

Trade & Investment and Green Transformation

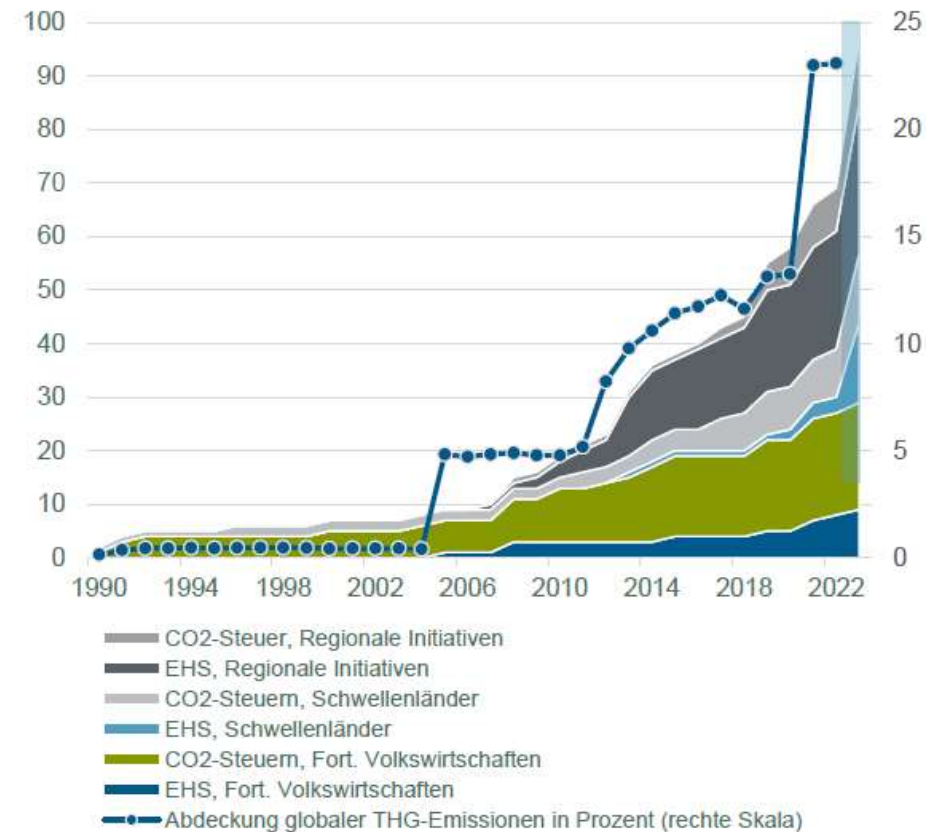
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1. CO₂-Pricing: Progress and Obstacles

- No global CO₂-pricing **but** many initiatives at *regional, national and sub-national level*
- Since 1990: *almost 70 CO₂-pricing initiatives* by around 47 countries worldwide
- **However:** the measures are far from sufficient

Anzahl implementierter CO₂-Preissysteme nach Instrument und Ländergruppe (linke Skala) und Abdeckung globaler Emissionen (rechte Skala).



Anmerkung: Hellblauer Bereich stellt künftig geplante oder diskutierte Initiativen dar. Wert für Abdeckung globaler Emissionen für 2022 ist vorläufig.
EHS: Emissionshandelssystem.

Quelle: World Bank Carbon Pricing Dashboard, KfW Research

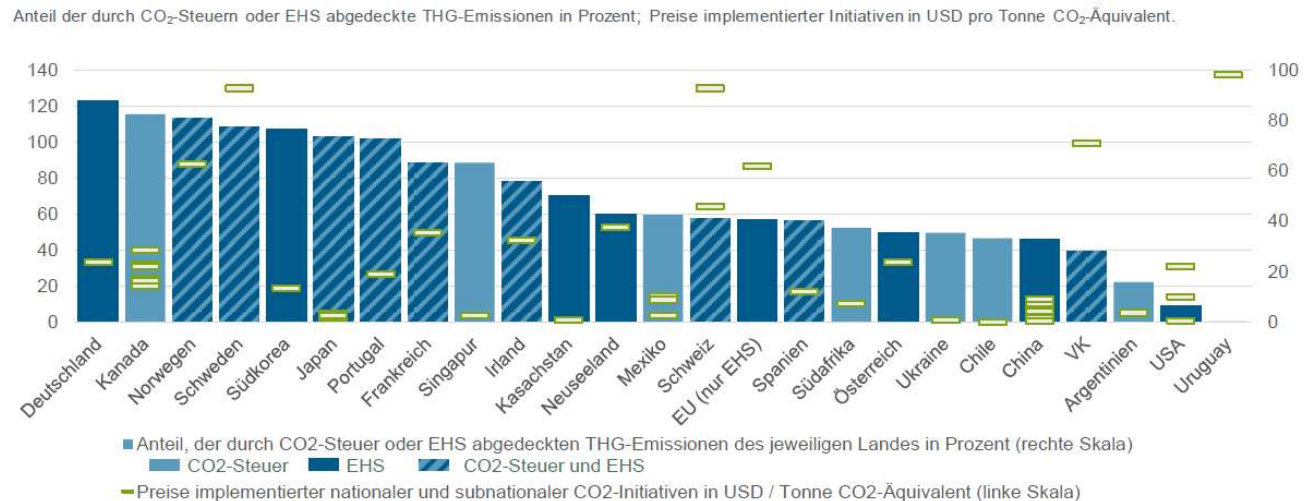
i) Distributional Effects of CO₂-Pricing

- Main Goal of **Just Transitions**: a socially just and acceptable transition to a climate-neutral global economy
- CO₂-pricing initially has a regressive effect
 - Hypothetical CO₂-price of 50 USD per ton without redistribution of revenues could increase extreme poverty worldwide (Malerba et al. 2022)
- *But*: Empirical studies show the potential of *revenue recycling* (Malerba et al. 2022)
- Redistribution of revenues from such a tax could:
 - Reduce poverty by 16%-27% (110-190 million people)
 - Reduce inequality (average Gini coefficient would decrease by 4%-8%)
 - **Conclusion**: policy design of the CO₂-pricing matters (and complementary measures)

ii) Question of Competitiveness

- Introduction of a CO₂-price negatively affect the competitiveness of the domestic economy
- Carbon Leakage

International "patchwork" of climate policy approaches



Anmerkung: Anteil abgedeckter THG-Emissionen durch positiven CO₂-Preis bezieht sich auf sämtliche national und supranational (EU ETS) geltenden expliziten Instrumente. Darstellung der Preise umfasst nur nationale oder, wo vorhanden, subnationale Systeme. Die Vergleichbarkeit der Preise über Länder hinweg ist aufgrund der unterschiedlichen Anzahl der erfassten Sektoren und spezifischer Ausnahmen eingeschränkt. Es gelten die zuletzt verfügbaren Daten: Anteil THG-Emissionen 2021, nominale Preise: April 2022. Für Uruguay liegen keine aktuellen Daten zum Anteil der THG-Emissionen vor, da die CO₂-Steuer erst 2022 in Kraft trat.

Quelle: World Bank Carbon Pricing Dashboard, OECD, KfW Research

ii) Question of Competitiveness

Possible solutions:

- a) global CO₂-price – not politically feasible
- b) “*Climate Clubs*” (discussions e.g. at G7; research has shown numerous environmental agreements with trade clauses generate club goods for their members; therefore *de facto* environmental clubs, see also Morin, Brandi, Schwab, 2023)
- c) border carbon adjustment, e.g. EU Carbon Border Adjustment Mechanism (CBAM) launched in 2023 (but is also currently being discussed or prepared in other regional contexts)

2. CBAM from a Global Perspective

- CBAM is primarily intended to promote an ambitious climate policy of the EU without energy-intensive sectors shifting their emissions abroad (*carbon leakage*)
- However, the design of the EU CBAM has disadvantages, not only at the expense of climate policy effectiveness, but also at the expense of a development policy perspective (not well compatible with the concept of Just Transition)
 - For many developing countries, additional export costs are expected as a result of the CBAM; this challenge could be addressed if the revenues of the CBAM were invested in decarbonization in other countries outside the EU (but this is not the case)
- *Important in future discussions:* Border compensation mechanisms should be designed in such a way that they are effective in terms of climate policy and sufficiently take low-income countries into account

3. Approaches beyond CO2-Pricing : Green Industrial Policy



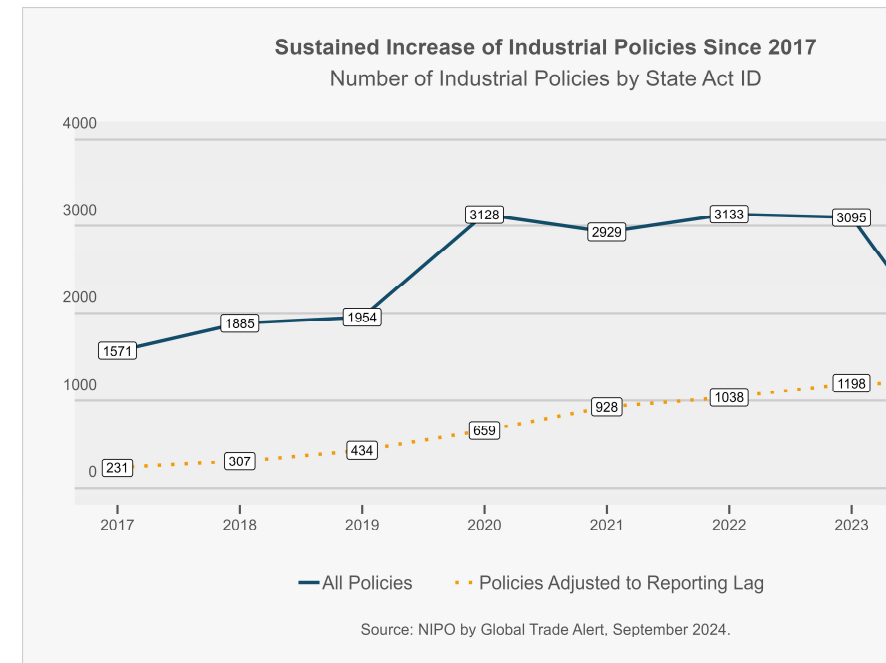
- The current trend is also in the direction of industrial policy support for climate-relevant innovations, in particular "green" subsidies
- *Main challenges:*
 - Subsidization has disadvantages, e.g. is less efficient than CO2-pricing
 - The international "*subsidy race*" has challenging implications, especially for low-income countries
 - One of the main reasons: they cannot afford subsidies, and then are left behind in the race for innovative technologies in the sense of climate neutrality (not well compatible with the concept of Just Transition)

Renewed Interest in Industrial Policy

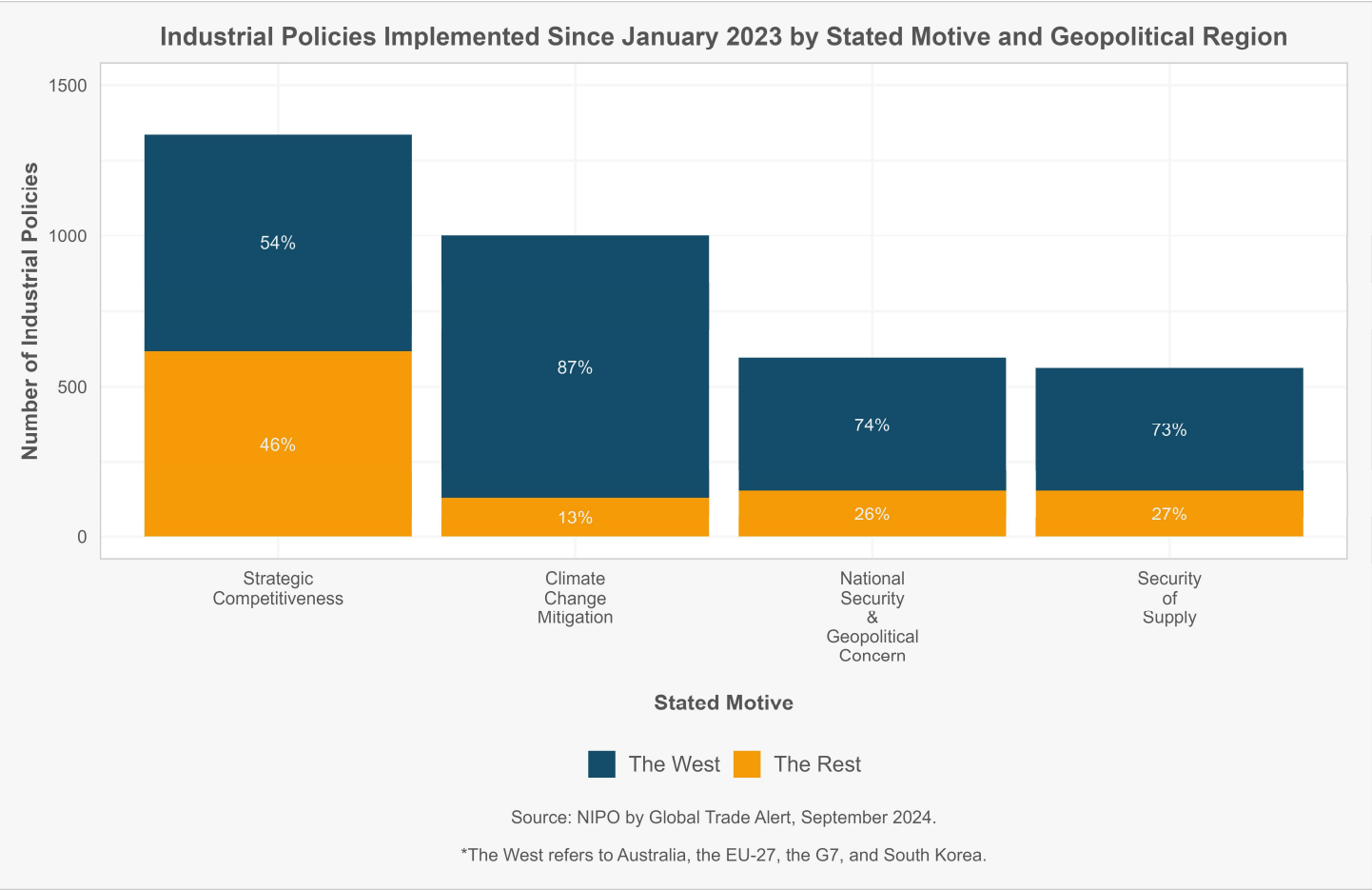


Industrial policy (IP) continues to gain momentum - a **historic high** is expected during 2024

- IP is not new but used to achieve **public policy goals**, e.g. low carbon transition
- some **Advanced Economies** which had eschewed IP in the past now embrace it



Competitiveness is the Most Frequent Stated Motive

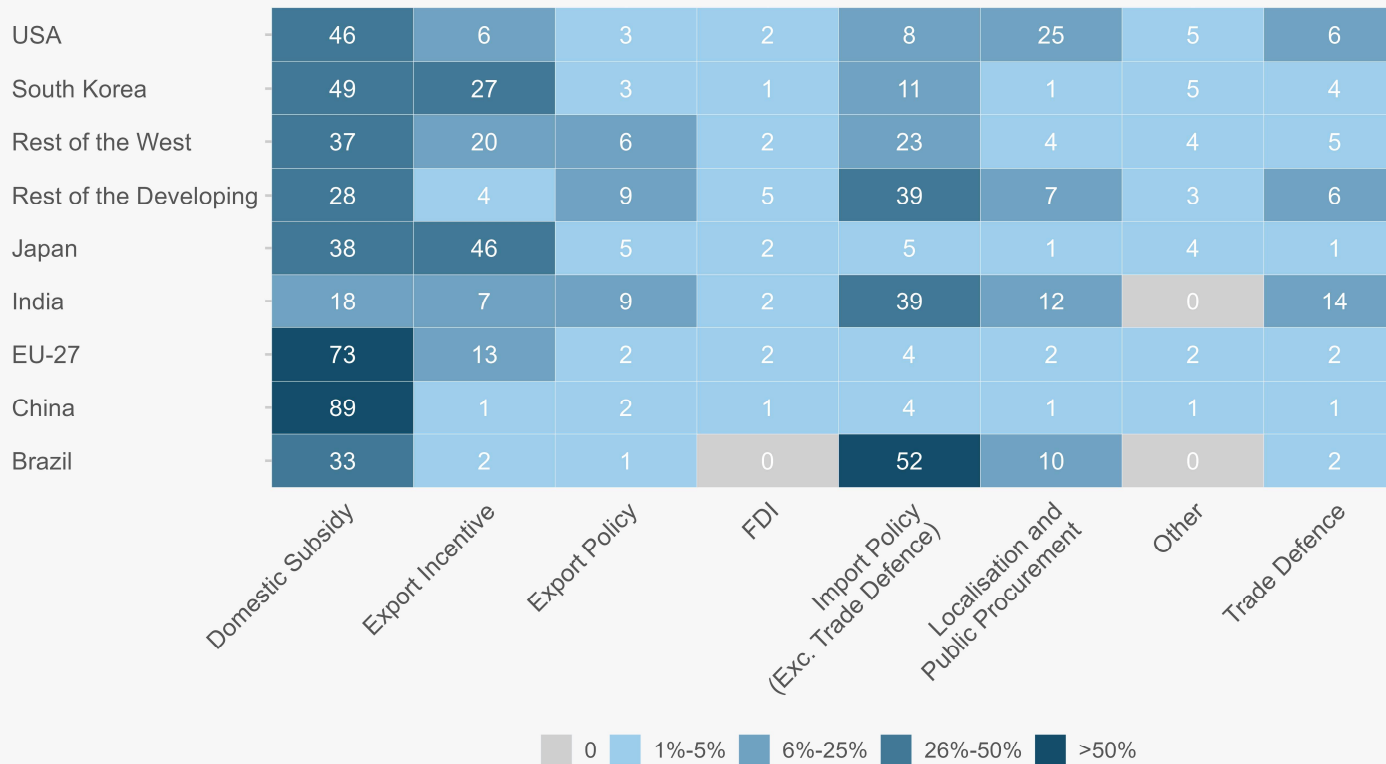


- **Climate change-related (87%) and national security & geopolitical concerns (74%) motives are found most often in the West**

Distinct Regional Variations are Evident in Selection of Policy Instruments



Percentage of Industrial Policies Since January 2017
Breakdown of Distortive and Liberalising Policies by Country and Policy Instrument



Source: NIPO by Global Trade Alert, September 2024.

- **Deep pockets likely matter:** high per-capita income economies (e.g. EU) lean heavily on corporate subsidies, while developing countries rely more on import barriers.
- The USA relies more on **localisation and public procurement** measures
- Most of the Japanese industrial policy relates to **export incentives** or financial help of firms abroad

4. Climate Policy in the context of Trade Policy

Why is it important to study the links between international trade and environmental policy?

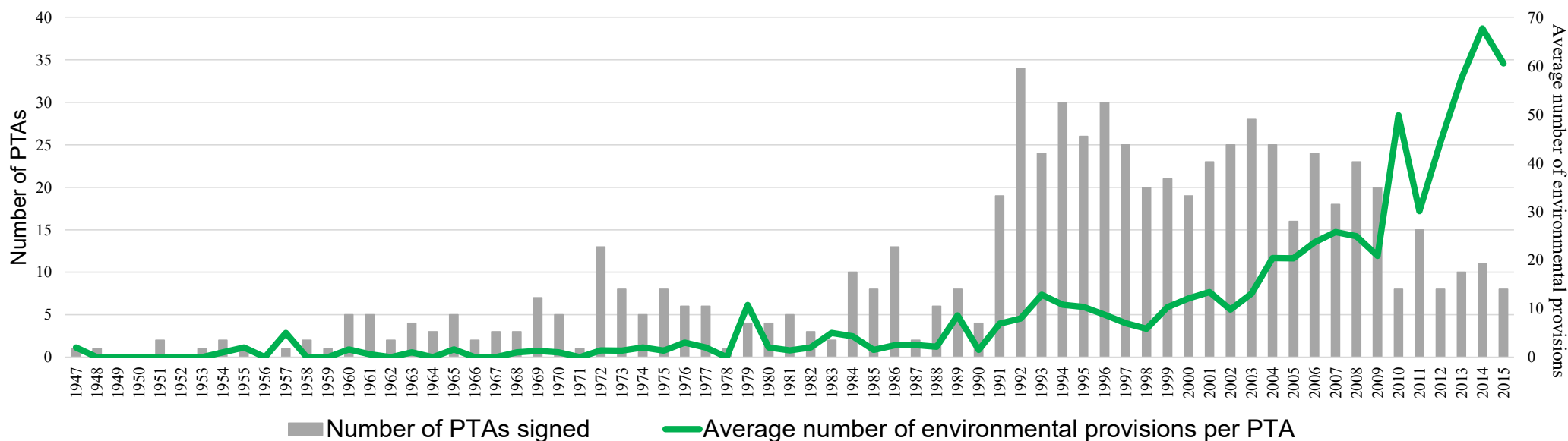
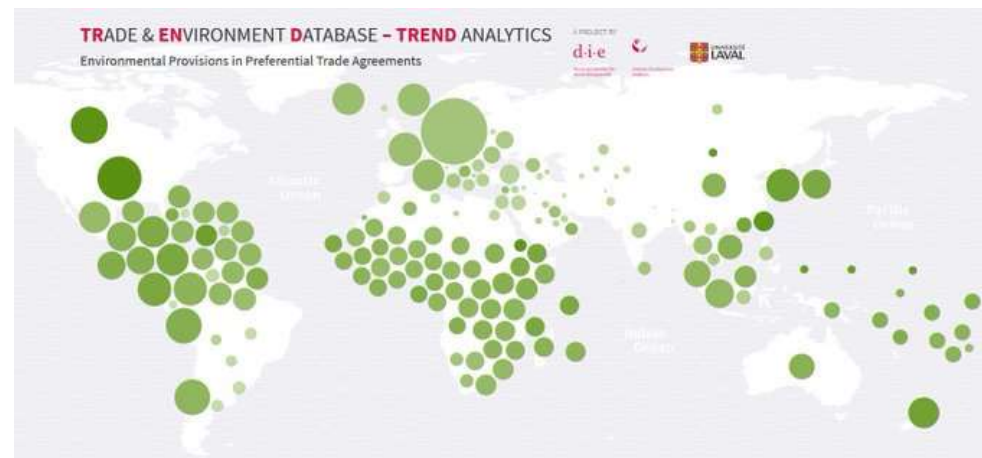
- Trade as part of the problem (transport, etc.). *But:* to what extent can trade also be part of the solution and contribute to environmental protection?
 - Negative relationship: conflict of interest; e.g. more emissions due to more production and transport (e.g. Daly, 1993; Esty, 1994; Conca, 2000)
 - *Positive relationship:* synergies; e.g. faster transition to environmentally friendly technologies; higher demand for environmental protection (e.g. Bhagwati, 1993; Gamso, 2017)



Trade and Environment Database (TREND)

- 700 preferential trade agreements (PTAs)
- include 300 types of environmental provisions, many of them are relevant for climate protection

See www.TRENDanalytics.info



Environmental effects:

- positive relationship between environmental clauses and environmental legislation (Brandi et al., 2019) and environmental quality (Bastiaens & Postnikov, 2017; Martínez-Zarzoso & Oueslati 2018; Zhou et al. 2017)
- e.g. environmental clauses are accompanied by a reduction in greenhouse gases, so they can promote climate protection (Brandi & Morin, 2023; Brandi & Schwab, 2023)



Trade effects:

- Potential for win-win effects: e.g. certain environmental clauses reduce environmentally harmful exports between partner countries and increase the exports of environmental goods (Brandi et al. 2020)

Practical Relevance for Trade and Climate Interactions

- Many of the climate provisions in trade agreements remain vague, weak and not very innovative; they should be specified and strengthened
- Some examples of practical relevance for trade and climate interactions:
 - Recently concluded Agreement on Climate Change, Trade and Sustainable Development (ACCTS) between some countries (incl. New Zealand, Costa Rica)
 - New discussions on trade and the environment in the World Trade Organization (WTO), incl. climate protection
 - At COP28: “Trade Day”, to discuss the interaction of trade and climate and to promote exchange between climate and trade experts



United Nations
Framework Convention on
Climate Change



5. Conclusions and Outlook

- Measures for decarbonisation from an international perspective are far from sufficient
- Policy measures should be designed in the sense of Just Transition; but this is challenging and is not happening to a sufficient extent at the moment (e.g. CBAM, subsidy race, etc.)
- Trade policy can also make an important contribution to climate protection; potential should be better exploited
- Overall: more global cooperation needed, which is difficult in the current geopolitical context
- But: climate policy one of the few policy areas in which international cooperation is currently progressing (although very slowly) and is possible at all



Thank you!

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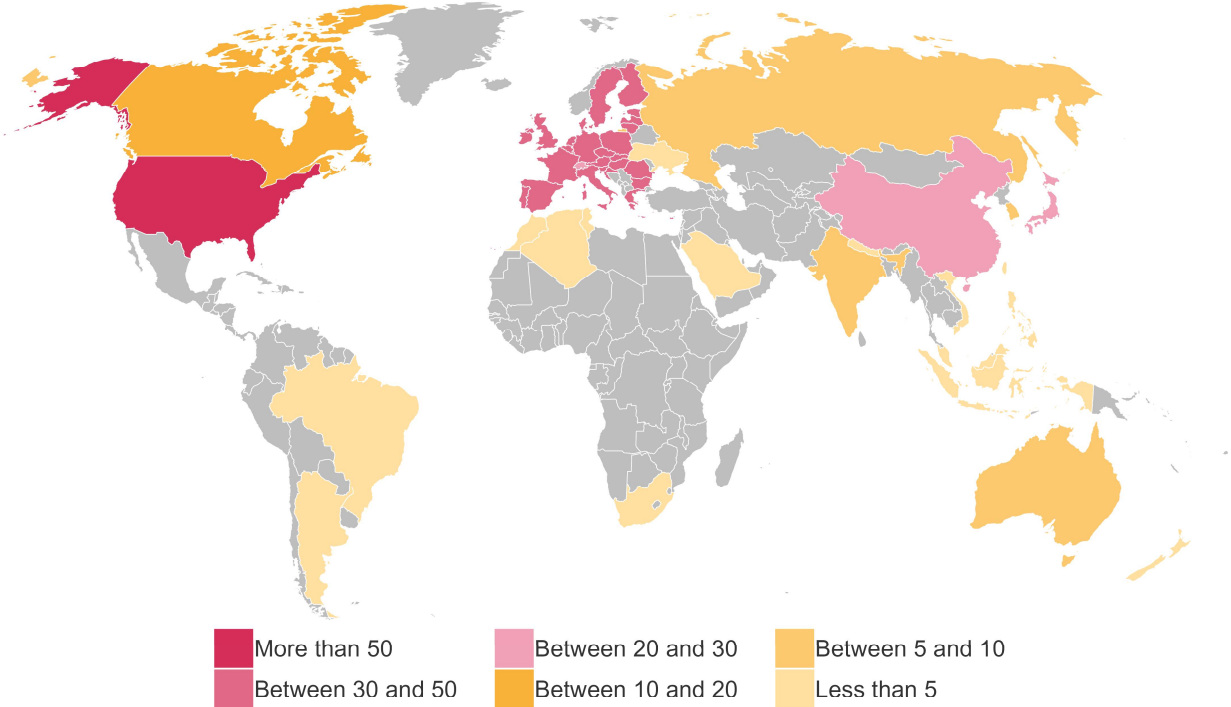
Brandi et al. (2023): Trade and climate change: how to design better climate-related provisions in preferential trade agreements

Malerba et al. (2022): The Impact of Carbon Taxation and Revenue Redistribution on Poverty and Inequality

The race for innovation in high-tech involves local support and export bans



Export Curbs in Force on 29 August 2024
Advanced Technology Products & IT and Digital Services



Source: NIPO by Global Trade Alert, September 2024.