

www.iea.org

Pre-2020 action to drive emission reductions

Christina Hood Head of Unit – Environment and Climate Change International Energy Agency



The IEA supports governments around the world in their clean energy transition

through real-world SOLUTIONS backed by ANALYSIS built on DATA



"In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of GHG emissions as soon as possible, recognizing that peaking will take longer for developing country Parties,..."

IEA strategy to raise climate ambition



Emissions savings in the Bridge Scenario by measure, 2030



Source: World Energy Outlook Special Report: Energy and Climate Change 2015

Five measures save almost 5 Gt of emissions by 2030 & achieve a global emissions peak by 2020, without harming economic growth & using only proven technologies

IEA SOLUTIONS – Energy Efficiency in Emerging Economies (E4) Programme



IEA working directly with countries to solve their energy efficiency challenges:

 China, India, Indonesia, South Africa, Mexico, Thailand and Ukraine, Southeast Asia, Latin America,



EXAMPLES

- Promoting energy efficient prosperity in India
- Building improved modeling and policy evaluations capabilities in China
- Helping Mexico develop strategies for energy efficiency in cities

IEA DATA – renewables



- Renewables fastest-growing source of electricity generation; IEA forecast raised as 2015 marks record year
 - Renewables have surpassed coal to become largest source of installed power capacity
- About half a million solar panels installed *every day* in 2015
- Further acceleration needed for <2°C goal



More detail: Medium-term Renewable Energy Market Report 2016

Bridging strategy is flexible across regions





The measures in the Bridge Scenario apply flexibly across regions, with energy efficiency & renewables as key measures worldwide

Peak in emissions





Source: World Energy Outlook Special Report: Energy and Climate Change 2015

The implementation of the Bridge strategy achieves a peak in energy-related emissions by 2020, but doesn't decarbonise as quickly as a 2 C trajectory would need

How to motivate GHG reductions ?





Air quality

© OECD/IEA, 2016

Source: World Energy Outlook Special Report:

Energy and Air Pollution 2016

Premature deaths from

A 7% increase in investment can save over 3 million lives in 2040, while providing energy access for all, lower energy import bills and leading to a peak in CO₂ by 2020

The IEA Clean Air Strategy



Cumulative investment

www.iea.org

Climate benefits of the IEA Clean Air Strategy





A Clean Air Strategy helps reducing energy-related CO2 emissions, but more efforts are needed to put the world on track for 2 °C.

© OECD/IEA, 2016

What more is needed ?



Improved technology costs and performance

Attention to lock-in (and reversing lock-in)

Real-world policy packages

Tracking the energy transition

Tracking and metrics



The carbon intensity of new power plants around the world has dropped by **27%** since 2005



Source: IEA World Energy Investment 2016

IEA ANALYSIS – new during COP22:



Energy, Climate Change and Environment: 2016 Insights

- Launch 4 Nov
- Real-world policy insights for Paris Agreement Implementation
- 20 years of Carbon Capture and Storage
 - Launch 14 Nov
 - Technology, policy, and regulation for CCS

World Energy Outlook 2016

- Launch 16 Nov in London
- First IEA analysis of below-2°C scenarios





www.iea.org

Thank you for your attention

Christina Hood Christina.hood@iea.org