



**Asia-Pacific
Economic Cooperation**

2021/CTI/PD/003

Session: 2.1

Regulating Trade in a Net-Zero World

Submitted by: Australian National University



**Policy Discussions on Trade-Related
Policies to Promote Trade in Environmental
Products and Technologies Including
Regulatory Issues, Contributing to Global
Carbon Neutrality
9 September 2021**

REGULATING TRADE IN A NET-ZERO WORLD

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RegNet Webinar

17th August, 2021



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National
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Outline

- 01 Trade BAU is not an option
- 02 Trade-related climate policies
- 03 Certification schemes
- 04 Regulatory complexity
- 05 Embedded emissions accounting
- 06 Conclusion



Business as Usual is not an option

...and the world's largest economies and businesses are shifting rapidly

110 countries and the EU have made net zero emission commitments

- 70% world's economy
- 65% global emissions

1/5th of the world's largest companies have made commitments to reach net zero emissions by 2040 (The Climate Pledge 2021).



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ANU stock image

Trade will need to change too

22% of global emissions are embedded in internationally traded products

Competitiveness concerns increasing

- Emissions-intensive trade-exposed industries now being included in carbon pricing schemes (e.g. EU ETS)
- Explicit or implicit carbon price likely to rise in coming decades

Leakage concerns increasing

- As above
- Also “low-carbon” fuels (see [One Earth Voices](#))

Trade-related climate policy

Trade-related climate policies are policies nominally to support climate objectives, which have trade and trade policy consequences, e.g.:

Carbon border adjustment mechanisms

- EU, plus Japan, Canada, US

“Green” and “low emissions” certification schemes

- Hydrogen, Ammonia, plus Steel, Aluminium

Preferential “green good” liberalisation

- APEC, WTO, others

Linked emissions trading schemes

- EU-Switzerland

Frameworks for trade in negative emissions services



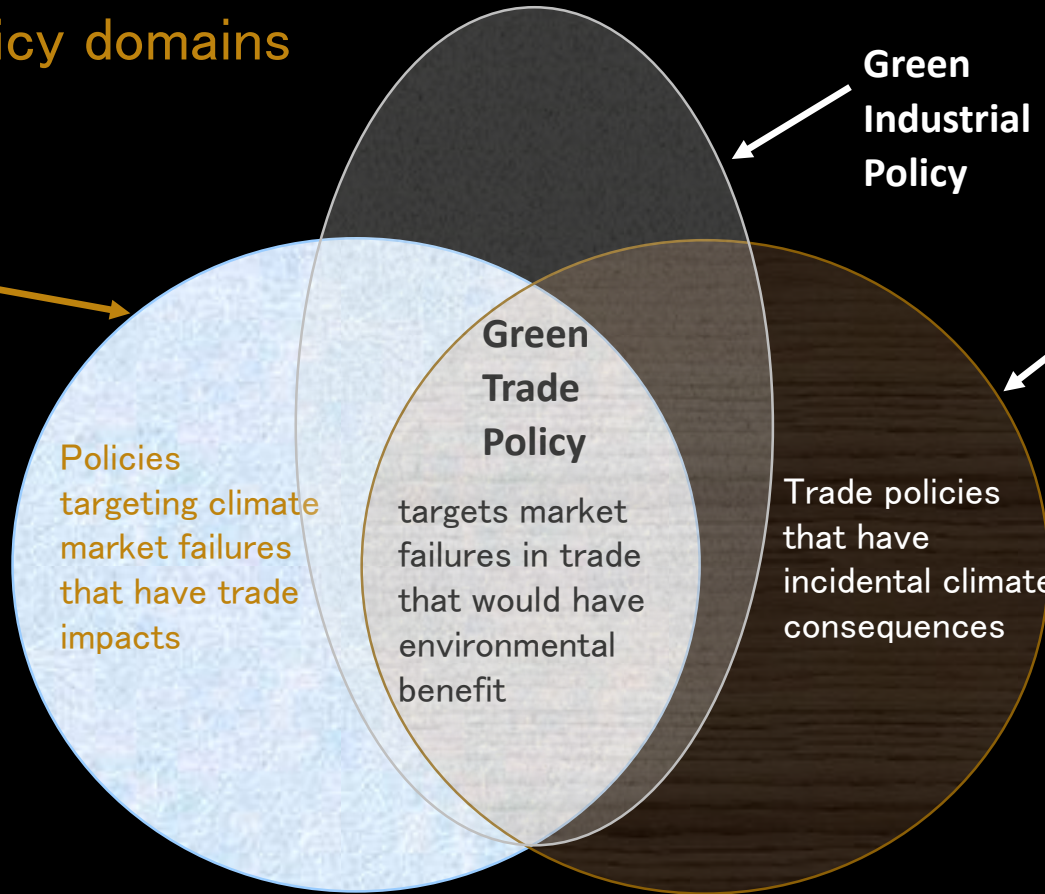
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Overlapping policy domains

Trade-Related Climate Policy

supports climate objectives, and have trade (policy) consequences



Green Industrial Policy

targets market failures inhibiting green industries

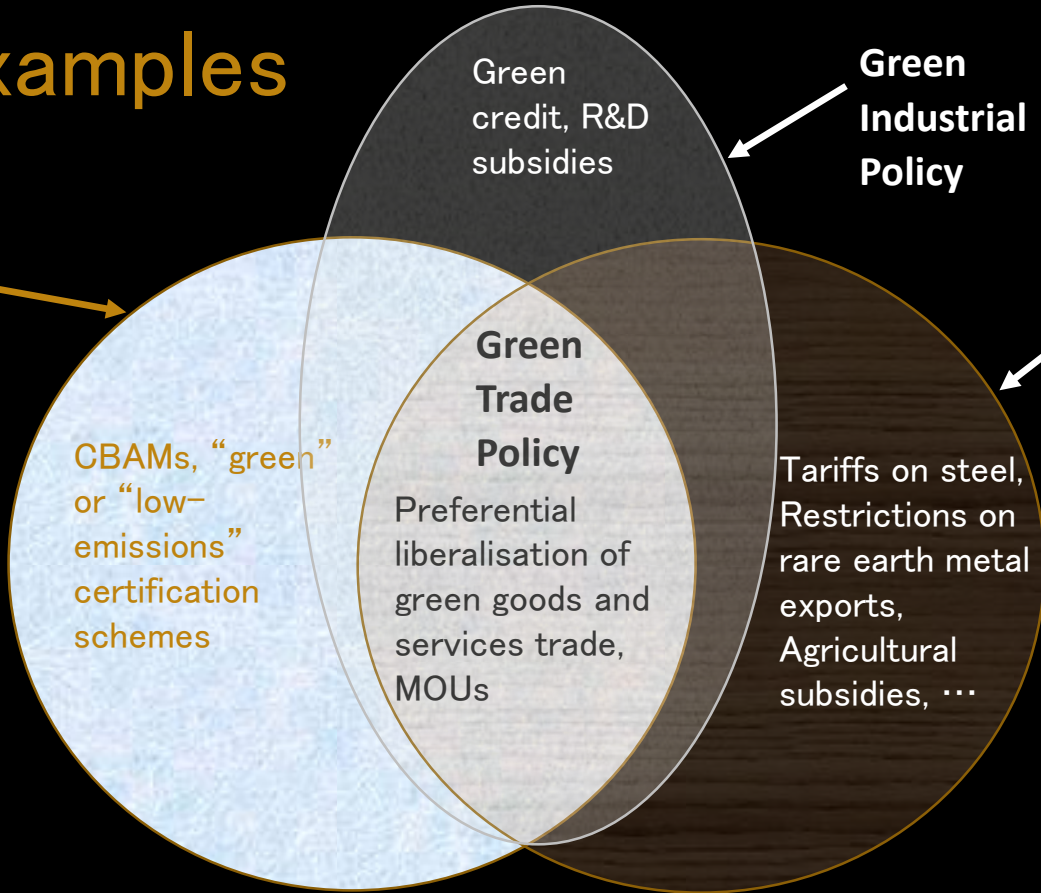
Climate-Related Trade Policy

supports trade objectives, and have climate (policy) consequences



Policy examples

Trade-Related Climate Policy



Green Industrial Policy

Climate-Related Trade Policy

CBAMs, "green" or "low-emissions" certification schemes

Green Trade Policy
Preferential liberalisation of green goods and services trade, MOUs

Tariffs on steel, Restrictions on rare earth metal exports, Agricultural subsidies, ...





Certification enables environmental price premia & market creation

There are many possible approaches to certification, e.g.

Green Certification

- E.g. H₂ & NH₃ from 100% renewable energy
- Should be net zero emission

Clean Certification

- Flexible and technology neutral
- Gas, coal, grid-connected electrolysis
- Certify how much embedded emissions – not necessarily zero





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Certification boundary options

Guarantee of Origin (GO)

- Primarily concerned with how the product was produced
- Do not generally account for embedded carbon in the plant, storage, transport and conversion at the customer gate

Life Cycle Accounting (LCA)

- Typically account for carbon emissions over whole life cycle, including transport, storage, conversion/reconversion, and use
- Some variation in which parts of the life cycle are covered
- Can be administratively more burdensome

Modular approach

- Balances regulatory burden and environmental impact
- See White et al, *Energy*, 2020



Regulatory competition and complexity

We are already seeing the emergence of multiple competing certification schemes for hydrogen and ammonia, both within and between countries.

There is the danger that regulatory complexity will lead to unnecessary regulatory burden and barriers to trade, especially for producers in jurisdictions with less regulatory capacity.

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Embedded emissions accounting frameworks to support TRCP

We need public embedded emissions accounting frameworks that are fit for purpose – including:

- minimising regulatory burden,
- interoperability, &
- incentivising genuine emissions reductions.

Australian Government has already committed to support our research on this topic.

International research collaborations and joint-funded research offer pathways to track 2.0 diplomacy.



Conclusion

- Trade-related climate policies will be essential if we are to avoid catastrophic climate change.
- A complex public and private regulatory regime is already emerging for some products.
- It is important that excessive regulatory complexity does not become a non-tariff barrier to trade.
- Public, interoperable embedded emissions accounting schemes can help lower regulatory burden.
- Research collaboration is a good place to start while complex questions remain unanswered.



Own photo



THANK YOU.

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