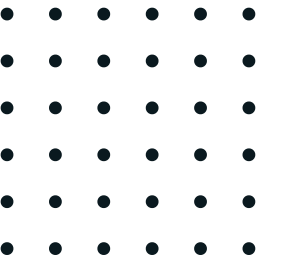
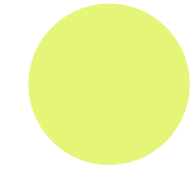




# THE CARBON CODE: TRADING, TRACKING AND TRANSFORMING EMISSIONS



**WEEK 3 DAY 3**



# **RISK MANAGEMENT & TRADING STRATEGIES**

# 1. CROSS-MARKET ARBITRAGE STRATEGIES

## A) Linked Market Arbitrage

Example (2024): Buy California CCAs @ \$36 → Sell Quebec units @ \$38 CAD (\$28 USD) → Capture \$8 gap

### Requirements:

Dual exchange memberships

Real-time FX hedging (CAD/USD)

**Execution Window:** Typically 2-4 hours before algis close gaps

## B) Vintage Arbitrage

**Profit Mechanism:** Buy old credits (2021 REDD+ @ \$4.20) → Sell as new (2024 @ \$6.80)

**Registry Hack:** Use Verra's bulk retirement to bypass vintage restrictions

## C) Physical vs Financial Arbitrage

**Typical Spread:** \$0.50-\$2.00 discount for physical credits

### Trade Lifecycle:

Buy 100k physical REDD+ @ \$4.25

Sell futures @ \$5.00

Deliver credits to close position

# 2. OPTIONS TRADING TACTICS

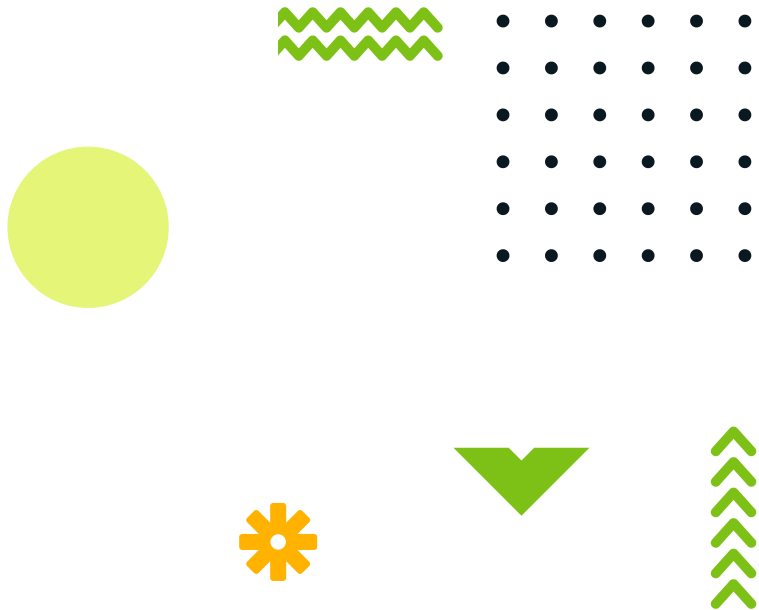
## A) Strategy Matrix

Strategy	Use Case	Carbon-Specific Adjustment
Covered Calls	Neutral/bullish EUAs	Use 90% strikes (policy caps)
Bear Put Spreads	Hedge REDD+ portfolio	Buy puts 20% below market
Straddles	Major policy decisions	2x normal implied volatility

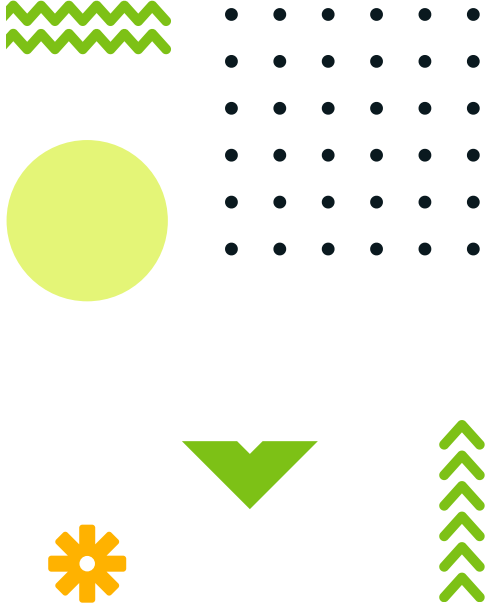
## B) Volatility Insights

**Skew:** Puts trade at 10-15% higher IV than calls (crash fear premium)

**Event Trading:** EU policy announcements cause 40-60% IV spikes



# 3. RISK MANAGEMENT FRAMEWORKS



## A) Credit Risk Scoring Model

Factor	Weight	Scoring Guide
Developer liquidity	30%	<6mo cash runway = 2/10
Host country risk	25%	BMI Index <50 = high risk
Methodology safety	20%	New methods = +3 risk
Buffer pool %	15%	<10% = immediate reject

## B) Liquidity Management Rules

**Position Sizing:**  $\leq 5\%$  of 30d avg volume (e.g., 100k tons if market trades 2M/mo)

### Exit Protocols:

OTC block trade lines (pre-negotiated)  
Futures hedge (minimum 50% coverage)

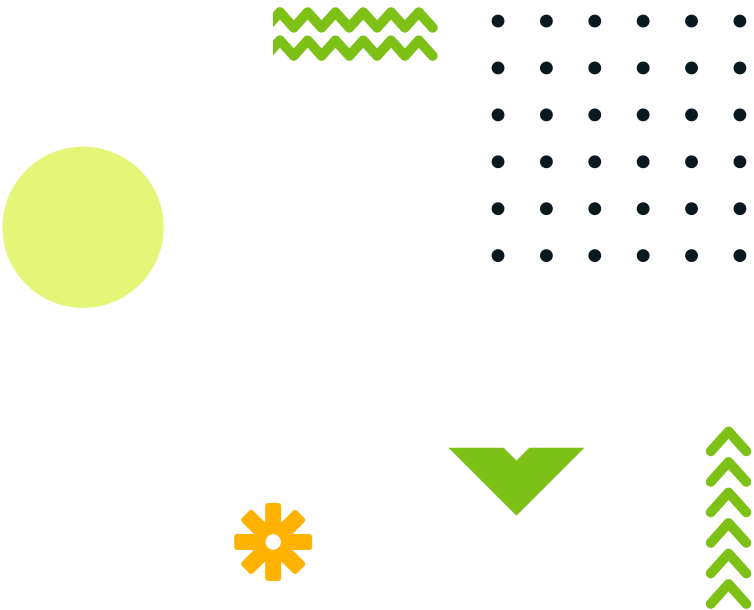
## C) Stress Test Scenarios

**Tail Risk Example:** "EU invalidates all pre-2023 forestry credits"

### Immediate action:

Short EUA futures  
Exercise puts on affected projects

# 4. MARKET CORRELATION STRATEGIES



## Key 2024 Relationships

Pair	Correlation	Trading Threshold
EUA vs Brent Crude	+0.72	Trade when >0.8
REDD+ vs S&P 500	-0.30	Hedge equity risk
DAC vs Tech Stocks	+0.15	Not significant

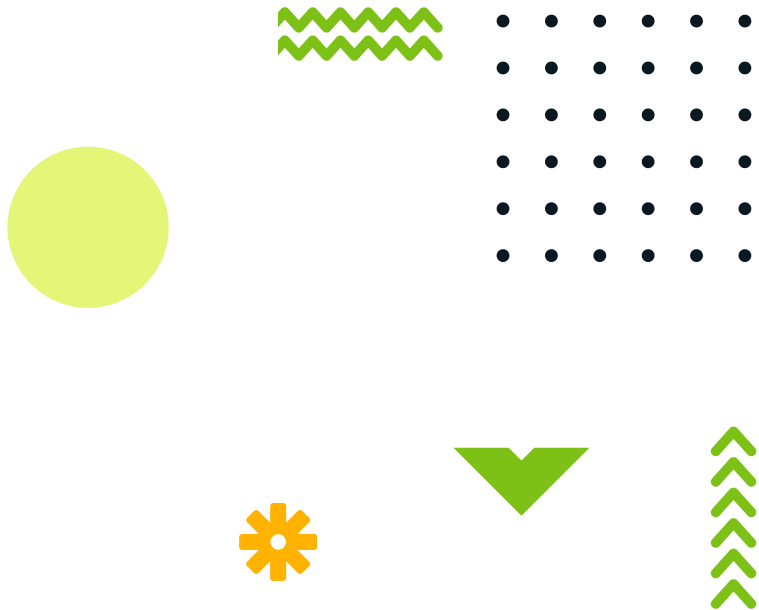
# 5. FRAUD PREVENTION PROTOCOLS

## A) Common Schemes

Type	Red Flags	Defense Tactics
Wash Trading	Repeated same-size trades	Blockchain tracking
Fake Retirements	Registry ID mismatches	Third-party custody
Baseline Gaming	Odd historical references	Satellite verification

## B) Verification Checklist

- Cross-check registry IDs with project documents
- Confirm retirement receipts with registry API
- Audit 5% of credits via ground truthing



# 6. TRADING SIMULATION EXERCISE

**\$10M Virtual Fund Rules:**

**Allowed Instruments:**

- Physical credits (max 40% allocation)
- Futures/options (must cover 30% of exposure)

**Scoring:**

Metric	Weight
Sharpe ratio	40%
Policy resilience	30%
Fraud avoidance	30%

**Debrief Focus:**

- Why did certain arbitrage fails? (e.g., settlement delays)
- How correlation assumptions held up

**Key Tools & Data Sources**

**Execution Platforms:**

- Xpansiv CBL (voluntary)
- ICE Endex (compliance)

**Analytics:**

- Bloomberg Carbon Beta models
- CarbonChain for physical tracking

**Risk Systems:**

- RiskMetrics Carbon Module
- Internal VaR calculators





**THANK YOU**