



Our Views

Carbon credits are a tradable permit scheme. They provide a way to reduce greenhouse gas emissions by giving them a monetary value. A credit gives the owner the right to emit one tonne of carbon dioxide. Carbon credits are generated as the result of an additional carbon project. A can be an emissions allowance which is allocated or auctioned by the administrators of a cap-and-trade program or an offset of Greenhouse Gas equivalent carbon dioxide emissions. An allowance, such as an European Union Allowance (EUA) generally has more value than an offset such as a Certified Emissions Reduction (CER). This is due to the lack of a developed secondary market for CERs, as well as due to the principle of complementarity. An offset generated by a carbon project under Clean Development Mechanism (CDM) or Joint Implementation (JI) is limited in value by the fact that regulated entities in the EU ETS are limited as to what percentage of compliance can be accomplished via these flexible mechanisms.

International treaties such as the Kyoto Protocol set quotas on the amount of greenhouse gases countries can produce. Countries, in turn, set quotas on the emissions of businesses. Businesses that are over their quotas must buy carbon credits for their excess emissions, while businesses that are below their quotas can sell their remaining credits. By allowing credits to be bought and sold, a business for which reducing its emissions would be expensive or prohibitive can pay another business to make the reduction for it. This minimizes the quota's impact on the business, while still reaching the quota.

Credits can be exchanged between businesses or bought and sold in international markets at the prevailing market price.

There are many companies that sell carbon credits to commercial and individual customers who are interested in lowering their carbon footprint. These offset marketers purchase the credits from an investment fund or a carbon development company that has aggregated the credits from individual projects. The quality of the credits are based in part on the sophistication of the fund or development company that acted as the carbon project sponsor.

In addition to the burning of fossil fuels, major industry sources of greenhouse gas emissions are cement, steel, textile, and fertilizer manufacturers. The main gases emitted by these industries are methane, nitrous oxide, hydrofluorocarbons, etc, which increase the atmosphere's ability to trap infrared energy.

The concept of carbon credits came into existence as a result of increasing awareness of the need for pollution control. It was formalized in the Kyoto Protocol, an international agreement between 169 countries. Carbon credits are certificates awarded to countries that are successful in reducing emissions of greenhouse gases.

For trading purposes, one credit is considered equivalent to one tonne of CO₂ emissions. Such a credit can be sold in the international market at the prevailing market price. There are at least four exchanges for carbon credits: the Chicago Climate Exchange, European Climate Exchange, NordPool, and PowerNext.

The Kyoto Protocol provides for three mechanisms that enable developed countries with quantified emission limitation and reduction commitments to acquire greenhouse gas reduction credits. These mechanisms are Joint Implementation (JI), Clean Development Mechanism (CDM) and International Emission Trading (IET). Recently, NordPool listed a contract to trade offsets generated by a CDM carbon project called Certified Emission Reductions (CERs).

Under JI, a developed country with relatively high costs of domestic greenhouse reduction would set up a project in another developed country that has a relatively low cost. Under CDM, a developed country can take up a greenhouse gas reduction project activity in a developing country where the cost of greenhouse gas reduction project activities is usually much lower. The developed country would be given credits for meeting its emission reduction targets, while the developing country would receive the capital and clean technology to implement the project. Under IET, countries can trade in the international carbon credit market. Countries with surplus credits can sell them to countries with quantified emission limitation and reduction commitments under the Kyoto Protocol.

However it is not so easy to understand.===How buying carbon credits attempts to reduce emissions=== Carbon credits create a market for reducing greenhouse emissions by giving a monetary value to the cost of polluting the air. This means that carbon becomes a cost of business and is seen like other inputs such as raw materials or labor.

By way of example, assume a factory produces 100,000 tonnes of greenhouse emissions in a year. The government then enacts a law that limits the maximum emissions a business can have. So the factory is given a quota of say 80,000 tonnes. The factory either reduces its emissions to 80,000 tonnes or is required to purchase carbon credits to offset the excess.

A business would buy the carbon credits on an open market from organizations that have been approved as being able to sell legitimate carbon credits. One seller might be a company that will plant so many trees for every carbon credit you buy from them. So, for this factory it might pollute a tonne, but is essentially now paying

another group to go out and plant trees which will, say, draw a tonne of carbon dioxide from the atmosphere.

As emission levels are predicted to keep rising over time, it is envisioned that the number of companies wanting/needing to buy more credits will increase, which will push the market price up and encourage more groups to undertake environmentally friendly activities that create for them carbon credits to sell. Another model is that companies that use below their quota can sell their excess as 'carbon credits.' The possibilities are endless hence making it an open market.

Managing emissions is one of the fastest-growing segments in financial services in the City of London's financial district with a market now worth about \$30 billion, but which could grow to \$1 trillion within a decade. "Carbon will be the world's biggest commodity market, and it could become the world's biggest market overall."

The Kyoto Protocol established the Clean Development Mechanism as a Flexible Mechanism by which capped entities could develop real, measurable, permanent emissions reductions voluntarily in sectors outside the cap. Criticisms of carbon credits stem from the fact that establishing that an emission of CO₂ equivalent GHG has indeed been reduced involves a complex process. This process has been established in a learning by doing manner as the concept of a carbon project has been refined over the past 10 years.

The first step in determining whether or not a carbon project has legitimately lead to the reduction of real, measurable, permanent emissions is understanding the CDM methodology process. This is the process by which project participants submit, through a Designated Operational Entity (DOE) their concepts for emissions reduction creation. The Clean Development Mechanism Executive Board (CDM EB), along with the CDM Methodology Panel decide which environmental proofs do indeed result in reductions that are additional.