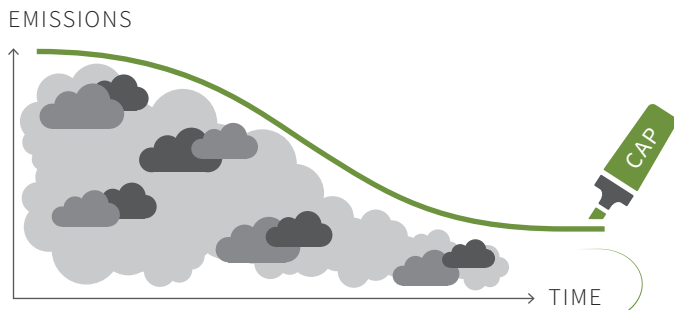


What is Emissions Trading?

An emissions trading system (ETS) is a market-based instrument that can be used to reduce greenhouse gas (GHG) emissions. It works on the principle of 'cap and trade'. The government imposes a limit (cap) on the total emissions in one or more sectors of the economy. Companies in these sectors need to hold one permit for every ton of emissions they release. They may either receive or buy permits, and can trade them with other companies. This is the 'trade' part of 'cap and trade'. Currently, there are 20 ETSs operating across five continents, with major economies like China preparing to introduce a nationwide system. Jurisdictions using emissions trading make up almost 40% of global wealth (GDP).



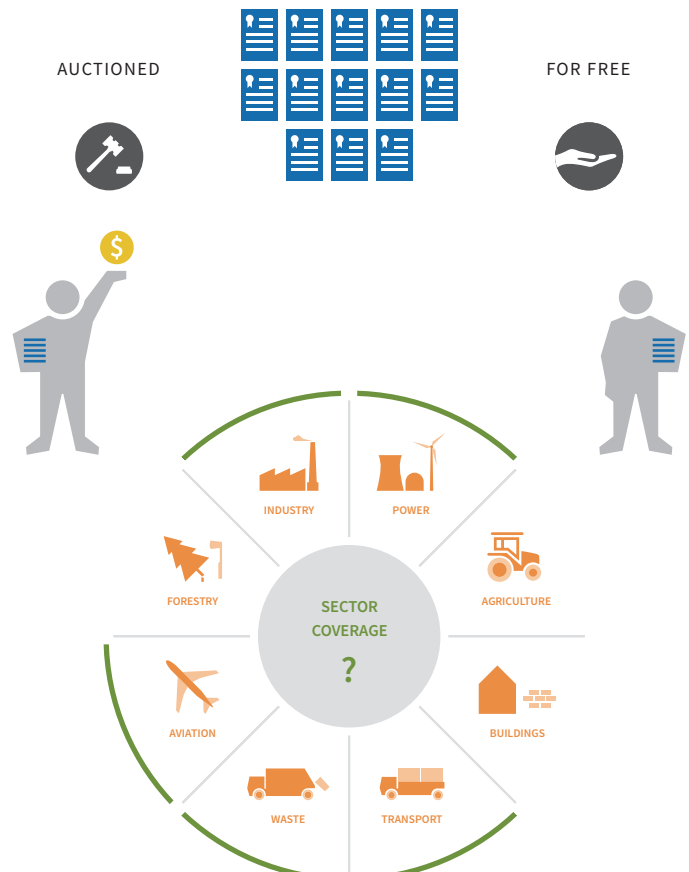
WHAT IS A CAP?

The government sets the maximum amount of emissions allowed in the ETS – this is the 'cap' part of 'cap and trade'. The cap should be set in advance and decline over time. It should also be in line with the jurisdiction's overall emissions reduction target. This provides a long-term market signal so companies can plan and invest accordingly.

CAP = TOTAL AMOUNT OF PERMITS

HOW TO DISTRIBUTE PERMITS?

Once the cap is set, the government distributes tradable permits among the companies. One permit represents one ton of GHG emissions. The government can decide to give permits out for free (based on past emissions or performance standards) or to auction them off (see also ICAP ETS Brief #6). How permits are distributed will also affect the way companies manage their emissions.

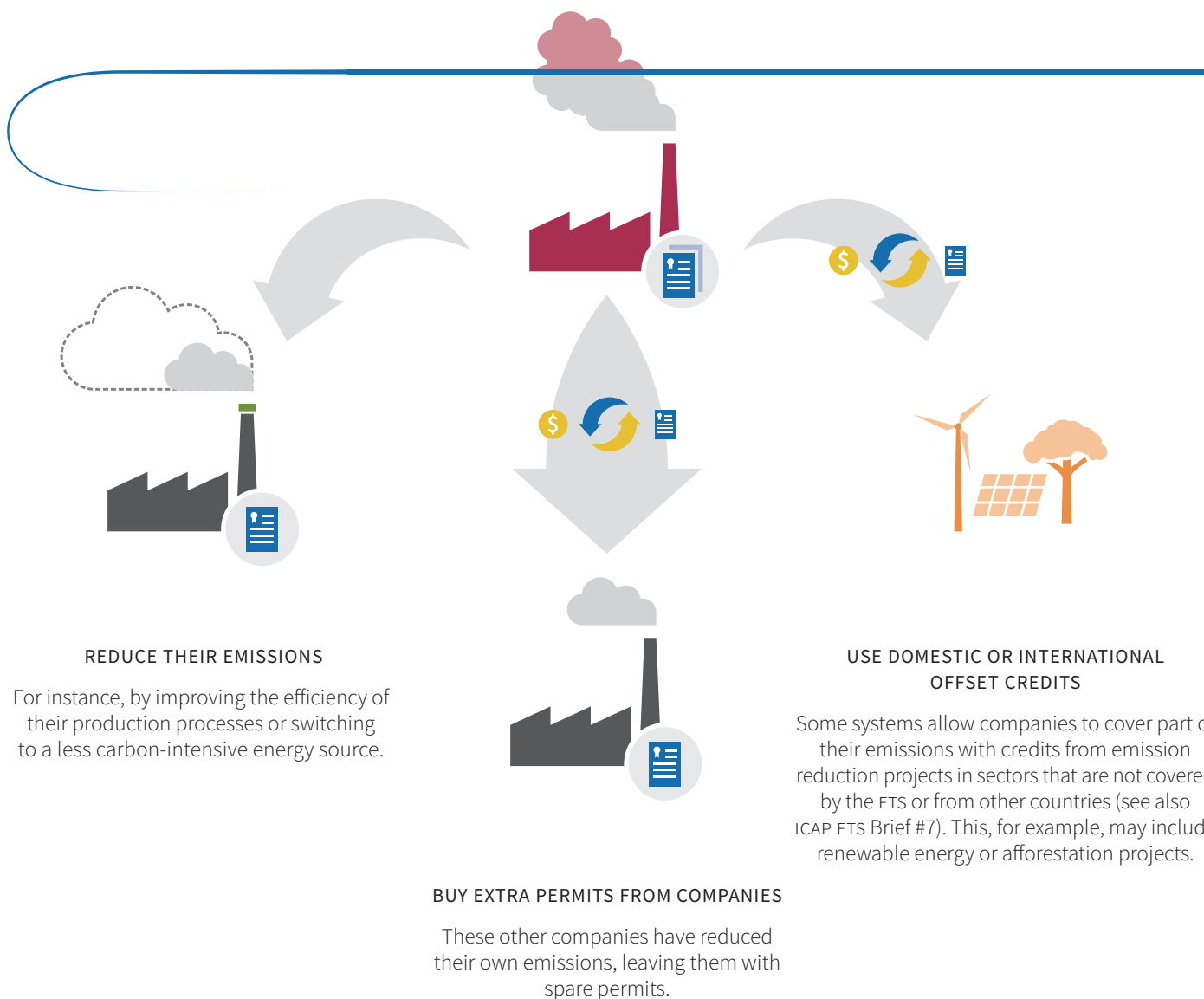


WHO IS REGULATED?

The government also needs to decide which sectors of the economy and GHGs will be included in the system. Theoretically, an ETS with broad coverage of sectors and gases will be most effective. Yet in practice it may be hard to measure and track emissions in some sectors, while other sectors may find it very difficult to reduce their emissions. The power and industrial sectors are included in most systems currently operating around the world. Carbon dioxide (CO₂), as the most common GHG, is also usually covered by an ETS. Other GHGs include methane (CH₄), nitrous oxide (N₂O) and synthetic gases (SF₆, HFCs and PFCs).

HOW CAN COMPANIES MANAGE THEIR EMISSIONS?

At the end of a trading period (for instance, one year), each company must submit enough permits to cover its emissions. To do so, companies can choose one or more of the following options:



REDUCE THEIR EMISSIONS

For instance, by improving the efficiency of their production processes or switching to a less carbon-intensive energy source.

USE DOMESTIC OR INTERNATIONAL OFFSET CREDITS

Some systems allow companies to cover part of their emissions with credits from emission reduction projects in sectors that are not covered by the ETS or from other countries (see also ICAP ETS Brief #7). This, for example, may include renewable energy or afforestation projects.

BUY EXTRA PERMITS FROM COMPANIES

These other companies have reduced their own emissions, leaving them with spare permits.



HOW TO ENSURE THE ETS RUNS EFFECTIVELY?

To guarantee the environmental effectiveness of the ETS, companies must monitor and report their emissions to an official authority. These reports must be verified by an independent party to ensure their accuracy. Penalties further ensure that companies comply with the ETS.

Permit transactions among ETS participants are tracked through a registry. Safeguards are in place to help minimize the risk of fraud and manipulation that comes with the financial value of the permits.

ABOUT THE INTERNATIONAL CARBON ACTION PARTNERSHIP: ICAP is an international forum for national and subnational governments focusing on best practices in emissions trading. Its work centers on three main pillars: technical dialog, knowledge sharing and capacity building. For more information see the [ICAP website](#) and its [ETS map](#), [Allowance Price Explorer](#), and [ETS Library](#) or follow us on [Twitter](#).