transformations

The IEA's newly-enhanced Tracking Clean Energy Progress provides a comprehensive and rigorous assessment of a full range of energy technologies and sectors that are critical in a global clean-energy transition. It includes the most up-to-date information for where technologies are today and where they need to be according to the IEA's [Sustainable Development Scenario](#), a pathway to reach the Paris Agreement well below 2°C climate goal, deliver universal energy access and significantly lower air pollution.

Are clean energy technologies on track?

Some technologies have made tremendous progress in 2017 – particularly solar PV, LEDs and EVs – but most are not on track. Energy efficiency improvements have slowed and progress on key technologies like carbon capture and storage remains stalled.

Click on a sector or technology for a detailed assessment of recent trends and progress.

● On track
 ● More efforts needed
 ● Not on track
 🔗 One to watch

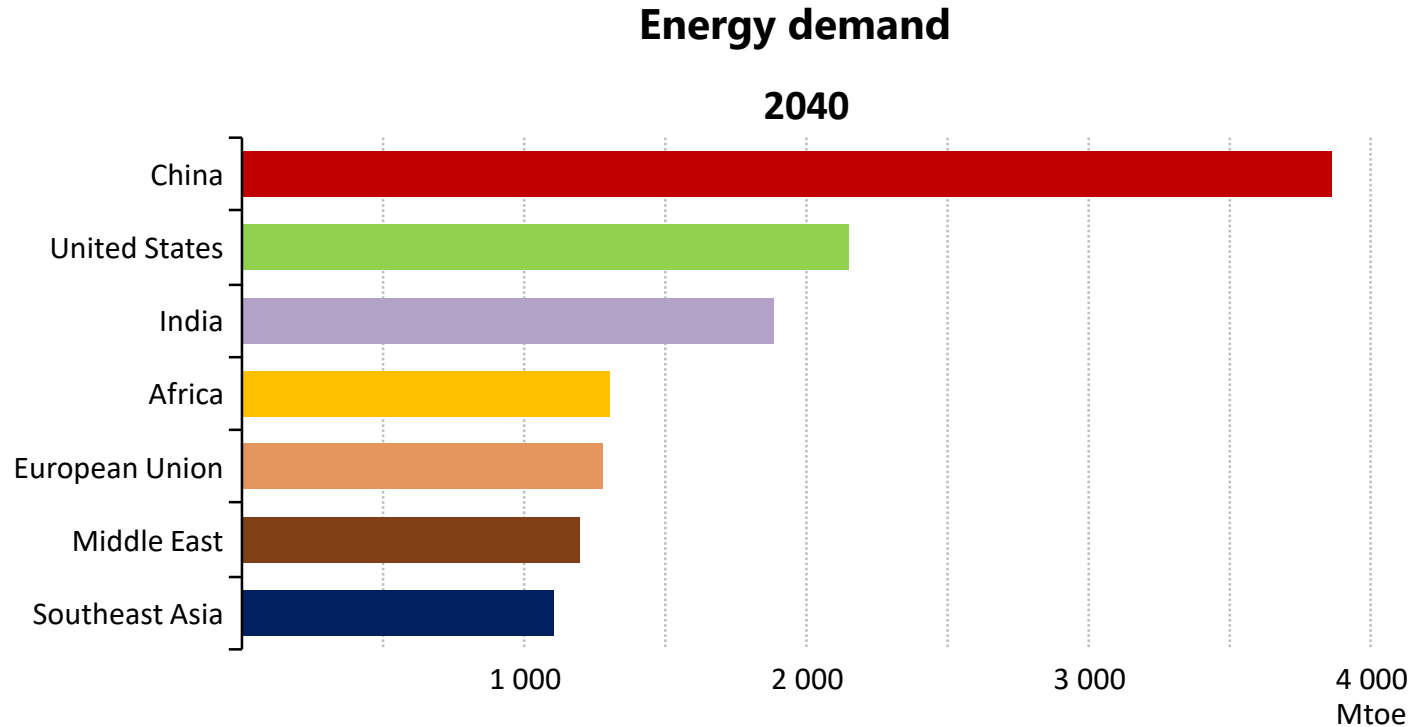
- **Power**
- Renewable power
- Solar PV
- Onshore wind
- Offshore wind 🔗
- Hydropower
- Bioenergy
- Geothermal
- Concentrating solar power
- Ocean
- Nuclear power
- Natural gas-fired power
- Coal-fired power
- CCUS in power

- **Buildings**
- Building envelopes
- Heating
- Cooling 🔗
- Lighting
- Appliances & equipment
- Data centres & networks

- **Transport**
- Electric vehicles
- Fuel economy of cars & vans
- Trucks & buses
- Transport biofuels
- Aviation
- International shipping 🔗
- Rail

- **Industry**
- Chemicals 🔗
- Iron & Steel
- Cement
- Pulp & paper
- Aluminium
- CCUS in industry & transformation

- **Energy integration**
- Energy storage 🔗
- Smart grids
- Demand response
- Digitalization
- Hydrogen
- Renewable heat



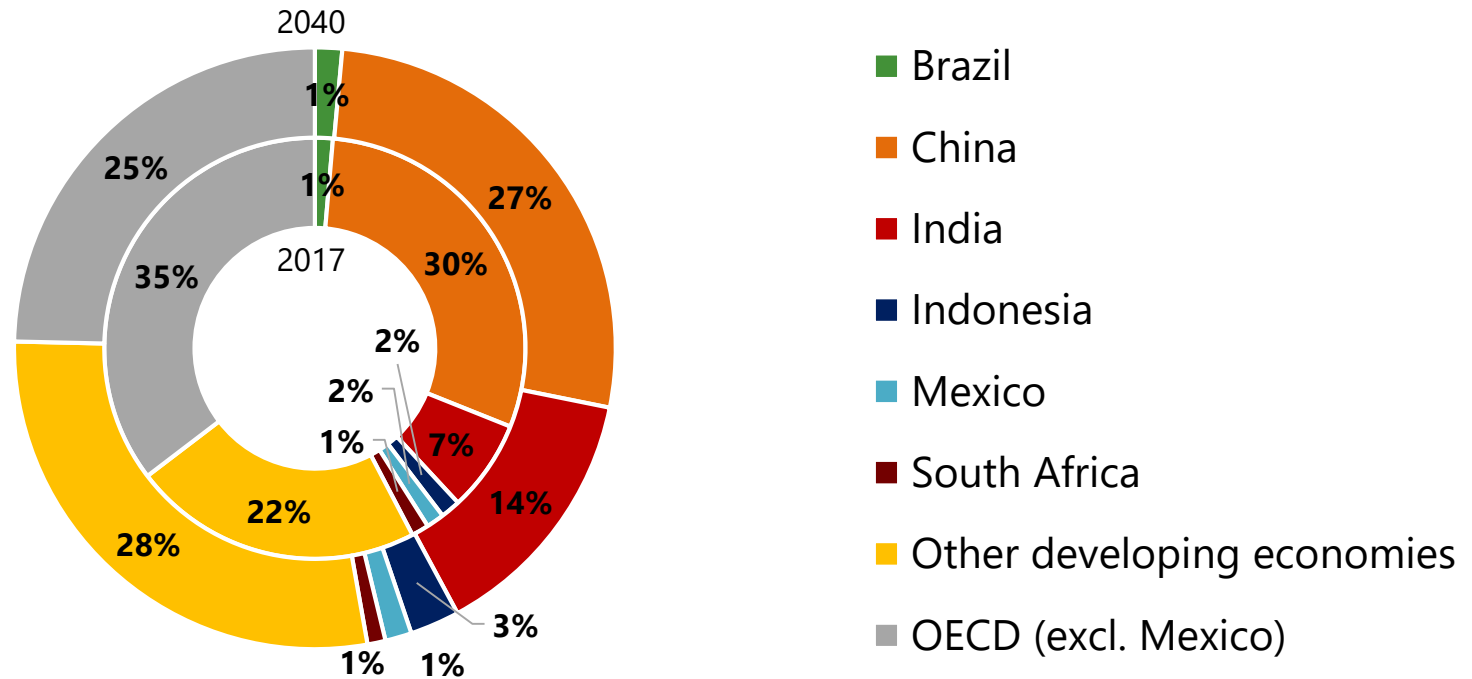
In 2000, more than 40% of global demand was in Europe & North America and some 20% in developing economies in Asia. By 2040, this situation is completely reversed

The IEA Clean Energy Transitions Programme embodies this approach



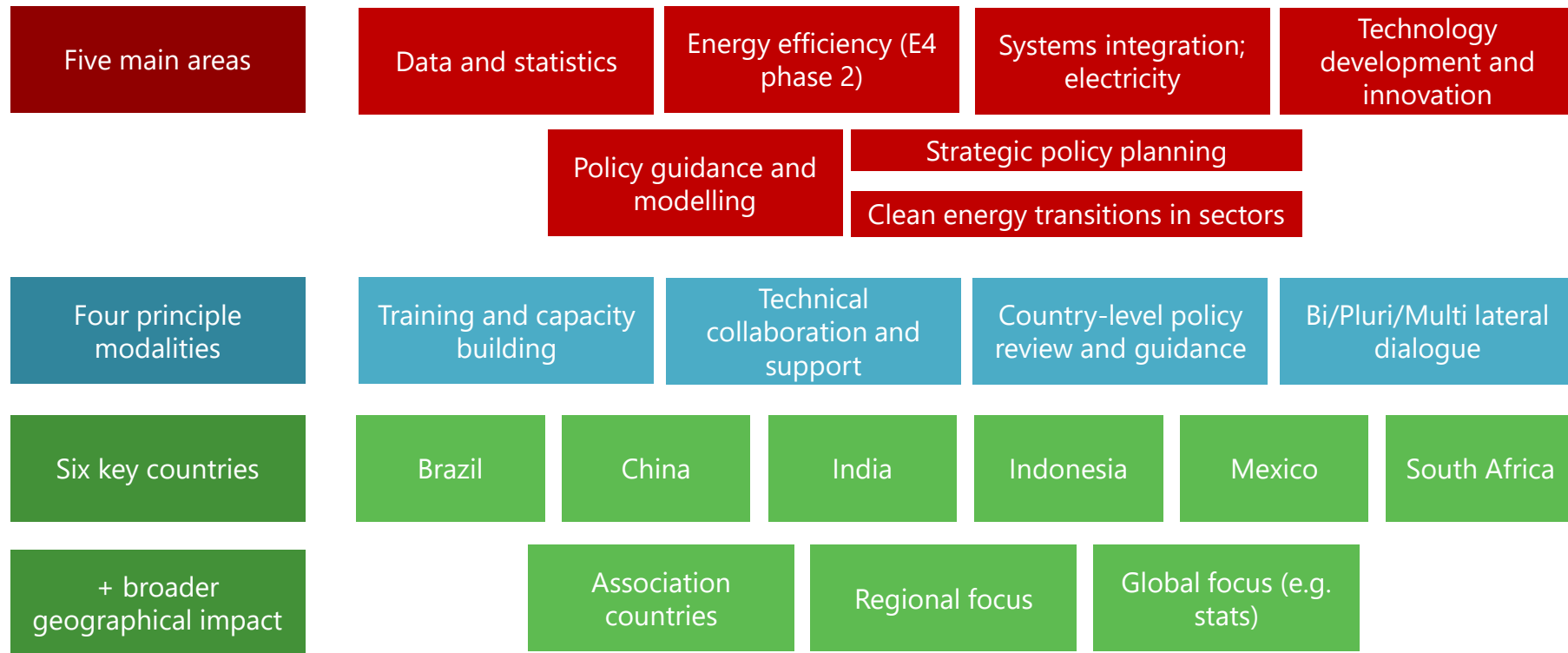
In November 2017, 13 IEA member countries launched the CETP: a multi-year, EUR 30 million commitment, enhancing IEA capabilities to support countries with their clean energy transitions

CO₂ emissions: 2017 vs 2040



Developing economies are becoming the main source of CO₂ emissions

Overview of the Clean Energy Transitions Programme



The CETP is an all-of-IEA effort, involving 10 substantive Divisions across all Directorates, and strong support from the Office of Global Energy Relations, as well as financial and legal teams

The IEA works around the world to support accelerated clean energy transitions that are

enabled by real-world SOLUTIONS

supported by ANALYSIS

and built on DATA



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