ICAP *Brief #8*

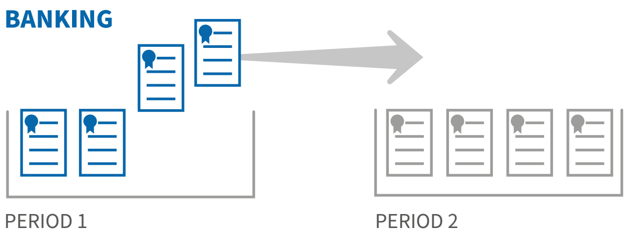
BANKING AND BORROWING

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. They can also trade allowance with other companies. Banking and borrowing are key levers that enable a degree of temporal flexibility within ETSs.

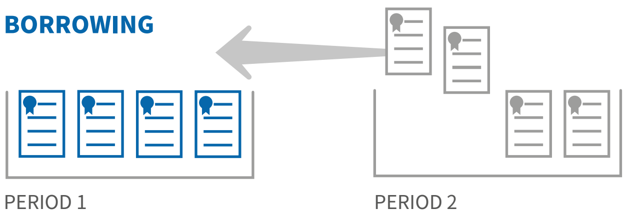
Banking

Banking allows covered entities to save up unused allowances from one compliance period for use in future periods, either to meet their own compliance obligation or to sell to other market participants. By allowing companies to carry forward unused allowances, banking can provide flexibility. This can incentivize early emissions reductions, making it more likely that short-term targets will be met.

Most established ETSs allow banking. This may help create private sector groups with a strong interest in ambitious future targets in order to maximize the value of their banked allowances. Furthermore, banking can enable companies to plan and operate with more confidence in their ability to navigate future price environments.



However, unlimited banking can carry forward the effects of economic shocks, such as an oversupply of allowances. Overreliance on banked allowances can result in higher than ideal emissions levels in the later phases of an ETS.



Borrowing

In contrast to banking, borrowing allows covered entities to postpone buying allowances or reducing emissions (for instance until technology becomes cheaper) by borrowing allowances they would expect to receive for free in future periods. This provides entities with flexibility in determining their compliance strategy. However, by reducing mitigation action in the near term, borrowing can delay the emissions reductions needed to achieve the ETS's environmental objectives. As such, most ETSs have either prohibited borrowing or allow it only to a limited extent.

Risks associated with borrowing

- **GOVERNMENTS MAY NOT BE ABLE TO ASSESS CREDITWORTHINESS:** The covered entities that are the least solvent are likely to want to borrow more. Requiring companies to report net compliance assets and liabilities on their balance sheets is one possible way to promote transparency and oversight by shareholders.
- **INCREASES IN POLITICAL PRESSURE TO DELAY ACTION:** Borrowing allows covered entities to delay abatement, thus potentially creating an active interest to lobby for weaker targets, or even for scrapping emissions trading altogether, so that debts are reduced or cancelled.
- **DELAY AND UNCERTAINTY OVER FUTURE TARGETS:** Depending on the length of the borrowing period, there can be less certainty over whether domestic or international emissions reduction targets will be reached. Delayed mitigation may be inconsistent with these obligations, for example as part of jurisdictions' Nationally Determined Contributions (NDCs).

Restrictions

ETSs can include restrictions on banking and borrowing to overcome the general risks associated with them.

When banking is allowed, it can be restricted in accordance with the net annual number of allowances previously sold or based on facility-specific emissions levels. Some ETSs restrict the banking of allowances between more than two consecutive compliance periods. On the other hand, when unlimited banking is allowed, it can still be indirectly restricted by setting a holding limit on how many allowances a covered entity can possess at any given time.

When borrowing is allowed, it is normally only within the same trading phase and instituted with limits on the percentage of a covered entity's compliance obligation that it can be used to fulfill. Furthermore, a formula can be instituted to limit borrowing that is based on past borrowing activity.

Some ETSs also tag issued allowances with vintages (dates) before which they cannot be used for compliance. These can only be banked or traded, limiting the extent of borrowing.

Length of compliance periods

A compliance period is the fixed time interval during which covered companies need to comply with their emissions reduction obligations. Compliance periods should not be confused with trading periods or phases, which refer to specified time intervals during which certain rules apply to an ETS. In practice, each trading period can often include multiple compliance periods.

The length of compliance periods can vary across different ETSs, typically ranging between one and three years. Longer compliance periods can give covered entities temporal flexibility as to when they can buy allowances or reduce emissions. Within a compliance period, covered entities can reduce emissions whenever it is most efficient, akin to having unlimited banking and borrowing within the period. However, longer compliance periods can raise the same challenges as banking and borrowing more generally.

	UNLIMITED BORROWING	BORROWING WITH RESTRICTIONS	NO BORROWING
UNLIMITED BANKING		EU ETS, UK ETS, SWITZERLAND	BEJING, CHONGQING, FUJIAN, GUANGDONG, RGGI, SHENZHEN, TIANJIN, OREGON
BANKING WITH RESTRICTIONS		CHINA, MASSACHUSETTS, QUÉBEC, MEXICO, REPUBLIC OF KOREA	CALIFORNIA, GERMANY, HUBEI, KAZAKHSTAN, NEW ZEALAND, SAITAMA, SHANGHAI, TOKYO, WASHINGTON
NO BANKING			AUSTRIA, NOVA SCOTIA