BOTH ECONOMIC AND ENVIRONMENTAL GOALS COULD BE ACHIEVED WITH THE RIGHT RENEWABLE ENERGY TRADE, INVESTMENT AND GREEN INDUSTRIAL POLICIES

AMPERES

Energy Transition Masterclass Session 8 - Recap on Key Message

TRADE, INVESTMENT AND GREEN INDUSTRIAL POLICY

Dr. Emily Aisbett Australian National University 02 June 2022

ENERGY TRANSITION ROUNDTABLES



Renewable energy trade, Foreign Direct Investment (FDI) and Green Industrial Policy can help drive a fast and efficient energy transition.

Trade-related climate instruments such as the **EU's Carbon Border Adjustment Mechanism** could have worldwide implications and stimulate the global decarbonization progress.







RENEWABLE ENERGY TRADE

Trading power and other energy carriers, e.g. hydrogen, will facilitate sharing of renewable resources among regions. Renewable energy trade will foster renewable energy cost reduction thanks to the advantage of economy of scale and the reduced need for energy storage. In addition, with diversified renewable sources, the energy system is less vulnerable to climate variability and geopolitical crises.

Renewable electricity trade is growing in the Asia-Pacific region.



ENERGY TRANSITION ROUNDTABLES Energy Transition Masterclass

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FOREIGN DIRECT INVESTMENT (FDI)

Foreign Direct Investment (FDI) helps developing countries quickly meet their financing needs for development of renewables and transmission projects and facilitates access to global market and advanced technology, avoiding energy transition delay and courter lock-in.

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GREEN INDUSTRIAL POLICY

Green Industrial Policy (GIP) comprises sector-targeted policies that **support the growth and development of certain industries and technologies**, with the aim to further both economic and environmental goals.

GIP addresses traditional market failures restricting industry growth, e.g. by using certification schemes to correct imperfect information. GIP also includes funding schemes, subsidies and price guarantees to support the development and acceleration of green technology. Technology-based approach is an alternative or "second-best policy" where carbon pricing policy faces considerable opposition and barriers to be employed.







GREEN INDUSTRIAL POLICY EXAMPLES



European Green Deal, announced in 2020, is a set of proposals to make the EU's climate, energy, transport and taxation policies fit for reducing net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.



GIP STRATEGIES FOR SPECFIC INDUSTRIES **Hydrogen strategies** are developed in Australia, Japan, South Korea and many other countries.



Innovation Fund is jointly managed by Australian Renewable Energy Agency (ARENA) and Clean Energy Finance Corporation (CEFC). The fund makes debt and equity investment in emerging clean energy projects and businesses, using CEFC financing.







FACILITATE HYDROGEN TRADE WITH CERTIFICATION SCHEMES

For trading hydrogen, certification systems are needed to establish trust between buyers and sellers. Certification informs purchasers of embedded carbon intensity in hydrogen production, correcting an "asymmetry of information" market failure.

Types of certification schemes:

- Guarantee of Origin (GO): Primarily concerned with how the hydrogen was produced.
- Life Cycle Accounting: Typically account for carbon emissions over whole life cycle, including transport, storage, conversion/ reconversion, and use.

CertifHy is a GO scheme widely adopted across Europe.

SCertifly







CBAM is a trade-related policy and a important climate action instrument of the **EU "Fit for 55" Package**, which aims to reduce net greenhouse gas emissions by at least 55% by 2030, compared to 1990 levels.

The objective of CBAM is to **reduce carbon leakage** occurring when businesses relocate production from countries with stringent emissions policy to ones with laxer constraints to avoid climate responsibility. Under CBAM, a carbon price will be imposed on specific products imported into the EU.









HOW CBAM WORKS

CBAM covers carbon-intensive products, including **cement, aluminium, fertilisers, electricity, iron and steel**.

EU importers will have to **buy carbon certificates** corresponding to the embedded emission intensity of the products at the price of the EU's Emissions Trading System allowances at any given point in time. The cost can be deducted if a carbon price has been already paid in the country of production. As a result, CBAM will level carbon price between the EU and the third country.

CBAM will start application from 1 January with a transitional period of three years and full application from 1 January 2026.







CBAM IMPLICATIONS

CBAM will consequently encourage carbon reduction in countries outside of the EU.

However, compliance costs are likely high in the Least Developing Countries (LDCs) where governments, sectors and firms lack the capacity and access to expertise to facilitate verification and compliance.

The EU plans to provide LDCs with technical assistance, technology transfer, extensive capacity building and financial support to develop industrial production structures compatible with long-term climate objectives.











POSSIBLE RESPONSES BY A THIRD COUNTRY

- Establish a domestic carbon price mechanism for reduction.
- Have an EU-compatible carbon accounting system for verification of actual embedded emissions.
- LDCs: active consultation with the EU for equitable use of the revenue from CBAM









NEXT SESSION

INDUSTRIAL TRANSFORMATIONS AND WORKFORCE PLANNING

Dr. Rebecca Pearse

10:00–12:00 HANOI–JAKARTA TIME 11:00–13:00 MANILA TIME 15 JUNE 2022

ETP Round Tables is a two-year capacity building and networking program of the ETP in Indonesia, the Philippines, and Vietnam. The program aims to build awareness and understanding of practical solutions and pathways that can support Indonesia, the Philippines, and Vietnam accelerate their transition to 100% zero-carbon energy.

Over a 24-week structured online training programme, the ETP Roundtables – **Energy Transition Masterclass** will provide a suite of tailored professional forums (training sessions) to enable the exchange of information, develop leadership among the region's energy transition stakeholders, and endow participants with the latest understanding and tools to accelerate energy transition for both policy and market contexts.

<u>See more:</u> https://www.energytransitionpartnership.org/ <u>Contact for ETP Roundtables:</u> Tien Le (Ms). Email: tienlth@amperes.com.au







