

CAP AND TRADE: THE BASICS



CAP-AND-TRADE PROGRAMME OVERVIEW

A cap-and-trade system places a limit on the amount of greenhouse gas (GHG) emissions that covered industries can emit in a single year. Emissions of gases such as carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) are measured by industry and reported to the government or regulator who monitors emissions and runs the programme. In order to control emissions, the government sets a cap on emissions of these gases. It does this by giving or selling companies “allowances” (or permits).

Allowances are distributed via allocation and/or auctioning. The free allocation of allowances helps to reduce cost and competitiveness burdens to affected industries, especially those competing with regions not subject to regulatory carbon constraints. Companies that are required to reduce emissions are called “regulated entities”. They must demonstrate that they comply with the cap-and-trade programme every year by turning in allowances (or, where allowed, offset credits) equal to their emissions (more on this below).

WHAT INDUSTRY SECTORS ARE COVERED UNDER CAP AND TRADE?



Most existing cap-and-trade systems apply to the power sector and heavy industry (eg, cement manufacturers, metals, chemicals, the oil and gas industry, ceramics, pulp and paper, mining, etc). An increasing number of programmes - including California, Québec, **China's pilots** and **Korea** - also cover transport fuels, **New Zealand's** covers forestry, and the **EU Emissions Trading System** applies to flights within the bloc. **South Korea's ETS** includes aviation, and the sector will also be included in **China's** national ETS. The **Regional Greenhouse Gas Initiative (RGGI)** is the only existing cap-and-trade programme that only applies to the power sector.

HOW DOES A REGULATED ENTITY COMPLY?



At the end of the compliance cycle (eg, calendar year, financial year, etc), regulated entities must submit a verified emissions report, developed by independent third parties. Companies will then have to surrender emissions units - allowances or, if permitted, offsets - equal to their emissions; by acting to reduce their emissions, regulated entities can reduce their carbon liability.

Those which have reduced their emissions could also potentially end up with surplus emissions units, which can be sold to those which have exceeded their cap, or expected emissions; this can typically be done via exchange or intermediary.

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HOW DOES CAP AND TRADE ACHIEVE THE ENVIRONMENTAL OBJECTIVE?

The cap typically declines each year, gradually phasing-down towards the emissions reduction goal. **This is essential in ensuring the environmental outcome is met at lowest cost.**



WHERE HAVE EMISSIONS TRADING SYSTEMS BEEN IMPLEMENTED?

Jurisdictions accounting for almost **40% of global GDP** now host a carbon market, according to ICAP's **Emissions Trading Worldwide: Status Report 2019**. This includes China, South Korea, Kazakhstan, New Zealand, the EU, 10 US states (including California and New York), Québec and Tokyo. Other systems are being developed or considered in Mexico, Turkey, Ukraine, Brazil, Taiwan, and Thailand, among others.