ENERGY CLUB
IIT BOMBAY

THE CARBON CODE: TRADING, TRACKING AND TRANSFORMING EMISSIONS

WEEK 3 DAY 2

TRADING PLATFORMS & TRANSACTION MECHANICS

(A Real-World Guide to How Carbon Credits Are Bought/Sold)

1. TRADING VENUES: WHERE DEALS HAPPEN

A) Exchanges (Transparent, Standardized Trading)

Top Platforms:

Xpansiv CBL (Voluntary Market Leader)

How it works:

Live order book (like stock exchanges)

Trades "N-GEO" standard contracts (nature-based credits)

Typical spread: 10-15% for REDD+ credits

Who uses it:

Corporates (Microsoft, Shell)

Speculative traders

ICE Futures (Compliance Market Giant)

Key products:

EU Allowance (EUA) futures (€85/ton as of July 2024)

California Carbon Allowance (CCA) futures ($36/ton)

Volume:

200M+ tons traded daily

Key Difference:

Exchanges guarantee settlement (reduces fraud risk)

But only standardized products traded (no custom deals)

Live Demo: Xpansiv CBL Market Screen

B) OTC Markets (Custom Deals, Higher Risk)

How Bilateral Trading Works:

Matchmaking:

Brokers connect buyers/sellers via phone/chat

Example: "I have 50k Kenya REDD+ credits at $6.25 - anyone interested?"

Term Sheet Negotiation:

- Delivery timeline (spot vs. 3-month forward)
- Liability if forest burns (who covers the loss?)
- Payment terms (escrow usually required)

Settlement:

Credits transferred via Verra/Gold Standard registry

Typically takes 3-5 business days

OTC vs Exchange:

Feature	OTC Market	Exchange
Customization	Yes (any project/terms)	No (standard contracts)
Transparency	Low	High
Counterparty Risk	High	Low (clearinghouse)
Typical Fees	5-15%	$0.02-$0.50/ton

Red Flag Alert:

65% of carbon market fraud occurs in OTC deals (2023 Carbon Market Watch report)

2. TRANSACTION STEP-BY-STEP

A) Due Diligence (Don't Skip This!)

Checklist for Buyers:

Registry Verification:

Confirm project exists in Verra/Gold Standard database

Check for "retired" status (avoid double-counting)

Project Documents:

Read the PDD (Project Design Document)

Verify monitoring reports show real emissions cuts

Credit Details:

Vintage year (older may be cheaper)

Buffer pool status (is there backup for reversals?)

Tool: Verra Registry Search

B) Execution Methods

Spot Trades:

Immediate delivery (2-5 days)

Used for urgent compliance needs

Forward Contracts:

Example: "Buy 10k DAC credits for Dec 2025 delivery at $800/ton"

Benefits:

Locks in prices

Lets removal projects pre-sell future capacity

Auctions:

Governments sell allowances (EU ETS auctions weekly)

Corporations sometimes auction offset portfolios

C) Retirement (When Credits "Disappear")

Why it matters: Retired credits can't be resold (stops double-counting)

How to verify:

Check registry retirement log

Get third-party confirmation

Pro Tip: Some registries now use blockchain for instant retirement proof

3. TRADING STRATEGIES THAT WORK

A) Compliance Market Plays
Calendar Spreads:
Buy Dec 2024 EUAs @ €85
Sell Dec 2025 EUAs @ €88
Profit if the €3 gap widens
Policy Arbitrage:
Buy California credits when cheap
Sell when linked markets (e.g., Quebec) catch up

B) Voluntary Market Tactics
Methodology Arbitrage:
Buy old REDD+ (VM0007) credits at $4
Sell as new REDD+ (VM0042) equivalent at $6
Bundle Trading:
Package 5 small projects together
Sell as "diversified portfolio" at premium

Real Example:
Trader bought 500k Mozambique credits at $3.20, repackaged as "African conservation bundle," sold at $5.75
Key Takeaways
Exchanges = Safe but Limited, OTC = Flexible but Risky
Always Verify Before Buying (Registry #1 Check)
Smart Traders Profit From Market Inefficiencies

4. SECONDARY MARKET MECHANICS: HOW CREDITS CHANGE HANDS (THE HIDDEN LIQUIDITY LAYERS)

A) Credit Lifecycle Stages

Primary Issuance

Developer sells newly issued credits (e.g., 2024 vintage)

Pricing: Typically 20-30% below secondary market

Lock-ups: Often 1-year holding periods

Secondary Trading

Speculators buy/sell existing credits

Retirement Markets

Final sale to end-users (irreversible transaction)

Premium: +5-15% over secondary prices

B) Who Provides Liquidity?

Actor	Role	Typical Holding Period
Project Developers	Initial sellers	0-6 months
Merchant Banks	Warehouse credits	3-18 months
Hedge Funds	Arbitrage trading	1-60 days
ESG Funds	Buy-and-hold	3-5 years

Real-World Example:

JPMorgan's carbon desk holds 2M+ credits as market-maker inventory

5. ADVANCED RISK MANAGEMENT TECHNIQUES (BEYOND BASIC HEDGING)

Why Traders Need This

Secondary Markets = 70% of Volume but rarely taught

Modern Risk Tools separate pros from amateurs

Regulators Increasingly Demand this level of oversight

THANK YOU