

1. Main Messages

Environmental provisions in Preferential Trade Agreements (PTAs) have grown in scope and complexity. Over time, PTAs have incorporated more detailed environmental commitments, particularly on issues such as climate change, renewable energy, and biodiversity conservation.

The impact of environmental provisions on Sustainable Development Goals (SDGs) varies widely. Provisions related to greenhouse gas (GHG) emissions reduction, renewable energy use, and fisheries protection are particularly effective, while others show no significant impact.

Binding vs. non-binding provisions yield different effects. Surprisingly, non-binding provisions are sometimes more effective than binding ones, suggesting that cooperation-based approaches may work better than sanction-based mechanisms.

Older PTAs are less effective in achieving environmental SDG targets. More recent agreements tend to include stronger environmental provisions and produce better sustainability outcomes.

Technical and financial assistance provisions improve outcomes. PTAs that include support mechanisms for capacity-building and environmental governance tend to achieve better SDG-related results.

2. Research Scope & Methodology

This deliverable employs quantitative analysis to assess the effect of environmental provisions in PTAs on selected SDG indicators. The approach includes:

- **Comprehensive dataset from TREND** (Trade and Environment Database) covering 630 PTAs.
- Use of synthetic difference-in-differences (SDID) estimation to account for staggered PTA implementation and endogeneity issues.
- Focus on five SDGs (6, 7, 13, 14, 15) with eight environmental indicators linked to specific PTA provisions.



THE EFFECT OF

ENVIRONMENTAL PROVISIONS IN PREFERENTIAL TRADE AGREEMENTS ON SUSTAINABLE DEVELOPMENT GOALS

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3. Key Findings: Evidence Supporting Policy Discussions

3.1. Environmental Provisions in PTAs and Their Effectiveness

- The number of PTAs with environmental provisions has surged since . the early 2000s, moving from general clauses to highly specific norms (Figure 4.1).
- Provisions on renewable energy production, GHG reduction, and fisheries protection are among the most effective in supporting SDG targets.
- Older PTAs are less impactful, suggesting that more recent agreements incorporate improved enforcement mechanisms.

Figure 4.1: Number of Trade Agreements with and without Environmental Provisions (EP)



Source: Authors' elaboration with data from TREND.

Implication: Future trade agreements should include stronger, well-defined, and enforceable environmental commitments.

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3.2. The Role of Binding vs. Non-Binding Environmental **Provisions**

- Non-binding provisions often perform better than binding ones, particularly in areas like illegal fishing and protected areas.
- Binding provisions work better for GHG reduction, but for other areas, cooperative frameworks yield better results.

Implication: A hybrid approach combining cooperative measures with targeted enforcement could be more effective.

3.3. PTAs and SDG Outcomes: Evidence by Sector

Water Management (SDG 6: Clean Water and Sanitation)

- Provisions on water efficiency and transboundary water governance show mixed results.
- Only binding provisions on river management significantly reduce water stress, while non-binding ones may lead to unintended negative outcomes.

Renewable Energy & Climate Action (SDGs 7 & 13)

- Renewable energy provisions increase the share of clean energy in the mix.
- GHG reduction provisions significantly lower emissions, particularly in PTAs with binding commitments.

Fisheries & Biodiversity Conservation (SDGs 14 & 15)

- PTAs with anti-illegal fishing clauses improve fish stock sustainability.
- Provisions on protected areas and biodiversity conservation show positive effects, particularly when technical assistance is included.

4. Implications for EU Policy & Trade Governance

- Ensure provisions are specific, enforceable, and linked to SDG indicators.
- Encourage a combination of binding and cooperative approaches to maximise effectiveness.
- Support mechanisms for implementation, including technical and financial assistance.
- Trade agreements should be **SDG-proofed** to assess sustainability impacts before implementation.
- Include environmental dispute settlement mechanisms with clear follow-up measures.

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- Encourage **knowledge transfer and capacity-building** to help partner countries meet sustainability goals.
- Coordinate trade agreements with EU climate, energy, and biodiversity strategies.
- Ensure alignment with the European Green Deal and CAP reforms.
- Improve data collection and monitoring to track sustainability outcomes.

5. Conclusion

This deliverable provides strong evidence that well-designed environmental provisions in PTAs can support sustainability goals, but their effectiveness depends on specific design choices.

Key takeaways include:

- Trade agreements must incorporate detailed and targeted environmental provisions.
- A hybrid approach combining cooperative and binding measures is recommended.
- Technical and financial support improves compliance and effectiveness.

This Project Brief is based on **Deliverable 2.1.** of the TRADE4SD project.

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Trade4SD is a 4-year project devoted to research on a topic which is high on the domestic as well as multilateral, EU and bilateral trade policy agenda. The ambition of the project is to explore and foster the positive linkages between trade and sustainable development is to provide policy recommendations for the creation of new opportunities for agents involved in the global, regional and national agri-food value chains, and to define conditions for sustainable livelihoods of farm producers in the EU and developing partner countries. Trade is a central factor in shaping global, regional and local development. Increased trade, empowered by the growth of Global Value Chains (GVCs), has boosted productivity and incomes in many countries.

