OFFSET CREDITS IN 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. The use of offset credits, which represent emissions reductions from projects outside the scope of an ETS, provides an additional source of low-cost abatement options and flexibility for covered entities.

An ETS is inherently flexible, as covered entities may choose to reduce emissions themselves or buy allowances from others that have done so. Some ETSs make use of measures that provide even more flexibility; the use of offset credits and linking with other systems give covered entities geographical flexibility (for more on linking ETSs, see ICAP ETS Brief #4).

Offset credits – reducing emissions outside of the ETS

Offset credits represent emissions reductions from activities outside the scope of an ETS. They are typically generated by emissions reduction or removal projects and certified by crediting mechanisms. Offset credits can be generated domestically, where the mitigation or removal activity takes place outside the ETS-covered sectors but within the same jurisdiction, or internationally, where the activity takes place in another jurisdiction. If the use of offset credits is allowed in an ETS, covered entities can use these to meet (in most cases a part of) their compliance obligation. Typical emissions reduction or removal projects include land use and forestry, waste management, renewable energy, and energy efficiency. As offset credits come from outside of the ETS, they increase the emissions allowed within the ETS (the cap). For this reason, jurisdictions usually limit the number of offset credits that may be used, to ensure that sufficient abatement takes place within the ETS sectors. Furthermore, to maintain the quality of offset credits, they are often limited by type or origin.
Offset credits and environmental integrity

Where offset provisions exist in an ETS presents potential challenges. Offset credits can pose a risk to environmental integrity if they are not additional (i.e., the emissions reduction activity would have happened without the presence of the offsetting provisions), not real (i.e., if emissions reductions do not actually occur), or not permanent (i.e., if emissions reductions are not sustained over the long term). The inclusion of offsetting, if not designed properly, may also create perverse incentives for jurisdictions to implement permissive climate commitments in offset-generating sectors and sources, thus weakening global environmental outcomes. Furthermore, there might be potential for double counting (i.e., if the emissions reduction benefits are claimed by both host and buyer jurisdictions). This highlights the need for robust and transparent accounting measures.

Approaches to offset policy and use in emissions trading

An important decision for governments to make is how and by whom offset credits can be generated – in other words, the governance structure. Jurisdictions can make use of offset credits sourced from an externally managed crediting mechanism, whether multilaterally governed and/or independently administered. Alternatively, a jurisdiction may choose to set up and administer its own domestic crediting mechanism. This involves creating institutions, developing rules, and approving individual projects. On the one hand, using an externally administered system may be simpler but procures less control over the development of the program. On the other, a domestic crediting mechanism can be more easily tailored to suit a local context but incurs much higher administrative costs and requires greater expertise within governments. Intermediate approaches also exist, e.g., by relying on externally administered programs for distinct operational elements, such as accreditation processes and the management of registries.

Why use offset credits?

Allowing offset credits in an ETS provides an additional source of low-cost abatement options for covered entities. In addition, offsetting creates benefits outside the boundaries of the ETS; the possibility to generate and sell offset credits creates incentives to reduce emissions in other sectors and regions. Internationally sourced offset credits provide financial resources for green development in regions where mitigation funding may be scarce. Furthermore, as offsetting makes it cheaper to achieve targets, it can encourage policy makers to set a more ambitious cap. However, given concerns about the environmental integrity of some types of offset credits (see below), the trend recently has been towards a more restrictive approach to offsetting or a focus on domestic rather than international projects.

1 California and Quebec mutually allow offset credits as they are linked to each other.
2 The Swiss and EU ETS have not accepted offsets since 2021.
3 Since 2015, New Zealand has no longer accepted international offset credits. However, under the current legislation, the government can decide to readmit international offset credits, contingent on access to high integrity sources.
4 Korea allows domestic offset credits as well as international CDM credits developed by Korean companies.
5 Nova Scotia’s cap-and-trade legislation initially included the possibility of offsetting; however, the current ETS will end after the compliance deadline in December 2023.

* Up to 5% from projects not located on federally recognized tribal land, plus an additional 3% from projects located on federally recognized tribal land.
** The Kazakhstan ETS is represented out of scale in this infographic.