Climate Action in the CAREC Region: Overview and way-forward for climate-smart trade and investment

ESCAP
Economic and Social Commission for Asia and the Pacific

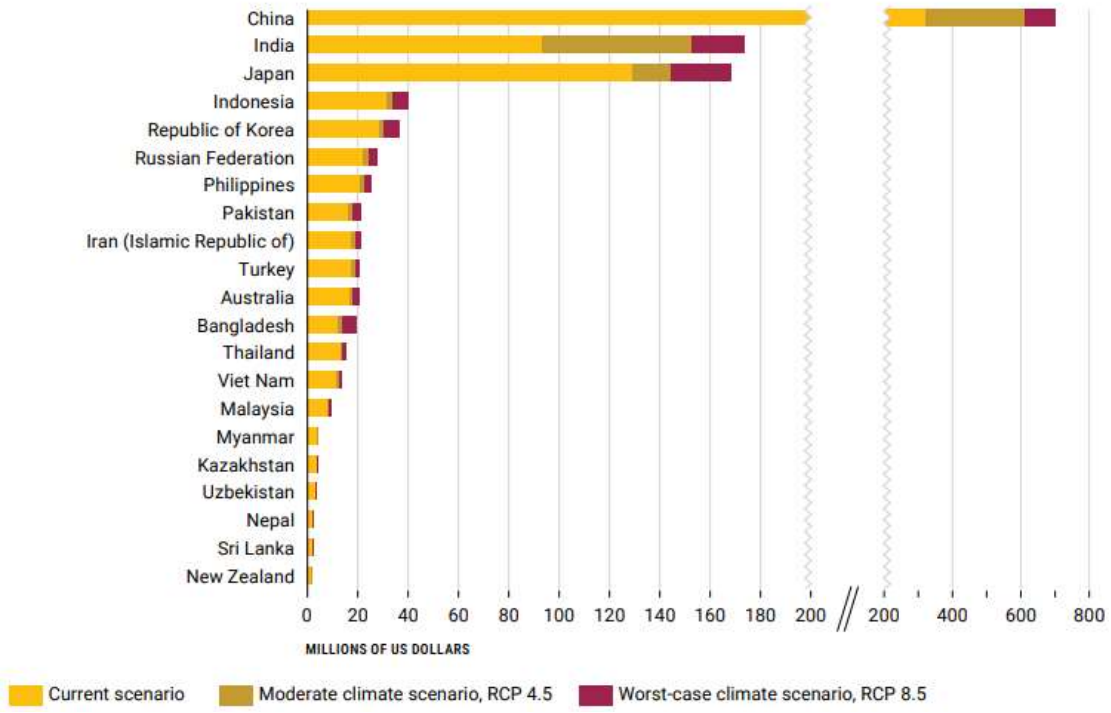
A changing climate in an already vulnerable region

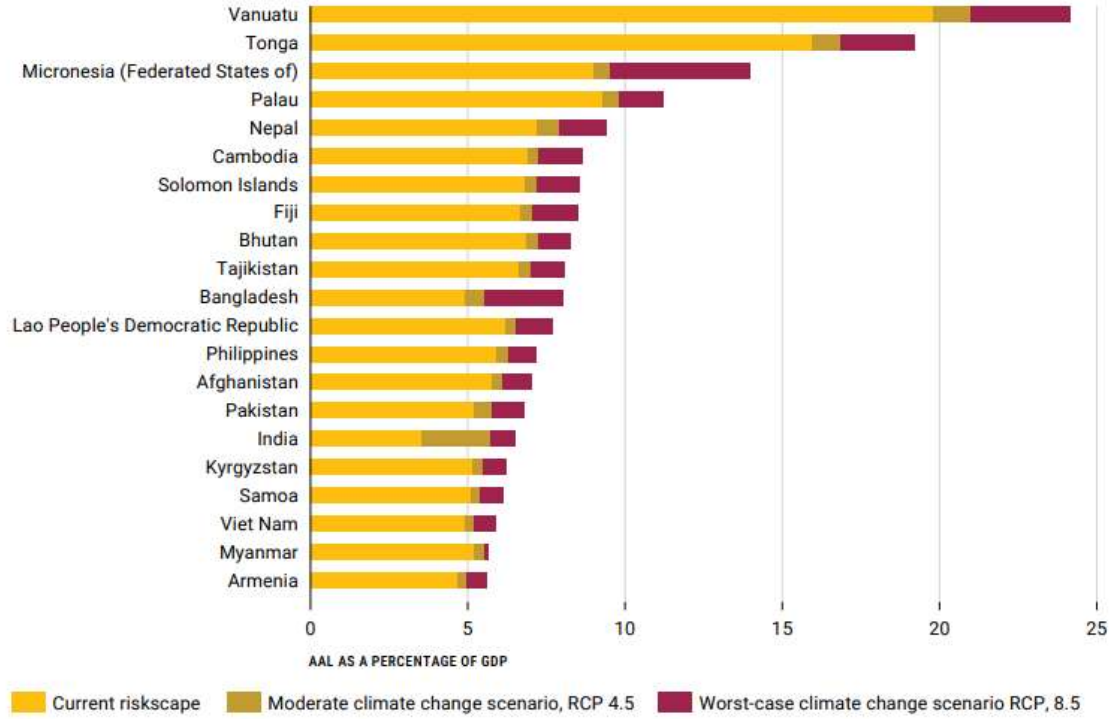
USD 780 billion in annual average economic losses natural and biological hazards

China, India, Japan and other larger countries **will lose the most in absolute terms**

Pacific SIDS shoulder the **heaviest burden as a share of GDP**

Average Annual Losses due to natural and biological hazards in Millions of USD (left) and as per cent of GDP (right)

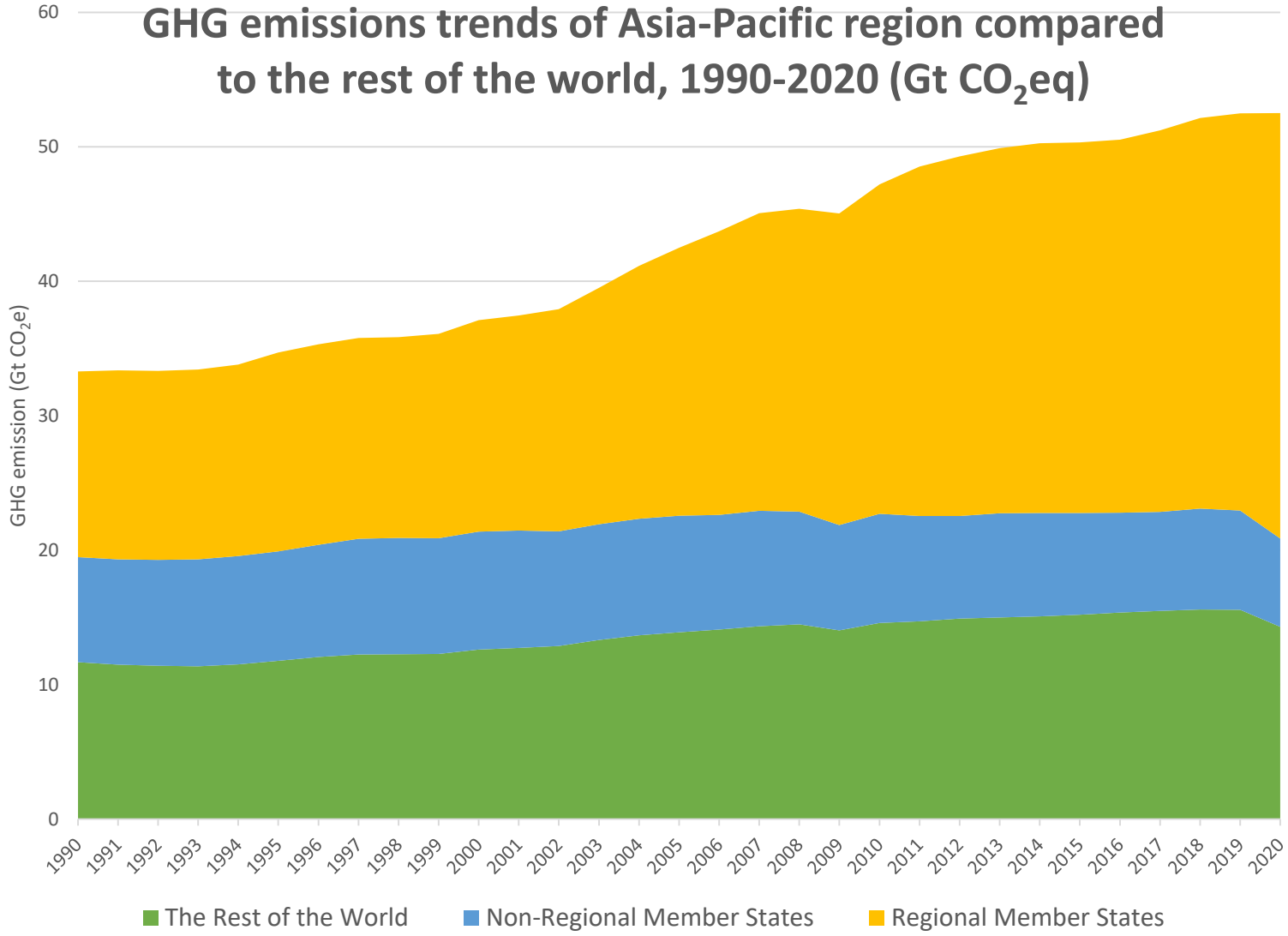




Source: https://www.unescap.org/kp/2023/race-net-zero-accelerating-climate-action-asia-and-pacific

Stepping back from the brink: More ambitious commitments needed

- 39/49 Asia-Pacific member States have **made carbon neutrality pledges**.
- Combined NDC targets of Asia-Pacific (AP) members:
  - 16% higher than 2010 levels
- Additionally, only 18/49 countries have **submitted their long-term low-emissions development strategies** (LT-LEDS)



Source: https://www.unescap.org/kp/2023/race-net-zero-accelerating-climate-action-asia-and-pacific

Overview of Climate Ambition in the CAREC Region

- CAREC region faces significant climate change challenges
- Increasing commitments to carbon neutrality and net-zero targets
- 5 out of 11 CAREC countries have considered or pledged carbon neutrality or net-zero emissions
- Enhancing climate ambition and taking concrete actions is crucial

Adopted a Law	Policy Document		Declaration/Pledge	
Fiji	Australia	Cambodia	Afghanistan	Pakistan
Japan	China	Indonesia	Armenia	Palau
Maldives	Kazakhstan	Lao People's Democratic Republic	Brunei Darussalam	Papua New Guinea
New Zealand	Malaysia	Marshall Islands (the)	Kyrgyzstan	Russian Federation (the)
Republic of Korea (the)	Nauru	Nepal	Kiribati	Samoa
	Singapore	Solomon Islands	India	Tonga
	Sri Lanka	Thailand	Micronesia (Federated States of)	Türkiye
	Uzbekistan	Viet Nam	Myanmar	Tuvalu
				Vanuatu

Key Mitigation Commitments in CAREC

COUNTRY	TARGET TYPE	2030 TARGET
China	CO_2 peaking	Peaking before 2030
Kazakhstan	Absolute reduction	15-25% below 1990
Azerbaijan	Absolute reduction	35% below 1990
Uzbekistan	Specific policies	23 key policies and measures
Georgia	Absolute reduction	35% below 1990
Pakistan	Absolute reduction	50% below 2016 BAU*
Kyrgyzstan	Absolute reduction	16% below BAU
Tajikistan	Absolute reduction	30-40% below 1990
Mongolia	Policies and projects	22.7% below BAU
Afghanistan	Specific projects	13 mitigation projects
Turkmenistan	Intensity target	Zero growth in emissions per GDP

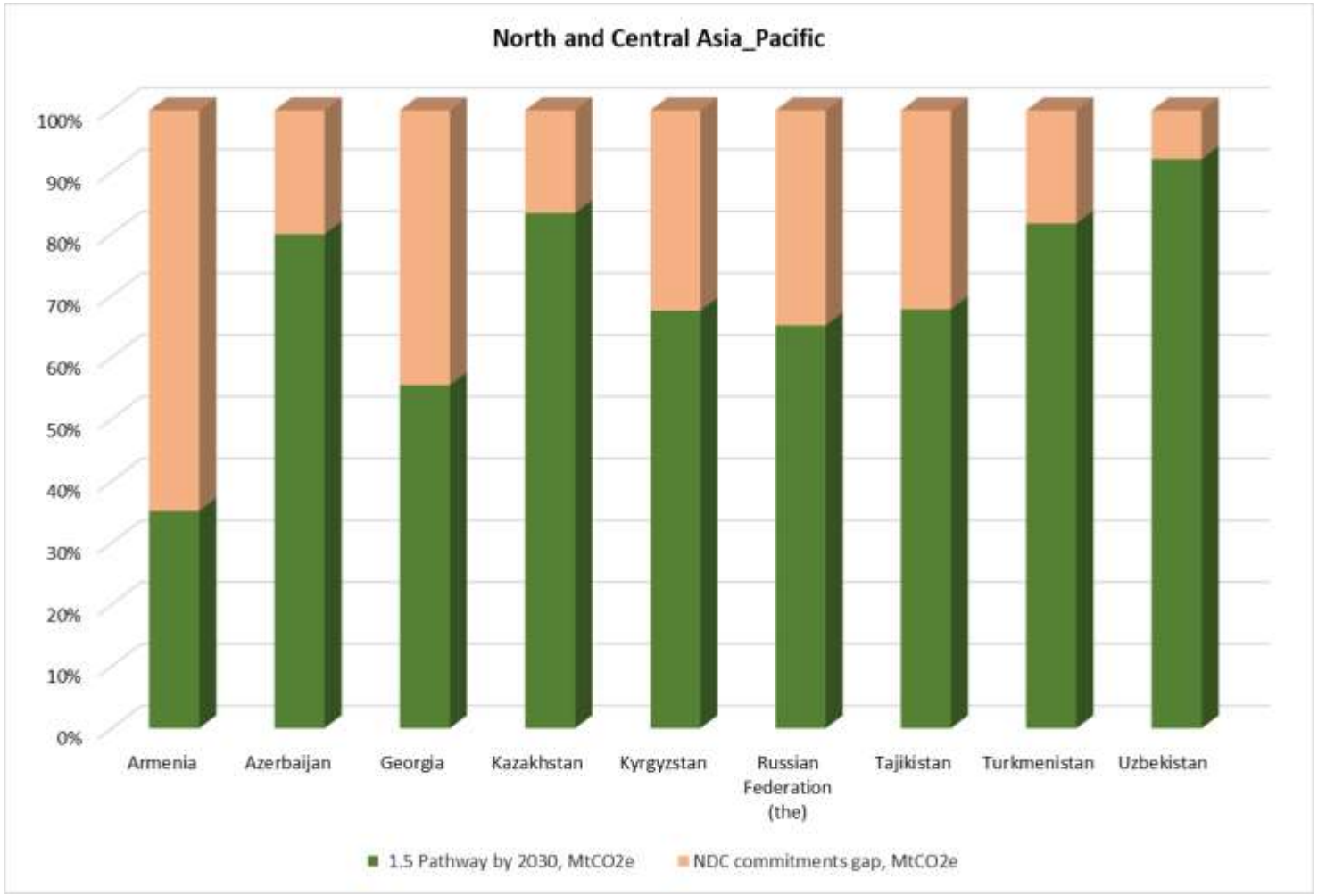
*BAU = Business As Usual scenario

https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs

Progress in NDC Implementation and Nature-based Solutions

Country	First NDC Submission	Updated NDC Submission
Afghanistan	Nov 2016	
Azerbaijan	Jan 2017	Oct 2023
China	Jun 2015	Oct 2021
Georgia	Apr 2017	May 2021
Kazakhstan	Dec 2016	June 2023
Kyrgyz Republic	Sep 2017	Oct 2021
Mongolia	Sep 2016	Oct 2020
Pakistan	Nov 2016	Oct 2021
Tajikistan	Dec 2017	Oct 2021
Turkmenistan	Oct 2016	Jan 2023
Uzbekistan	Apr 2017	Oct 2021

Gap between the NDC commitments and the 1.5C pathway, North & Central Asia



Recommendations for CAREC countries to enhance their climate action

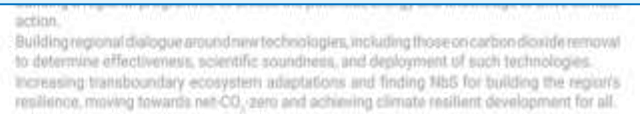

CHAPTER 4
Conclusions and recommendations

- Key recommendations:

1. Conduct a critical review of current **NDC commitments** and strengthen mitigation targets to ensure implementation of **carbon neutrality pledges** and **long-term low-emissions development strategies**
2. Strengthen the provisions for national **nature-based solutions-related measures in the updated NDCs** in 2025 and provide enabling conditions and enhanced financial flows
3. Develop a national enabling environment to **gender, inclusion**, **engage the youth in climate action** and NDC implementation policies
4. Building **a regional platform** to facilitate the exchange of best practices and lessons learned

Implementing recommendations is crucial for raising climate ambition and contributing to 1.5°C goal


Conduct a critical review of current NDC commitments and strengthen mitigation targets to ensure implementation of carbon neutrality pledges and long term low-emissions development strategies that will enhance Asia-Pacific contribution to the reduction of global greenhouse gas emissions aligned with the 1.5°C goal.

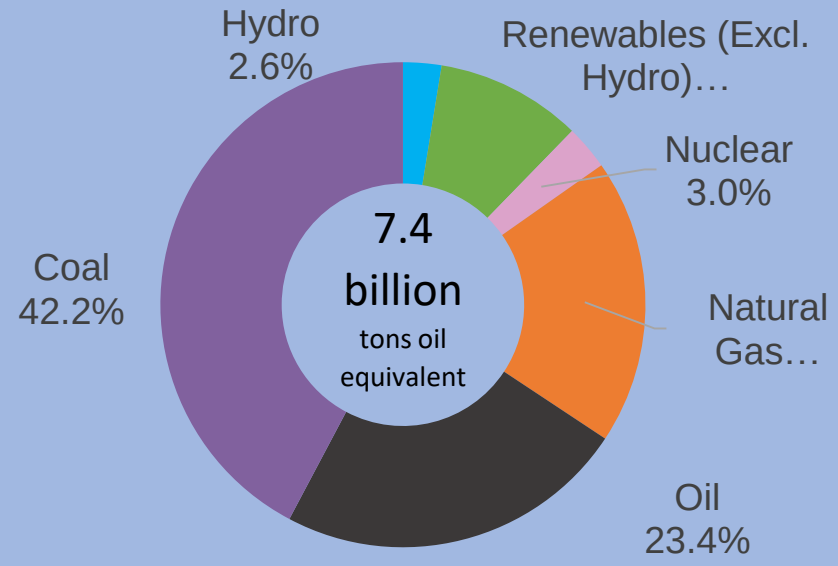

action.
Building regional dialogue around new technologies, including those on carbon dioxide removal to determine effectiveness, scientific soundness, and deployment of such technologies.
Increasing transboundary ecosystem adaptations and finding NbS for building the region's resilience, moving towards net-CO_2-zero and achieving climate resilient development for all.

Source: https://www.unescap.org/sites/default/d8files/event-documents/Presentation%20by%2 0Aneta%20Nikolova%20EDD%20ESCAP.pdf

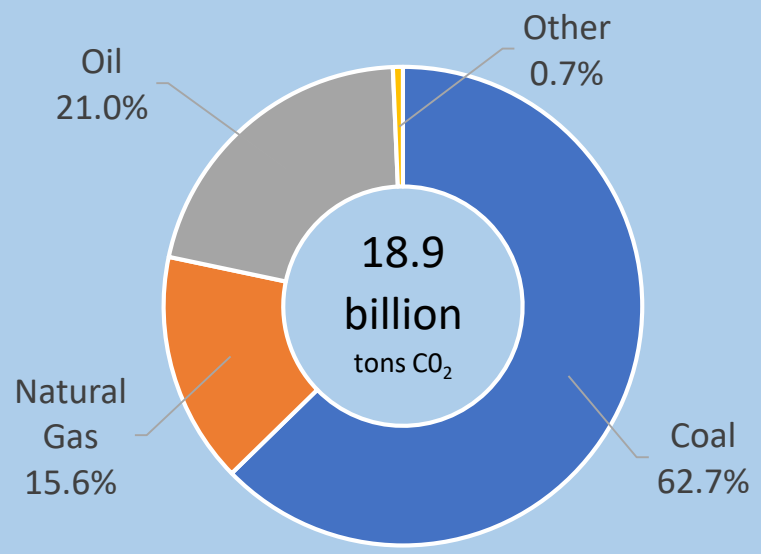
Energy transition for a greener, better region

- In 2020, the region **reached its highest-ever global share** of energy-related emissions (60%).
- The **fastest-expanding region** for energy demand and renewables growth over the coming decades.
- NDC commitments to **phase out fossil fuel**, scale up **energy efficiency**.

Primary Energy Supply (2020)



CO_2 Emissions from Fuel Combustion (2020)

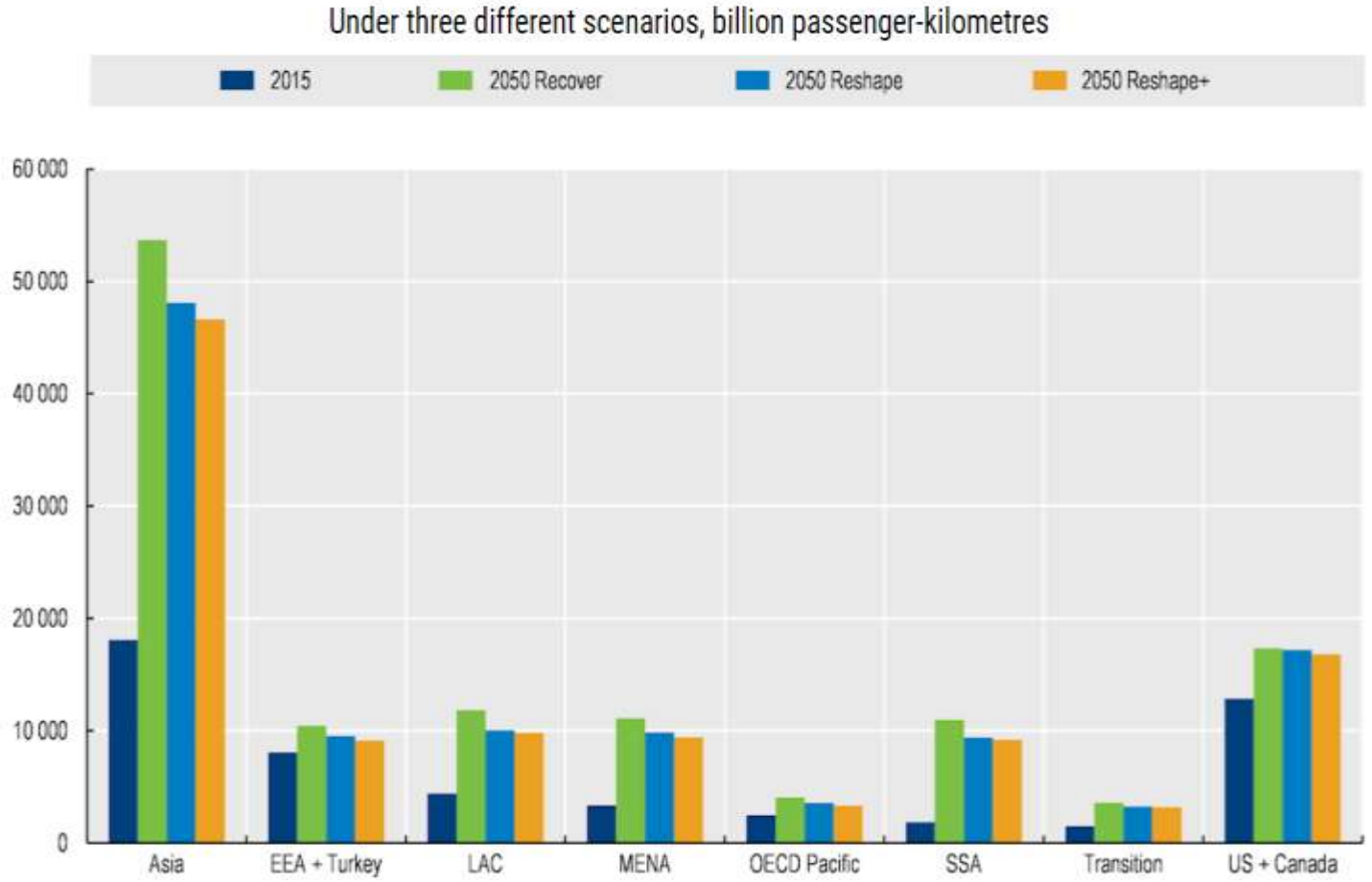


Source: https://www.unescap.org/kp/2022/race-net-zero-accelerating-climate-action-asia-and-pacific

Decarbonizing the fragmented and oil-powered transport sector

- Transport **constitutes 27% of total CO_2 emissions** in the region (vs global average 24%).
- Motorization rate of AP region is still relatively low but rapidly increases.
- Under BAU, transport demand and CO_2 emissions **could increase by more than 50%** by 2050.

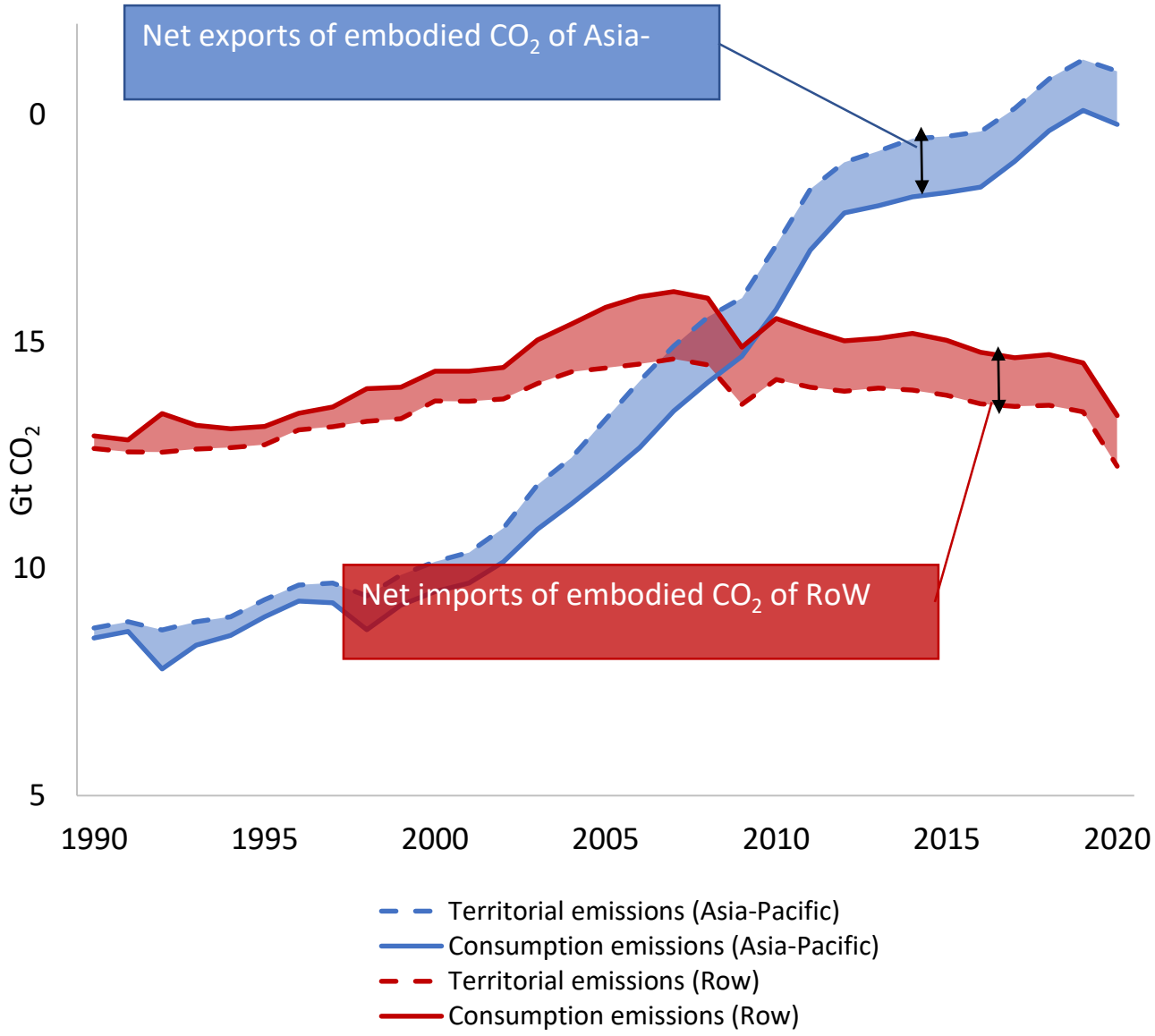
Demand for passenger transport by world region to 2050 in billion passenger-kilometers



Source: https://www.unescap.org/kp/2023/race-net-zero-accelerating-climate-action-asia-and-pacific

Decarbonizing industries through climate-smart trade and investment

- Manufacturing and construction are the **largest sources of CO_2 emissions** (including emissions from the electricity/heat for this sector)
- AP accounts for nearly **3/4 of global emissions in manufacturing and construction**.
- Climate-smart trade and investment policies in AP include:
  - **Liberalize trade in environmental goods and services**
  - **Addressing cross-border trade inefficiencies, emissions standards of imports, non-tariff measures (NTMs)**
  - **Need to incorporate eliminating fossil fuel subsidies and establishing carbon pricing mechanisms**



Source: https://www.unescap.org/kp/2023/race-net-zero-accelerating-climate-action-asia-and-pacific

Digitalization for Green Trade Facilitation

"Each single end-to-end trade transaction undertaken fully digitally could save emissions equivalent to planting 1.5 trees. For the whole of Asia-Pacific, this implies savings of about 13 million tons of CO2 annually, equivalent to the carbon absorbed by 400 million trees.

Table 5. Emissions Saved from Implementing Cross-Border Paperless Trade.

Estimated emissions saved per transaction (gCO_2e)	Average	Low	High
Paper	3,814	1,562	7,041
Ink	14	6	26
Transport	3,509	850	7,381
Printer	129	53	238
Storage	10,240	918	41,731
Productive hours	30,098	16,346	62,857
Estimated emission savings	**47,804**	**19,734**	**119,273**
Trees required to match these savings in a year	1.5	0.6	3.8
Aggregate Estimates (metric tons CO_2e)			
Asia-Pacific estimated emission savings	**12,984,573**	**5,360,132**	**32,397,150**
Trees required to match these savings in a year	412,208,662	170,162,923	1,028,480,951

Source: The authors.

Environmental impact of the export process of Bangladesh readymade garments

- Extends BPA methodology to environmental impact assessment
  - Primary data collected from exporters
- Environmental impact of "as-is" process measured in terms of
  - GHG emissions,
  - waste generation and
  - water usage
- → confirms importance and potential to reduce environmental impact through **trade digitalization**

Environmental goods
trade facilitation

Green NTMs
compliance facilitation

Digitalization
of trade procedures

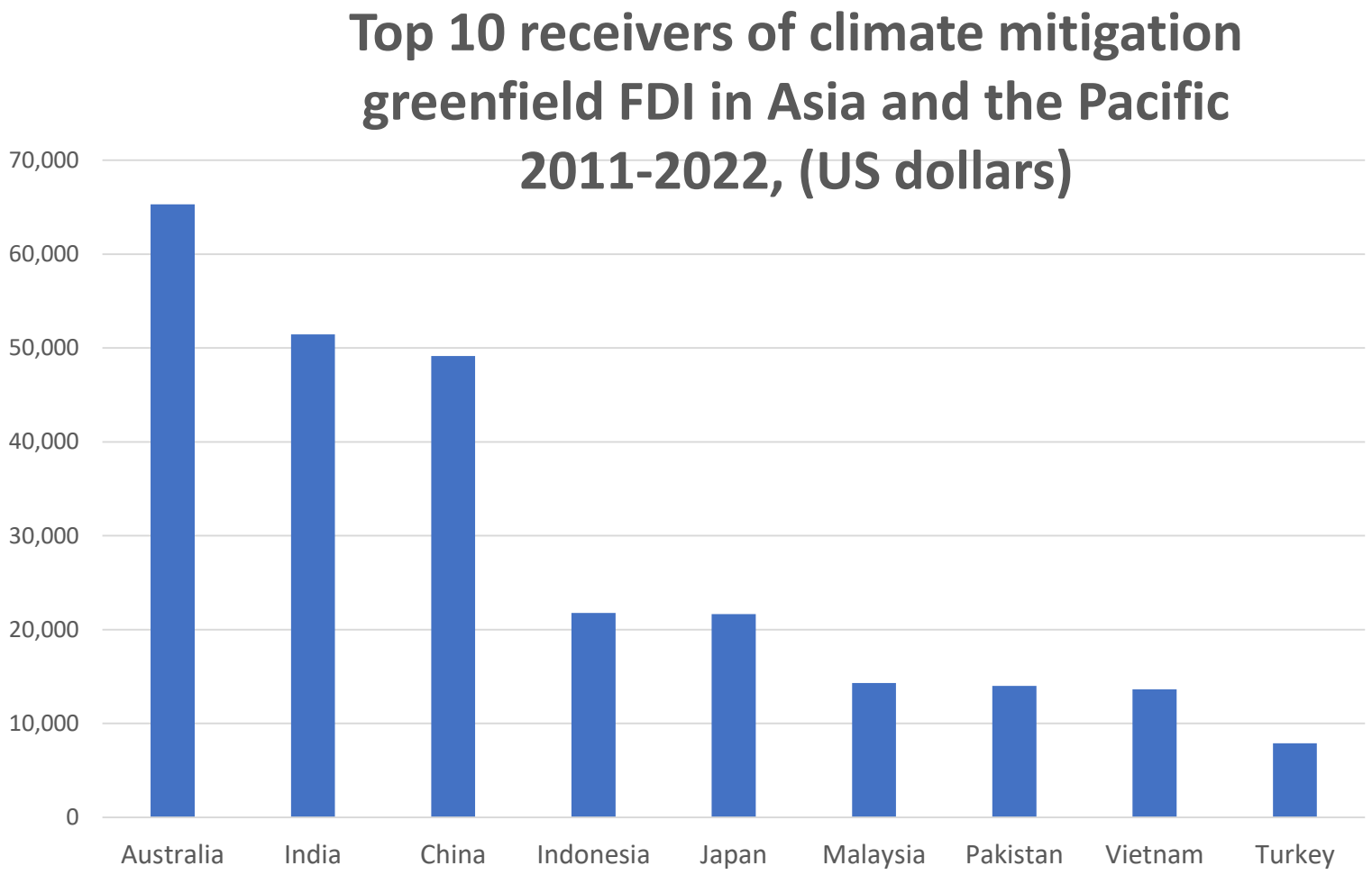
Green Transport
of goods traded

Green
Trade Facilitation

Advancing climate-smart foreign direct investment

- Climate smart investment as **catalyst for scaling up industries** with clean technology, supporting climate friendly sectors.

- Support developing countries to **fill climate finance gaps and technology transfer**.



Source: https://www.unescap.org/kp/2023/race-net-zero-accelerating-climate-action-asia-and-pacific

Encourage climate-smart investment and private sector initiatives

Energy sector

increasing the share of renewables

Industrial sector

increasing energy efficiency and reducing resource-use in sectors such as cement, iron and steel.

Transport sector

Investing in cleaner modes of transport / technologies

Construction sector

Greening buildings through increasing energy efficiency

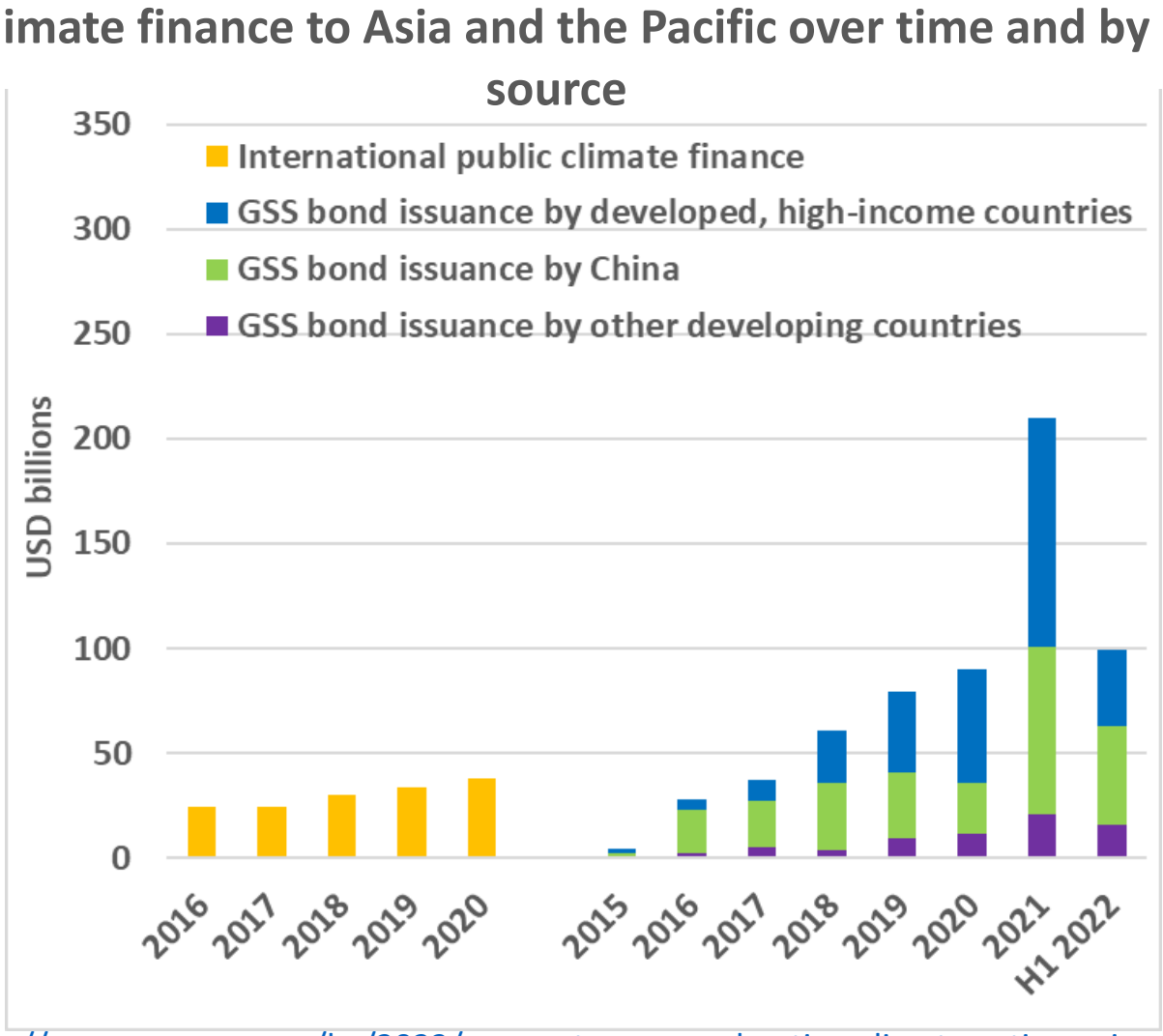
Private sector initiatives: internal carbon pricing, sustainability reporting (increasing required by investors)…

Source: ASIA-PACIFIC TRADE AND INVESTMENT REPORT 2021

Financing climate action and measuring progress

- Annual average financial needs to meet the NDCs in all AP developing countries are around **$362 billion per year**
  - $258 billion mitigation and $104 billion adaptation

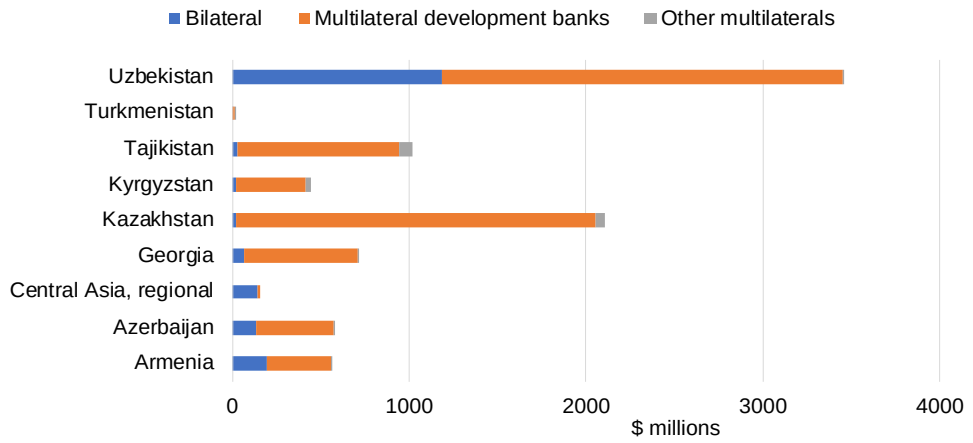
- Only 17 Asia-Pacific countries reported their financial needs and 12 provided **a breakdown of financing needs for mitigation and adaptation**.



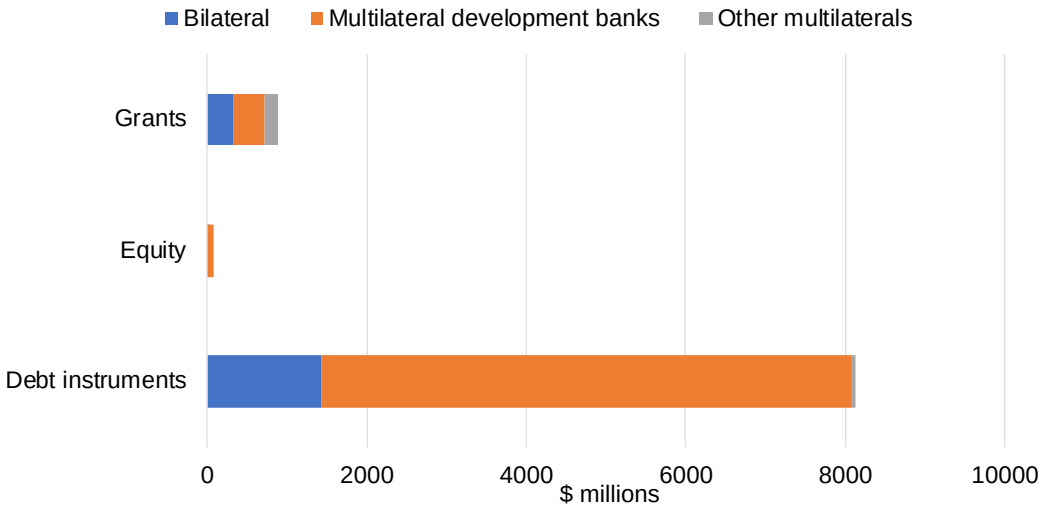
Source: https://www.unescap.org/kp/2022/race-net-zero-accelerating-climate-action-asia-and-pacific

Climate Finance Access and Mobilization Strategy

- Key findings:
  - MDBs are the largest providers of climate finance (78% in 2013-2018)
  - Debt instruments are most common, grants and equity investments are limited
  - Untapped potential for accessing climate funds, particularly for regional projects
- Strategies for enhancing access to climate finance:
  - **Strengthen institutional capacities for bankable projects and accessing various sources**
  - **Engage strategically with MDBs and other climate finance providers**
  - **Explore innovative financing instruments (green bonds, blended finance)**
  - **Collaborate regionally for joint projects and programs to attract larger-scale finance**
- Implementing strategies is key to unlocking financial resources fo NDC implementation and climate action



Source: George Anjaparidze using data provided by UNFCCC secretariat compiled based on OECD reporting.



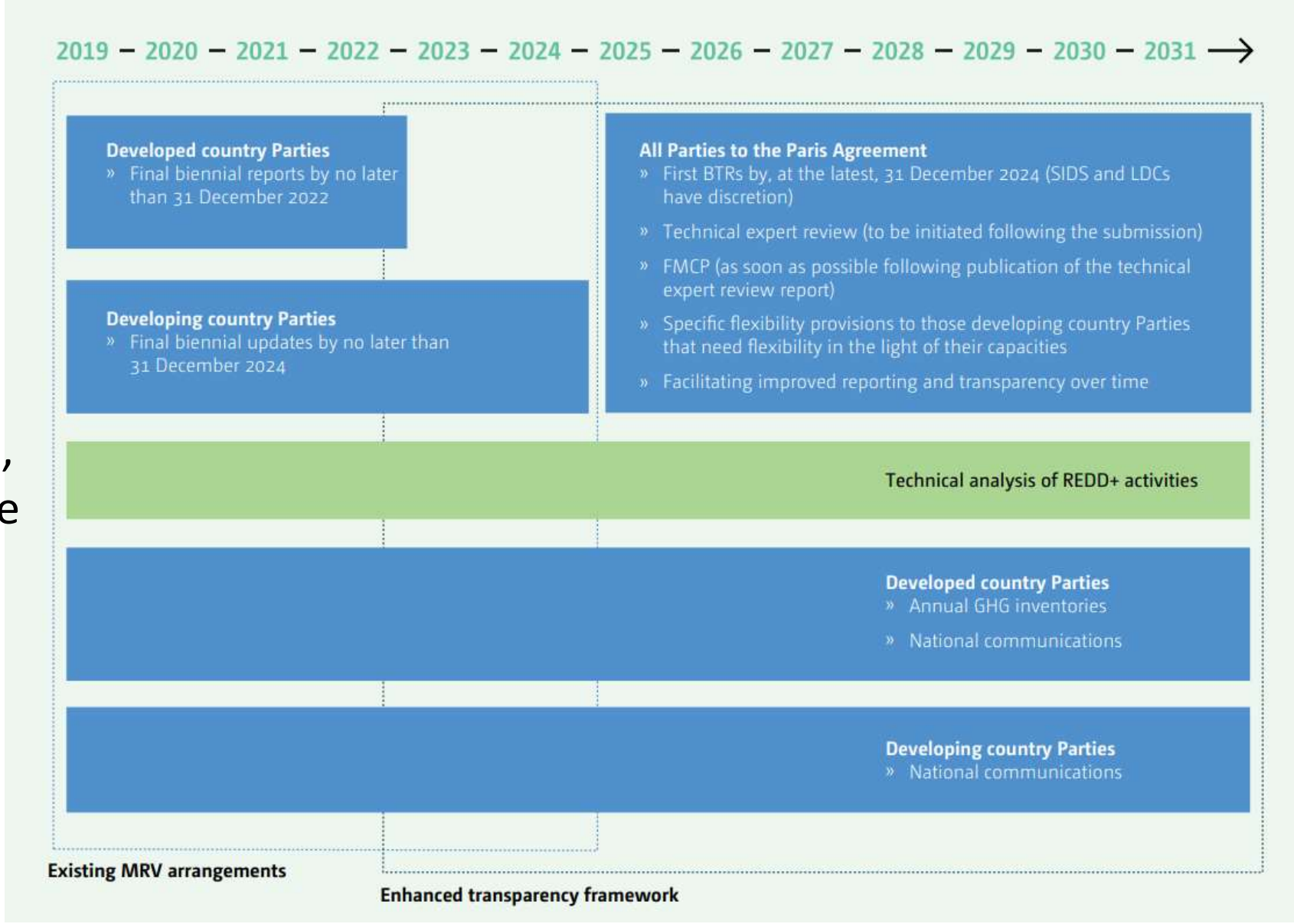
Source: George Anjaparidze using data provided by UNFCCC secretariat compiled based on OECD reporting.

Source: https://www.unescap.org/sites/default/d8files/event-documents/Presentation%20by%2 0Aneta%20Nikolova%20EDD%20ESCAP.pdf

A key challenge: Different reporting obligations and reported information

- Inconsistency of climate-related data and information, and lack of data for 1/4 of the climate change-related SDG indicators

- New Biennial Transparency Reports (BTRs) under the Enhanced Transparency Framework



- Global Set of Climate Change Statistics and Indicators
  - 158 indicators in five policy areas, namely, drivers, impacts, vulnerability, mitigation and adaptation.

SWOT analysis of Carbon Pricing Instruments (CPI) in Central Asia

Strengths: - Government support via programs, projects; - Could utilize already developed IT based and transparent MRV instruments in developed countries; - Ongoing regional cooperation through regional platforms; - The major emitting sectors in the CA countries are suitable for ETS;	**Weaknesses:** - Not being in line with some governmental and state programs and strategies of the country; - Institutional capacity and resources; - Limited experience of CPI (except in Kazakhstan) - Not enough funding from government, only in the frameworks of international organizations' projects and programs focused for development of CPI implementation in Central Asia; - Small number of local specialists that have enough knowledge of techniques, but having a holistic view of the current situation in the region;
Opportunities: - Less competitions among state bodies and private companies (enterprises) in terms of the institutions that will realize CPI; - Existing support structure from international organizations such as UN, World Bank, USAID, EBRD, ADB, GIZ, among others. - Large GHG mitigation opportunities; - Opportunities to capitalize on green development to diversify the economy and create new sources of export (green electricity, green hydrogen, emission reduction units, etc.); - Opportunity to cut costs of fossil fuel subsidies; - Opportunity to align CPI policy development with NDC implementation, green economy strategies and a green COVID-19 recovery; - Large potential for RE in the region; - Bilateral and regional electricity cooperation, can facilitate regional ETS;	**Threats/barriers:** - The costs associated with emissions trading are included in the production costs of the business; - The rise in prices may create tensions unless effective compensation schemes for vulnerable groups are developed and financed through the CPI revenues; - CPI is perceived as an additional burden on administrative costs (statistics, audit, verification, ISO standards, training); - Lack of staff and capacity; - Insufficient technical information in Russian language; - Vested interests in fossil-fuel based industries; - Trade relations with countries outside of CA that might be impacted by CPI;

Source: ReDiCaP Regional Dialogues on Carbon Pricing: Central Asia

Regional Dialogue on Carbon Pricing (ReDiCap) and Roadmap

1. Sharing and development of documents

Such as NDCs, green economy strategies, CPI information and Article 6 instruments in Russian language between countries and international partners.

2. Technical capacity building

Training on MRV and carbon pricing, development of MRV guidelines as a basis for CPI and cooperative approaches.

3. Scenario modelling

Developing subregional and country specific macro-economic models/scenarios on the impacts of CPI and related climate policies.

4. Generating high-level political support

Building support from political decision makers by high-level capacity building events, stakeholder engagement and studies to highlight benefits from CPI.

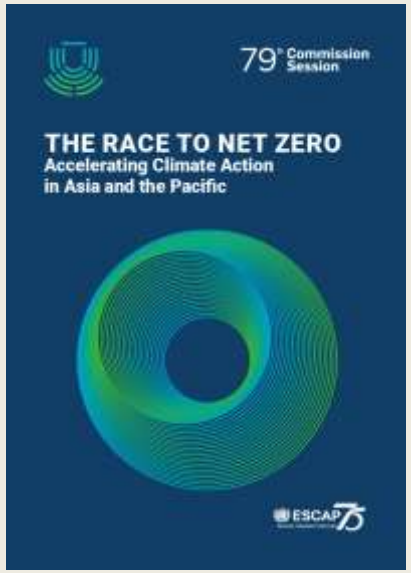
SHORT-TERM
Mapping of information, coordination of support, exchange of experiences and capacity building.

Follow-up Dialogue on Carbon Pricing including the Central Asian countries, potentially in connection to the Asia-Pacific Climate Week.

MEDIUM-TERM
Macro-economic modeling, exchange of strategic documents, technical trainings on CPI and cooperative actions.

LONG-TERM
Building a regional support structure, high-level political commitment, development of MRV guidelines and stakeholder consultations.

Analyzing key design considerations of CPI in the CA countries as well as on a subregional level.



Regional cooperation for faster, bolder climate action

01

Strengthen **resilience and adaptive capacity** to climate-related hazard.

02

Launch a **regional platform** for policy dialogue and technical cooperation on **low carbon transition**.

03

Accelerate the **energy transition** and reduce energy intensity.

04

Promote regional dialogue and research on **decarbonization of the transport sector**.

05

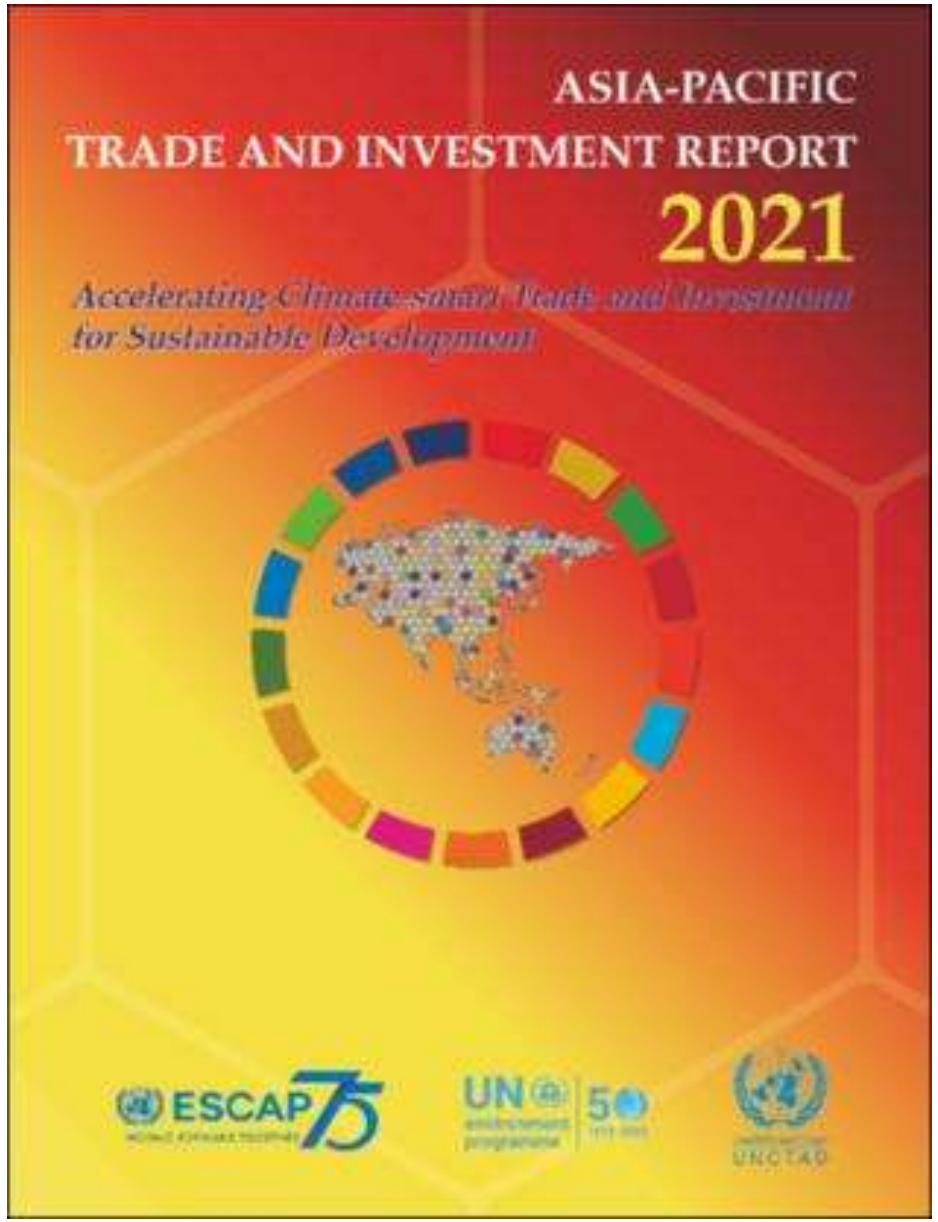
Facilitate **climate-smart trade and investment** to decarbonize industry.

06

Strengthen national policies and enabling conditions for **climate finance**.

07

Strengthen national capacity for **measuring challenges and progress**.



https://www.unescap.org/kp/APTIR2021

Accelerating climate-smart trade and investment – 10 recommendations

1. Liberalize trade in climate-smart and other environmental goods and services
2. Phase out fossil fuel subsidies
3. Adopt climate-smart non-tariff measures
4. Encourage climate-smart investment and private sector initiatives
5. Accelerate trade digitalization
6. Transition to climate-smart transport
7. Incorporate climate considerations in regional trade and investment agreements
8. Prepare for carbon pricing
9. Incorporate climate consideration in multilateral trading rules
10. Strengthen capacity for climate-smart trade and investment policy making

Self-paced “certificate” course available online

Thank You!

For more information:

On climate-smart trade and green trade facilitation:

duvaly@un.org

On overall climate action strategy and ReDiCap:

nams@un.org

ESCAP
Economic and Social Commission for Asia and the Pacific