

CARBON OFFSETTING

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CORPORATE & INSTITUTIONAL BANKING
GLOBAL MARKETS

2024



BNP PARIBAS

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The bank for a changing world



01

PATH TO NET ZERO
EMISSIONS



Global emissions of carbon dioxide (CO₂) have increased by **almost 50%** since 1990

Emissions grew more **quickly** between 2000 and 2010 than in each of the three previous decades

Levels of carbon dioxide were **18%** higher from 2015 to 2019 than in the previous five years



AT BNP PARIBAS, SUSTAINABILITY IS AT THE HEART OF OUR BUSINESS MODEL



“Delivering on sustainability is today a must, it is what will ensure we all keep a license to do business in the 21st century.”

Jean-Laurent Bonnafé
CEO of BNP Paribas



BNP PARIBAS SIGNED A
NET ZERO COMMITMENT AS
PART OF THE NET ZERO
BANKING ALLIANCE



HOWEVER, OUR COMMITMENT
TO NET ZERO CAN ONLY BE
ACHIEVED WITH OUR CLIENTS ALSO
CONTRIBUTING TOWARDS ECONOMY
WIDE CARBON NEUTRALITY

OUR MANDATE IS TO HELP OUR
CLIENTS NAVIGATE THIS CHANGE





400+ COMPANIES

at least one fifth* of the world's
2000 largest companies have
now **committed to meet**
net zero targets.

CAPACITY FOR EXPONENTIAL GROWTH

SUSTAINABILITY STRATEGY IS AND WILL BE NECESSARY TO:

Secure long term financing

Enhance image and visibility

Contribute to secure business in the long run

Prepare for possible future regulatory constraints



02

INTRODUCING CARBON OFFSETTING



TO REDUCE EMISSIONS, THREE MAIN CARBON PRICING PRODUCTS/MECHANISMS WERE PUT IN PLACE:

REGULATED MECHANISM



CARBON TAX

Application of a flat and predefined rate on carbon emissions.



EMISSIONS TRADING SCHEME (ETS) "CAP AND TRADE"

Regulated entities are subject to an emissions cap and can trade Carbon Allowances (e.g. permit to emit one metric ton of carbon emissions).

REGULATED / VOLUNTARY MECHANISM



VOLUNTARY OR VERIFIED MARKETS (VER)

In these markets entities can buy carbon offsets credits. Initially started on a voluntary basis, progressively allowed for usage under regulated carbon markets such as CORSIA.

GOVERNMENTS HAVE BEEN USING THESE TWO MAIN MECHANISMS TO REACH CARBON REDUCTION GOALS

V.E.R. – VOLUNTARY EMISSION REDUCTION – HOW DOES IT WORK



VERs are generated by three main **project typologies** mostly from developing countries and emerging economies:

- Forestry
- Renewable energies
- Energy efficiency

VERs can be used for two purposes:

- Reduce Carbon Footprint on **Voluntary Basis**
- Comply with **Regulated Carbon Market**

CARBON OFFSETS

are units of carbon dioxide-equivalent that are **reduced, avoided, or sequestered and used** to neutralize carbon emissions.

- ➡ COMPENSATE for emissions occurring elsewhere through **Emission Reduction Projects**

Companies can offset carbon by purchasing carbon offsets: measurable, verifiable emission reductions from certified climate action projects.





03

EMISSIONS REDUCTION
PROJECT OFFERING

Katingan Mentaya REDD+ Project

The Katingan REDD+ Project is located in Central Kalimantan, Indonesia, which is at serious threat of forest loss through commercial exploitation.

The threat of commercial exploitation

The principal threat to the project area, and the main driver of forest loss in Indonesia, is commercial exploitation. From the late 2000s, there has also been an increase in palm oil agriculture. By 2010, areas within the project zone were being earmarked for conversion and subject to pending commercial applications from industrial acacia plantation companies.

Protect and restore 149,800 hectares of peatland ecosystems

The goal of the project is to protect and restore 149,800 hectares of peatland ecosystems, to offer local people sustainable sources of income, and to tackle global climate change. This is done by obtaining a legal license to the project area, and preventing conversion through numerous project activities.

Engagement of the local communities

Project activities are implemented in partnership with each community and focus on the development of enhanced and alternative livelihoods, aiming to improve local economies in a way that relieves pressure on the adjacent natural ecosystem.



Check
the website

Source: <https://katinganproject.com/>



Location of the Katingan Project in Kalimantan, Indonesia.
For illustrative purposes only.

Project benefits:

The Katingan Mentaya REDD+ project is the largest REDD+ project in the world, and the second one chosen by BNP Paribas, to provide clients an alternative to offsetting their carbon emissions, this time in Asia.

BIODIVERSITY PROTECTION AND RESTORATION:

- Enabling the protection of further peat swamp forest: **149,800 hectares**
- Contributing to the reduction of over **7 MILLION TONS OF CO₂ A YEAR**
- Protecting endangered species: significant populations of Bornean orangutan, Southern Bornean gibbon and proboscis monkeys

PARTNERS WITH LOCAL COMMUNITIES:

- Creating jobs for local community, **AROUND 43,000 PEOPLE IN 34 COMMUNITIES**
- Embedding the project in local culture
- Providing a living network for communication and learning





04

GEO & N-GEO
CARBON OFFSETS



A CLEAR AND STANDARDIZED STRATEGY TO ACHIEVE EMISSIONS REDUCTION

GEO & N-GEO

BNP Paribas is an active liquidity provider on both instruments.



2013

CBL Markets started as a trading platform for environmental commodity and ranks amongst the largest trading platform for carbon products.



2020

Launch of the **Global Emission Offset (GEO)** product, enabling market participants to buy carbon offsets eligible under CORSIA compliance program.



2021

Launch of the **Nature-Based Global Emission Offset (N-GEO)** product, which focuses on high-quality, nature-based carbon offsets.

Source: CBL Xpansiv

Aviation Industry is a large source of carbon emissions.

The industry has committed to meet carbon neutral growth from 2021 onwards.



CORSIA



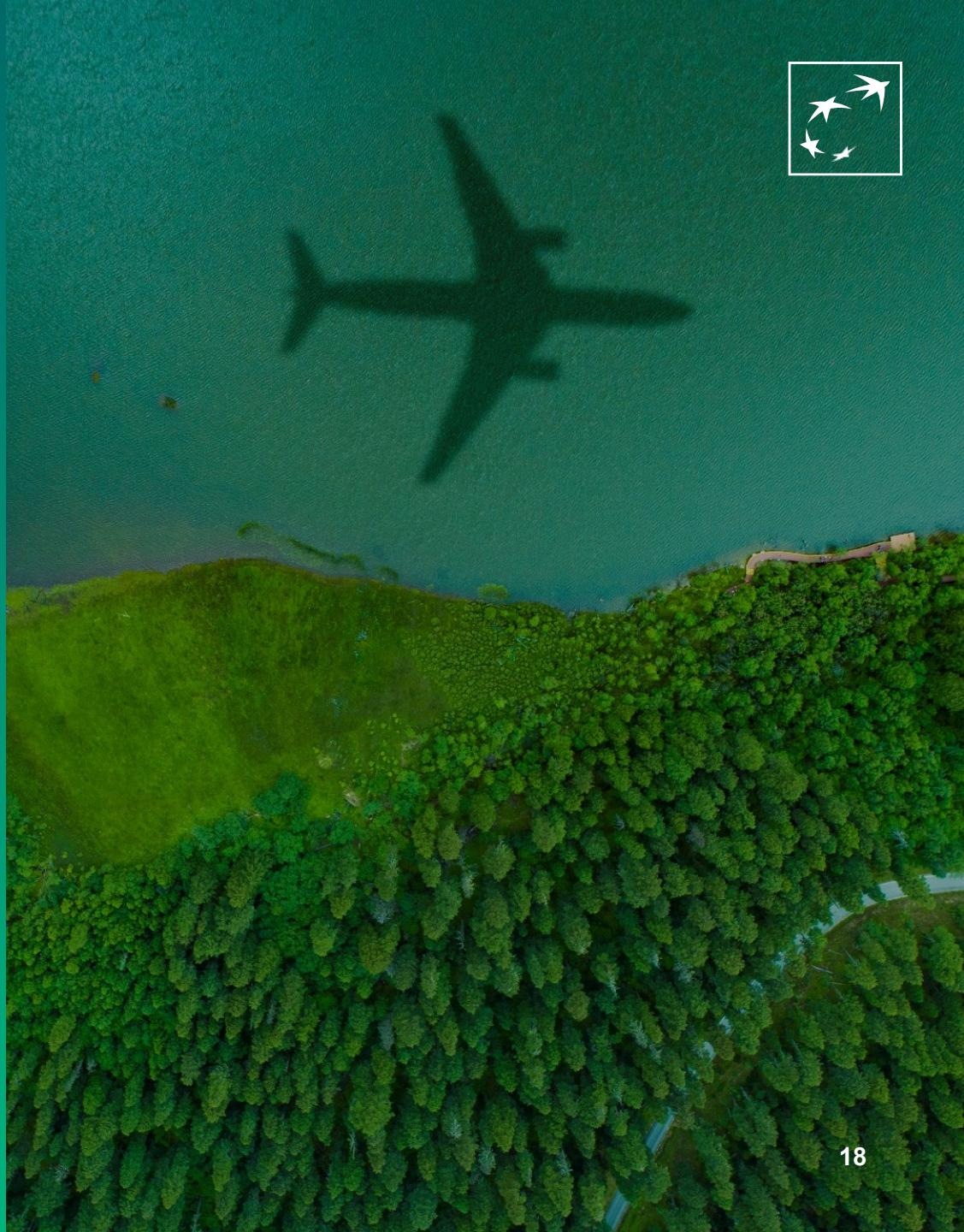
(Carbon Offsetting and Reduction Scheme for International Aviation established by the International Civil Aviation Organisation, the ICAO)

CORSIA is a compliance carbon market, which aims to stabilize international civil aviation through the use of carbon offset products.

Carbon Market Timeline



Source: International Civil Aviation Organization



GEO (Global Emissions Offset)

GEO is the first standardized strategy for voluntary carbon offsets. It enables market participants to buy carbon offsets that meet the stringent eligibility criteria defined by the International Civil Aviation Organization (ICAO) for CORSIA.

GEO screens underlying projects to ensure all carbon offset units delivered meet CORSIA eligibility framework.

GEO Eligibility Rules – Defined by CBL and in line with CORSIA framework



Registries

- American Carbon Standard (ACR)
- Climate Action Reserve (CAR)
- Verified Carbon Standard (VCS)



Project Start Date

- From 1st January 2016



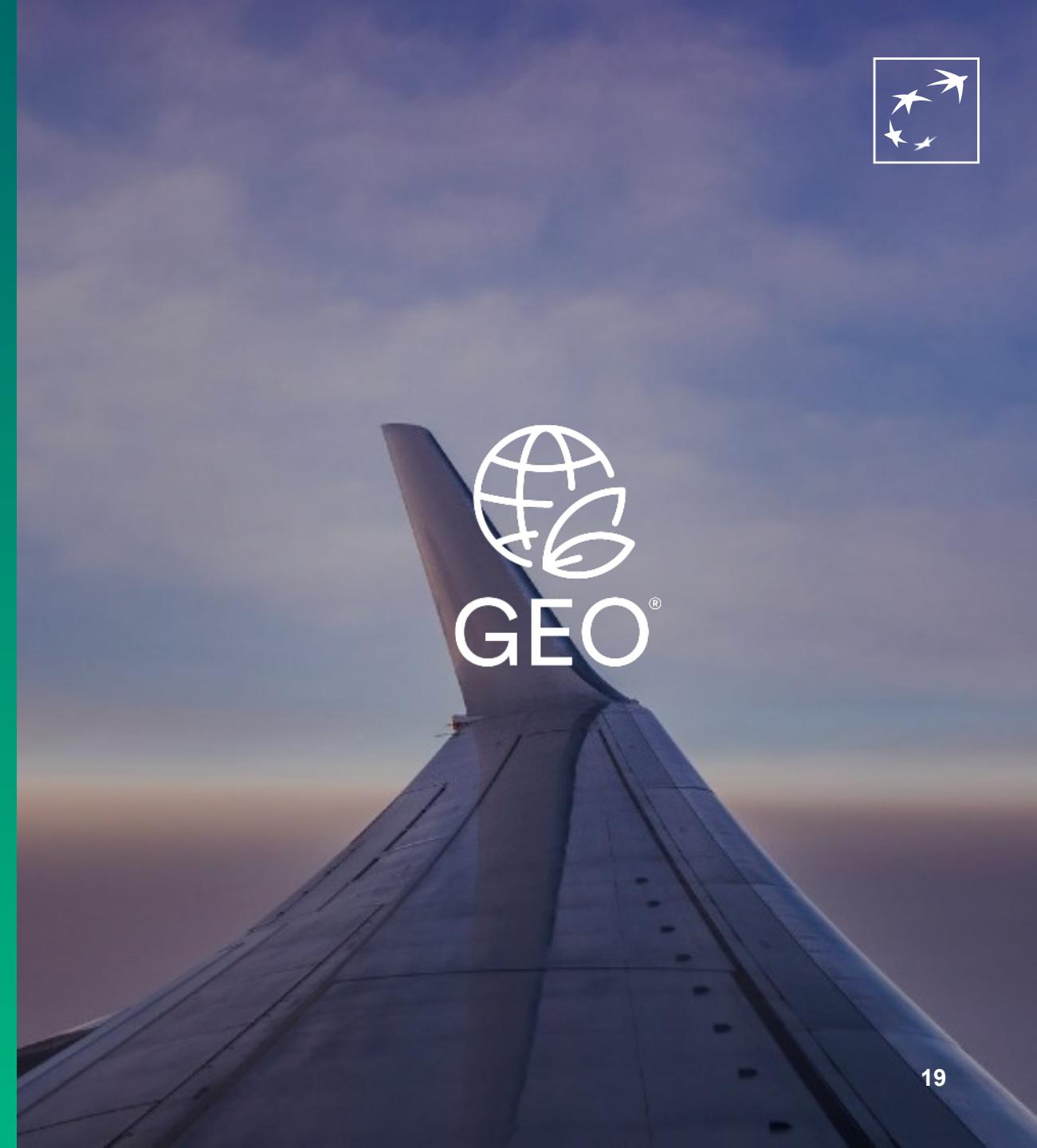
Vintage (period of time during which emissions reduction have occurred)

- Vintage 2016 to 2020 accepted



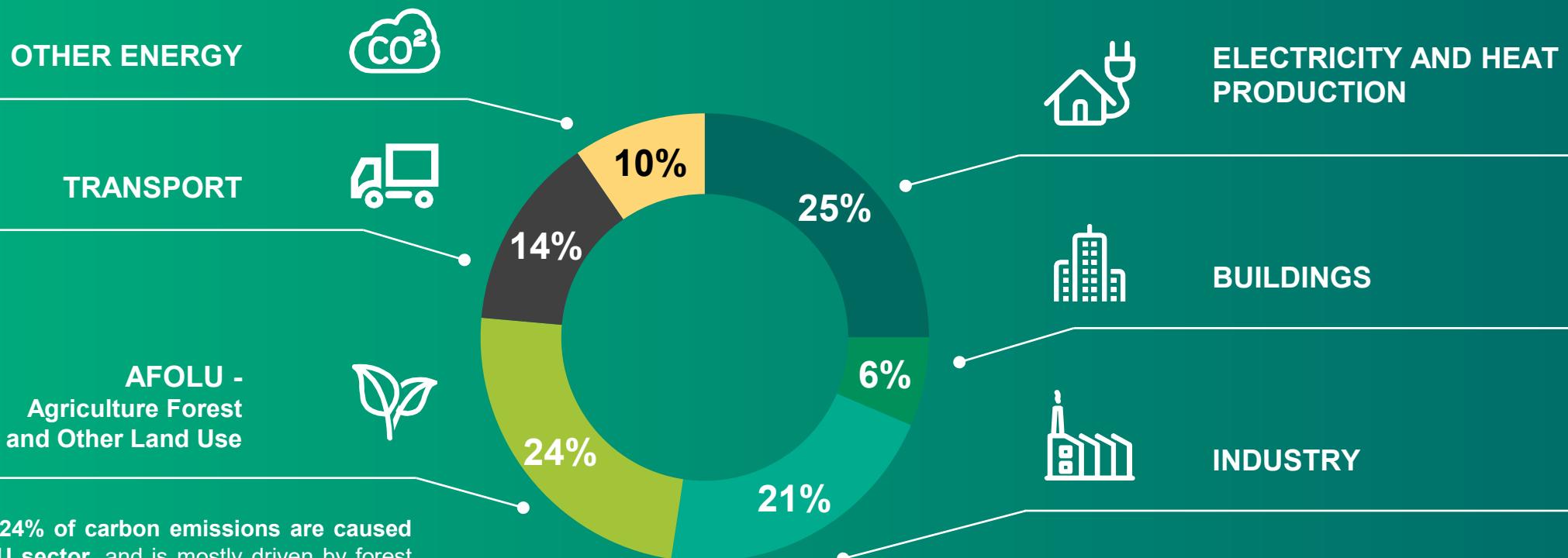
Specification

- VCUs (Verra) need an approved Sustainable Development Goals Contributions Report.
- Jurisdictional REDD+ programs and small scale REDD+ projects only.





Emissions are coming from multiple sources



- Roughly 24% of carbon emissions are caused by AFOLU sector, and is mostly driven by forest destruction and poor agricultural practices.
- Nature-Based Solutions (NBS) are projects that aim to achieve carbon emission reduction through the protection and enhancement of biodiversity.
- Demand for these projects amongst corporate entities and governments has grown substantially over the years.

Source: US Environmental Protection Agency,
<https://www.epa.gov/ghgemissions/global-greenhouse-gas-emissions-data>

N-GEO (Natural-Based Global Emissions Offset)

N-GEO is a new carbon offset product for voluntary markets only. It offers market participants a streamlined strategy to help them achieve emissions-reduction targets by using offsets sourced exclusively from Agriculture, Forestry, and Other Land Use (AFOLU) projects.



N-GEO Eligibility Rules – Solely defined by CBL



Registries

- Verified Carbon Standard (VCS)
- Projects need to follow one of the **“Agriculture, Forestry and Other Land Use” (AFOLU)** methodologies



Project Start

- No restriction



Vintage

(period of time during which emissions reduction have occurred)

- Rolling vintage window:
 - Currently 2016 – 2020
 - Expanding to 2016 – 2022 on 1st July 2022
 - Begins rolling to 2018 – 2023 on 1st July 2023



Specification

- Minimum 1 label from the **Climate, Community, & Biodiversity Standards (CCB)**.



N-GEO®



BNP Paribas Trading Capabilities and Product Specifications

Cleared (CME/CBL)

BNP Paribas is now active market maker for **GEO and N-GEO Cleared products**, including:

- **Physical Spot:** Cleared Spot product on CBL platform for same day delivery. 1 contract = 1 carbon offset and overall liquidity is very thin (10kt average trade size/max 50kt).
- **Physical Futures:** CME Monthly Futures currently listed up to DEC25 for size 1 lot = 1,000 carbon offset units.

Bilat/OTC

BNP Paribas can also offer **GEO and N-GEO OTC products**, including Spot, Swaps, Forwards, and bespoke strategies (e.g. repo):

- BNP Paribas can **provide financially settled and physically settled** products and structures.

Block

BNP Paribas is also able to execute block trades both spot (CBL) or futures (CME) for transaction negotiated off exchange.

CME/CBL min size threshold = 10 lots.

Project Methodology / Region

Underlying GEO and N-GEO projects can operate around the world and there are no constraints on project location:

- Current supply of GEO projects are related to technology (e.g. renewable energy and energy efficiency). The underlying supply of GEO units is estimated at 40MtCO₂, with around 100 active projects across three registries*.
- Current supply of N-GEO products is estimated at approximately 70mt of CO₂ across 60 active projects (roughly 61MtCO₂ (85%) made of REDD+ CCB projects)*.

CTD

Both GEO and N-GEO are **seller option products**, meaning delivery is usually done on “cheapest to deliver” basis.

GEO/N-GEO products provide reference floor price for their respective project types.



05

CARBON OFFSETTING - CORPORATES AND FINANCIALS



CORPORATES OFFSETTING OF RESIDUAL EMISSIONS

01

CHOOSE CO₂ AMOUNTS
TO BE OFFSET



Company A wants to take responsibility for its calculated residual emission

02

DEFINE YOUR
IMPACT OBJECTIVES



Pay for Performance, i.e. buy Carbon Offsets generated by an emission reduction project

03

SELECT THE RELEVANT PROJECTS
FROM OUR PORTFOLIO



Carbon offsets programs can include: Avoided Deforestation, Renewable energy, Methane capture/combustion...

04

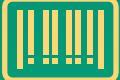
BUY THE OFFSET
(SPOT, FORWARD) VIA AD HOC
NEGOTIATED DOCUMENTATION



Carbon Offsets generated by an emission reduction project



BNP PARIBAS OFFERS YOU COMPLIANT & VERIFIED OFFSETS

- Emission Reduction Projects which reduce carbon emissions versus a baseline can receive VERs (carbon offsets) according to their verified performance, audited and reviewed by both an independent auditor and BNP Paribas.
-  Each VER has a unique serial number, in order to combat the risk of fraud and double selling.
- At the time of the purchase of the VERs, clients can request:
 - BNP Paribas to cancel the VERs on their behalf directly from BNP Paribas registry
 - OR
 - Transfer the VERs to clients VER registry



BNP PARIBAS CAN ACCOMPANY A FINANCIAL INSTITUTION



IN ADDING IMPACT TO A PORTFOLIO

01

Select Fund

02

Perform initial Carbon
Footprint assessment

03

Define Carbon
Offsetting Framework

04

Perform the
on-going Offset



WHY CHOOSE BNP PARIBAS

PRICE CERTAINTY

Offering Forward and Hedging Strategies, plus inventory refinancing

INVOLVED PARTICIPANT

BNP Paribas has been active in carbon markets for more than a decade

AVAILABILITY

Capacity to Structure Large Volume Requirements

ROBUST ON-BOARDING FRAMEWORK

Extensive Due Diligence on Projects and Project Developers

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