

Brief #1

WHAT IS EMISSIONS TRADING?

An emissions trading system (ETS) is a market-based instrument that can be used to reduce greenhouse gas (GHG) emissions. The government determines a limit (cap) on total emissions in one or more sectors of the economy and issues allowances according to this limit. Companies in these sectors need to hold one allowance for every tonne of emissions they release. They may receive these allowances for free from the government or buy them in auctions organized by the government.



Time

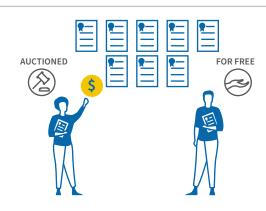
What is a cap?

The government determines the maximum emissions allowed in the ETS, commonly referred to as the 'cap'. The cap can be either set in advance and decline over time (absolute cap) or determined as a function of a desired emission intensity of the production processes (intensity-based cap). The cap should be in line with the jurisdiction's overall emissions reduction target. This provides a long-term market signal so that covered entities can plan and invest accordingly.

CAP = TOTAL AMOUNT OF ALLOWANCES

How are allowances distributed?

Once the cap is set, the government distributes tradable allowances among the covered entities. One allowance represents one tonne of carbon – or the corresponding equivalent – emissions. The government can decide to give allowances out for free (based on past emissions or performance standards) or to auction them off (see also ICAP ETS Brief #6). How allowances are distributed will also affect the way companies manage their emissions.



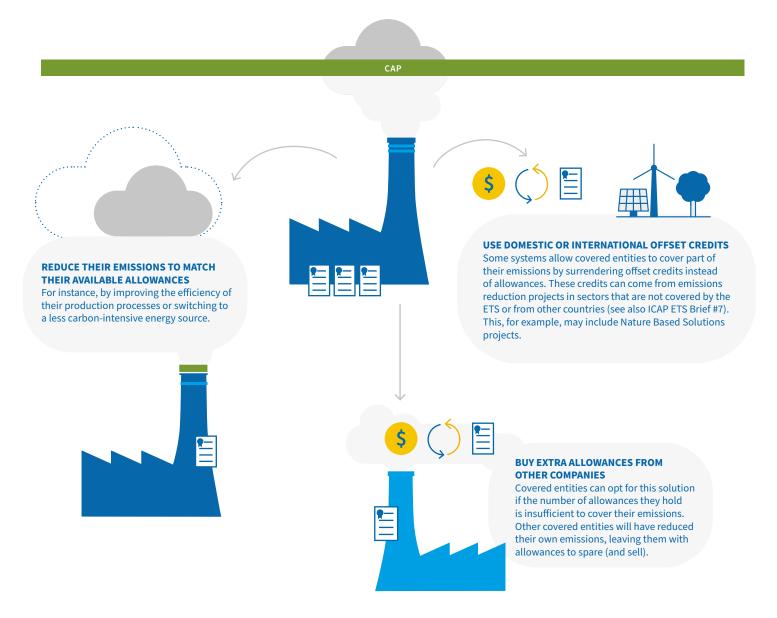
AGRICULTURE SECTOR COVERAGE DOMESTIC AVIATION TRANSPORT

Who is regulated?

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

How can covered entities manage their emissions?

At the end of a trading period (for instance, one year), each covered entity must submit enough allowances to comply with their obligations. Covered entities can meet their compliance obligations by choosing one or more of the following options:





How to ensure the ETS runs effectively?

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

Allowance transactions among ETS participants are tracked through a registry. Safe-guards are in place to help minimize the risk of fraud and manipulation that comes with the financial value of the allowances.