

Dragoman Digest

China revises ambitious steel emissions reduction targets

Extension of deadline is further evidence that China is balancing its targets with energy security and economic growth

This week, **Beijing** set 2030 as the new deadline for peak carbon emissions for the steel sector, five years later than the target it announced in September. There is concern that the revision to the sector's target will challenge China's net-zero 2060 ambitions. Steel accounts for at least 17 percent of China's emissions. Reducing the carbon footprint of the sector will be vital to the country's broader decarbonisation goals.

Notwithstanding shifting goalposts, China is making significant headway. Analysts believe emissions may have peaked already. Last year, China successfully capped output at below 2020 levels – marking the first yearly fall in steel output since 2015. Strict regulations around production capacity increases are set to remain in place in 2022 and the sector may be integrated into China's emissions trading scheme. China's steel giants – China Baowu Steel, HBIS Group, and Inner Mongolia Baotou Steel Union – remain committed to peaking emissions by 2023. They also face mounting pressure to invest in clean-tech modification and efficiency solutions. By 2025, nearly 100 state-owned enterprises, including Baosteel, will be required to raise renewables' share of installed power generation capacity to 50 percent while decreasing energy consumption and carbon dioxide emissions by 15 and 18 percent respectively.

Giving more room for the sector to transition suggests Beijing is placing greater emphasis on softening the economic impact of its ambitious transformation plans.

Japan's aging infrastructure problem

A "grand plan" is coming, but specific initiatives or incentives to drive domestic investment remain unclear

The **Japanese** government has been unable to keep up with the pace of deterioration of the country's critical infrastructure. By 2033, over half of its infrastructure will be at least 50 years old. Around 60 percent of road bridges and 40 percent of tunnels require critical repairs within the next decade to ensure their safety. Despite this, Japan's infrastructure spending has fallen 40 percent between 1996-2019 – the only one of the world's seven largest economies to report a decline.

Delaying the repairs is expected to increase the future cost paid by central and local governments. According to Japan's Ministry of Land, Infrastructure, Transport and Tourism, they will cost around 12 trillion Japanese yen (circa. US\$106 billion) per annum – double what would have been required to address the issues two years ago.

Japan's fiscal firepower is limited. Public debt currently represents around 240 percent of GDP. Last month, Prime Minister Kishida announced his Administration's intent to incentivise domestic public-private partnerships however details are scant as to how this will be implemented. Kishida says a "grand plan" for Japan's economic transformation will be unveiled in the coming months.

Shifting sands in Chile's resources sector

State set to take a more prominent role in resource development under Gabriel Boric amid constitutional reform

As conservative billionaire Sebastián **Piñera** hands over the presidency to left-wing Gabriel **Boric**, the future of **Chile's** mining industry has come into question. Boric has made it clear he plans for Chile's energy transition to be state led.

In December last year, he announced his intention to establish a state-run lithium firm, and to advance proposed increases to mining royalties. His Government's plans may divert growth from private-sector developers. Piñera's last-minute attempts to award additional production quotas to miners has sparked outrage among the incoming administration.

Chile is the second-largest producer of lithium after **Australia** and is on track to produce 27 percent of the world's lithium by the end of the year. Lithium mining is crucial in battery production.

Chile has begun debating changes to its Constitution, with the left pushing for greater Indigenous land rights, and more state control of natural resources. With the final changes expected in July, the precarious environment has many in the sector adopting a wait-and-see approach.

Biden adds nuclear and renewable energy to Critical and Emerging Technologies list

Low-emission energy's inclusion demonstrates strategic importance of transition technologies

Earlier this month, the **Biden** Administration added artificial intelligence technology, renewable energy generation and storage, and nuclear energy to its list of Critical and Emerging Technologies (CETs). CETs are a subset of advanced technologies that the US' defines as having the "greatest" future potential to further its "national security objectives, expand economic opportunity and defend democratic values." Hypersonic, bio, and space technologies were listed as CETs in October 2020.

The inclusion of low-carbon energy sources in Biden's CETs dovetails with the US' efforts to counter Beijing dominance of green technologies. The list will shape priority areas for "cooperation with allies" and influence public and private investment flows. While the outlines of cooperation on technology have been discussed in recent meetings of the Quadrilateral Security Forum, a formal technology alliance between US allies is yet to be established.

Progress toward India's carbon sink goal disputed

Definitional questions illustrate difficulties in uniformly tracking decarbonisation progress

India's definition of canopy cover may be distorting reported progress toward its 'carbon sink' target. By 2030, the country aims to create an 'additional carbon sink' of 2.5–3 GtCO_{2e} through planting extra forest and tree cover. Carbon sinks are forests and other ecosystems that capture and store carbon. The target is part of India's Nationally Determined Contribution (NDC) under the 2015 Paris Agreement.

Analysis suggests the state-run Forest Survey of India's (FSI) definition may be flawed. The FSI reported that India gained 1,530 square km in forest cover between 2019-2021 – a negligible increase of 0.2 percent. Of the forest cover added, 0.06 percent was 'very dense forest,' with 70 percent and above canopy cover. According to FSI, any area of land greater than a hectare with a canopy cover of 10 percent or more counts as 'forest cover.' This means that tea estates, plantations and tree-lined avenues are classified as forests. Research suggests that biodiverse forests may have a greater carbon storage capacity than monoculture forest plantations.

Over the past 20 years, India's forest has grown by 5.7 percent or around 40,000 sq km. However, FSI's definition includes areas with a tree canopy density of less than 10 percent including degraded land and wetlands. An alternate calculation by Global Forest Watch – with a stricter definition of what constitutes a forest – says it may have dropped by 3.4 percent between 2002 and 2020.

The lack of a standardised definition or measurement system among economies that have submitted NDCs presents clear issues in demonstrating progress toward targets.