

Agora
Energiewende



Climate club, EU CBAM and China

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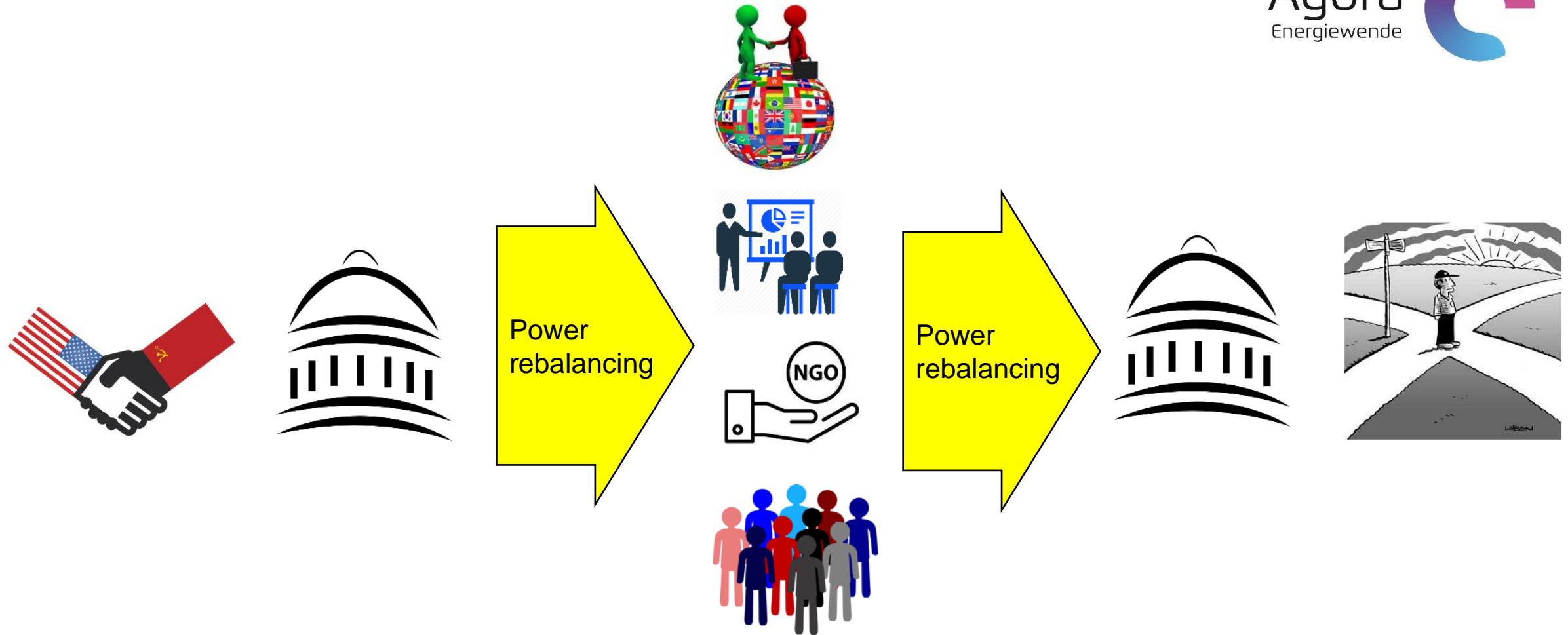
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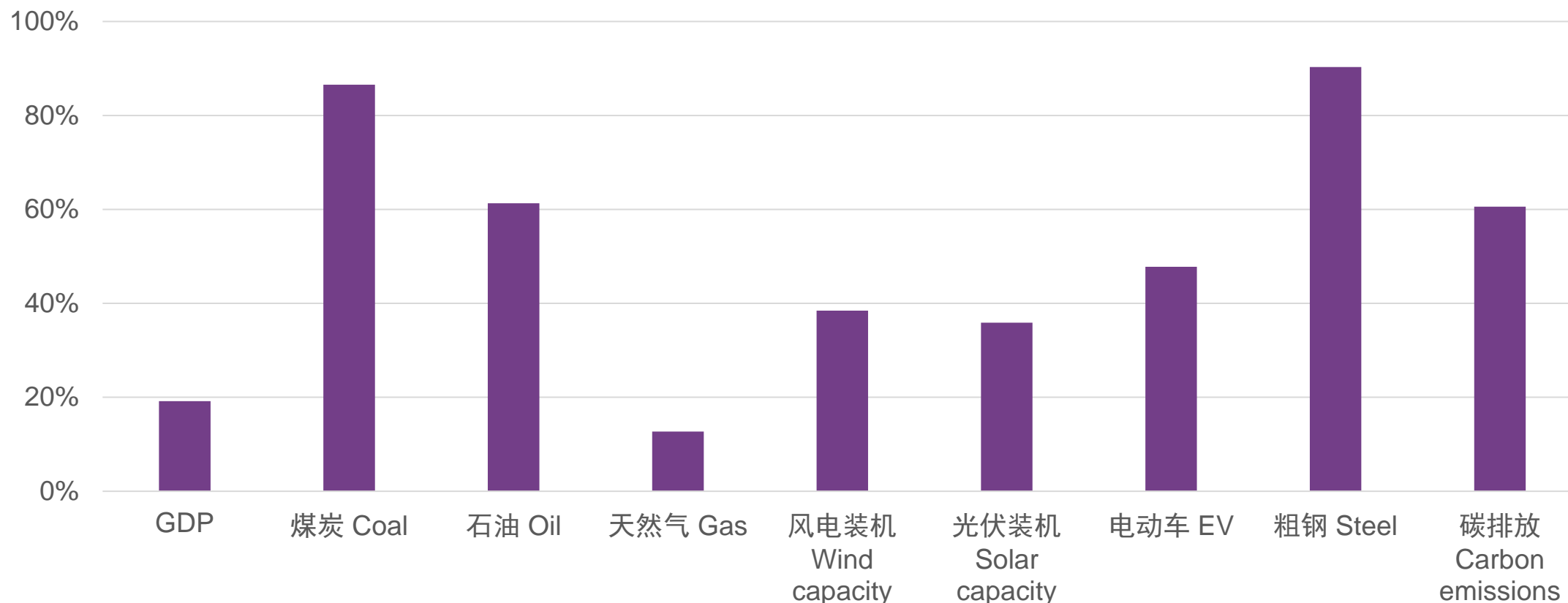
Mega-trend: the cycle of power rebalancing



- After the end of the Cold War in 1991, power rebalanced from the state to non-state actors.
 - Following the global financial crisis in 2008, power is rebalancing with a U-turn fashion, reinforced by the climate crisis and the COVID-19 pandemic.
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China's importance in terms of key energy and climate indicators

中国1978年改革开放以来的全球增长占比 China's growth as percentage of world total, 1978-2020

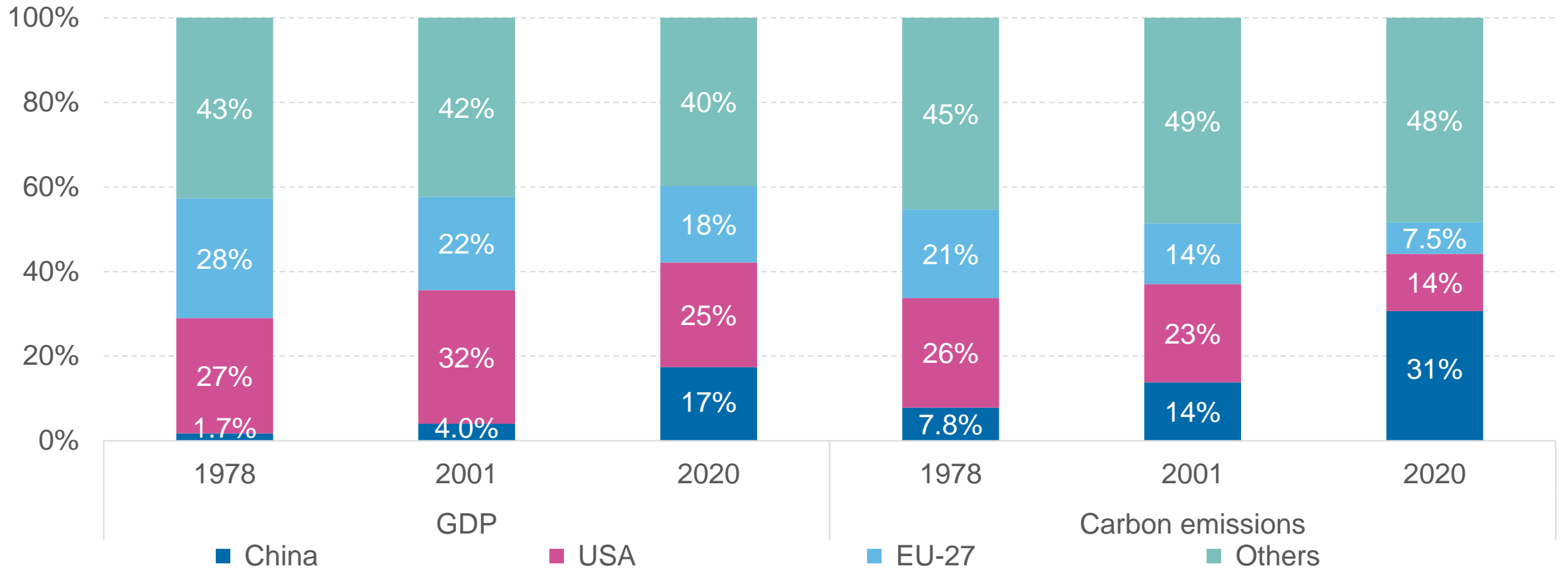


Source: World Bank data portal and BP (2021).

Since 1978, China alone accounts for more than 60% of global growth in CO₂ emissions.

Will China, US and EU-27 collaborate with each other on climate issues?

World GDP and carbon emissions by key economy

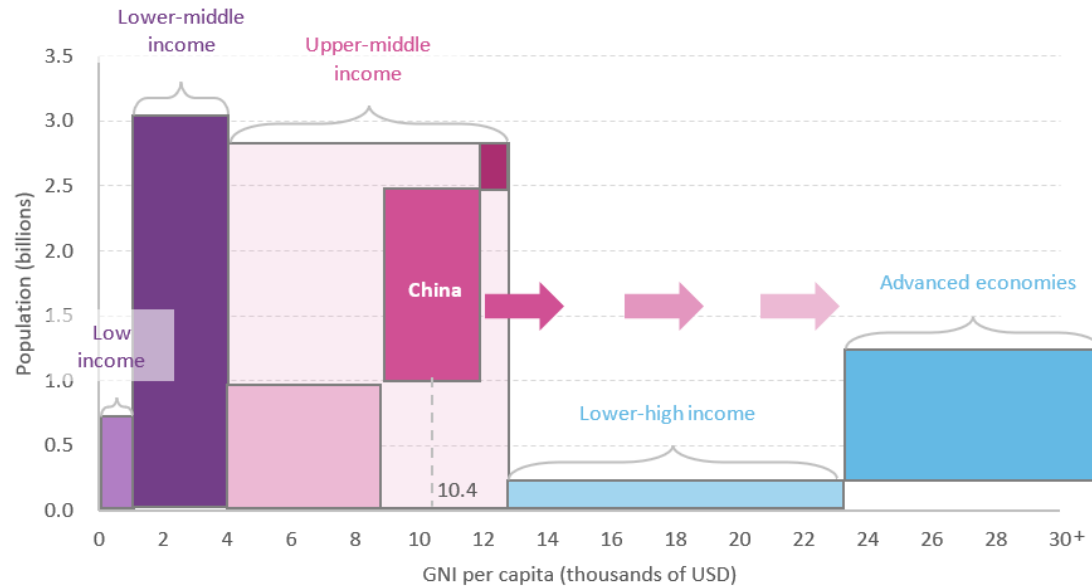


Source: World Bank and Our World in Data.

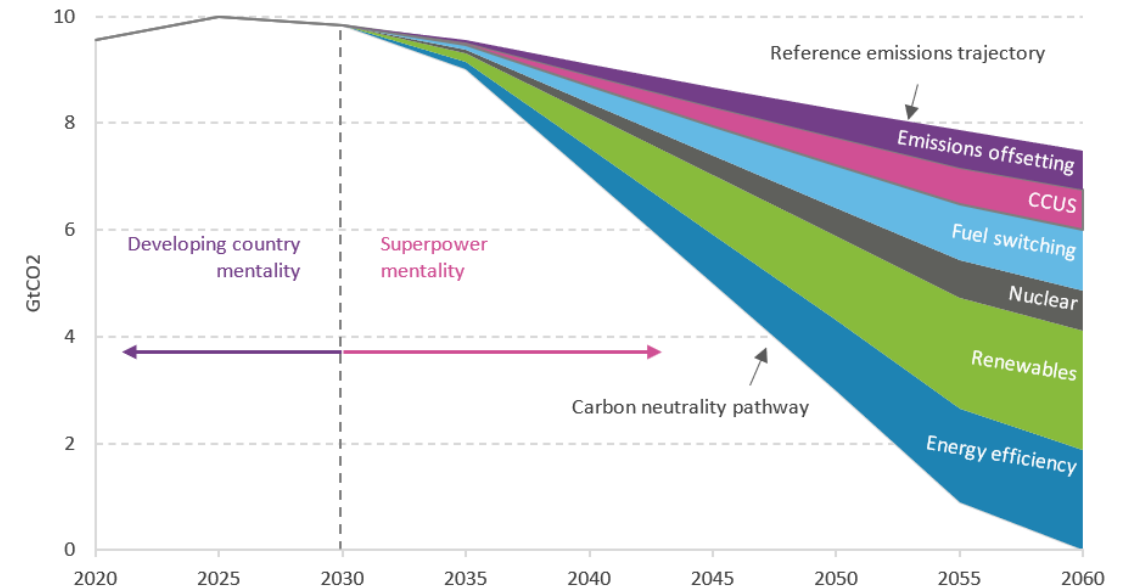
China, United States and European Union have all made net-zero pledges against the backdrop of rising geopolitical tensions.

国内外政治与经济背景——“混合经济体超级大国” China's hybrid superpower status could well explain the country's dual carbon targets

→ 中国是现代国际社会第一个“混合经济体超级大国” China is the first ever hybrid superpower in the modern era



→ 中国碳中和潜在路径楔形分析 Illustrative wedge analysis of China's carbon neutral pathway



Source: Benoit and Tu (2020) Is China still a developing country? CGEP at Columbia University: New York.

Climate politics in the United States: Uncertainty in the long-run

Economist Rudiger Dornbusch is known for the statement:

In economics, things take longer to happen than you think they will, and then they happen faster than you thought they could.

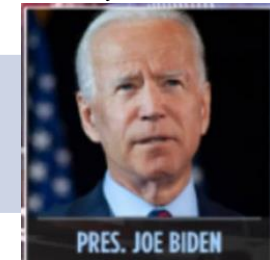
Clinton administration signed Kyoto Protocol on 12 Nov 1998



Obama administration formally enters Paris Agreement with China on 3 Sept 2016



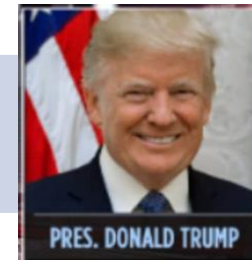
On 20 Jan 2021, President Biden signed the instrument to rejoin Paris Agreement



Upon taking office in 2001, Bush stated his opposition to Kyoto Protocol

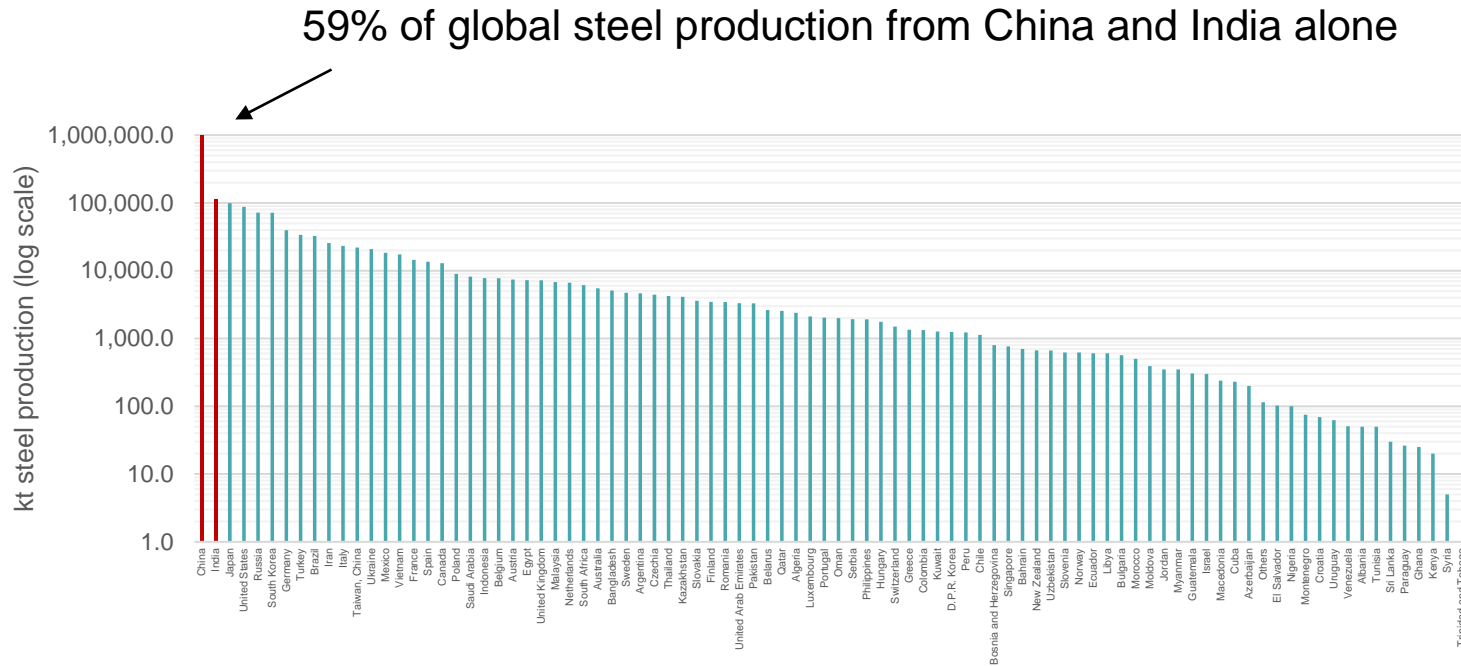


President Trump announced to withdrawal from Paris Agreement on 1 June 2017



Climate politics in the European Union: an EU perspective

Can a « climate club » avoid the need for an EU CBAM?



E.g. of steel: 59 countries produce 1-1000 Mt/yr of steel; over 66% of production from large developing countries (India, Brazil, South Africa, Indonesia, Vietnam, etc.)

- **Common climate club idea is based on the idea of a growing alliance of countries adopting common carbon prices** (or shadow carbon prices), thus reducing need for a CBAM between members of the club, or, potentially implementing common border adjustments on non-members.
- **However**, global production and trade of key commodities like steel, aluminium etc. are not limited to a small number of countries likely to adopt high carbon prices anytime soon. **How would carbon leakage protection w/ cost pass-through in EU be provided in foreseeable future?**

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Can a « climate club » avoid the need for an EU CBAM?

→ A Climate Club based on aligning carbon prices also raises other challenges

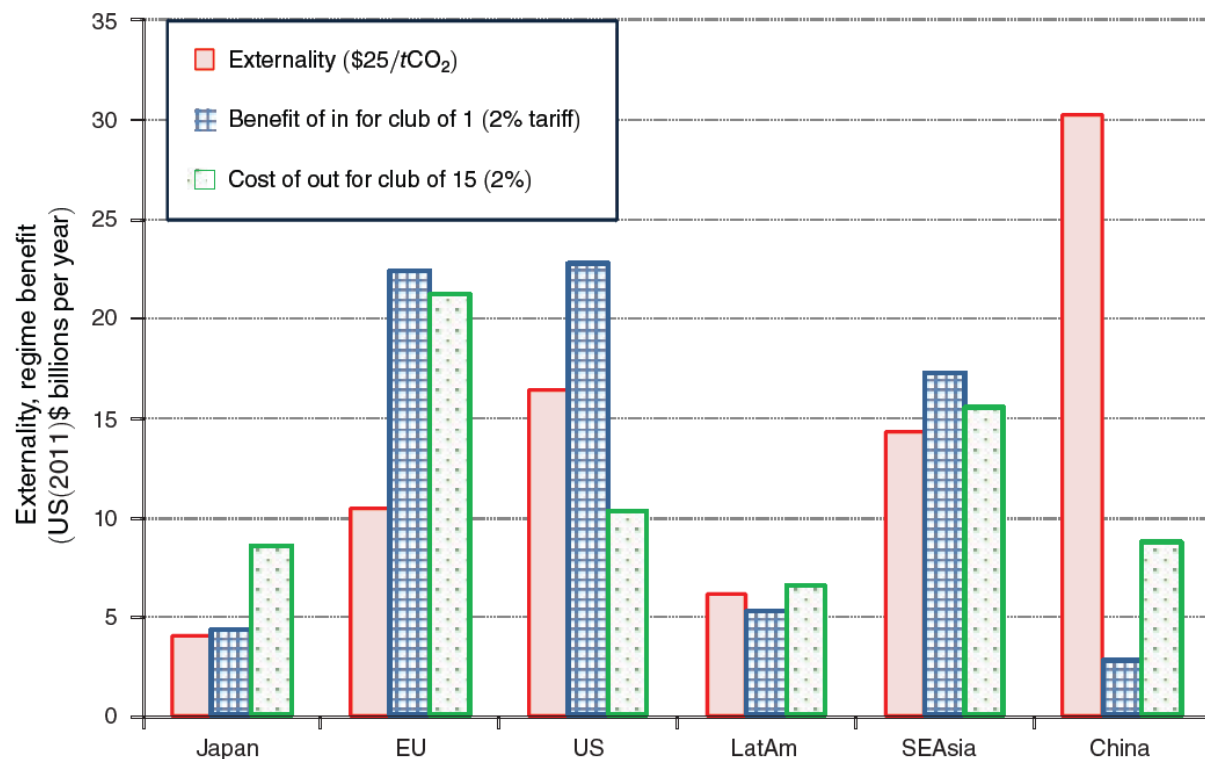
- How easy to agree on methodologies for shadow prices of non-price policies ?
- How would explicit carbon prices be aligned in practice (e.g. the EU ETS is not a fixed price)?
- Shadow carbon abatement costs can change depending on energy price fluctuations, etc.
- Would take substantial time for >50% of global market to have equivalence to EU ambition levels (Willingness of China? India? US?)

→ Observation:

- Although of possible value in longer term, not clear that the Climate Club *based on CO2 price-alignment* is a clear *alternative* to a *EU CBAM* => EU needs its own strategy.

China's stance on "climate club" and EU CBam

Comparison of the Transnational Externality and the Impacts of Penalty Tariffs by Region



Source: William Nordhaus (2015).

China's short-term stance on EU CBAM

July 26, 2021
1:02 PM CST
Last Updated 5 months ago

Sustainable Business

China says EU's planned carbon border tax violates trade principles

3 minute read

Reuters



Source: Reuters, 26 July 2021.

The left-hand externality bar shows the transnational spillover for each region for a \$25 per ton global social cost of carbon. The middle bar shows the benefit of participating in a Climate Club with a penalty tariff of 2% for clubs of 1. The right-hand cost bar shows the cost of not participating in a Climate Club with a penalty tariff of 2 percent for clubs of 14 (that is, the region is the only nonparticipant).

Concluding remarks

- As the second largest economy, largest energy consumer and CO₂ emitter, leading importer of coal, oil and gas, China is key for any global climate solutions.
- Given the rising geopolitical rivalry among major economies, collaboration instead of confrontation on climate change is not necessarily guaranteed especially between the United States and China.
- How to learn from historical lessons and avoid the worst scenario will test political wisdom for leaders across the globe especially major economies including Russia.

