



Government of Pakistan
Ministry of Climate Change



IGES

Regional Collaboration Centre – Bangkok
Promoting Action Against Climate Change

Study on the Introduction of Carbon Pricing Instruments in Pakistan

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June 2019



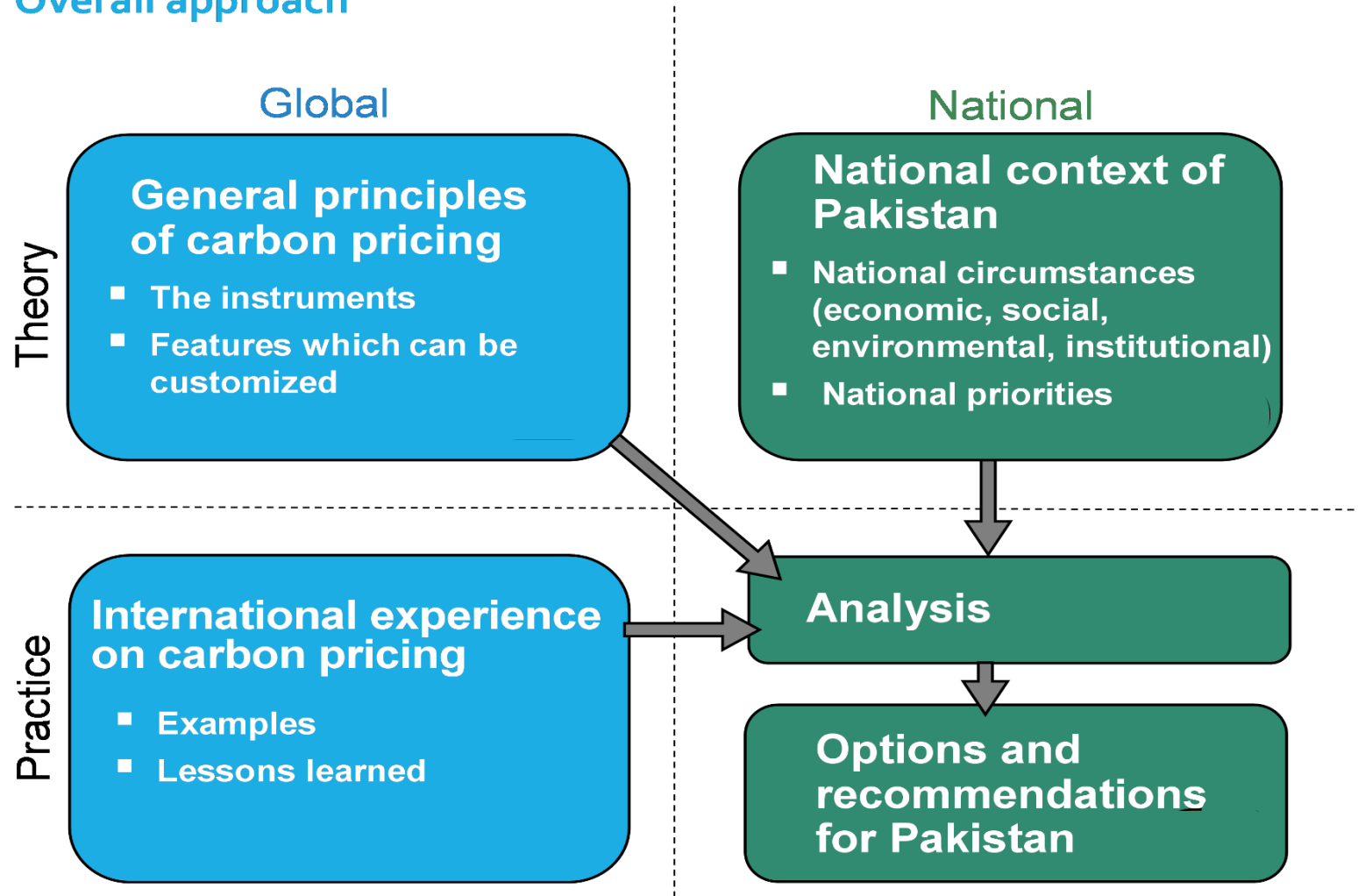
Background of the study

- **Objective:** To explore and analyse opportunities for Pakistan to introduce carbon pricing instruments as a means of supporting a low-carbon development trajectory while taking into account national development priorities



Approach adopted in this study

Overall approach



National context of Pakistan

National circumstances

- Lower-middle income country (GDP/capita ~1558 USD)
- Development priorities: poverty reduction; food security; energy access
- Adaptation: priority over mitigation
- Emissions expected to increase 4x over 2015-2030 period (as per NDC)
- Net energy importer (oil and petroleum imports \approx 3% of GDP in 2016-17)
- Energy sector as the major source of emissions (~46% in 2015)

➔ SWOT analysis & Readiness assessment prepared

- Capacity building, awareness raising and stakeholder engagement
key enablers for successful introduction of carbon pricing instruments



Pakistan & Carbon pricing instrument

Policy basis for considering the introduction of a carbon pricing instrument:

- National Climate Change Policy (2012)
- National Climate Change Policy and its implementation framework (2013)
- Pakistan Climate Change Act (2016)

Potential benefits for Pakistan with the adoption of a carbon pricing instrument:

- Achievement of NDC targets
- “Co-benefits” from GHG mitigation
 - ↓ air pollutants; ↓ energy imports ↑ Technology ↑ Long term decarbonization
- Could be an additional source of revenue for the government

Main options for Carbon pricing instruments for Pakistan

- Carbon taxation (or “direct pricing”)
- Emissions trading system (ETS)



Carbon taxation for Pakistan

Carbon taxation (or “direct pricing”)

- Low implementation costs
- A broad coverage of emissions
- Building upon tax collection systems
- Challenges: obtaining political support for a carbon tax

Options considered for Pakistan

- Adjusting the already existing Petroleum Development Levy (PDL) or carbon tax on coal
- Adopting an economy-wide carbon tax would be challenging but, if so international good practice can be taken as reference



ETS for Pakistan

Emission Trading system

- Higher degree of flexibility than a carbon tax
- The national government can shape an ETS as it considers fit

Is a domestic ETS feasible at all?

- Sufficient number of participants: 121 facilities by 2023
- Relevant coverage \approx 26% of domestic emissions
- Estimated sufficient liquid for an effective carbon price to form



ETS for Pakistan

Recommendations for the ETS in Pakistan

- Flexibly capping CO₂ emissions from key sectors (power generation) and industry (cement, refineries, fertilizers and steel production etc.)
- Progressive inclusion on a step-wise basis
- Sectors not included could be considered as a source of offsets
- Consider alignment (and/or linkages) with other ETS (e.g. China)

Challenges and risks

- The relative complexity
- The low familiarity of companies
- The need to establish certain governing elements



“Hybrid approaches” for Pakistan

Considered approaches

- Establishment of an Emissions Reduction Fund
 - ➡ unfitting for a “cash-constrained” Pakistan
- Introduction of a carbon tax on large-scale emitters and then transiting to an ETS
 - ➡ expected resistance from industries and the public
- Creation of an energy efficiency certificate system
 - ➡ suboptimal environmental outcome



A domestic ETS for Pakistan

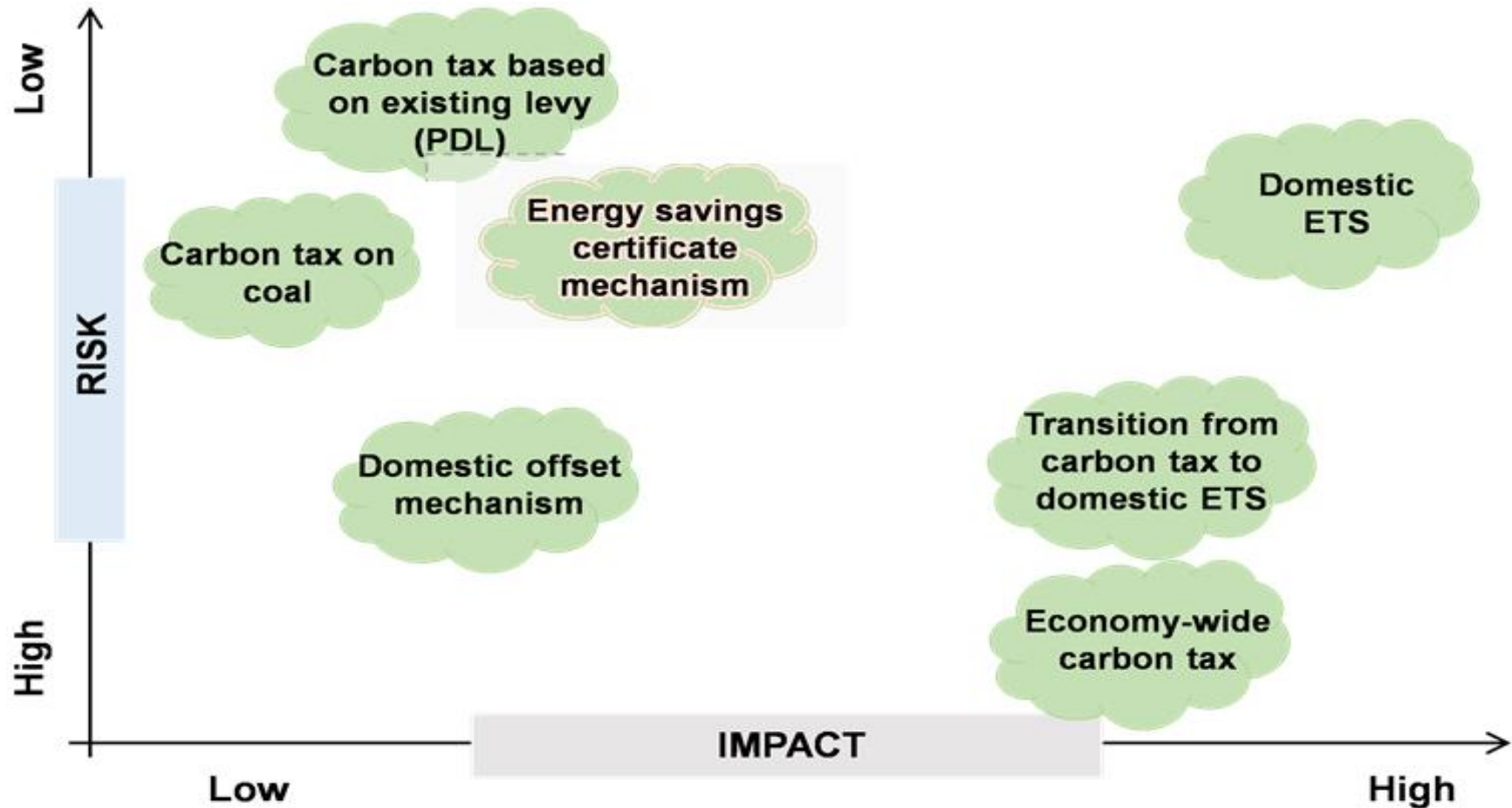
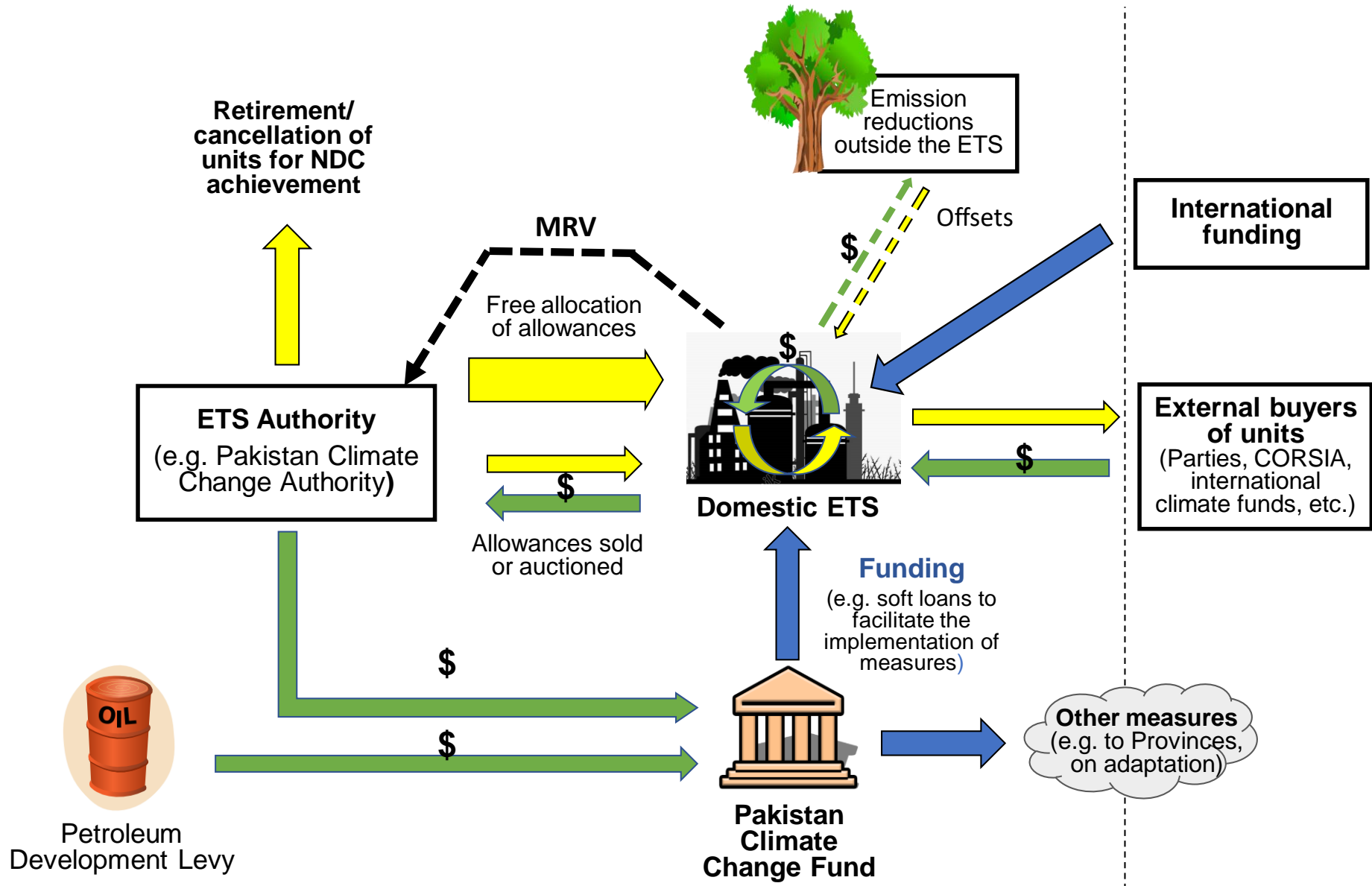


Figure: Impacts and risks of carbon pricing options identified for Pakistan

A domestic ETS is the option expected to result in the highest benefit and have the greatest impact overall

Possible architecture for carbon pricing in Pakistan



Potential way forward for carbon pricing in Pakistan

A carbon pricing architecture combining instruments

- Adjusting existing levies to a carbon tax (e.g. the PDL which targets transportation fuels) (short term option)
- Further consideration of a domestic ETS (mid-to-long term ambition)

Possible next steps

- Consultations with provinces and industries
- Steps towards the development of a domestic ETS (*focusing on “readiness” elements*)
- Consider opportunities for collaboration with partners



Thanks

Any questions?

