

How can the Paris Agreement link shortterm actions with long-term goals?

Dr. Christina Hood
International Energy Agency
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IEA messages to COP21



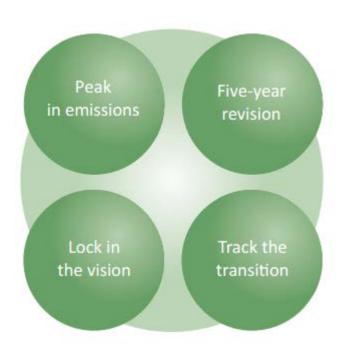
To shift the energy sector onto a low-carbon path that supports economic growth & energy access:

- 1. Take 5 key actions, led by energy efficiency & renewables, to peak then reduce global energy emissions
- 2. Use the Paris Agreement to drive short-term actions consistent with long-term emission goals
- 3. Accelerate energy technology innovation to make decarbonisation easier and even more affordable
- 4. Enhance energy security by making the energy sector more resilient to climate change impacts

2. Use Paris Agreement to drive actions consistent with long-term goals



- Lock in the vision by translating the below-2 °C temperature goal into a clear long-term emissions goal. Link short-term national targets to the long-term objective through national low-carbon development strategies.
- Establish a 5-year revision cycle to strengthen action as countries experience success and technology costs decline.
- Track the transition of the energy sector, not just greenhouse gas levels.

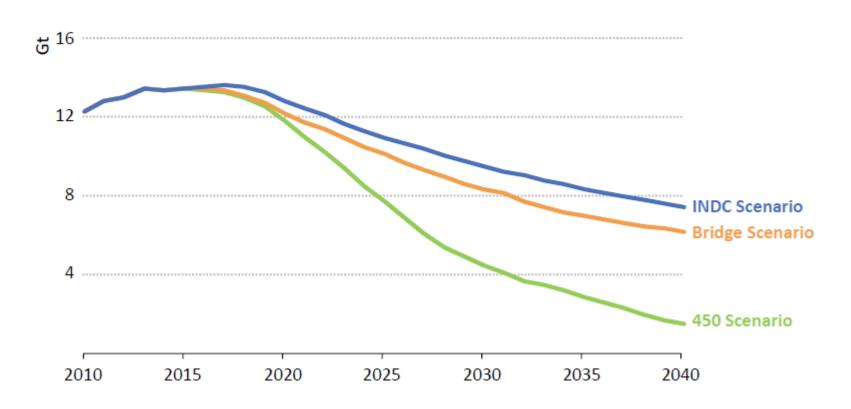


Source: World Energy Outlook Special Report: Energy and Climate Change (2015).

Long-term goal



Global emissions from power plants, existing and under construction

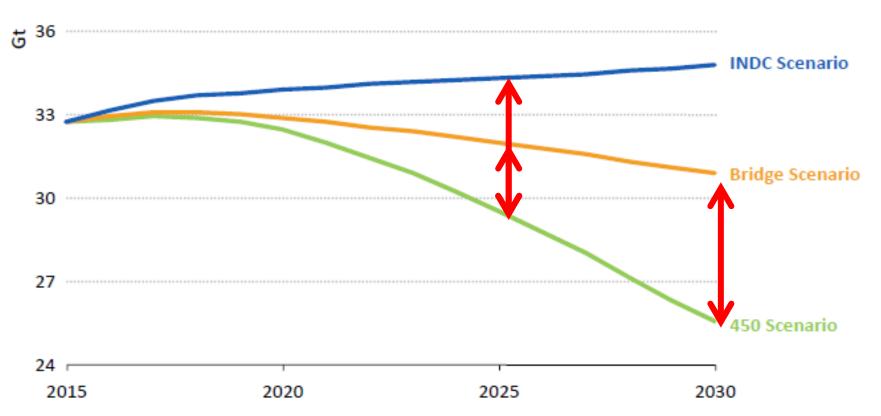


Clarity of long-term low-carbon direct drives a transformational shift in use of existing energy assets

Five year review cycle



Global energy-related CO₂ emissions by scenario

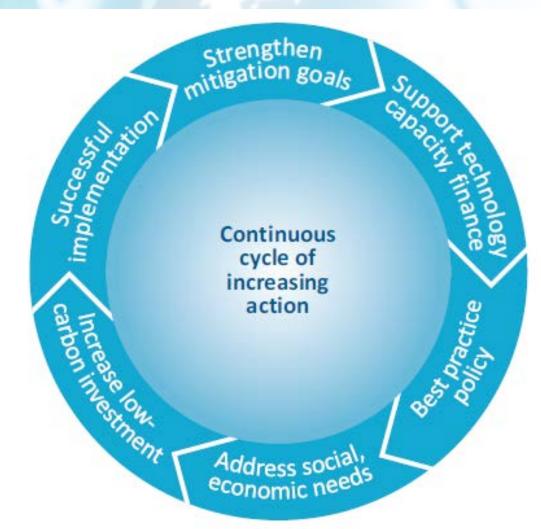


Source: World Energy Outlook Special Report: Energy and Climate Change (2015).

Following the INDC scenario to 2025, or the Bridge scenario to 2030 make the below-2C goal less plausible

Five year review cycle





A five-year review cycle allows countries to strengthen targets as technology costs reduce and they experience policy success

A strong tracking framework for the energy sector

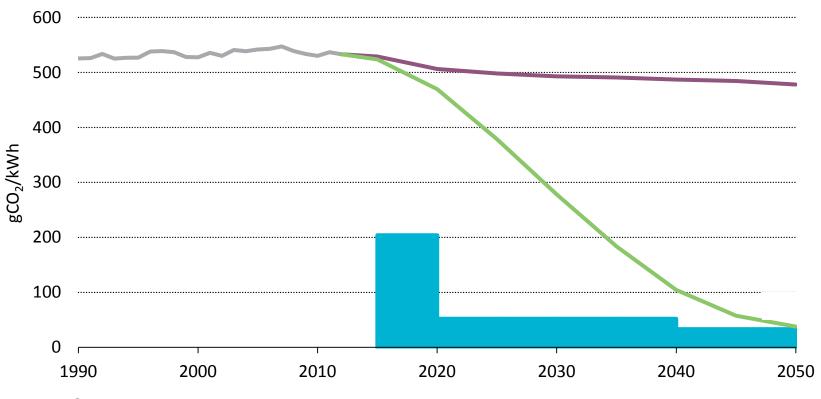


- Greenhouse gas inventories are a core element of UNFCCC processes
 - Show "where we are"
- Important supplement is a strong energy sector tracking framework:
 - Provides picture of "where we are headed" is structural change occurring?
 - Energy sector metrics also have short-term benefits: they can be more accessible to citizens and policymakers, and suggest where opportunities for immediate action lie.

Choosing the right metric can help stimulate the right actions



Global fleet average and new-build plants emissions intensity of power generation in IEA scenarios



Source: ETP 2015

Developing richer data and tracking the right metrics can push for better outcomes

Examples of possible metrics



- Carbon intensity of primary energy supply
- Energy intensity of GDP
- Fossil fuel subsidies
- Investment in RD&D
- Share of low-carbon generation in new additions
- New passsenger car vehicle fuel economy
- Retrofit rate for buildings
- CO2 emissions per unit of industrial production
- Share of natural gas vented, flared or lost

Conclusions



- **COP21** must send a strong signal to the energy sector
 - Long-term goal;
 - > 5-year reviews;
 - strong tracking framework
- The IEA stands ready to support implementation, bringing together data, modelling, policy and technology



Thank you for your attention

christina.hood@iea.org

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