

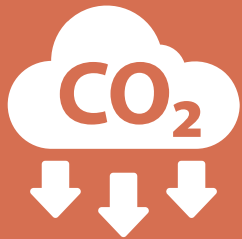
EXECUTIVE SUMMARY

State and Trends of Carbon Pricing 2021



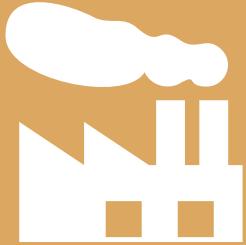
THE WORLD BANK





CARBON PRICING – A NECESSARY BUT NOT SUFFICIENT POLICY

- Carbon pricing can play a role in incentivizing low-carbon action by internalizing the cost of greenhouse gas emissions
- However, for it to work, several things are needed:
 - It must be sufficiently **AMBITIOUS**. Experts say prices of USD 40-80/tCO₂e are needed to meet the 2°C goal.
 - It must be **WELL DESIGNED AND ADAPTED** to the jurisdictional context.
 - It must **FORM PART OF A SUPPORTIVE POLICY PACKAGE** – other policies are needed to drive research and development, unlock non-economic barriers to mitigation and to target emissions reductions with very high abatement costs



HOW DOES CARBON PRICING FIT WITH NET ZERO COMMITMENTS?

- Despite the economic and social upheaval of COVID-19, most governments continued rolling out or increasing the ambition of their carbon pricing instruments.
- The proliferation of net zero commitments from governments and the private sector is also a positive sign. But they must be backed up by ambitious short- and medium-term action.
- But what do these net zero commitments mean for the role of carbon pricing and how these instruments will look like in order to reach net zero targets?



SOME EARLY SIGNS OF MORE AMBITIOUS CARBON PRICING POLICIES

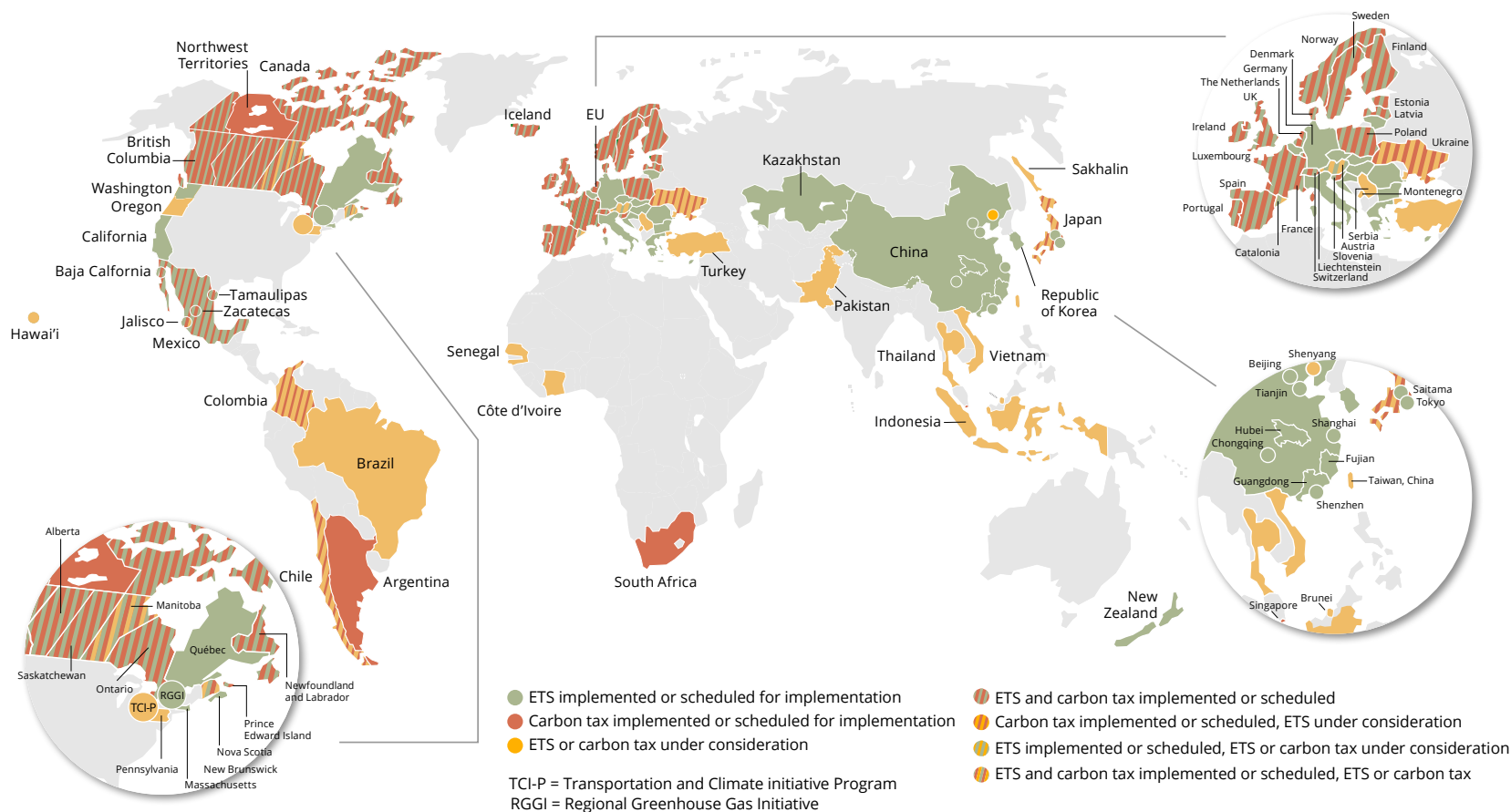
- More governments are adopting net zero targets and we are beginning to see **MORE AMBITIOUS CARBON PRICING INSTRUMENTS:**
 - In the EU, allowance prices have hit all-time highs as the bloc steps up both long and short term climate ambition and the market foresees caps tightening following the announcement of the Green Deal.
 - Prices are increasing in countries like Canada, Germany and Ireland
 - New Zealand's Climate Change Act sets out changes to its ETS and outlines a national mitigation framework in line with a 2050 net zero target
- Greater ambition is also leading more governments to consider **CARBON BORDER ADJUSTMENTS**. These may in turn may spur more climate ambition (but are also facing opposition)



NEW CARBON PRICING INSTRUMENTS LAUNCHED

- China's emissions trading system came online – the **LARGEST CARBON MARKET IN THE WORLD**, initially covering around 4,000 MtCO₂ or 30% of its national GHG emissions.
- The UK and Germany both launched national carbon markets and carbon taxes in the Netherlands and Luxembourg came into operation.

CARBON PRICING MAP (2021)

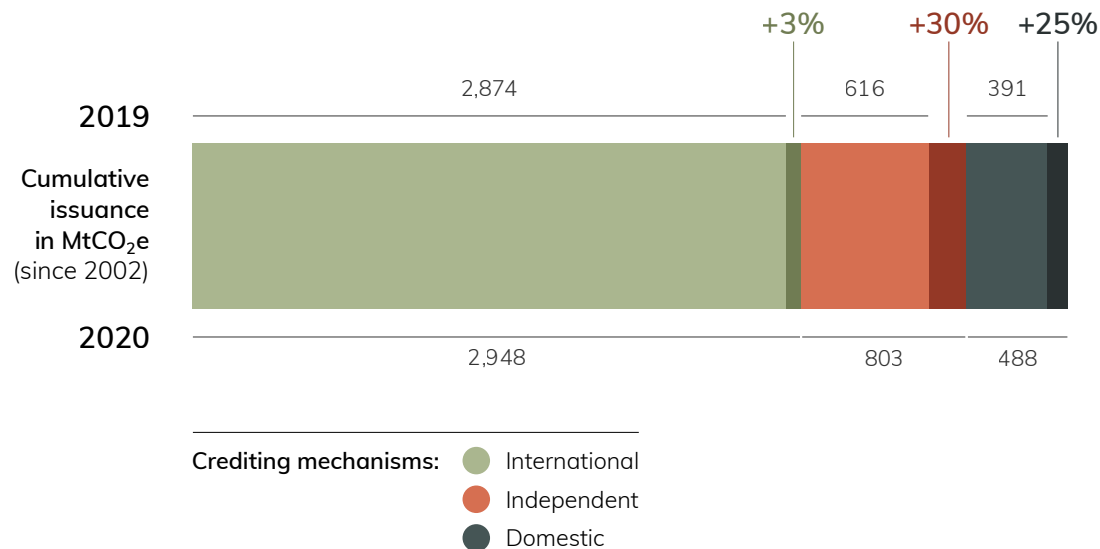


The large circles represent cooperation initiatives on carbon pricing between subnational jurisdictions. The small circles represent carbon pricing initiatives in cities. In previous years, Australia was marked as having an ETS in operation. However, the Safeguard Mechanism functions like a baseline-and-offsets program, falling outside the scope of the definition of ETS used in this report. Therefore, the system was removed from the map. Rio de Janeiro and Sao Paulo were marked as considering the implementation of an ETS based on scoping work done in 2011 and 2012 respectively. Given there have been no updates since, these were removed from the map.

Note: Carbon pricing initiatives are considered “scheduled for implementation” once they have been formally adopted through legislation and have an official, planned start date. Carbon pricing initiatives are considered “under consideration” if the government has announced its intention to work towards the implementation of a carbon pricing initiative and this has been formally confirmed by official government sources. The carbon pricing initiatives have been classified in ETSs and carbon taxes according to how they operate technically. ETS not only refers to cap-and-trade systems, but also baseline-and-credit systems as seen in British Columbia. The authors recognize that other classifications are possible.

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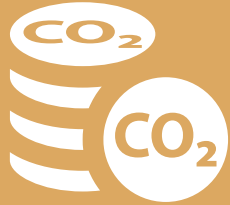
COMPANIES ARE ADOPTING NET ZERO TARGETS, DRIVING DEMAND IN THE VOLUNTARY CARBON MARKET





MOMENTUM BUILDS FOR CARBON MARKETS

- **NET ZERO** and other corporate climate commitments are leading to **INCREASING CARBON MARKET ACTIVITY** – though volumes remain below those seen in the early 2010s.
- **FINANCIAL ACTORS** increasingly are getting more involved in carbon markets, which can improve liquidity but comes with risks.
- More standardized products for voluntary credits reflect growing interest in the market.



A SUPPLEMENTARY ROLE FOR CREDITS

- Carbon crediting should **PLAY A SUPPLEMENTARY ROLE** in corporate climate strategies: other solutions are needed too and reducing emissions should be prioritized first.
- The **LANDSCAPE OF PROJECTS IS LIKELY TO CHANGE** significantly
 - Assessing and improving the quality of carbon credits in the voluntary market
 - Renewable energy project have a limited future
 - More focus on removals
- But the voluntary market remains heterogeneous



BUT SHORT-TERM AMBITION LAGS BEHIND AND CARBON PRICES ARE FAR LOWER THAN THEY NEED TO BE

- Countries' **CLIMATE PLANS** (Nationally Determined Contributions submitted to the UNFCCC) **CONTINUE TO FALL SHORT** of what is needed to meet the goals of the Paris Agreement.
- This limited ambition is **REFLECTED IN LOW CARBON PRICES** – only 3.76% of emissions covered by a carbon price above USD 40/tCO₂e (the bottom range of 2020 prices recommended to be Paris compliant).

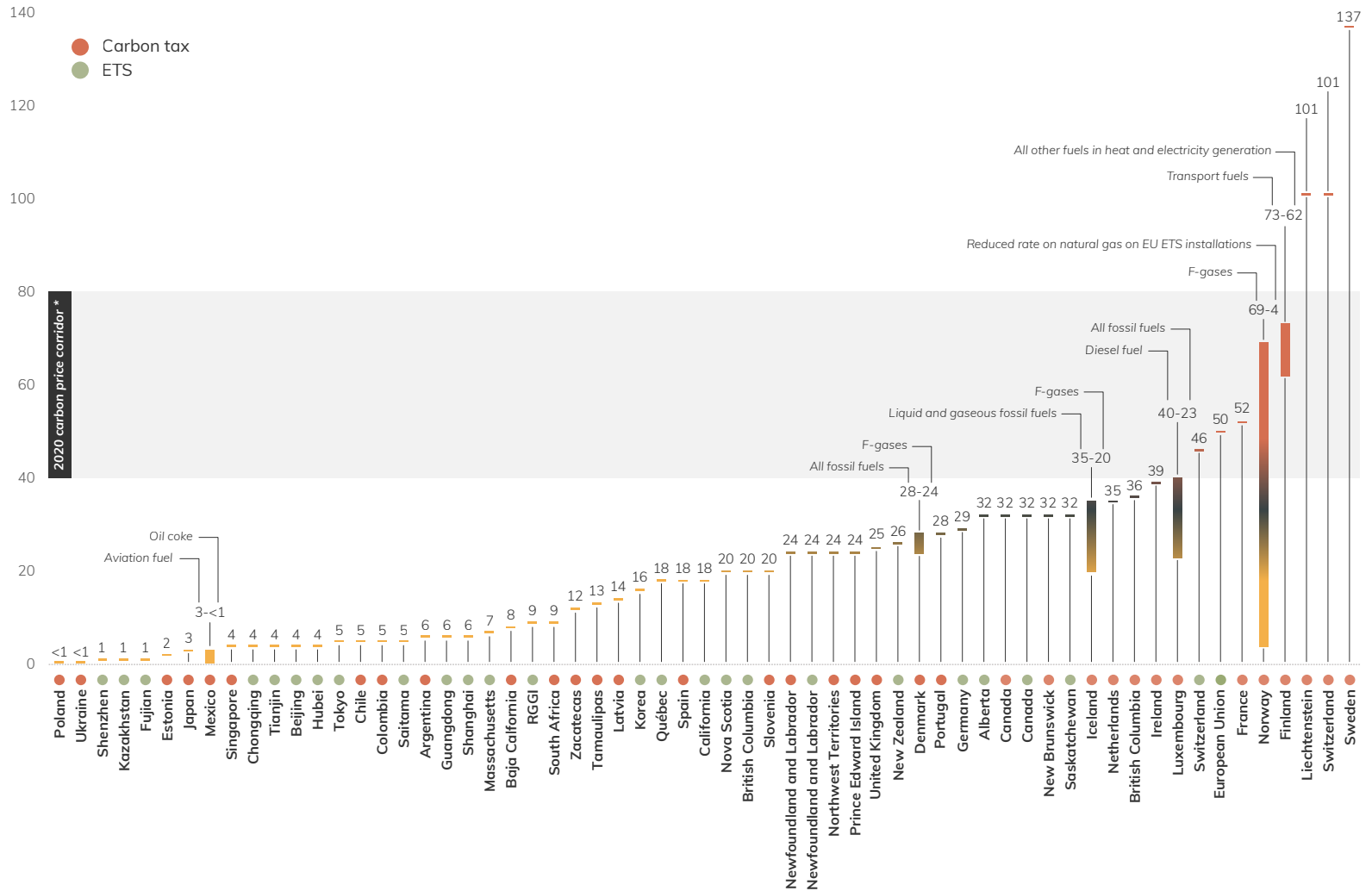


INTERNAL CARBON PRICING

- Nearly half of the largest 500 companies in the world by market value already have an internal carbon price or intend to adopt one in the coming two years.
- Climate governance initiatives and the resulting corporate climate commitments encourage the adoption of an internal carbon price.
- There is a rising level of sophistication in the way internal carbon prices are being set and applied, reflecting geographic/regulatory contexts.
- While internal carbon prices fall short of Paris Agreement aligned prices, it often exceeds regulatory prices.

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CARBON PRICES (2021)



Nominal prices on April 1, 2021, shown for illustrative purpose only. China national ETS, Mexico pilot ETS and UK ETS are not shown in this graph as price information is not available for those initiatives. Prices are not necessarily comparable between carbon pricing initiatives because of differences in the sectors covered and allocation methods applied, specific exemptions, and different compensation methods.

*The 2020 carbon price corridor is the recommendation of the World Bank's 2017 High-Level Commission