

## CARBON TRADING

# Carbon trading leaps forward



**Will participants at COP26 push for expansion of emissions trading systems or stick with those in place? asks Nnamdi Anyadike in a round-up of carbon trading initiatives worldwide.**

Later this year, the major nations are set to lay out the first practical measures to meet targets necessary to cut emissions to net zero, as part of commitments under the Paris Agreement. Binding commitments are expected to be made at the UN Climate Change Conference in Glasgow, COP26, to be hosted by the UK and Italy in November 2021. The big question, however, is whether they will go for an expansion of the various emissions trading systems (ETS) that are already in place or push for more carbon taxes.

Since 2005, the European Union (EU) has plumped for reducing emissions through an ETS. This carbon market covers about 22% of global emissions. It is currently the biggest of the World Bank's estimated 46 national carbon pricing schemes that are either in operation or in the planning stage plus 32 regional systems within countries. The scheme is mandatory for all 27 EU members as well as Iceland, Liechtenstein and Norway. It covers power plants, aviation and energy intensive industries. Frans Timmermans, Head of EU Climate Policy, says that the bloc's ETS has already proven its efficiency in curbing emissions, by achieving a 35% drop in carbon emissions from participating power plants and factories.

## Voluntary carbon markets

The argument in favour of carbon markets as a means to curb emissions is supported by many, though not all, in the energy industry. In a recent report, global consulting firm McKinsey outlined the key advantages of voluntary carbon markets to help companies supplement their emissions-reduction efforts and finance climate action. 'A large, effective voluntary carbon market would help increase the flow of capital to these projects, and thereby play a critical role in reaching net zero and net negative emissions goals,' it said.

Last September, the Institute for International Finance (IIF) established a private-sector Taskforce on Scaling Voluntary Carbon Markets. Its ambition is to create a blueprint for building a voluntary carbon market of unprecedented scale, while ensuring it is transparent, verifiable and robust.

## Expanding the EU ETS

Proposed changes to the EU carbon market this year could involve more sectors, such as building, shipping and road transport, and curbing the free permits given to EU industry. It is also likely to include higher 2030 targets to boost renewables and energy efficiency. In June 2021, the EC plans to propose the draft EU legislation

needed to achieve the 55% target – agreed by EU ministers last December – as part of its European Green Deal strategy to make the EU climate neutral by 2050.

A proposed carbon border tax (CBT) aims to reduce the risk of carbon leakage due to higher carbon prices and to shield EU carbon-intensive industries against cheaper imports from countries with laxer climate policies. Options being considered include a new carbon customs duty/tax on certain carbon-intensive products/sectors; a carbon tax at consumption level; purchasing allowances from an import-dedicated pool; or extension of the EU ETS to imports. The CBT would most likely be levied on goods from countries that do not put an equivalent price on carbon and would be linked to pricing in the EU ETS. Essentially, it would need to comply with World Trade Organisation rules and other international obligations of the EU. Steel and building materials, which are also among the highest emitters, would most likely be pilot industries in the implementation phase.

## UK mulls post-Brexit options

Meanwhile, the question of where the UK stands with regards to any potential future alignment with Europe on climate policy, and in particular with the EU's ETS, currently remains unanswered.

Cutting carbon emissions by extending carbon pricing schemes is a priority for COP26

Source: Getty Images

On 31 December 2020, the UK left the ETS, along with the other EU institutions to which it had been a member. The UK has already started preparations to launch its own ETS, which the government said should be up and running in the second quarter of this year. However, the lack of certainty about an alignment strategy with the EU has raised concerns from within the energy industry. The sector particularly fears the imposition of an emissions tax, arguing that tradable credits are the most efficient way to cut pollution. Last November, the world's leading energy companies and energy trading associations wrote to Prime Minister Boris Johnson urging him not to implement an emissions tax after the Brexit transition ends.

Also unknown is whether the UK will introduce a CBT, similar to the one currently being drawn up at EU level. There are concerns, with Shane Tomlinson, Deputy CEO at E3G, for example, noting that given the country's ambitious climate target, the UK could be tempted to impose its own carbon border tax on the EU 'in retaliation', which would be a worst-case scenario and potentially 'catastrophic' to the delivery of climate change objectives.

Yet despite these warnings, UK Chancellor of the Exchequer Rishi Sunak has hinted that he could move in the direction of a swathe of carbon taxes to shore up dwindling tax revenues. The Institute for Fiscal Studies estimates the UK will need to find £40bn/y by the middle of the next decade to stop the debt spiralling. Should the UK's carbon tax go ahead, it would be broadly calculated on the average EU ETS price in 2021 and 2022. As of end-2020, the EU ETS price had risen to above €27/t of CO<sub>2</sub>, from less than €5/t CO<sub>2</sub> emitted in 2017.

#### Canada implementing carbon tax

Meanwhile, despite its earlier reticence, Canada now looks likely to implement a carbon tax as part of its climate policy. This follows the plan presented by Prime Minister Justin Trudeau's government in early December 2020. This would imply a carbon tax of \$C170/t CO<sub>2</sub> by 2030, equivalent to a tax of 40 Canadian cents/litre of petrol. The current tax is \$C30/t CO<sub>2</sub>, equivalent to a tax of 7 cents/litre of petrol. Prior to the presentation of the plan this had been set to rise to \$C50/t CO<sub>2</sub> by 2022.

The government hopes to soften the blow by ensuring that only the

biggest industry emitters will pay more. The plan is to return a lot of the money to taxpayers, similar to what is already done in provinces such as Alberta and Ontario that have declined to impose their own carbon tax. According to Canada's *Globe and Mail* by 2030, a family of four in Ontario 'can expect to receive \$C2,000 in refunds' while the same family in Alberta 'could get \$C3,200'.

#### Japan to launch carbon pricing system

Japan, which is committed to a carbon neutrality goal by 2050, aims to introduce a carbon pricing system before COP26. This follows the unveiling of the government's strategy outline at the end of last year by Prime Minister Yoshihide Suga, when he also pledged his country to work more closely with the US government's new administration to cut CO<sub>2</sub> emissions. However, neither carbon pricing nor cap and trade were mentioned at the strategy launch, nor were any concrete renewable targets.

As Masahiro Sugiyama, Associate Professor at the Institute of Future Initiatives at the University of Tokyo, opined in the East Asia Forum Organisation

## Other carbon pricing schemes

**China:** Ever since President Xi Jinping announced in September 2020 that China would become carbon neutral by 2060 there has been expectation that it would launch a national ETS – building on the success of its regional schemes – possibly this year. Pilot schemes were conducted in provinces and cities including Beijing, Chongqing, Guangdong, Hubei, Shanghai, Shenzhen and Tianjin. They cover energy production and various energy-intensive industries. However, a national system, if launched, would become the world's largest, and is expected to cover several billion tonnes of CO<sub>2</sub> from power plants each year.

**India:** At the end of last year, Carbon Pulse reported a senior Indian government official as saying that his country was considering setting up a domestic greenhouse gas (GHG) emissions trading scheme. India's carbon market is already one of the fastest growing markets in the world and has already generated approximately 30mn carbon credits, the second highest transacted volumes in the world. The big question though that was left unanswered at COP25 in Madrid in 2019 is whether it will have the right to sell these old carbon credits or certified emission reductions (CERs) that it had accrued under the earlier Kyoto Protocol.

**Australia:** Companies are buying up Australian carbon credits at an increasing rate, in what is thought to be a bet on future international regulations. Market Advisory Group Managing Director Raphael Wood says the investment in Australian carbon credits is 'doubling every year, albeit off a low base'.

**Russia:** Russia is understood to have set ambitious targets for a low carbon future, with Ruslan Edelgeriyev, an adviser to President Vladimir Putin on climate change issues, reported to have said: 'Russia is 'actively advocating for the creation of a national greenhouse gas emissions trading system.'

**Brazil:** In 2020, Brazil launched new private and public policy carbon pricing initiatives. This followed a widespread ETS simulation exercise conducted by 29 companies in 2018. Trading takes place through the Rio de Janeiro Green Stock Exchange (BVRio).

**Mexico:** A three-year pilot ETS scheme was launched in 2020, covering the power, oil and gas, and industrial sectors.

**New Zealand:** New Zealand's ETS began in 2008 and covers electricity generators and manufacturers' liquid fossil fuels including petrol and diesel.

**South Korea:** Starting in 2015, South Korea's ETS covers around 600 of the biggest emitters, collectively responsible for almost 70% of the country's annual emissions.

**US:** The US does not have a national ETS, but many regions and states use carbon pricing, such as California and states covered by the Regional Greenhouse Gas Initiative (RGGI). President Joe Biden has pledged \$2tn to tackle climate change and cut emissions. ●

Sources: World Bank Group, International Carbon Action Partnership, Reuters



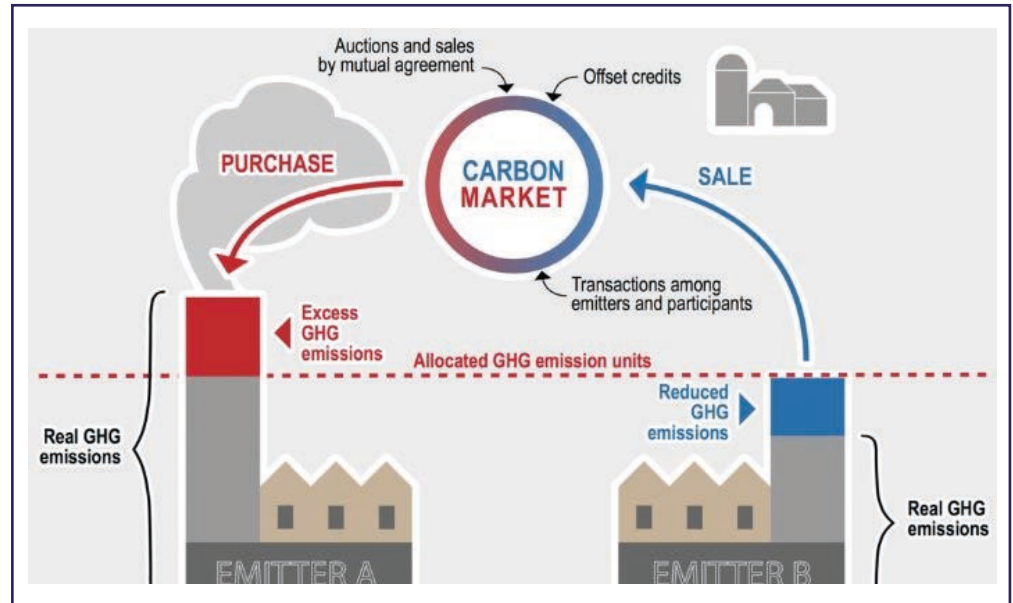
recently, the lack of detail could present opportunities for stakeholders to provide vitally needed input.

Two key issues stand out. First, unlike Europe and North America, there is less potential for a renewable energy mix dominated by wind and solar power. Renewables are less abundant in Japan and more costly than either in the EU or the US. This means that Japan is likely to continue to favour nuclear power as an alternative, which will remain a 'significant share' of the mix until at least 2050, he said. Second, Japan's heavy industry is one of the most difficult sectors to decarbonise. 'The final energy and CO<sub>2</sub> emissions of Japan's heavy industry sector are significant and render Japan closer to those of the G20 average than the G7 average,' said Sugiyama.

#### COP26 prospects

The 'holy grail' for COP26 and beyond is the establishment of a single, global price on carbon. However, this remains a distant prospect according to David Hone, Chief Climate Adviser at Shell, which uses an internal carbon price to help meet its own sustainability goals.

The average global carbon price, according to the International



Monetary Fund (IMF), is only \$2/t CO<sub>2</sub>, but the spread is huge. Carbon prices in Asian countries range from about \$1/t CO<sub>2</sub> in some of the sub-national pilots of ETS in China to \$29/t CO<sub>2</sub> in the Korea ETS.

Meanwhile, the EU ETS end-December 2020 price of above €27/t CO<sub>2</sub> is deemed by many analysts to be still way too low to provide industry with the necessary push toward investing

in emissions-cutting technologies like hydrogen. The IMF suggests a price of \$75/t CO<sub>2</sub> by 2030. While Mark Lewis, Chief Sustainability Strategist at BNP Paribas, argues that the price would need to be around €90/t CO<sub>2</sub> (\$107/t CO<sub>2</sub>) by 2030 to have the desired effect.

COP26 will be watched with interest when it comes to the thorny issue of carbon pricing. ●

Figure 1: Carbon market showing positive feedback

Source: [imattertheyouth.org](http://imattertheyouth.org)

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