



## EXECUTIVE SUMMARY

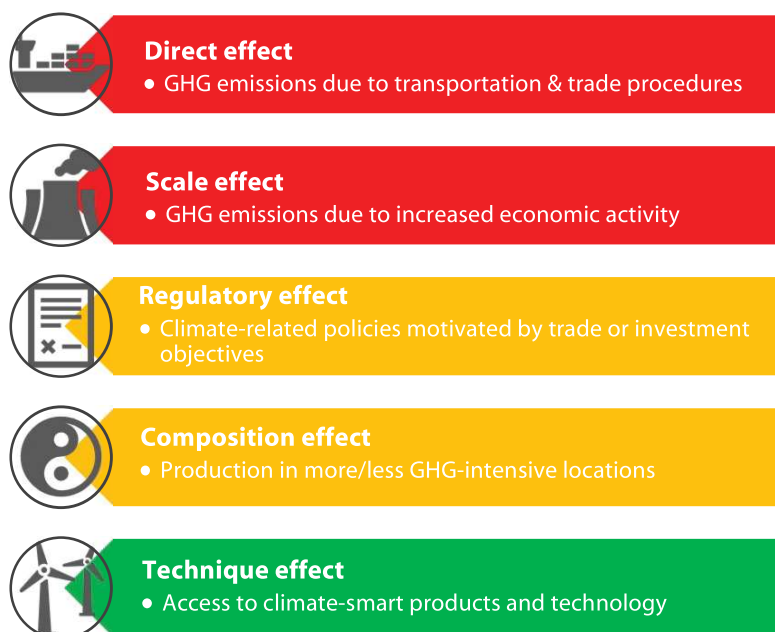
### Trade and investment need to be climate smart

International trade and investment have been indispensable engines of economic growth in Asia and the Pacific and remain essential means of implementation for achieving the 2030 Agenda for Sustainable Development. However, this economic growth has come with significant social and environmental costs, including the rapidly worsening climate crisis. This report looks at how “climate-smart” trade and investment-related policies can help address climate change, taking into account the ongoing COVID-19 pandemic.

Even though climate action is an integral part of the 2030 Agenda, most explicitly addressed in Sustainable Development Goal 13, the Asia-Pacific region has regressed on this Goal. Between 1990 and 2018, while global greenhouse gas (GHG) emissions increased by nearly 50 per cent, in the Asia-Pacific region, they more than doubled. Despite the region being known as the “factory of the world”, the primary source of growth in emissions is increased consumption, in line with rising standards of living in developing countries. **Still, there is an urgent need for economies in the region to reduce GHG emissions, including to maintain their trade competitiveness as carbon taxes at borders become more likely.**

“Climate-smart” trade and investment policies are defined as all government regulations aiming to reduce or limit net GHG emissions that can affect foreign trade and investment. Eliminating fossil fuel subsidies and establishing carbon pricing mechanisms are among the main policies that internalize the environmental costs of GHG emissions. Other “climate-smart” trade and investment policies include liberalizing trade in environmental goods and services, addressing cross-border trade inefficiencies, emissions standards of imports, non-tariff measures (NTMs), and addressing other wasteful subsidies.

#### Effects of trade and investment on greenhouse gas emissions



**Trade and investment have a complex relationship with climate change.** While transportation and increased economic activity due to trade tend to increase GHG emissions, trade is also crucial for spreading technologies to attain ‘green’ economies and reduce emissions. Some impacts are less clear-cut. What products a country specializes in producing may also affect their overall emissions. This can be net beneficial to climate action if a country with a greener energy system produces more energy-intensive products, but it could also be detrimental if a country seeks to produce similar products in a less environmentally friendly way.

## How climate-smart is trade and investment in Asia and the Pacific?

According to ESCAP research, all economies in the region have significant room for making their trade and investment more climate-smart. **Barriers to trade in environmental goods are more prevalent than barriers to trade in carbon-intensive fossil fuels.** In 16 out of 26 economies examined in the Asia-Pacific region, the average applied tariffs on carbon-intensive fossil fuels appear to be lower than those on environmental goods. Apart from a few notable exceptions (Japan, Kyrgyzstan, the Lao People’s Democratic Republic, the Philippines and Nepal), 21 out of the 26 economies examined applied more non-technical NTMs on imports of environmental goods than on imports of carbon-intensive fossil fuels.

More concerning is that, on average, **Asia-Pacific economies have increased the share of carbon-intensive fossil fuels in their trade since 2015.** Wasteful and regressive fossil fuel subsidies continue to contribute to GHG emissions in the region. Their timely abolishment – and importantly replacement – with more targeted support policies, could provide much-needed finance for social and environmental policies in addition to the reduction in emissions.

Progress towards a climate-friendly investment environment has been mixed. **In more than half of the economies in the region, the share of coal in electricity generation has increased since 2015.** The Asia-Pacific region accounts for 75 per cent of the global coal-fired generation capacity. However, many economies in the region have a large share of renewable energy in electricity generation; a share that has increased since 2015. Some reports suggest that fossil fuel power demand has peaked globally, and that it is now more cost-effective to invest in green power.

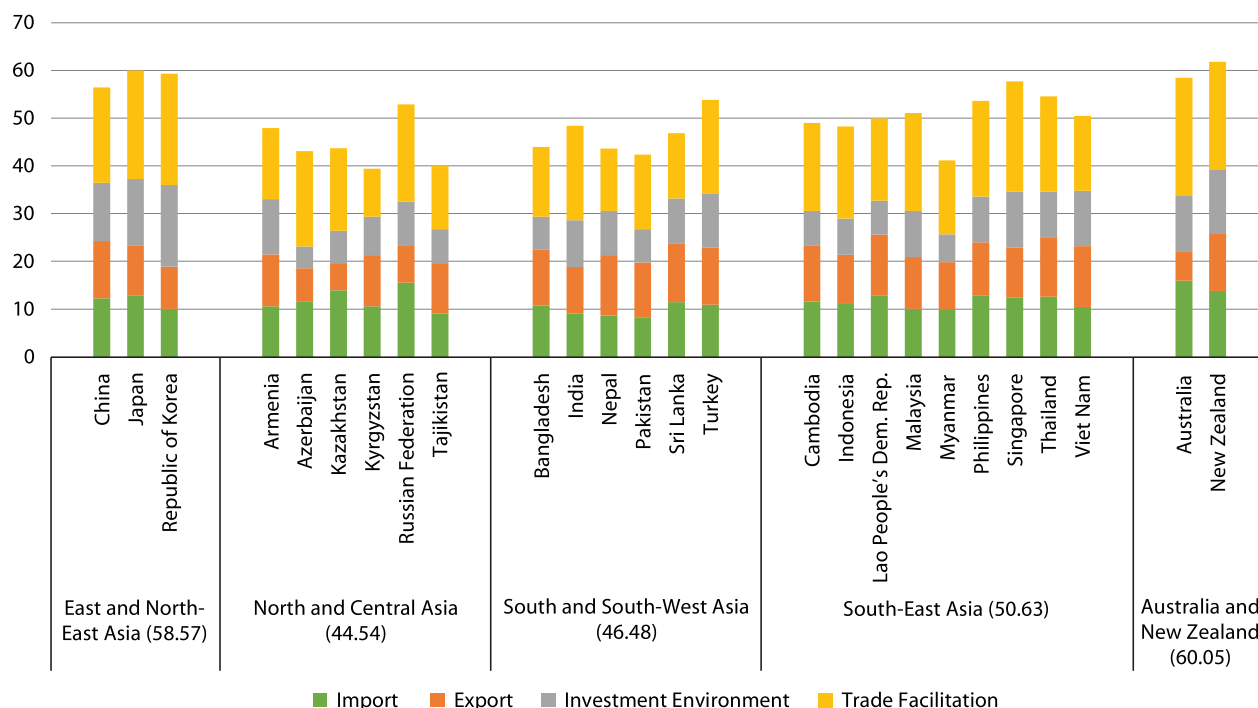
While many countries in the region have set mandatory emissions standards on imports of vehicles, require energy ratings labels and ban trade in chlorofluorocarbons (which are potent GHGs), more should consider doing so, as well as taking additional steps to address trade in illegal timber (which contributes to deforestation). Mandatory requirements of climate-friendly production processes may run contrary to the current non-discriminatory principles of the World Trade Organization (WTO). In such cases, Governments may encourage voluntary eco-labelling in lieu of imposing NTMs.

On the positive side, ESCAP analyses show that there has been steady progress in trade facilitation in the Asia-Pacific region. The transparency and efficiency of trade procedures have improved significantly since 2015, and the latest data from the UN Global Survey on Digital and Sustainable Trade Facilitation confirm that the region continued to advance between 2019 and 2021. While much remains to be done, implementation of cross-border paperless trade – the electronic exchange and legal recognition of trade-related data and documents across borders – has picked up. This can be partly attributed to the COVID-19 pandemic and the resulting physical distancing requirements.

## Climate-smart business and investment

Climate pledges by several countries in the region need to be underpinned by policies and measures to drive the transformation towards lower carbon economies, including in the private sector. Such a transformation would facilitate a surge in investments, including in clean energy and energy efficiency measures in the industrial, building and transport sectors. These investments, in turn, would drive structural change in which jobs in old industries are replaced by those in new sectors. **Recent estimates suggest**

Climate-smart trade and investment index scores, by subregion, 2019



Source: ESCAP Climate-smart Trade and Investment Index (SMARTII).

that 16 million new jobs would be created in clean energy, energy efficiency, engineering, manufacturing and construction industries, more than compensating for the estimated loss of five million jobs by downscaling industries.

While government policies, such as carbon pricing and energy performance standards, are key to driving this transformation, ambitious corporate action is also needed to proceed at the scale and pace required. To integrate climate considerations into business decisions, companies may adopt internal carbon prices, publish transparent sustainability reports and disclose emissions, and commit to emission reduction goals in line with a 1.5-degree trajectory. Notably, such private sector action to reduce emissions is increasing in the region – albeit from a low level – in particular with regard to sustainability reporting.

Moreover, as the world moves towards a net-zero economy, **the finance sector will need to enable this transformation by ensuring that climate and environmental factors are fully integrated into financial decision-making.** However, while financial institutions increasingly launch sustainable finance products, only a quarter of surveyed financial institutions disclose their portfolio emissions, and less than half align their portfolios well below the 2 degrees pathways. This is likely to increase, as the net-zero movement is picking up steam through initiatives, such as the Principles for Responsible Banking and the UN-convened Net-Zero Banking Alliance, both of which have emerged in the past couple of years. Another important development is that over the past few years, more and more financial sector actors – government, multilateral development banks and private sector entities – have declared their intention to stop funding coal and other fossil fuels.

## Regional trade agreements: tools to promote climate-smart trade

Regional trade agreements can help address climate change. The number of such agreements involving countries in Asia and the Pacific region has increased rapidly, with more than 200 having been signed or entered into force and another 95 under negotiation, as of December 2020. These agreements typically go

beyond commitments made under WTO agreements, making them useful for dealing with environmental issues, including climate change. **Over time, there has been a general trend towards including a higher number of environmental provisions in regional trade agreements, broadening their scope and deepening their stringency.**

**The vast majority – 85 per cent – of the regional trade agreements signed after 2005 by at least one Asia-Pacific economy contain one or more climate-related provisions.** The agreements with the most climate-related articles and that include an Asia-Pacific economy most often involve the European Union, the Republic of Korea and Japan. While the empirical evidence of the impact of environmental provisions in regional trade agreements is minimal, it does suggest that such provisions do not substantially reduce exports from developing countries, but they do promote “green exports”.

Climate-related provisions vary greatly across agreements and are typically statements of intent or cooperation, with few concrete, binding commitments. **In the Asia-Pacific region, regional trade agreements mainly call for climate action (34 per cent) or promote environmental goods, services and technologies (27 per cent). Very few refer to fossil fuel subsidies or carbon markets.** The two new mega-regional trade agreements, the Regional Comprehensive Economic Partnership (RCEP) and the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), vary markedly in terms of their level of ambition in this area. RCEP hardly deals with the environment or climate change. In contrast, CPTPP contains provisions requiring Parties to effectively enforce domestic environmental laws and prohibiting the loosening of environmental laws to encourage trade and investment.

Looking to the future, countries could use regional trade agreements to realize climate goals by including provisions covering climate-friendly public procurement, carbon markets and border carbon adjustment taxes, and the limiting of fossil fuels. **To be effective, climate-related provisions should specify more precise, measurable and binding commitments.** Regional trade agreements should also incorporate credible mechanisms for the enforcement of these provisions. In addition, including commitments in the agreements to reduce tariff and non-tariff barriers to trade on environmental goods and services and incorporating binding commitments on reducing environmentally harmful subsidies, including fossil fuel subsidies, would be a good starting point.

## Climate-smart trade and transport facilitation

The link between trade facilitation and climate change is not well recognized. Multilateral and regional trade facilitation agreements do not seek to exploit the potential synergies between trade facilitation and climate change efforts. **Trade facilitation – in addition to boosting trade – can also help mitigate the negative impacts on climate by making the trade transaction process less carbon intensive.** As e-commerce and the COVID-19 pandemic has led to explosive growth in shipments of small parcels across borders, reducing carbon emissions associated with trade procedures has become even more important.

There is evidence that **digital trade facilitation, such as implementation of automated customs and paperless trade systems, can contribute to reducing carbon dioxide (CO<sub>2</sub>) emissions.** For example, the electronic single window in Vanuatu reduced CO<sub>2</sub> emissions by 5,827 kg by eliminating the use of papers in two trade procedures. Trade information portals have also been found to be an efficient tool in reducing energy consumption as they increase transparency and make it easier for traders to access the information needed to fulfil administrative trade requirements.

In addition to lowering the costs of sourcing emission-intensive goods from producers with a smaller GHG emissions footprint, trade facilitation can also ease trade in environmental goods – essential for addressing climate change. The critical role of trade facilitation in the movement of essential goods became evident during the early stages of the COVID-19 pandemic when countries scrambled to facilitate trade in personal protective equipment. **Facilitation measures put in place for essential goods during the pandemic may be extended to environmental goods to address the climate crisis.**



As a major consumer of oil, transport typically accounts for the largest portion of emissions associated with any given trade transaction.<sup>1</sup> Freight transport contributed about 6 per cent of global GHG emissions, on average, over the past decade, with road transport accounting for the largest share. Reductions in transport emissions comprised more than half of the historic fall in global energy-related CO<sub>2</sub> emissions during the first year of the COVID-19 crisis in 2020 (-5.8 per cent).

Regulation of transport emissions is increasing and transitioning towards climate-smart transport entails significant changes in transport operations. Reducing emissions in this sector is particularly difficult as it is the least diversified energy end-use sector; there is continuous growth of global demand for transport, and there are technical limitations to replacing oil-based fuels. The Enable-Avoid-Shift-Improve (EASI) framework presented in chapter 5 of this report can help identify mitigation options when designing transport policy measures.

Digitalizing transport networks has become a priority in the Asia-Pacific regional policymaking agenda, as a result of the COVID-19 crisis, with significant potential to reduce emissions and increase trade resilience. For example, under the Association of Southeast Asian Nations regional recovery guidelines, digitalized and smart solutions are identified as a priority to shift towards sustainable transport. **Regional approaches play an important role in shifting towards more sustainable and resilient transport systems and in leveraging digitalization** to address interoperability issues and additional costs and threats arising from diverging technical and operational standards.

## The impact of switching to climate-smart trade and investment

Tackling climate change, including through climate-smart trade and investment, comes with a significant price tag. The costs of inaction, however, are estimated to be orders of magnitude greater, by some estimates as high as \$792 trillion by 2100 if the Paris Agreement targets are not met. **Cutting fossil fuel subsidies to provide a level playing field for trade and investment in cleaner energies is estimated to reduce global emissions by 3.2 per cent; a much more significant reduction than existing carbon price schemes.** As real GDP does not decline when subsidies are removed, eliminating global subsidies brings a win-win situation with gains in economic welfare accompanying reductions in emissions. Reducing fossil fuel subsidies would increase real GDP in all subregions of the Asia-Pacific region except North and Central Asia, which is heavily dependent on fossil fuel production and exports.

**Modelling the impact of existing carbon pricing schemes reveals that they reduce global GDP by \$46 billion, while reducing GHG emissions by only 2.18 per cent.** Almost half of the effect in emissions is due to schemes within the European Union + region. The largest cuts in emissions in the Asia-Pacific region have been in East and North-East Asia where several countries have implemented national carbon pricing schemes. All subregions have benefited from increased investment from existing carbon pricing schemes.

The limited impact of these schemes on emission is explained by their limited implementation. **As of June 2021, approximately 21.5 per cent of global GHG emissions – and only 7.8 per cent of emissions in Asia and the Pacific – were covered by some sort of carbon pricing initiatives, with a global average price estimated at \$2 per ton of CO<sub>2</sub>.** Carbon prices of existing schemes vary from \$1 to \$100 and the schemes also vary greatly in terms of coverage of emissions. For example, the scheme deployed by Japan covers more than 75 per cent of total emissions, whereas existing state-level schemes in the United States cover only 5 per cent of the country's emissions.

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<sup>1</sup> As highlighted throughout report, emissions from international transport only reflect part of the carbon footprint of global trade. Production methods, storage and disposal methods also play a role in understanding the carbon footprint of traded goods.

A potential consequence of carbon pricing policies implemented in one country or region is carbon leakage, which occurs when high emission production activities move to economies with less stringent policies. Some governments, particularly the European Union,<sup>2</sup> are either discussing or proposing the introduction of carbon border tax adjustments (BTAs), which are also aimed at addressing the concerns of producers whose competitiveness is eroded by carbon pricing when competitors are not similarly taxed. EU+ carbon pricing schemes contribute to a reduction of 360 tons of CO<sub>2</sub>, whereas resultant carbon leakages represent about 12 per cent of that amount.

The economies in Asia and the Pacific that have in place carbon pricing schemes are estimated to experience relatively small increases in emissions due to existing European Union+ pricing schemes. Nevertheless, modelling results show that BTAs are effective at stemming carbon leakages. The increases in emissions in least developed countries expected to be exempted from EU+ BTAs total less than half a ton of CO<sub>2</sub>.

A global carbon pricing scheme would make BTAs unnecessary. Setting a global carbon price would reduce emissions much more effectively for a much smaller economic cost than unilateral carbon prices in myriad unconnected schemes. Imposing a global carbon price of only \$10 is estimated to reduce emissions in the Asia-Pacific region much more significantly than existing unilateral and regional schemes – at a cost of 0.07 per cent of real GDP. Still, **a global carbon price greater than \$50 and covering more than half of global emissions would be necessary to keep global warming under 2°, highlighting the need to exploit all possible strategies to reduce emissions.**

Carbon pricing and elimination of fuel subsidies will have a greater impact on the economies that rely heavily on fossil fuel and carbon-intensive manufacturing sectors. Marked negative employment effects in the carbon-intensive fuel sectors can be expected, indicating a need for stronger social safety nets and multilateral cooperation to ensure that “no one is left behind”.

## CONCLUSION AND RECOMMENDATIONS

Urgent action is needed to tackle the climate crisis. **Climate-smart considerations need to permeate activities and decisions by all actors and are starting to do so, including in the areas of trade and investment.** Climate policies implemented outside of the region will also affect Asian and Pacific economies. A proactive approach by countries to prepare their economies for this new market environment, supported by regional and multilateral cooperation, is recommended. Tangible policy recommendations discussed throughout the report that countries may consider include the following:

- (a) **Liberalize trade in climate-smart and other environmental goods and services.** This can be done unilaterally or as part of regional or multilateral initiatives.
- (b) **Phase out fossil fuel subsidies.** Importantly, to be successful, the phasing out process needs to ensure that the most vulnerable segments of society relying on such subsidies are supported in other ways.
- (c) **Adopt climate-smart non-tariff measures and encourage voluntary eco-labelling.** Such measures can include, among others, requirements pertaining to energy performance, emissions from cars, and certification of legal and sustainable sourcing of timber. Additionally, Governments may want to encourage the adoption of relevant voluntary sustainability standards, such as eco-labelling of emission-intensive good and food products.

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<sup>2</sup> The European Union proposes, in its July 2021 package to support climate targets, a carbon border adjustment mechanism to reduce carbon leakage by equalizing the carbon price between domestic and imported products in key industries. This is a type of border tax adjustment that is intended to increase climate mitigation efforts that are compatible with the World Trade Organization. ([https://ec.europa.eu/commission/presscorner/detail/en/qanda\\_21\\_3661](https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_3661)).

- (d) **Encourage climate-smart investment and private sector initiatives.** Governments can play an important catalyst role and lead by example by directing the investment bodies under their control to reorient their funds towards investing in low carbon businesses. They can also encourage other investors as well as companies to increase their sustainability reporting, adopt internal carbon pricing, and set emission reduction goals aligned with what is needed to limit global warming to 1.5 degrees.
- (e) **Accelerate digital trade facilitation.** Streamlining trade procedures reduces trade costs, makes trade more inclusive, and significantly lowers CO2 emissions associated with a given trade transaction. Governments may accelerate their trade digitalization efforts, including by acceding to the Framework Agreement on Facilitation of Cross-Border Paperless Trade in Asia and the Pacific.
- (f) **Transition to climate-smart transport.** Digitalization of transport processes also holds great promise to reduce emissions by optimizing utilization of existing logistics infrastructure. Regional cooperation is important to ensure that new policies and regulations are put in place to support the transition to more climate-friendly international transport systems.
- (g) **Incorporate climate considerations in regional trade agreements.** Governments in the region should explore how regional trade agreements can be used to incorporate precise, replicable, and enforceable environment and climate-related provisions that help mitigate the negative impacts of trade on climate change and boost positive impacts. These agreements could integrate provisions related to most of the recommendations mentioned above, including binding commitments on fossil fuel subsidies and trade facilitation measures for environmental goods.
- (h) **Prepare for carbon pricing and carbon border adjustment taxes.** Unilateral or regional carbon pricing mechanisms can help economies in the region prepare for potential border carbon adjustment taxes. Carbon pricing instruments can also be a powerful component of post-COVID-19 recovery packages which could simultaneously address greenhouse emissions and raise much needed revenue. The proceeds from carbon pricing schemes should be channeled towards green growth and the circular economy as well as to help those most affected by the schemes.