



# The vital role of the voluntary carbon markets and impact of the Inflation Reduction Act on these markets in the US

The development of transparent, sound and efficient voluntary carbon markets (VCMs) is of vital importance to the growing number of companies using carbon credits to help meet their emissions reduction and net zero goals.

The article provides an overview of the VCMs and the impact of the Inflation Reduction Act on these markets in the US.

## The importance of VCMs

Carbon markets exist as mandatory (compliance) schemes and voluntary programs. Mandatory carbon markets (which are also referred to as emissions trading systems (ETSs)) represent a market-based approach to reducing carbon emissions.

VCMs are trading systems in which carbon credits are sold and bought. The VCMs function alongside compliance schemes and enable companies, governments, non-profit organizations, universities, municipalities and individuals to purchase carbon credits (offsets) on a voluntary basis. Market demand from entities and individuals purchasing carbon credits that are created through investments in nature-based or technology-based projects have fueled growth of the sector. Companies or individuals can use carbon markets to compensate for their greenhouse gas (GHG) emissions by purchasing carbon credits from entities that remove or reduce GHG emissions. One tradable carbon credit equals one ton of carbon dioxide, or the equivalent amount of a different GHG reduced, sequestered or avoided. When a credit is used to reduce, sequester, or avoid emissions, it becomes an offset and is no longer tradable.

Unlike the regulatory compliance market - a result of policy or regulatory requirements - the VCM incentivizes project developers (Governments, industries, and individuals) to reach net zero through reduction (changing land management practices), avoidance (switching to renewable energy) or removal (revegetating an area to sequester carbon) of GHGs; it encourages achievement of Sustainable Development Goals (SDGs). While compliance markets make use of independently operated registries, a central regulator establishes or approves all standards used by these independent entities. The independent registries then typically have discretion in how to implement the regulatory standards in a manner most appropriate to the markets they oversee. In contrast to the highly regulated mandatory carbon market, VCMs do not currently involve any direct government or regulatory oversight.

The importance of VCMs is growing, because VCMs help major polluters offset GHG emissions and create innovative ways to solve the climate crisis.

## Inflation Reduction Act marked a historic moment for the advancement of clean energy technologies and decarbonization

The US is entering a new era of climate action. In August 2022, the US's Inflation Reduction Act (IRA) was approved, which represented the outcome of the significantly more ambitious "Build Back Better" Bill. It marked a historic moment for the advancement of clean energy technologies and decarbonization of the US electric grid. This far-reaching Law includes provisions to "finance green power, lower costs through tax credits, reduce emissions, and advance environmental justice". The IRA is intended to reduce US carbon emissions by roughly 40% by 2030 and to reach a net-zero economy by 2050. In support of these goals, the IRA makes "the single largest investment in climate and energy in American history", in the amount of US\$ 369 billion to advance clean energy technologies, reduce GHG emissions, and support environmental justice issues. The Law expands existing tax incentives and introduces incentives for developing technologies, including clean hydrogen, standalone storage, nuclear, sustainable aviation, and transportation electrification provisions.

The IRA has the potential to rapidly transform the US energy grid and spur clean energy innovation that will create more projects and financing opportunities for many energy customers. While the Law does not directly impact the voluntary market, the climate portions of the IRA represent the biggest investment in clean energy sources in US history and are approximately four times larger than the incentives included in the American Recovery and Reinvestment Act of 2009.

The IRA provisions aim to strengthen innovation with investments in new clean energy technologies, expand domestic clean energy production and manufacturing, and lower energy prices for customers. This legislation promises significant progress towards meaningful emissions reductions through the development of clean energy technologies, which will help to make progress toward the US. climate commitment.



The incentives in the IRA pave a path for corporate buyers to step up action and advance climate-related commitments.

The IRA also opens new pathways to transfer private capital into renewable projects. For example, the IRA includes updates to a tax credit located in Section 45Q of the Internal Revenue Code. This credit incentivizes the use of carbon capture, utilization and storage (CCUS) technology. The updates increase the credit values for qualifying technologies, thus increasing the incentive to use these technologies. Further, the updates allow 45Q credit recipients to transfer all or any portion of the credit value to any third-party tax-paying entity in exchange for a cash payment during the credit window. Beyond monetization of 45Q credits, these updates also have the potential to advance the VCMs. Projects utilizing CCUS technology may have the opportunity to sell carbon credits into the market representing their carbon abatement. Thus, if more businesses adopt CCUS technology due to the favorable tax treatment under 45Q, this may also lead to an increased supply of carbon credits, and therefore increase trading, in the VCMs.

The IRA introduces new tax credits and clean energy financing for a range of clean energy technologies, including clean hydrogen, nuclear, storage, carbon capture and sequestration, and electric vehicles. These incentives not only drive investment into the development and deployment of new, emerging technologies needed to drive grid decarbonization, but also provide voluntary buyers with more options to meet their own climate and sustainability goals.

As the voluntary markets are expected to serve a growing role in fulfilling carbon emissions commitments, it is likely that regulation in this space will also increase. Boards of directors and executives, as well as other participants in these markets should keep a close eye on legal and regulatory developments as they consider their use of carbon credits and offsets as part of overall emissions reductions targets and strategy ■

**NHẬT MINH**

(Source: Cleary Gottlieb)

## The global carbon markets need to be more strictly regulated

Governments around the globe have made commitments to limit global warming and reach net zero carbon emissions by 2050 in order to deliver against the targets of the Paris Agreement. Carbon markets have a significant role to play in helping to achieve these commitments by enabling governments and organizations to more effectively manage emissions and emissions reductions limits.

Financial sector regulation of carbon emissions, trading and disclosure will develop given the fundamental need to reduce gross carbon emissions to manage the financial risks of climate change. In the short to medium term, carbon markets will become more highly regulated, in order to introduce greater consistency, reinforce the integrity of sustainability disclosures, and respond to stakeholders' expectations that sustainability information should be transparent and comparable.

### Mandatory and voluntary markets

Carbon markets exist as mandatory (compliance) schemes or voluntary programs. Emissions trading schemes (ETS) usually fall into the first category, with participants identified by governments based on carbon intensity, sector or size. The EU ETS is the world's largest cap and trade scheme, covering just over a third of the EU's GHG emissions.

Under these schemes, a limit (cap) is set on the total amount of certain GHGs that can be emitted by the companies covered by the scheme. The cap is reduced over time so that the total permitted emissions fall. Within the cap, companies buy or receive emissions permits (or allowances) which they can trade with one another as needed. At the end of each year, companies must surrender enough allowances to fully cover their emissions or incur heavy fines.

Conversely, baseline-and-credit mechanisms (also known as carbon credit schemes) are largely voluntary and have typically grown organically to meet the demand from organizations which seek to manage their carbon footprint. These schemes allow the purchase or sale of "carbon credits", which represent a standardized unit of carbon (1 ton CO<sub>2e</sub>) being either removed from the atmosphere or not produced. While ETSs cap the amount of carbon that can be emitted by an organization, carbon credit markets allow companies to manage the impact of their emissions more proactively.

Voluntary markets function independently of compliance markets, and the credits traded cannot be used to meet the legal and regulatory obligations placed on organizations by compliance markets.

### Increasing the legal and regulatory for carbon markets

The global landscape for carbon markets has developed rapidly leading to a patchwork of regulations and standards. Standards are heavily influenced by organizations operating in the voluntary markets. Mandatory frameworks are also being reviewed. Therefore, Carbon Border Adjustment Mechanism