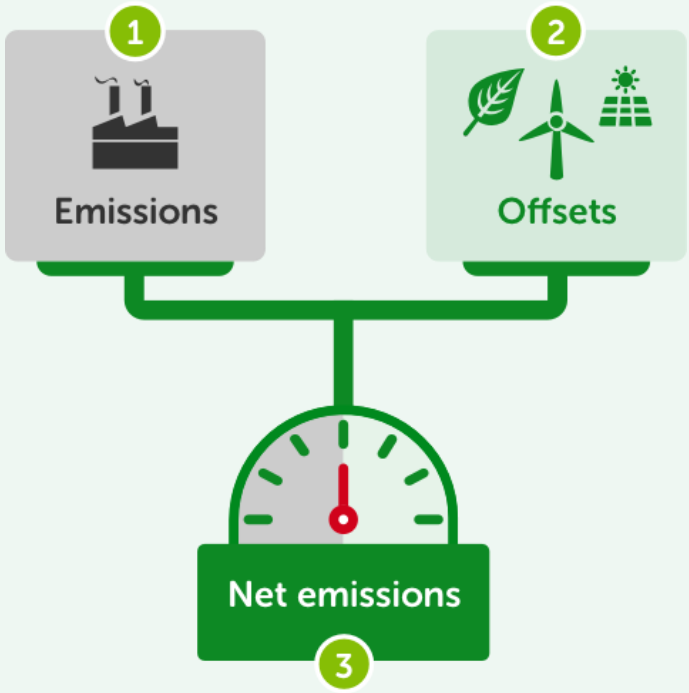


THE NIGERIA EMISSIONS TRADING SCHEME (ETS)

CARBON TRADING MARKET

THE NATIONAL COUNCIL ON CLIMATE CHANGE
LEADING NIGERIA'S CLIMATE CHANGE RESPONSE

Rosehill GROUP
RC: 371095

BACKGROUND

Nigeria, like other parties to the United Nations Framework Convention on Climate Change (UNFCCC) and other treaties aimed at stabilizing greenhouse gas (GHG) emissions (i.e. the Kyoto Protocol and Paris Agreement), participated actively in the 2021 UN Climate Change Conference (COP26) which took place between October and November 2021 in Glasgow.

The goals of COP26 were for countries to renew their commitment to securing net-zero targets by mid-century and to keep the 1.5 degrees target within reach; protect communities and natural habitats; mobilize finance to deliver on the first two goals; and to work together to deliver on the various goals.

During COP26, Nigeria committed to achieve net-zero by 2060, and barely a week after the conference, President Muhammadu Buhari signed into law the Climate Change Act, 2021 (the Act), which was passed by the National Assembly in October 2021.

In order to protect the Nigerian environment and ecosystem from the ravages associated with climate change and to achieve the reduction of greenhouse gas emissions in Nigeria, The Act seeks to provide a framework for achieving low GHG emissions and to mainstream climate change actions into national plans and programmes.

The expectation is that the implementation of the Climate Change Act will enable Nigeria to achieve a reduction of greenhouse gas and carbon emissions to internationally acceptable levels. Private entities should be aware of their obligations and put in place the necessary structures that will ensure they are compliant with the Climate Change Act.

The Climate Change Act establishes the National Council on Climate Change (the "Council") which is vested with the powers to develop policies and make decisions on all matters concerning climate change in Nigeria.

The Federal Government of Nigeria took a big step to address the climate change challenge by establishing its Emission Trading Scheme (ETS), to provide recommendations that will guide the transition to a green economy.

The conversation for the Emissions Trading Scheme started with concerns around global warming and Greenhouse Gases (GHG) resulting in a series of urgent legislations and innovative strategies to reduce greenhouse gas emissions. In December 1997, the

BACKGROUND

Kyoto Protocol was adopted by 192 parties to operationalize the United Nations Framework Convention on Climate Change (UNFCCC). Part of the commitment of parties under the Kyoto Protocol is to accept limits and targets to limit or reduce GHG emissions with compulsory targets. Nigeria is showing leadership on the African front in the launching of the trading scheme in line with the legal framework provided in the Climate Change Act of 2021 for the reduction of greenhouse gas emissions through a carbon market approach to meet its Net Zero target.

The launching of the Emission Trading Scheme (ETS) signals the commencement of activities that would lead to the establishment of the Nigeria Emissions Trading Scheme, sensitization of the public, and ensuring coordination with other relevant arms government/development partners under the leadership of the Federal Ministry of Environment, with the active collaboration of the Federal Ministry of Trade & Industries.

Emissions Trading, also known as 'cap-and-trade', is a market-based trading system that aims to provide economic incentives for countries and businesses to reduce their total carbon emissions, where a regular or government sets a limit or cap on the maximum levels of emission and creates permits or allowances for the allowed unit of emission to be traded under the cap. When a government allocates units of emission at the start of a compliance period, firms can trade their permits or allowances according to their emission needs. Firms with more emissions will buy more permits while firms that stay under their allocated unit or emit less can sell permits. Also, firms that expect not to have enough permits must either cut back on their emissions or buy permits from another firm, creating a new commodity in the form of emission reductions or removals.

In August 2022, the Nigeria government announce its intention to adopt the Emissions Trading Scheme (ETS), and establish the Nigeria Emissions Trading Scheme which provides policy recommendations and measures for meeting the country's net zero greenhouse gases emission target, in line with the Climate Change Act, 2021.

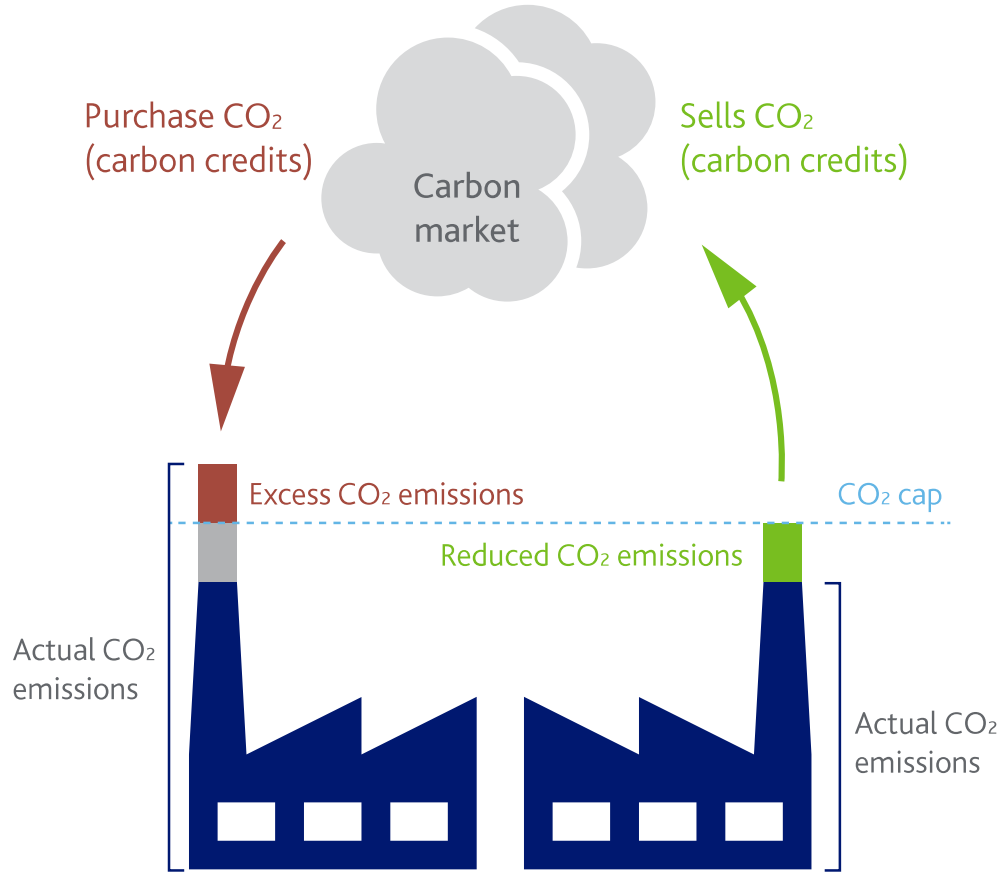
This development will provide critical first steps in investigating the impacts of GHG emissions on all sectors, from transport to energy, aviation and even construction and deliver effective mechanism for carbon pricing for Nigeria.

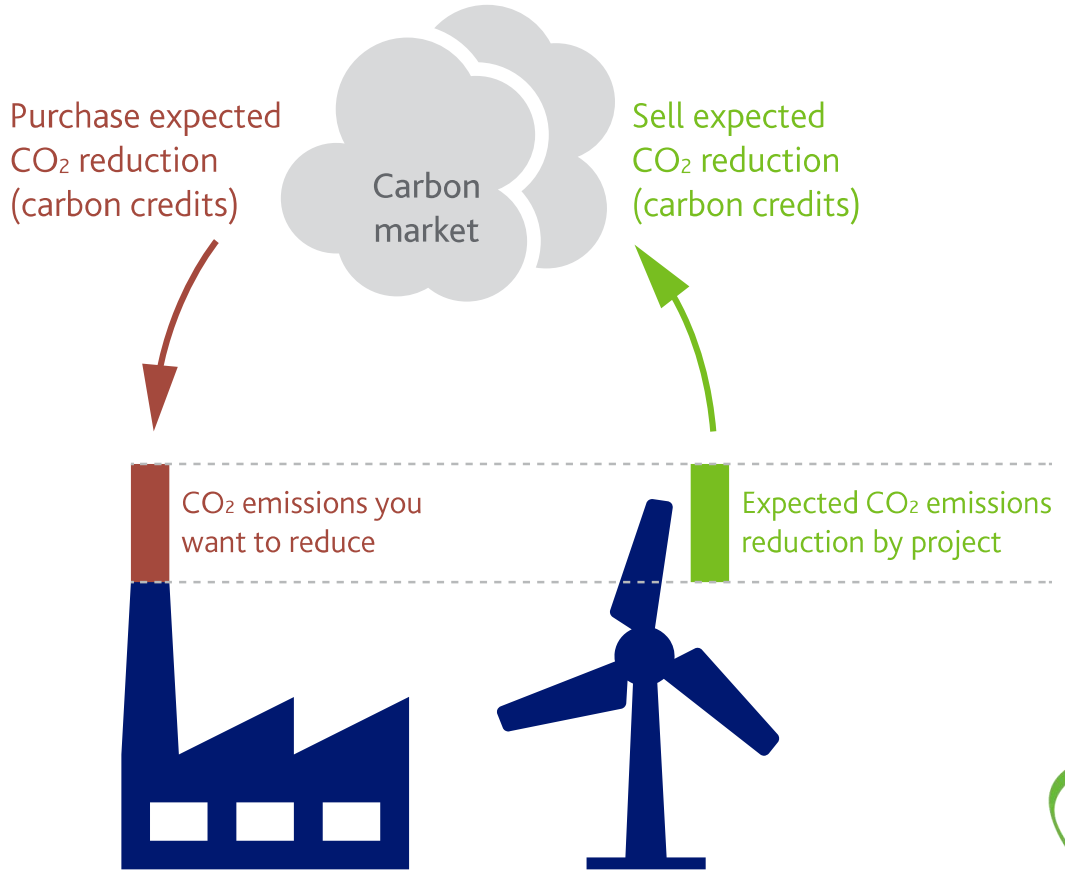
RHG has been mandated by the President and the National Council on Climate Change (NCCC), to collaborate with, and render technical and strategic support to the Council with respect to the actualization of the Council's mandate to establish a framework of the development of an orderly and structured Emission Trading System (ETS) for both voluntary and mandatory carbon markets, adopting strategies and other measures aligned with national aspirations and development plans.

VOLUNTARY AND MANDATORY CARBON CREDIT MARKET

Mandatory market → Voluntary market

Optional: Carbon credits from mandatory markets **can** be sold to the voluntary market





VOLUNTARY AND MANDATORY CARBON CREDIT MARKET

What is the difference between the mandatory and voluntary carbon credit market?

As its name suggests, the mandatory market is used by companies and governments that are legally mandated to offset their emissions. The countries that have joined these markets are those that have accepted and adopted the emission limits established in the Framework of the United Nations Convention on Climate Change (UNFCCC).

Nigeria is a signatory to the UNFCCC, approved the Naturally Determined Contribution (NDC) in 2021, and established a National Council on Climate Change to meet Zero target by 2060.

The voluntary carbon market, on the other hand, operates outside the compliance markets but in parallel, allowing private companies and
individuals to purchase carbon credits on a voluntary basis.

Who regulates the mandatory carbon credit market?

This market is regulated through international, regional and sub-national carbon reduction schemes, such as the Clean Development Mechanism under the Kyoto Protocol, the European Union Emissions Trading Scheme (EU-ETS) and the California Carbon Market.

Each ton of CO2 is measured in carbon credits or CERs (Certified Emission Reductions). These credits or CERs are generated in the implementation phase of the project; and are issued once the reduction has been credited.

Projects wishing to offer CERs in the market will need to have their emission reductions validated by Designated Operational Entities (validators and verifiers) and registered by the CDM Executive Board to ensure that real and measurable emission reductions are achieved.

VOLUNTARY AND MANDATORY CARBON CREDIT MARKET

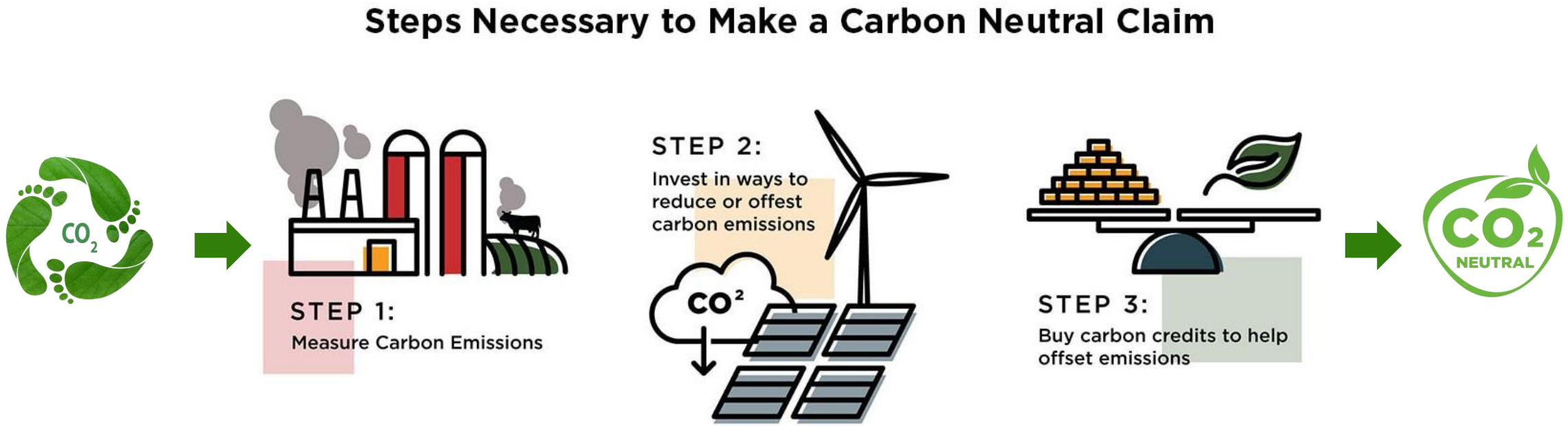
How does the voluntary carbon credit market work?

The main objective for acquiring Verified Emission Reduction (VER) credits, is to neutralize the **carbon footprint**, motivated mainly by Corporate Social Responsibility (CSR) and public relations.

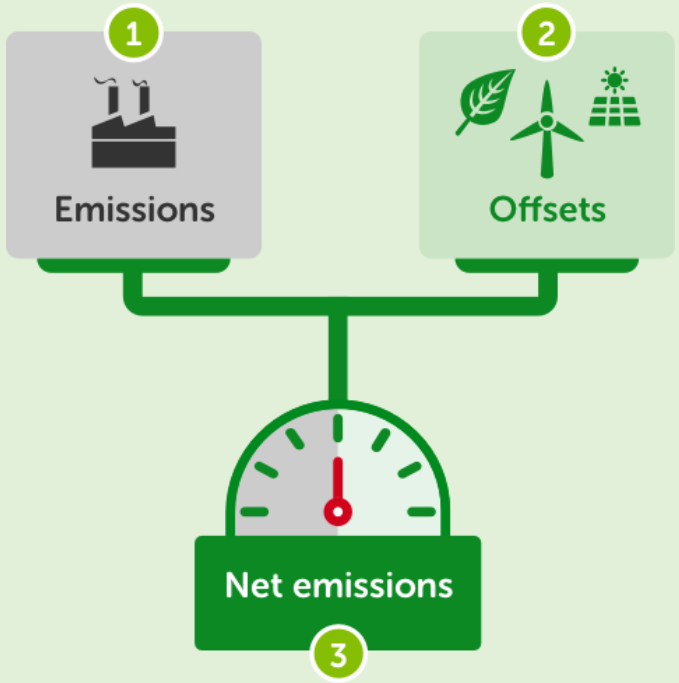
Other reasons are considerations such as certification, reputation and environmental and social benefits.

Companies and individuals can acquire or buy carbon credits directly from projects, companies or carbon funds. However, as in the regulated market, all VERs must be verified by an independent third party and must be developed and calculated according to one of the existing VER standards.

Basically, the main difference is that a VER (voluntary market), unlike CERs (mandatory market), cannot be used to achieve obligations under the Kyoto Protocol compliance regime. However, a CER can be accepted by entities wishing to voluntarily offset their carbon footprint.



UNDERSTANDING CARBON OFFSETS



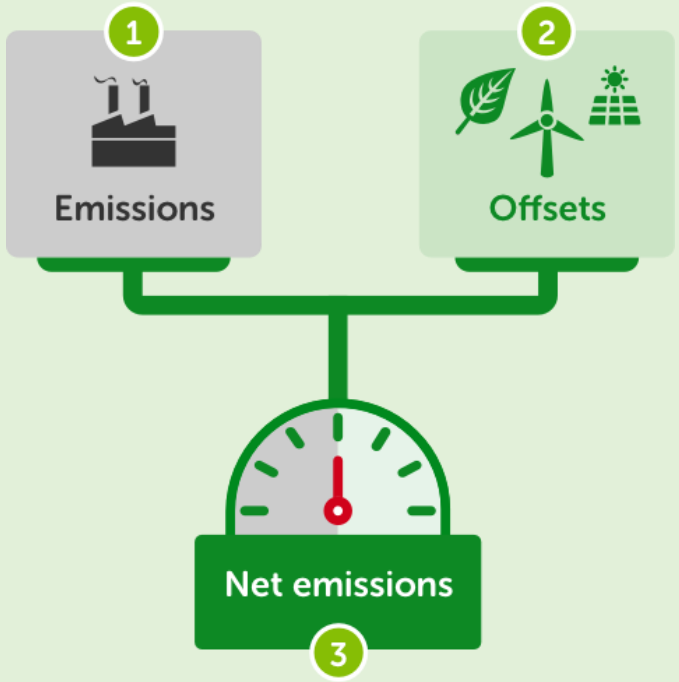
Carbon markets exist under both mandatory (compliance) schemes and voluntary programs. Compliance markets are created and regulated by mandatory national, regional, or international carbon reduction regimes. Voluntary markets function outside of compliance markets and enable companies and individuals to purchase carbon offsets on a voluntary basis with no intended use for compliance purposes. Compliance offset market credits may in some instances be purchased by voluntary, non-regulated entities, but voluntary offset market credits, unless explicitly accepted into the compliance regime, are not allowed to fulfill compliance market demand.

The concept of carbon offsetting arose in the late 1980s, as policymakers first began to seriously grapple with how to mitigate climate change. Although the first demonstrations of carbon offset projects involved voluntary arrangements, the idea evolved into a tool for controlling costs within broader “market mechanisms” for addressing GHG emissions, including emissions trading systems. The first and largest carbon offset program was the CDM, established under the Kyoto Protocol as a mechanism to allow developed countries to cost-effectively meet emission reduction obligations by investing in mitigation in developing countries. As the comparison of offset programs suggests, a number of other regulatory emissions trading systems have also incorporated carbon offset credits as a compliance tool. Because demand for compliance offset credits is driven by regulatory obligations, their prices tend to be higher than offset credits issued solely for the voluntary market.

Voluntary carbon offset programs started to develop after 2005, as the CDM became more established and the corporate social responsibility (CSR) community began to recognize that there was a demand for these instruments beyond just regulated companies and countries to the Kyoto Protocol. There is now a variety of carbon offset programs primarily (or exclusively) serving the voluntary market comprised primarily of corporations wishing to make GHG emission reduction claims.

In some cases, voluntary carbon offset programs have influenced and interacted with compliance markets. In California, for example, the Climate Action Reserve (CAR) developed a series of voluntary offset project protocols that were subsequently adopted (with some modification) in the California Compliance Carbon Offset Program. Offset credits issued under these protocols by CAR prior to the start of California’s cap-and-trade program were able to transition over and become eligible for compliance. Countries like Mexico and South Africa have also recognized offset credits issued by voluntary programs as a means of complying with carbon tax obligations.

UNDERSTANDING CARBON OFFSETS



GOLD STANDARD

The Gold Standard (GS) is a voluntary Carbon offset program focused on progressing the united nation's Sustainable Development Goals (SDGs) and ensuring that project's benefits their neighboring communities. The GS can be applied to voluntary offset projects and to Clean Developments Mechanism (CDM) projects. It was developed under the leadership of World Wildlife Fund (WWF), HELIO International, and South-south North, with a focus on offset projects that provide lasting social, economic, and environmental benefits.

The GS CDM was launched in 2003 after a two-year period of consultations with stakeholders, governments, non-governmental organizations, and non-private sectors specialists from over 40 countries. The GS for voluntary offset projects (GS VER) was launched in 2006. The GS project registry – containing all projects implemented through the standard was launched in 2018.

For projects to be accepted by GS they must conduct additional assessment of the project's communal impact and ensure neighboring populations are benefitting.

Project on the "Great Green Wall Initiative." For this, a "green wall" of tress will be planted across the dry-land area of Nigeria to push back deforestation and secure agriculture and livelihood across the Sudan-Sahel zone of the country. This initiative will address not only climate change, but the UN Millennium development goals a well. There is also the Presidential Initiative on Da potential project for REDDT Afforestation Programed for Environmental Sustainability which targets about 40 million trees to be planted annually.

The government recognizes that much more need to be done and has placed climate change issues high on its development agenda. Efforts are now being accelerated to ensure that climate risks will be integrated into national development projects and strategies.

UNDERSTANDING

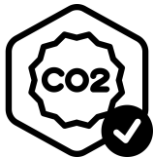
- CARBON CREDIT
- CARBOM REGISTRY
- CARBON FOOTPRINT
- CARBON CERTIFICATE
- CARBON AUDITS

CARBON CREDIT

Carbon credit is an instrument that represents one (1) tonne of carbon dioxide (CO2) or greenhouse gas (GHG) emissions removed from the atmosphere. Carbon credits are given to companies whose activities benefit the climate either by removing CO2 from the air or preventing it from being emitted in the first place.

CARBON FOOTPRINT

A carbon footprint is the total amount of greenhouse gases (including carbon dioxide and methane) that are generated by our actions or activities.



CARBON REGISTRY

A carbon registry system is a platform that allows organizations to track, manage and trade greenhouse gas emissions (GHG emissions). Carbon registries are essential because they provide a way for companies and governments to measure, report and verify emission reductions.

CARBON CERTIFICATE

Carbon certificates represent the amount of emissions for which financial responsibility is assumed through support for climate protection projects. One certificate corresponds to one tonne of greenhouse gases.

CARBON AUDITS

Carbon audits measure the greenhouse gas emissions (GHG) of a business or an organisation, giving building owners the information, they need to reduce GHG by embracing more cleaner and renewable energy and improving energy efficiency and promoting energy conservation.

FAQ ON ARTICLE 6 OF PARIS AGREEMENT AND INTERNATIONALLY TRANSFERRED MITIGATION OPTIONS (ITMOs)

What is an ITMO?

Internationally transferred mitigation outcomes (ITMOs) use a carbon dioxide equivalent [CO2e] metric for a new set of market provisions or other greenhouse gas (GHG) mitigation outcomes that are defined under Article 6 of the Paris Agreement. Under Article 6.2, ITMOs differ from previous offset schemes, as they count toward countries' Nationally Determined Contributions (NDCs), support overall mitigation in global emissions (for Article 6.4) and involve more substantial government participation than under the Clean Development Mechanism of the Kyoto Protocol. Although the Paris Agreement rulebook is not fully finalized, enough has been agreed for some countries to begin engaging and planning for ITMO transactions.

What is in Article 6.2 of the Paris Agreement?

Article 6 of the Paris Agreement makes provisions for voluntary international cooperation between parties to achieve NDC targets. Sub-section 6.2 calls for transparency and the avoidance of double counting when two parties engage in the international transfer of emission reductions known in the Agreement as Mitigation Outcomes. This sub-section implies that two parties can enter into an agreement whereby one party reduces carbon emissions and transfers those reductions to the other party which counts it towards its NDC targets. It is assumed that the receiving party will provide financial compensation to the transferring party.

How does Article 6.2 help a country achieve its NDC commitment?

Transferred mitigation outcomes contribute to the NDC targets of the party that purchases the ITMO. The selling party must make a corresponding adjustment which means that it has to "un-count" these mitigation outcomes from the emission reductions that contribute to its NDC targets.

What are the benefits to the selling party and benefits to the purchasing party?

For the selling party, selling ITMOs is an innovative way to channel investments into low- carbon projects. The payments for the ITMOs can leverage finance and stimulate investment into projects that contribute to its sustainable development. As stated above, the ITMOs sold to the buyers cannot count towards the selling countries NDC, but mitigation benefits can be achieved in the long-term. It is assumed that a contract for International Transferred Mitigation Outcomes (ITMO) is shorter (usually 5-6 years) than a mitigation project, therefore, when the ITMO contract expires and the payments/ transfers stop, if the project continues producing mitigation outcomes, this will be accounted against the selling Party's NDC.

For the buying country, buying the ITMOs enables it to meet its NDC target in a cost-efficient way.

FAQ ON ARTICLE 6 OF PARIS AGREEMENT AND INTERNATIONALLY TRANSFERRED MITIGATION OPTIONS (ITMOs)

How do you find parties that want to engage in ITMO transactions?

At the moment, there is one active state buyer of ITMOs; Switzerland. Nordic countries through the Nordic Environment Finance Corporation (NEFCO) are considering engaging in ITMO transactions. The World Bank has set-up the Transformative Carbon Asset Facility (TCAF) to buy mitigation outcomes from Article 6 projects which will be used by the donors of the Facility against their targets. The TCAF considers buying a portion of the mitigation outcomes so that the other portion can count towards the selling party's NDC target. The other group of buyers are companies which buy mitigation outcomes to voluntarily offset their emissions (mainly flight emissions). Most offsetting projects are small but there are also some large buyers such as oil companies.

What contractual agreements should be in put place to engage in ITMO transactions?

This depends on the buyer. In the case of Switzerland, a bilateral legal agreement between the two participating countries is needed to govern the overall ITMO programme. In addition to that, the official buyer of the Swiss government, the KliK Foundation – will sign an Emission Reduction Purchase Agreement (ERPA) which defines the Terms and Conditions related to the purchase of the emission reductions. These contracts are usually signed with project developers that provide upfront finance for project implementation. The ERPA can potentially be used as a collateral for loans required for the implementation of the projects. The actual ERPA payments are made only ex-post upon verification of the achieved mitigation outcomes.

What monitoring system should be in place before engaging in an ITMO transaction?

The country will need an MRV system that fulfils all Biennial Transparency Report (BTR) requirements of the Paris Agreement and can track mitigation outcomes at project level. The transferred mitigation outcomes will be included in the national registry and reported as ITMOs to UNFCCC through the BTR. UNDP is providing support for development of BTR eligible MRV systems in some countries.

Who can implement ITMO projects?

Each ITMO project is governed by a state-to state bilateral agreement. Individual projects implemented within the scope of the bilateral agreement require a government authorization but can be implemented by the private sector.

Can an existing project be an ITMO project?

This will depend on the rules agreed by the two governments involved. In the case of Switzerland, it's not possible.

FAQ ON ARTICLE 6 OF PARIS AGREEMENT AND INTERNATIONALLY TRANSFERRED MITIGATION OPTIONS (ITMOs)

What are the consequences of engaging in an ITMO contract when the Paris Agreement rulebook regarding Article 6.2 is not finalized?

The Paris Agreement rulebook will not regulate Article 6.2 and it will always be at the discretion of the participating governments to define their rules and regulations within the broader goal of the Paris Agreement.

Who receives the ITMO payments, the government or the ITMO project developer?

It depends who signs the ERPA with the buyer. It can be a public entity or a private sector actor. If the government, investments will have to be made by the government upfront to implement and successfully operate the project in order to allow a project to generate mitigation outcomes.

What is the role of the government if the ITMO project is implemented by a private entity?

The government will authorize the project, approve the validation and verification reports (replace the UNFCCC Secretariat's as we have known it under the CDM), make corresponding adjustments and track the mitigation outcomes through the BTR reporting.

What is the role of UNDP in facilitating ITMO transactions?

The goal of this FAQ is to make countries aware of the opportunities and potential benefits of selling ITMOs UNDP will have no role in the negotiations between the Parties. For implementation of the ITMO programme, UNDP can conduct due diligence on participating companies, sign performance-based payment agreements and make the actual payment to companies based on their verified mitigation outcomes. UNDP can support the development of the detailed project design document which outlines how the project will be implemented and the mitigation outcomes it is expected to generate. In addition, UNDP can engage third parties who will be required to validate the volume of mitigation outcomes estimated ex-ante, and verify the final calculations of mitigation outcomes produced, ex-post. Furthermore, UNDP can participate in steering committee meetings where the validation and verification reports are reviewed and approved. Finally, UNDP can facilitate the impact assessment of the project if required in the cooperation agreement.

FAQ ON ARTICLE 6 OF PARIS AGREEMENT AND INTERNATIONALLY TRANSFERRED MITIGATION OPTIONS (ITMOs)

What are the consequences of engaging in an ITMO contract when the Paris Agreement rulebook regarding Article 6.2 is not finalized?

The Paris Agreement rulebook will not regulate Article 6.2 and it will always be at the discretion of the participating governments to define their rules and regulations within the broader goal of the Paris Agreement.

Who receives the ITMO payments, the government or the ITMO project developer?

It depends who signs the ERPA with the buyer. It can be a public entity or a private sector actor. If the government, investments will have to be made by the government upfront to implement and successfully operate the project in order to allow a project to generate mitigation outcomes.

What is the role of the government if the ITMO project is implemented by a private entity?

The government will authorize the project, approve the validation and verification reports (replace the UNFCCC Secretariat's as we have known it under the CDM), make corresponding adjustments and track the mitigation outcomes through the BTR reporting.

What is the role of UNDP in facilitating ITMO transactions?

The goal of this FAQ is to make countries aware of the opportunities and potential benefits of selling ITMOs UNDP will have no role in the negotiations between the Parties. For implementation of the ITMO programme, UNDP can conduct due diligence on participating companies, sign performance-based payment agreements and make the actual payment to companies based on their verified mitigation outcomes. UNDP can support the development of the detailed project design document which outlines how the project will be implemented and the mitigation outcomes it is expected to generate. In addition, UNDP can engage third parties who will be required to validate the volume of mitigation outcomes estimated ex-ante, and verify the final calculations of mitigation outcomes produced, ex-post. Furthermore, UNDP can participate in steering committee meetings where the validation and verification reports are reviewed and approved. Finally, UNDP can facilitate the impact assessment of the project if required in the cooperation agreement.

ACCELERATING THE NET ZERO AMBITION

The Vision of the National Policy on Climate Change is a climate change resilient Nigeria for rapid and sustainable socio-economic development. Its mission is to strengthen national initiatives to adapt to and mitigate climate change in a participatory manner involving all sectors of Nigeria society, including the poor and other vulnerable groups (women, youths etc.) within the overall context of advancing sustainable socio-economic development in Nigeria.

National efforts to address climate change in a policy responsive and strategic way are guided by a number of principles including the following:

- Strategic climate change response is consistent with national development priorities
- Climate change addressed within the framework of sustainable development, which ensures that climate change response must be sensitive to issues of equity, gender, youth, children and other vulnerable groups.
- The use of energy as a key driver for high economic growth is pursed within the broad context of sustainable development
- Mitigation and adaptation are integral components of the policy response and strategy to cope with climate change
- Climate change policy is integrated with other interrelated policies towards promoting economic and environment efficiency.
- Climate change is cross-cutting and demands integration across the work programmes of several government Ministries/Agencies/Parastatals and stakeholders, and across sectors of industry, business and the community.
- Climate change response provides viable entrepreneurship opportunities.

ACCELERATING THE NET ZERO AMBITION

SECTORAL ADAPTION AND MITIGATION PROGRAMMES

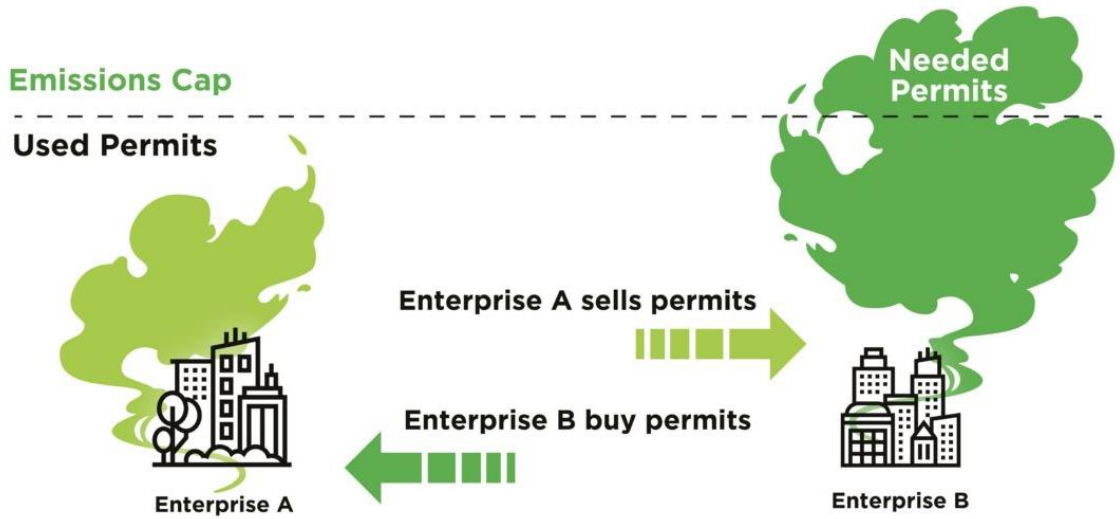
The National Climate Change Policy and Response Strategy has identified adaptation and mitigation intervention in key sectors. Some specific adaption and mitigation actions include:

- Energy: Ensuring adequate energy for sustainable rapid socio-economic development without substantially increasing the sector's GHG emissions.
- Agriculture: Developing and integrated agricultural intervention plan to reduce the sector's vulnerability to climate change and enhance its productivity for food security and poverty reduction.
- Water: Regulatory and fiscal measure to manage the supply of water including watershed re-charge.
- Coastal Areas: Actively support the actualization of the Integrated Coastal Zone Management (ICZM) Plan of the Gulf of Guinea and domesticate it for Nigeria in terms of an Integrated Coastal Area Management Plan.
- Forestry and Land Use: Increase Forest covers through afforestation, reforestation and prevention of deforestation.
- Transport: Promote the use of efficient means of transport on all transport modes by limiting new acquisitions to those low emission ratings including electric vehicle.
- Health: Promote community resilience in the area pf environment health to reduce vulnerability to climate change.
- Culture and Tourism: Build knowledge of the impact of culture and tourism and simple procedures to adopt for adaption.

EMISSION TRADING SCHEME

Emissions trading, also known as 'cap and trade', is a cost-effective way of reducing greenhouse gas emissions. To incentivize firms to reduce their emissions, a government sets a cap on the maximum level of emissions and creates permits, or allowances, for each unit of emissions allowed under the cap. Emitting firms must obtain and surrender a permit for each unit of their emissions. They can obtain permits from the government or through trading with other firms. The government may choose to give the permits away for free or to auction them.

Firms that expect not to have enough permits must either cut back on their emissions or buy permits from another firm. For a given permit price, some firms will find it easier, or cheaper, to reduce emissions than others and will sell permits.



If there are too many such firms in the market, the price of permits, the total number of which is set in advance by the cap, will decline, inducing some firms to reduce their emissions reduction efforts. Only when the price of permits is just right will the number of permits offered for sale by firms that can reduce emissions at low cost be equal to the number of permits demanded by firms for which emissions reductions are costly. This process of trading ensures there is a unique price for all firms coordinating their activities and drives down emissions to the level allowed under the cap cost-effectively.

EMISSION TRADING SCHEME

If there are too many such firms in the market, the price of permits, the total number of which is set in advance by the cap, will decline, inducing some firms to reduce their emissions reduction efforts. Only when the price of permits is just right will the number of permits offered for sale by firms that can reduce emissions at low cost be equal to the number of permits demanded by firms for which emissions reductions are costly. This process of trading ensures there is a unique price for all firms coordinating their activities and drives down emissions to the level allowed under the cap cost-effectively.

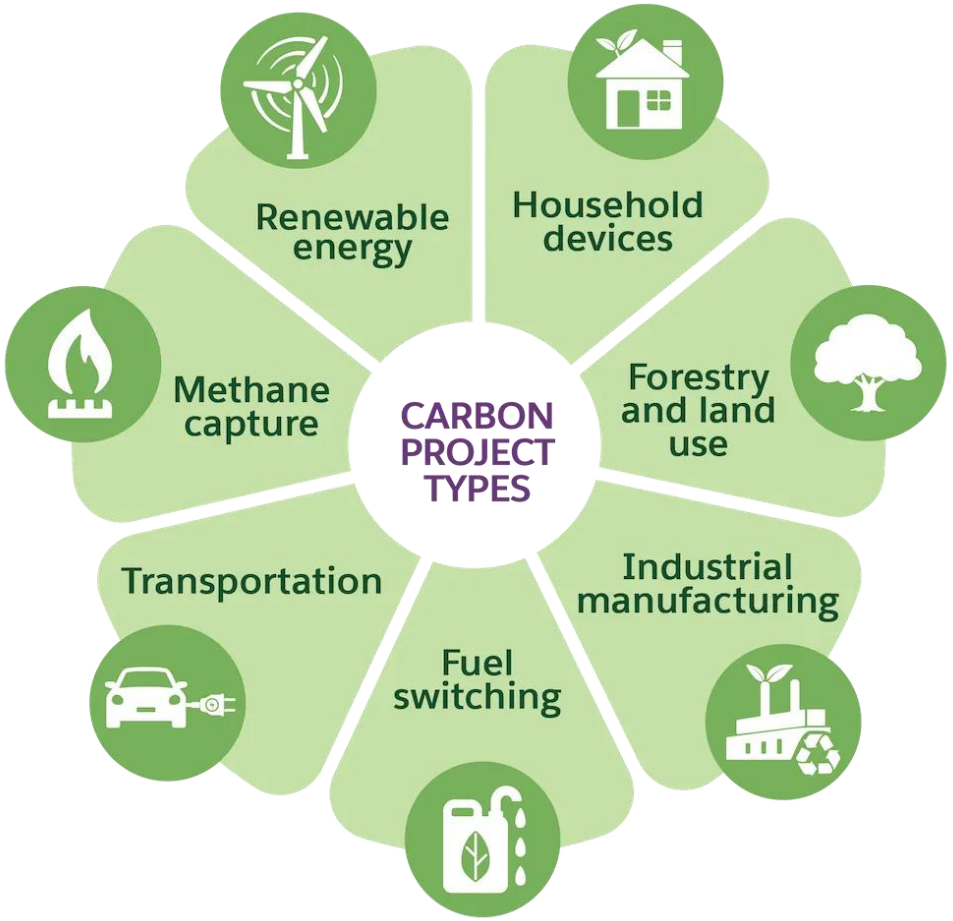
Of course, there is no reason to expect that a permit price that clears the market at a point in time will continue to do so in the future. As economic conditions and emitting firms' circumstances change, permit prices will fluctuate, becoming more expensive when demand is high relative to supply (for example when the economy is growing robustly) and cheaper when demand is lower (for example when ample renewable electricity reduces the requirement for thermal generation firms).

The origins of cap-and-trade programmes to control pollution date back to the 1980s and 90s when they were successfully used in the United States to phase out lead in petrol and to reduce Sulphur dioxide and nitrous oxide emissions to combat acid rain.

What role does emissions trading play in reducing climate change?

Emissions trading is widely considered a key part of efforts to reduce the manmade greenhouse gas emissions that are causing climate change. The setting of caps is informed by scientific evidence of the emissions cuts needed to limit climate change, including meeting the Paris Agreement target of keeping temperature rise well below 2°C this century. For example, the European Union describes its emissions trading system – the world's largest – as 'a cornerstone' of its climate change policy. It attributes past success in reducing emissions to the system and predicts that in 2020 emissions from the sectors it covers will be 21% lower than in 2005. Research has also shown that the EU emissions trading system has helped to drive innovation in low-carbon technologies such as renewable power sources and energy efficiency, one of the original objectives of the system. Increased use of these technologies also helps to reduce greenhouse gas emissions.

EMISSION TRADING SCHEME



PROJECTS

STAKEHOLDERS

TECHNOLOGY FRAMEWORK

WHAT ARE CARBON TRADING PLATFORMS?

A short answer would be that the UN Carbon Offset Platform is an e-commerce platform where a company, an organization or a regular citizen can purchase units (carbon credits) to compensate greenhouse gas emissions or to simply support action on climate.

WHAT IS BLOCKCHAIN TECHNOLOGY FOR CARBON CREDITS?

Blockchain is a method of recording information that makes it impossible or difficult for the system to be changed, hacked, or manipulated. A blockchain is a distributed ledger that duplicates and distributes transactions across the network of computers participating in the blockchain.

Blockchain technology is a structure that stores transactional records, also known as the block, of the public in several databases, known as the “chain,” in a network connected through peer-to-peer nodes. Typically, this storage is referred to as a ‘digital ledger.’

The blockchain is a computer-based system that use digital keys to prove and display who owns what. A blockchain combined with a central registry of carbon credits helps ensure that those who are carrying out green projects aren't selling the credit for one tonne of emissions reductions to more than one buyer.

Blockchain technology could be an effective tool to expand voluntary markets and increase their accessibility primarily through the ease of transparent credit tracking. The possibility of using a transparent, distributed ledger to aggregate small buyers could help everyday consumer offset their environmental impact. However, any new crypto-marketplace will still need to ensure the integrity of offsets through the use of verifiable and quantifiable project protocols. If the integrity of offsets can be met with lower cost through blockchains then voluntary individual buyers could have access to the market that was previously difficult to access.

Rosehill Group Limited

1, Asokoro Island Hilltop, Murtala Mohammed Way, Asokoro, Abuja. Nigeria

+234 818 883 7700
+234 706 088 8866

info@rosehillgroupe.com

www. rosehillgroupe.com