Article 6
Paris' Flexibility Mechanism
It's Potential and Challenges

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The Paris Agreement of 2015

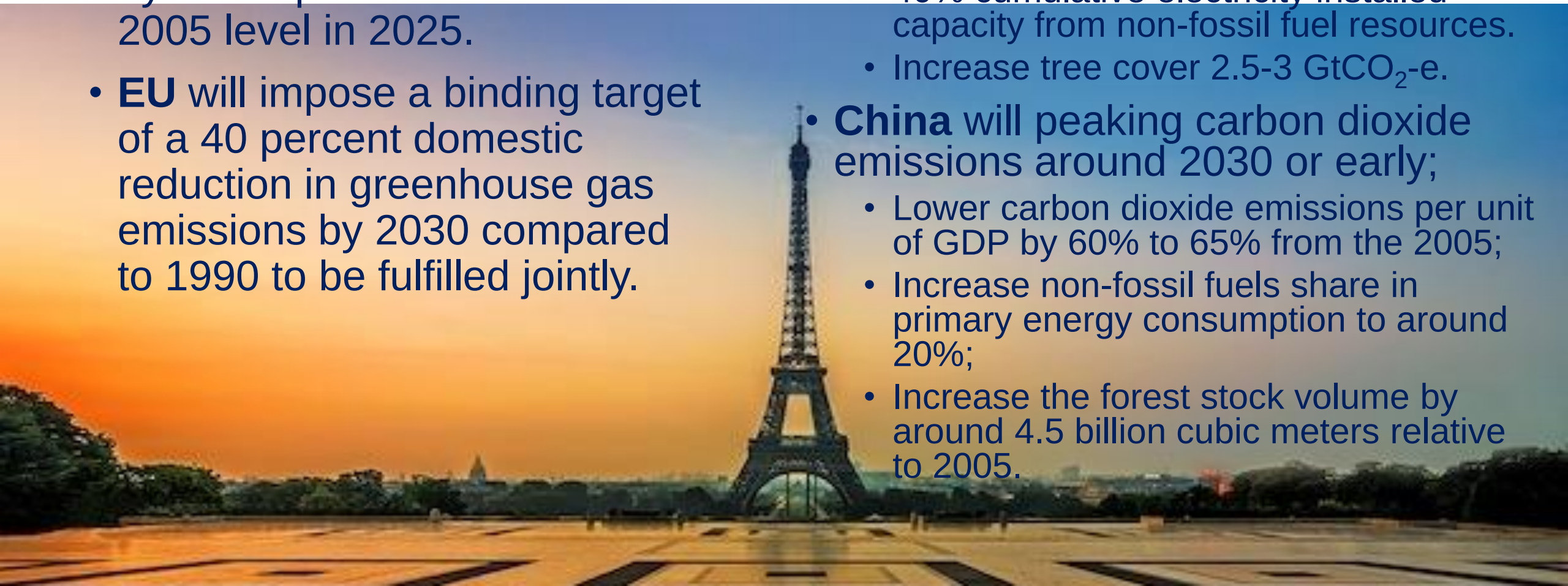
- Adopted by consensus on 12 December 2015; (Entered into force 4 November 2016)

- The goal: *“Holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels”*

- The key feature was the (Intended) **Nationally Determined Contributions** (NDCs)

Heterogeneous Paris Commitments (NDCs)

- **United States** will reduce its net greenhouse gas emissions by 26-28 percent below its 2005 level in 2025.
- **EU** will impose a binding target of a 40 percent domestic reduction in greenhouse gas emissions by 2030 compared to 1990 to be fulfilled jointly.
- **India** will reduce emissions intensity 33-35% by 2030, compared to 2005 levels. Also by 2030
  - 40% cumulative electricity installed capacity from non-fossil fuel resources.
  - Increase tree cover 2.5-3 $GtCO_2$-e.
- **China** will peaking carbon dioxide emissions around 2030 or early;
  - Lower carbon dioxide emissions per unit of GDP by 60% to 65% from the 2005;
  - Increase non-fossil fuels share in primary energy consumption to around 20%;
  - Increase the forest stock volume by around 4.5 billion cubic meters relative to 2005.



Article 6

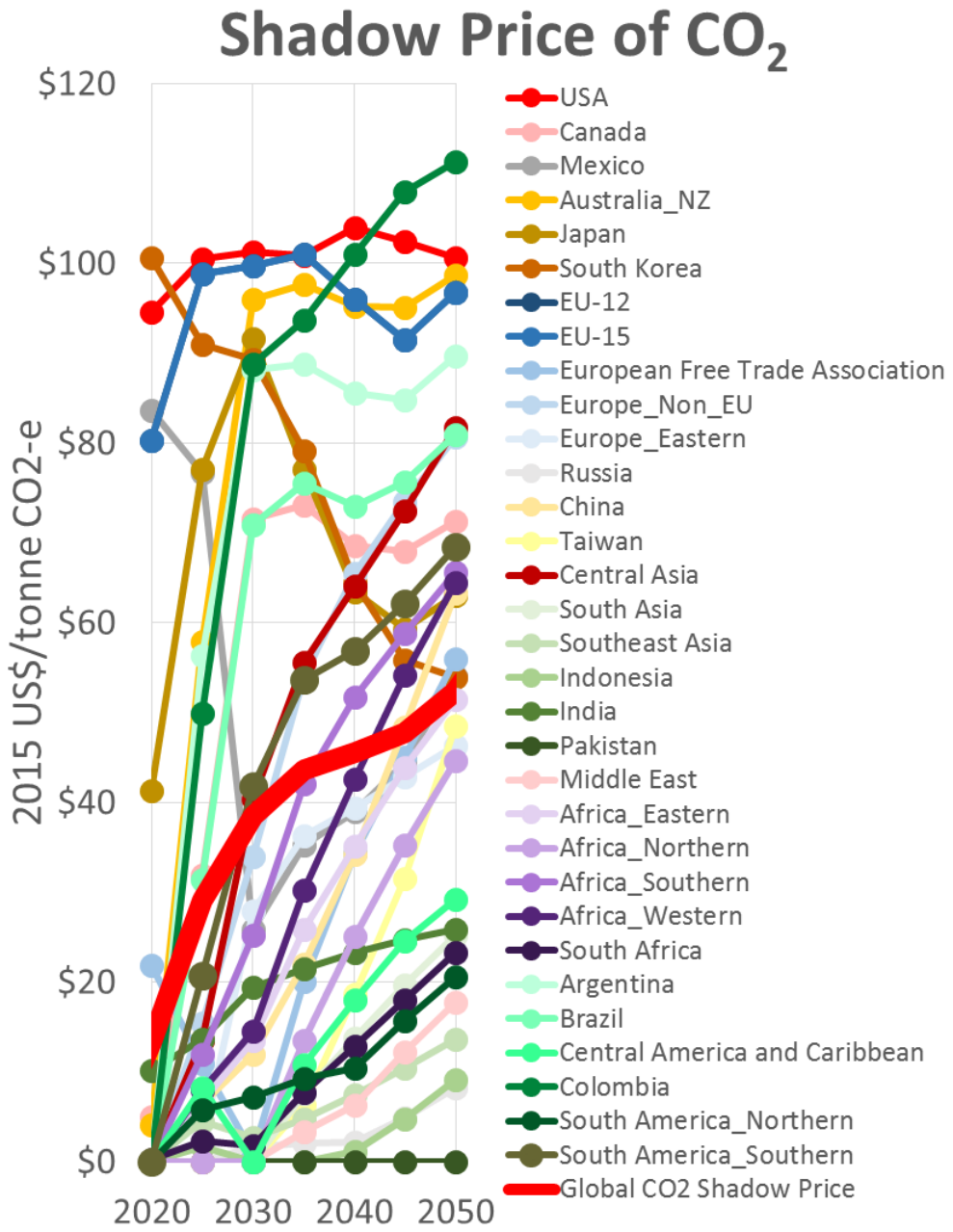
- Allows countries to work together to meet their NDC goals

- But, **NOT DOUBLE COUNT**

NDC Shadow Prices: Independent Implementation

- Wide range in shadow prices
- Joint implementation shadow price lies between high and low prices of independent implementation

	2030	2050
Independently Implemented NDCs Shadow Price Range	\$0 to \$101/tonCO_2	\$0 to \$111/tonCO_2
Cooperatively Implemented NDCs	**\$38/tonCO_2**	**\$52/tonCO_2**

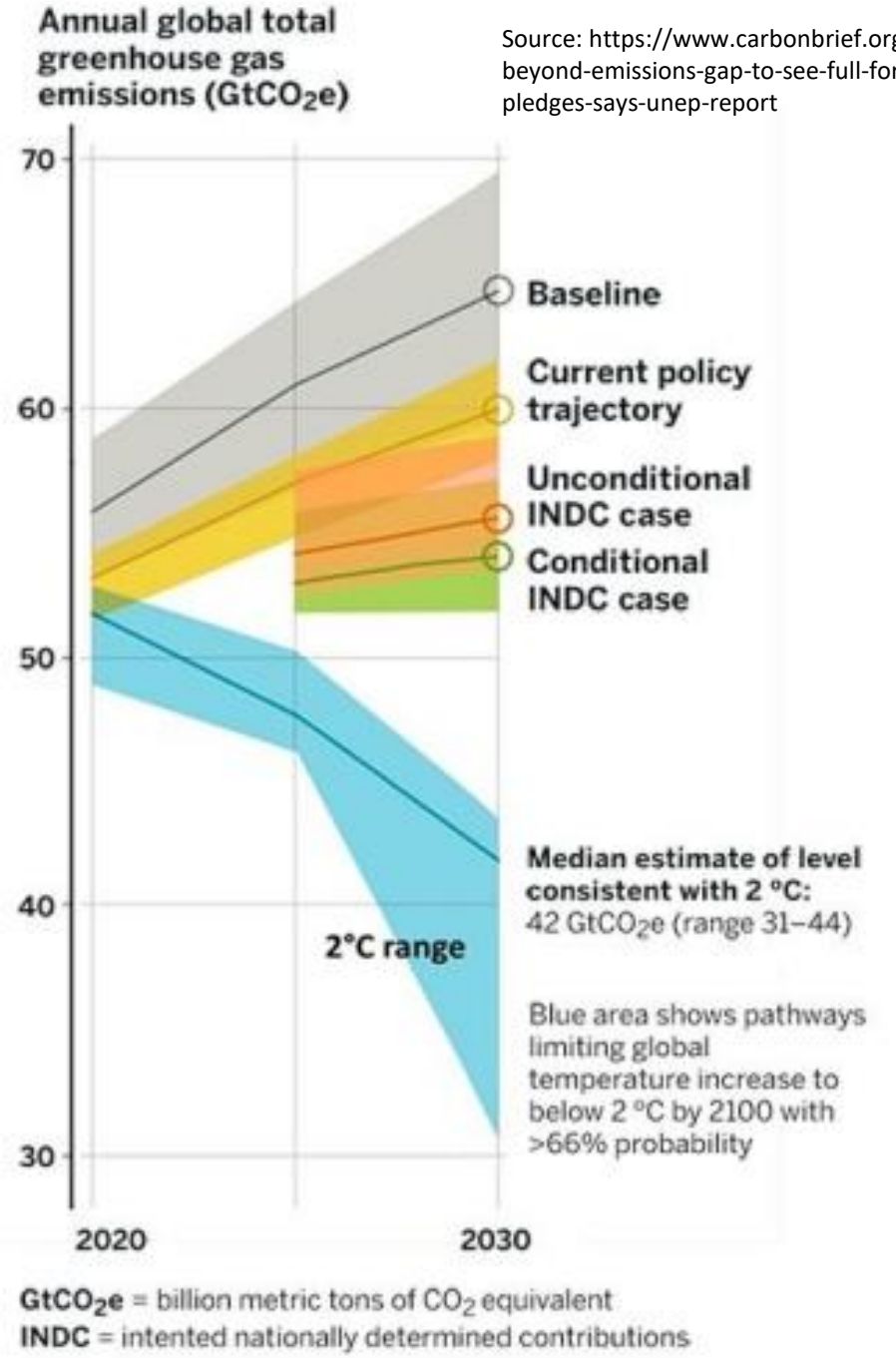


DRAFT PRESENTATION—DO NOT QUOTE, SUBJECT TO CHANGE

How Valuable is Article 6?

Article 6 holds significant potential to reduce cost and enhance ambition

- Everyone could be better off through collaboration
- Estimated potential 2030 cost savings ~$250 billion 2015 US$
- Mitigation could be enhanced by 5GtCO$_2$/year in 2030



Source: https://www.carbonbrief.org/look-beyond-emissions-gap-to-see-full-force-of-climate-pledges-says-unep-report

The Challenges

- **Near-term challenges**:
  - How to translate heterogeneous NDCs into Internationally Transferred Mitigation Outcomes (ITMOs)?
  - Ensure that rules prevent “hot air”
    - Calvin, et al. showed that seemingly air-tight rules for CDM-types of emissions trading can have perverse macro-outcomes.
  - Can clubs collaborate to extract the benefits without a formal trading regime?

- **Longer-term challenges:**
  - Can dynamic incentives be developed to increase ambition?

Source: https://unfccc.int/files/focus/long-term_strategies/application/pdf/mid_century_strategy_report-final_red.pdf

DISCUSSION