

ALLOCATION: HOW EMISSIONS ALLOWANCES ARE DISTRIBUTED

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. How governments decide to distribute allowances is a fundamental design element of an ETS.



Why allocation matters

Allocation in an ETS refers to the way in which allowances are distributed by the government to covered entities and market participants. The allocation method is key to how covered entities react to the ETS. It can affect how they decide on production volumes, the recipients or direction of new investments, and how much of the emissions costs they pass on to consumers. This means that, in some circumstances, certain methods of allocation can distort the carbon price signal and the related incentives for abatement.

In practice, there are two main ways to allocate allowances: providing them for free or selling them through auctions.

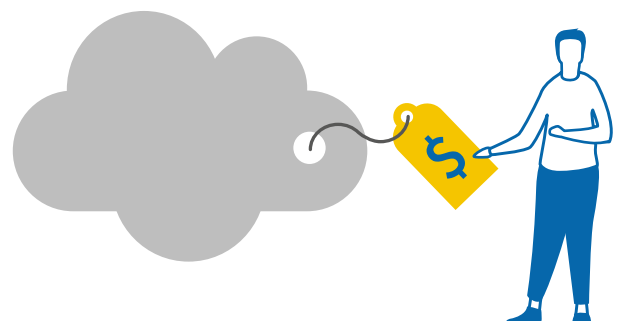
The pros and cons of auctioning and free allocation

Auctioning allowances is considered a straightforward and efficient way to allocate them to those who value them most. Furthermore, it generates revenues, rewards early action, and promotes an active carbon market by revealing a carbon price and encouraging trading (for more on auctioning and ETS revenues, see ICAP ETS Brief #6).

However, free allocation may also be warranted, especially in the early phases of an ETS. Allocating allowances for free can compensate covered entities for their existing carbon-intensive infrastructure and processes. This may smooth the transition into an ETS. Free allocation might also be used to protect covered entities from the potential loss of competitiveness and the risk of carbon leakage. In theory, if ETS-covered entities have competitors in jurisdictions not covered by a carbon price, there is a risk that production and investment could shift to areas with laxer climate regulations – carbon leakage – which would harm the local

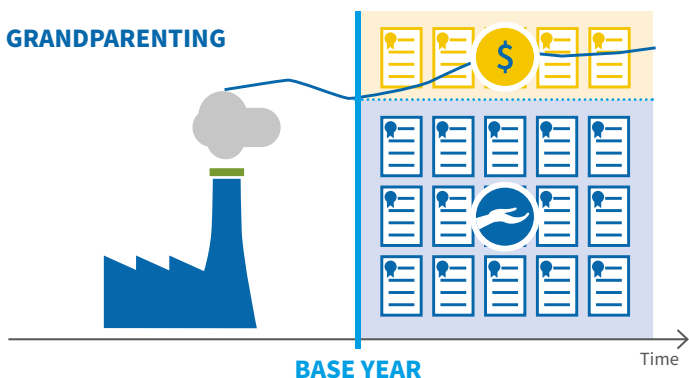
economy and fail to reduce global emissions. Free allocation can compensate these vulnerable sectors for their carbon costs, allowing them to continue to be competitive.

Even when entities are allocated allowances for free, they still have an economic incentive to reduce emissions. This is because if they lower their emissions, they can sell any extra allowances, whereas increasing their emissions means they face additional costs. The strength of this incentive is determined by the method of free allocation.



Different methods of free allocation

GRANDPARENTING – Under grandparenting, covered entities receive free allowances based on their historical emissions, or their historical emissions intensity, from a specified period. Grandparenting has the advantage of being relatively simple with moderate data requirements. However, it may reduce the need to trade in early years and can penalize companies that invest in emissions reductions early on, as these reductions may lower their ‘historical emissions baseline’ and cause them to receive fewer allowances.



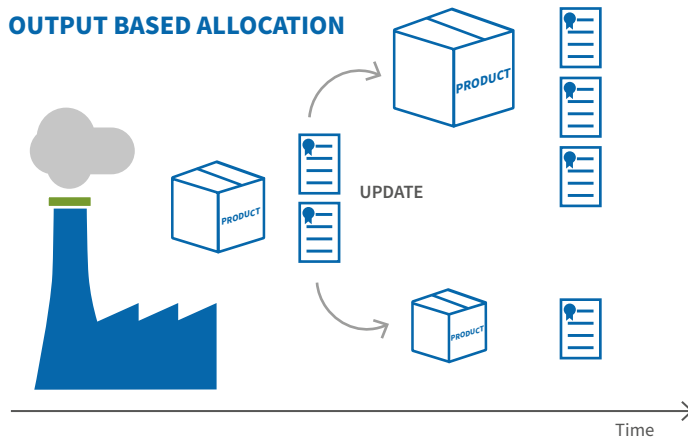
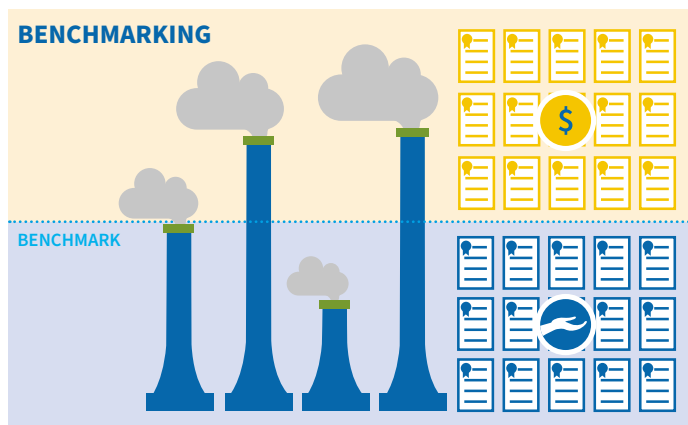
BENCHMARKING – Under benchmarking, covered entities receive free allowances depending on a set of performance standards, commonly referred to as ‘benchmarks’, based on the emissions intensity of a product or across a sector. Benchmarks can address fairness concerns and reward early action. However, benchmarking requires high quality data and a thorough understanding of (often complex) industrial processes.

A common method of benchmarking in an ETS is to establish fixed performance standards for certain products or sectors (‘fixed sector benchmarking’). Benchmarks may be set at the average performance level, at the level of best practice, or a value in between (e.g., the average of the top 10% best performers).

The allocation quota is then determined by multiplying the benchmark value by historical or recent production levels. Covered entities that operate at the benchmark level receive

all the allowances they need for free, whereas more inefficient entities operating above the benchmark level receive only a portion of the allowances needed for their compliance.

The use of auctioning and free allocation varies across ETSs and sectors, depending on their circumstances. Auctioning is often used for the power sector, while free allocation has often been granted to industrial sectors. Typically, auctioning is limited in the early phases of an ETS, but its share tends to grow as the system matures. At least some level of auctioning is considered important to support an active carbon market. In Germany, Austria, Massachusetts and RGGI, there is no free allocation.



	GRANDPARENTING	BENCHMARKING	NO FREE ALLOCATION*
AUCTIONING	MONTENEGRO	QUÉBEC, CALIFORNIA, UK, SWITZERLAND, EU ETS, NOVA SCOTIA, NEW ZEALAND	AUSTRIA, GERMANY, RGGI, MASSACHUSETTS
NO AUCTIONING	TOKYO, MEXICO, SAITAMA, KAZAKHSTAN	CHINA	

* Allowances are sold for a fixed price in the German National ETS and the Austrian National ETS in 2021–2025. The auctioning phase for both jurisdictions will start as planned in 2026. In RGGI, allowances issued by each RGGI state are distributed through quarterly auctions.