

Barriers and challenges around addressing sustainable development and socioeconomic impacts in a Just Energy Transition

Yin Shao Loong
Senior Research Associate
yin.shaoloong@krinstitute.org

4 June 2023
World Conference Centre, Bonn

Locating National Climate Strategy



Grand Strategy – long-term sovereignty and sustainable development within a geopolitically dynamic Asia-Pacific

National Development Strategy – redress socioeconomic inequality, long-term structural transformation of the economy, sustainable development, industrial policy, managing the energy 'trilemma' (access, affordability, security)

National Climate Strategy – support national development via diplomatic climate action to reduce emissions and domestic climate resilient development (adaptation and mitigation)

BALANCING COMPETING PRESSURES, IDENTIFY WHICH CLIMATE POLICIES ARE RELEVANT FOR YOU

Party's Climate Strategy Challenge

**Contribute to both global climate stabilisation
and sustainable development**

Countries must consider their national circumstances, common but differentiated responsibilities and respective capabilities.

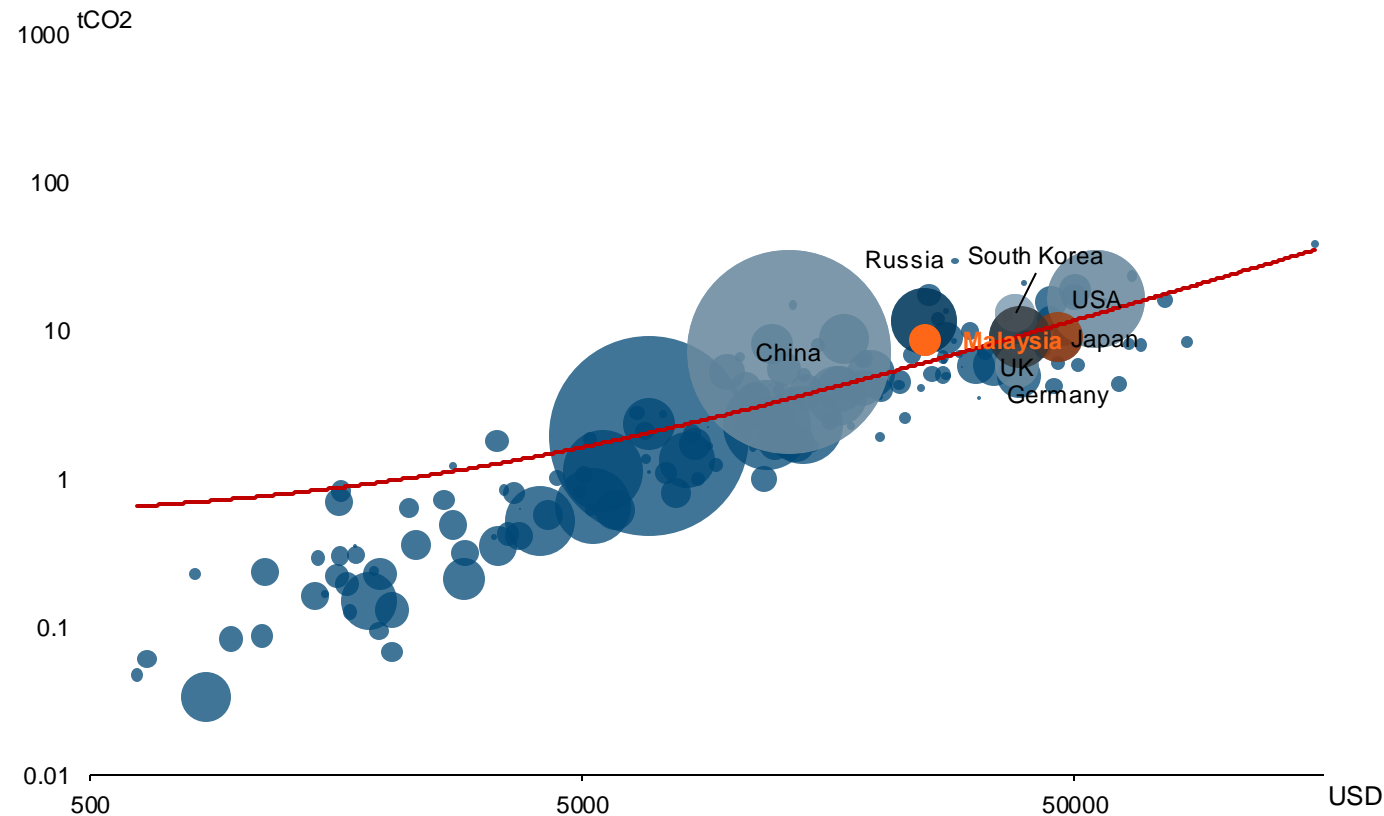
How does your country **contribute to global climate stabilisation**, consistent with your treaty obligations, **without compromising your development objectives**, especially in access to energy resources to fuel economic activity and consumption?

National strategy for a country with **high emissions**, **low sinks**, but high technological and financial endowments...
Will be different than a country with **low emissions**, **high sinks** and low technological and financial endowments...
It is also complicated for middle-income countries who are a **hybrid** of these.

Multiple just transition pathways, not just one

Decoupling emissions from GDP linked to high levels of GDP

Annual emissions per capita versus GDP per capita, 2018



Source: Our World in Data (n.d.); KRI/Khoo Wei Yang
Note: Bubble size indicates population size.

Current policies are attempting to break this curve. Especially with interventions in poor countries.

Generally, decoupling emissions from GDP tends to happen at high levels of GDP.

Decoupling isn't permanent and it can reverse.

Sustaining decoupling is a function of policy and higher levels of economic development.

Some countries are already 'net zero' because they lack development.

Some regions may desire **leapfrogging**, but require fossil thermal plants to anchor renewables.

Industrial Policy is back with a vengeance

- Countries with **high emissions**, **low sinks**, and **high technological and financial endowments** are turning back to **traditional industrial policy** (particularly the use of subsidies and trade measures). It is worth learning lessons from this.
- A handful of **middle-income countries** are pursuing less energy intensive paths with such industrial policy methods. Others are still operating with a playbook from the 1990s-2000s.
- However, **you can only cut as much as you can emit**. **Low emissions countries** may struggle to balance decarbonisation costs v other sustainable development priorities. Some need to transition from wood fuels. However, they are still climate vulnerable. Adaptation is neglected. Policy capacity is also limited. Industrial policy needs to embrace climate resilient development.
- The other means for low emission countries to contribute to decarbonisation is via **diplomacy**. Towards those who can make the biggest cuts.

Decarbonisation strategies thus operate on two levels: domestic and international. Some countries may find one more optimal than the other.

Just Transition Challenges

Modelling – Energy transitions are usually modelled (e.g. LT-LEDS). It is important for countries and regions to have the **capacity to do their own modelling** for a just energy transition. A model is only as good as its assumptions. If these are unjust then it can undermine just energy transitions. **Climate resilient development** (mitigation and adaptation) may be a better way forward for just transition modelling (LT-LEDS) as both old and new energy infrastructure and linked communities may experience **physical risks**.

Costs of consumption - Many developing countries will struggle to become **producers** of clean energy technologies. Industrial policy plays a role, but there are constraints on industrial policy. **Consumer countries** will have to manage terms of trade, exchange rate fluctuations, debt and security of supply (including cross-border supply arrangements).

Skills, training and firms - Reskilling workforces will require **teachers** and appropriate **educational institutions**. **State-owned firms /Sovereign Wealth Funds** may be able to play a role as a pioneer/loss leader in establishing clean energy businesses and undertake the social mission to retrain fossil energy labour.

Just Transition is full of unexpected twists

Cheaper tech = lower wages? - Renewable energies have now become very cheap compared to the last decade, though affordability challenges remain for developing countries. (Storage costs are lagging).*

It's not just a challenge to mobilise finance. **Rates of return** are sometimes too low for investors.** Low RoR can imply lower wages in RE (relative to the fossil fuel sector), which is in tension with aspirations of higher income.***

Can industrial policy change prices and RoR?

It's a policy frontier - Coordination, communication and inclusive consultation are crucial aspects of just transition. 'Tripartite' approach between workers, firms and government (of all levels, central, regional and local).

Even developed countries are still experimenting and 'learning by doing' with just transitions.

* Also, low additionality can make emissions credits unfeasible. ** WEF/Khazanah/KRI, Mobilising Investment for Clean Energy in Malaysia. *** PETRONAS/PwC, Just Transition Roundtable Series 2.

Thank You

Yin Shao Loong
Senior Research Associate
yin.shao loong@krinstitute.org
www.krinstitute.org