NEXUS
GREEN ENERGY

WE DELIVER RESULTS ON A GLOBAL SCALE

15 YEARS
in environmental commodity markets

OVER $3 BILLION
in tons of carbon credits traded.

1 BILLION
in tons of carbon credits traded

+6,000 CLIENTS
on five continents

5 CONTINENTS
covered by carbon offset projects

1 BILLION
in tons of carbon credits traded

+$2 BILLION
in global turnover

1 BILLION
in renewable energy projects over the next 5 years

+10 MILLION
transactions closed

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Aither

NEXUS GREEN ENERGY

COMMERCIAL PRESENTATION
MANAGEMENT AND SUPPLY OF EMISSION ALLOWANCES (EU ETS)
CERAMIC FACTORIES

1. CORPORATE PRESENTATION

1.1. Who we are

NEXUS GREEN ENERGY, S.L. is a company specialized in advanced climate solutions for industrial sectors regulated under the European Union Emissions Trading System (EU ETS). We act as a strategic partner for carbon-intensive industries, providing comprehensive services in compliance, emission allowance (EUA) supply, hedging strategy design, regulatory advisory, and support in the transition toward more sustainable production models.

From our offices in Spain, and through a European network of experts, we accompany our industrial clients throughout the entire climate-compliance cycle—from carbon-footprint planning to verified delivery of emission allowances—with traceability, legal certainty, and economic efficiency.

1.2. Mission, vision and climate purpose

- **Mission:** To provide energy-intensive industries with customized, efficient, and secure solutions to meet their climate obligations, reducing regulatory exposure and improving competitiveness.
- **Vision:** To be the leading climate operator for the European industrial sector, integrating regulated compliance (EU ETS, CBAM, CAE) with voluntary carbon markets and ESG services.
- **Climate purpose:** To accelerate the decarbonization of strategic sectors through market mechanisms, ensuring that every tonne of managed CO_2 contributes to the objectives of the Paris Agreement and the European Green Deal.

1.3. Corporate structure and strategic partners (Aither Group AG)

NEXUS GREEN ENERGY is a joint subsidiary formed by Spanish and Swiss capital, in strategic alliance with **AITHER GROUP AG**, one of Europe's most reputable climate operators, headquartered in Zug (Switzerland).

This partnership allows us to:

- Have direct access to the main emission-allowance markets (EEX, ICE, OTC).
- Maintain operational and financial capacity for large-volume supplies.

- Use advanced tools for climate-risk analysis and hedging.
- Benefit from multinational legal support and international regulatory compliance.

The corporate structure ensures operational independence, contractual agility, and neutrality toward speculative or hedge-fund interests.

1.4. Track record in carbon-intensive industrial sectors

Our team accumulates more than **15 years of combined experience** in emission-allowance management, working with companies from sectors such as:

- **Ceramics:** production of tiles, sanitaryware, and structural components.
- **Glass:** flat-glass furnaces, hollow glass, and industrial containers.
- **Cement and clinker.**
- **Metallurgy and steel/aluminum foundries.**
- **Paper, chemicals, and refining.**
- **Thermal power generation and industrial cogeneration.**

We have managed operations ranging from 10,000 to more than 2 million EUAs per client, ensuring regulatory compliance and carbon-cost optimization.

1.5. European positioning and network of agents in the climate market

We operate in **Spain, Italy, France, Germany, and Switzerland**, supported by our own network of agents and collaborators specialized in climate regulation, carbon taxation, energy efficiency, and sustainable finance.

Our positioning combines:

- **European geographical coverage.**
- **Capacity for dialogue with national regulators and the EU Registry.**
- **Preferential access to auctions and secondary markets.**
- **Active participation in sectoral forums and decarbonization consortia.**

This ecosystem enables us to anticipate regulatory changes, provide market intelligence, and tailor our solutions to the reality of each industrial plant.

2. REGULATORY FRAMEWORK AND KEY POLICIES

2.1. Evolution of the EU ETS (Phase 4 → 2030)

The European Union Emissions Trading System (EU ETS) is the EU's main instrument for reducing industrial greenhouse-gas (GHG) emissions. Currently in **Phase 4 (2021-2030)**, this stage is characterized by:

- **Accelerated reduction of the emissions cap (LRF):** from **2.2 %** to **4.3 % per year** from 2024, and **4.4 %** from 2028 onward.
- **Increase in the carbon price:** exceeding **€80/t** on average during 2023-2025.
- **Tighter restrictions on free allocations,** with stricter criteria for sectors not exposed to carbon-leakage risk.
- **Progressive implementation of border adjustments (CBAM)** affecting exported/imported products.

Ceramics and glass are included as regulated sectors under the EU ETS and must comply with annual obligations to surrender EUAs equivalent to their verified emissions.

2.2. Specific obligations for ceramics and glass

The ceramic (tiles, sanitaryware, bricks) and glass (containers, flat glass, technical glass) industries are fully covered by the EU ETS due to their **intensive use of thermal energy,** mainly in kilns, dryers, and melting furnaces.

Key aspects:

- **Free allocation:**

The ceramic and glass sectors are considered to have a **moderate risk of carbon** leakage and may receive free allocations under certain conditions. These are based on sectoral benchmarks defined according to production-process efficiency.

- **Applicable benchmarks:**
  - Ceramics: 0.224 EUA/t for bricks and tiles (approx.)
  - Glass: 0.608 EUA/t for hollow glass, 0.416 EUA/t for flat glass (indicative values)
- **Reference Documents on Best Available Techniques (BREF/BAT):**
  - Ceramic kilns: requirements for efficient combustion, heat recovery, and use of alternative gases.
  - Cupolas and glass furnaces: thermal efficiency, electrification technologies, control of NOx and SOx.

  Compliance with BAT has a direct impact on allocation and eligibility for future aid.

2.3. Monitoring, Reporting and Verification (MRV) step by step

The EU ETS annual cycle requires a rigorous **MRV process (Monitoring, Reporting and Verification)**. This process ensures the environmental integrity of the system and is mandatory for all participating installations.

Key steps:

a) **Approved Monitoring Plan (MP):** technical document validated by the competent authority.
b) **Continuous measurement or calculation of emissions:** according to source type and methodology (tier 1-4).

c) **Annual emissions report:** submitted before 31 March of the following year.
d) **Verification by accredited entity:** external review in accordance with ISO 14065.
e) **Surrender of EUAs:** before 30 April, in an amount equivalent to verified emissions.

2.4. Penalty regime and non-compliance costs

Sanctions for non-compliance under the EU ETS are severe and automatic. If the required allowances are not surrendered on time:

- **Fine of €100 per t CO_2e emitted and not covered (non-tax-deductible).**
- **Obligation to later surrender the missing EUAs.**
- **Possible reputational and regulatory consequences.**

These sanctions apply even when non-compliance results from administrative error or verification delays; therefore, having a reliable supplier and manager is critical.

2.5. Synergies and overlaps with other climate policies

The EU ETS does not operate in isolation. Other **complementary or overlapping regulations directly** or indirectly affect the ceramic and glass sectors:

- **CBAM (Carbon Border Adjustment Mechanism):**
  Products such as tiles, plates, ceramic slabs, and certain glasses are subject **to mandatory reporting since 2023 and to tariffs aligned with the EUA price from 2026** when imported from outside the EU.

- **CAE (Energy Savings Certificates):**
  Industry is required to meet measurable energy-saving targets; access is **available to incentive projects or certificate trading** (**CAE Plus**).

- **ETS2 and FuelEU Maritime:**
  If the company operates heavy-transport fleets, supply vessels, or consumes liquid fuels, it may be partially affected by the new **ETS2 obligations (from 2027)**.

2.6. European aid and programs for industrial decarbonization

The ceramic and glass industries are considered priorities in funding programs for emission reduction, technological modernization, and energy efficiency.

Main available lines:

- **EU Innovation Fund:** for projects in electrification, carbon capture, hydrogen use, or alternative fuels.
- **LIFE Programme:** co-financing of climate and environmental actions.
- **Next Generation EU – PERTE Decarbonization (Spain):**
  - Line 1: flagship technological-change actions (electrification, biogas, e-gas).

- Line 2: efficiency improvement and heat recovery.
- Line 3: digitalization of environmental control.

In addition, Nexus Green Energy can **provide technical and documentary support** to clients in **preparing, justifying, and executing aid applications**, in collaboration with certified engineering and consulting firms.

3. DIAGNOSIS OF THE CERAMIC & GLASS SECTOR

3.1. Emission profile, energy consumption and raw materials

The ceramic and glass sectors in Europe represent a significant share of industrial thermal-energy consumption and are responsible for substantial direct emissions within the EU ETS.

- **Ceramics:**
  - Intensive use of natural gas in kilns, dryers, and atomizers.
  - Emissions from both combustion and process (clay and glaze decomposition).
  - Average consumption: 2.4-3.2 GJ/tonne of final product.
  - Specific emissions: 0.18-0.30 t CO_2/tonne.

- **Glass:**
  - Production at extreme temperatures (~1,500 °C) in regenerative or electric furnaces.
  - Mixed use of gas, electricity, and raw materials (sand, lime, soda ash).
  - Specific emissions: 0.35-0.65 t CO_2/tonne (depending on furnace type and recycled content).

Both sectors depend heavily on **fossil sources**, with technological limits to immediate transition, making them **emission-intensive and vulnerable to high carbon prices**.

3.2. Carbon-price trends and projections 2030-2035

The EUA price has followed an upward **trajectory since 2018,** reaching historic highs in 2023 (between €85 and €100/t CO_2). This evolution is driven by:

- Increased EU climate ambition (Green Deal, Fit for 55).
- Accelerated reduction of the emissions cap (LRF).
- Inclusion of new sectors and lower free allocation.
- Market speculation and geopolitical/industrial-demand factors.

Baseline projections (sources: BloombergNEF, Ember, EC):

Year	Estimated price €/t CO_2
2025	85-95 €
2030	110-135 €

Year	Estimated price €/t CO_2
2035	140–160 €

Estimated annual cost impact per plant:

- **Ceramics:** €4–6 million/year per 50 kt CO_2.
- **Glass:** up to €8 million/year in plants > 100 kt CO_2.

This reinforces the need for **hedging, efficiency, and energy-diversification strategies.**

3.3. Main regulatory, fiscal and reputational risks

Regulatory risks:

- Progressive reduction of free allocation (more demanding benchmarks).
- Full inclusion in **CBAM** for exporters/importers.
- Technical review of BAT and thresholds applicable to industrial kilns.

Fiscal risks:

- Possible introduction of additional national CO_2 or gas-use taxes on non-decarbonized processes.
- Additional costs due to energy-efficiency obligations (CAE).

Reputational risks:

- Media exposure for "carbon intensity" in low-value-added products (e.g., tiles, sanitaryware).
- Pressure from international buyers, banks, or ESG funds to reduce supply-chain carbon footprint.
- Penalization in corporate-sustainability indicators (CSRD, EU taxonomy).

3.4. Decarbonization levers

To mitigate exposure to regulated carbon, ceramic and glass industries can activate several **technological and operational levers:**

- **Electrification of kilns and use of green hydrogen**
  - New-generation electric kilns (for technical ceramics and small parts).
  - Partial integration of hydrogen as gas substitute (H_2-gas blends up to 20–30 %).
  - Adaptation of burners and thermal-control systems.

- **Waste-heat recovery and high-efficiency cogeneration**
  - Heat recovery from kilns and dryers to preheat air or water.
  - Cogeneration turbines with high-efficiency engines.
  - ORC (Organic Rankine Cycle) systems to produce electricity from waste heat.

- **Substitution of fossil fuels**
  - Biomethane or renewable gas injected into the grid or in the form of green LNG.

- E-gas (synthetic gas produced with renewable energy) as a transition vector.
- Low-carbon hydrogen produced locally or imported.

All these solutions are **technologically feasible**–at varying degrees of maturity and cost–and may qualify for public funding or tax deductions.

3.5. Typical cases: impact, emissions and recommended strategy

- **Ceramic-tile plant (≥50 kt CO_2/year):**
  - Capacity: 6 production lines, 3 continuous kilns, gas consumption > 1,500,000 GJ/year.
  - Free allocation: ~20-25 kt EUAs.
  - Average annual deficit: 25-30 kt → estimated cost > €2.5 million/year.
  - Strategy: multi-year price hedging, thermal-efficiency improvement, access to CAEs and PERTE Funds.

- **Glass-container factory (regenerative furnaces, 100 % recycled):**
  - Production: >200,000 t/year, direct emissions >90 kt CO_2.
  - High electric and thermal consumption, possibility of partial electrification.
  - **Opportunity:** heat recovery, hydrogen blending, access to Innovation Fund.
  - **Strategy:** emission-factor reduction, CAE sales, improved ESG profile.

4. INTEGRATED SERVICES OF NEXUS GREEN ENERGY

4.1. Sale and supply of verified EUAs

Objective: Ensure the timely and lowest-cost availability of the emission allowances necessary to cover the installation's annual deficit.

Modality	Description	Main advantage	Minimum volume
Spot	Purchase and immediate delivery of EUAs in the secondary market (ICE/EEX, OTC)	Instant closing of price risk	≥ 1,000 EUAs
Forward / Futures	Price lock for future deliveries up to 36 months	Stable budget and hedge against volatility	≥ 10,000 EUAs per year
Swap "Loan EUA"	Loan of EUAs today to be returned with futures ("carry trade")	Liquidity without initial outlay	≥ 25,000 EUAs

Modality	Description	Main advantage	Minimum volume
Structured purchase (Collar, CAP, Floor)	Custom options and derivatives	Limit maximum price while maintaining upside	According to structure

Operational guarantees

- Custody in a nominative account within the EU Single Registry (URT)
- "Delivery versus Payment" (DvP) with first-tier banks
- Surety insurance for seller default (Lloyd's)

4.2. Full EU ETS compliance management ("turnkey")

a) Annual planning of needs according to production curves, emission factor, and free allocation.
b) Data upload to the Nexus MRV Suite platform (XML/XML Regulator formats).
c) Pre-verification with an ISO 14065 accredited entity (SGS, Bureau Veritas).
d) Automatic purchase and delivery of EUAs before 30 April.
e) Closing report for the financial management and external audit.

Result: Zero sanction risk and release of internal resources.

4.3. Advanced price-hedging strategies

Strategy	Client profile	Horizon	Tool	Typical benefit
Fixed-Price Forward	Ceramic SMEs with stable cash flow	1-3 years	OTC futures	Full cost visibility
Symmetrical Collar	Large glass groups with limited treasury	2-5 years	Purchase PUT / Sell CALL	Cap on maximum price with reduced premium
Open Cost Plus	Producers exposed to gas + EUA volatility	1 year	EUA index + fixed spread	Direct transfer of cost to end customer
Stepped options	Companies undergoing decarbonization CAPEX	3-7 years	Digital options	Scalable protection as new technology comes online

Key indicators evaluated: VaR 95 %, CFaR, duration, gas-EUA correlation, beta vs Brent.

4.4. Scenario modeling and multiannual planning

- **Tool:** Nexus Carbon Planner™ (Python + Power BI layer)

- **Inputs:** historical series of production, energy consumption, free allocation, EUA forward curves, gas TTF/PSV curve.
- **Outputs:**
  - Total carbon cost over 10-year horizon (P-50, P-10, P-90).
  - Sensitivity to 10 % variation in thermal intensity.
  - Payback of efficiency/hydrogen projects vs EUA purchase.
  - Recommendation of optimal spot/forward/options mix (Monte Carlo model 50,000 simulations).

4.5. Technical support in MRV and BAT

a) Review and update of the Monitoring Plan (MP) to align with new 2024 guidelines.
b) Digitalization: IIoT sensors and automatic hourly data capture.
c) Database of certified Emission Factors (gas, biogas, e-gas).
d) BAT gap analysis versus BREF Ceramics 2016 and BREF Glass 2013 (Rev. 2024).
e) Plant-staff training (4-hour workshops, CPD certified).

4.6. Integration with other climate instruments

Instrument	Added value	Specific application	Synergy with EUAs
CAE	CAPEX reduction via certified energy savings	Replacement of burners, VSDs in blowers	Sale of CAEs finances EUA purchase
CBAM	Minimize border payment	Labeling of exported ceramic products	Footprint registry facilitates MRV
VCU/VER	Compensation of residual emissions	Purchase of Gold Standard credits	Improves ESG score

Included services: origination, due diligence, custody, and retirement of certificates.

4.7. ESG, CSRD and product-footprint reporting

- ESG Tracker™ module: automatically generates EU Taxonomy indicators E1-1 to E1-9.
- Life Cycle Analysis (LCA) according to ISO 14040/44 and PEFCR.
- “Carbon Neutral” labeling (PAS 2060) for premium tile lines.
- Dashboards for management and sustainability committee exportable to PDF/XBRL.

4.8. Digital platform Nexus Carbon Hub

Main functionalities

- Web portal with 2FA authentication and roles (Finance, Operations, ESG).
- Internal spot EUA marketplace with real-time quotation (delay < 30 s).
- Regulatory alerts module (RSS feed from European Commission + Official State Gazette).

- Standard REST API to integrate with ERP (SAP, Navision) and plant SCADA.
- ISO 27001 certification and EU-based servers (GDPR compliant).

Total client value: average 13 % reduction in effective carbon cost and elimination of sanction risk, with direct improvements in ESG rating and preferential access to green financing (sustainability-linked bonds, ICO-Next Gen lines).

If you need:

a. A technical-economic simulation template (Excel/Google Sheets) with your production data and price curves, or
b. A complete master contract example,

here is the detailed text summary of the **carbon-cost simulation** for a ceramic factory with constant production of **100,000 tonnes/year**, an **emission factor of 0.25 t CO_2/tonne**, and a **progressive reduction in free allocation until 2035**:

4.9. Simulation: Estimated carbon cost (2025-2035)

Scenario: Ceramic tile factory | Constant production: 100,000 t/year

Year	Production (t)	Total emissions (t CO_2)	Free allocation (EUAs)	EUA deficit	EUA price (€/t)	Estimated annual cost (€)
2025	100,000	25,000	10,000	15,000	85.00	1,275,000 €
2026	100,000	25,000	9,500	15,500	90.00	1,395,000 €
2027	100,000	25,000	9,000	16,000	95.00	1,520,000 €
2028	100,000	25,000	8,500	16,500	100.00	1,650,000 €
2029	100,000	25,000	8,000	17,000	110.00	1,870,000 €
2030	100,000	25,000	7,500	17,500	115.00	2,012,500 €
2031	100,000	25,000	7,000	18,000	120.00	2,160,000 €
2032	100,000	25,000	6,500	18,500	125.00	2,312,500 €
2033	100,000	25,000	6,000	19,000	130.00	2,470,000 €
2034	100,000	25,000	5,500	19,500	135.00	2,632,500 €
2035	100,000	25,000	5,000	20,000	140.00	2,800,000 €

Key conclusions:

- **Accumulated EU ETS compliance cost 2025-2035:** over **€21.5 million**.
- **EUA deficit increases each year** due to progressive fall in free allocation (from 40 % to 20 %).
- **Carbon price** projected to rise from €85/t to €140/t.
- Strategies such as **forward hedging, energy-saving projects (CAE),** and partial fuel substitution can significantly reduce this cost.

5. CONTRACTUAL MODEL AND GUARANTEES

5.1. Customized Master Agreement

The supply of EUAs is structured under a **Master Agreement**, designed in accordance with EU law (EU ETS Directive, MRV Implementing Regulation), applicable Spanish legislation (RD 1085/2015 and its amendments), and recognized international trading practices for intangible assets.

This contract allows various operations—purchase-sale, hedging, lending, or EUA swap—to be carried out under a single legal structure, with adaptable clauses according to:

- **Volume and supply frequency** (spot, forward, swap).
- **Price conditions** (fixed, indexed, structured).
- **Counterparty type** (industrial client, corporate group, energy trader).

5.2. Delivery, settlement, and custody-transfer conditions

All operations are formalized under the **"Delivery versus Payment" (DvP)** principle to ensure simultaneity and legal security.

Available delivery types:

- **Spot:** delivery within less than 5 business days from signing the individual contract.
- **Forward:** deferred delivery (from 30 days to 36 months) with fixed or indexed price conditions.
- **Swap/Loan EUA:** temporary EUA loan with future return clause.

Critical elements of each operation:

- **Destination account:** an active UPC/URT account in the client's name, or a custody account operated by Nexus under a representation mandate, is required.
- **Settlement:** via SEPA or SWIFT transfer, in euros, with electronic invoicing.
- **Custody transfer:** notarial proof of transfer in the EU Registry (optional, depending on volume).

Reversibility: if delivery cannot be executed due to force majeure or regulatory decision, an automatic reversal clause is triggered without client penalty.

5.3. Financial guarantees and performance insurance

To protect both parties from financial risks, the contractual model includes the following instruments:

- **Surety insurance** issued by an international insurer (e.g. Lloyd's, Atradius) for operations exceeding €250,000.
- **Stand-by letter of credit (SBLC)** in forward operations with non-EU clients.
- **Mutual contractual default clause:** compensation equivalent to **5 %** of the volume of EUAs not delivered or received.
- **Optional guarantee deposit:** for structured operations or corporate groups with low credit rating.
- **Annual creditworthiness certification:** reviewed by Nexus's financial department, without affecting the client's rating.

All contracts are governed by Spanish or Swiss law and are subject to institutional arbitration in case of dispute (Spanish Court of Arbitration or Swiss Chambers' Arbitration Institution).

5.4. Registration, representation, and custody in the EU UPC/URT account

Nexus Green Energy offers complementary **registry-management and allowance-custody services** for clients without prior experience in operating the **EU Union Registry for Emissions Trading.**

Available modalities:

- **Opening and management of UPC account (installation personal account):** full support in the process before the **Spanish Office for Climate Change (OECC)**.
- **Technical and legal representation** for authorizations and electronic signature in the **SEUR** environment.
- **Custody account operated by Nexus:** for non-operational clients or those who prefer to delegate daily administration.
- **Automated notifications** of MRV-related movements and expirations linked to the account.

All operations are documented and notified in accordance with **Implementing Regulation (EU) 2013/389** and its updates.

5.5. Confidentiality, sustainability and force-majeure clauses

The Master Agreement includes specific provisions that **strengthen legal security, sustainability, and contingency management:**

- **Enhanced confidentiality clause:** covers not only prices and volumes but also technical and strategic conditions associated with carbon management.

- **Sustainability clause:** both the client and Nexus undertake not to use the supplied allowances for speculative or environmentally contrary operations under the EU ETS.
- **Force-majeure clause:** protects both parties against exceptional circumstances such as:
    - Suspension of EU registries due to cyberattacks or regulatory causes.
    - International embargoes, sanctions, or change in the client's legal status.
    - Duly evidenced logistical or administrative impediments.

An **automatic contract-update clause** is also included in case of relevant regulatory changes (Regulation 1031/2010, ETS revision 2024, CBAM).

6. COMPETITIVE ADVANTAGES

6.1. Direct access to primary and secondary market

Primary market (auctions)

- Operational license in the **European Commission's weekly auctions (EEX, ICE Endex**), enabling volume acquisition at clearing prices without intermediaries.
- Algorithmic monitoring of order books: we identify windows of low buying pressure to bid when the price relaxes between €0.50 and €1.20/t below the weekly average.

Secondary market (OTC, ICE/EEX)

- Proprietary network of **industrial counterparties** selling surpluses—tiles, technical glass, steel—and OTC brokers with tight spreads.
- Capacity to close blocks of **≥ 50,000 EUAs** within 24 hours, with DvP settlement and commission included (< €0.05/t).
- Real-time market-intelligence tools (forward curve, bid-ask, implied volatility) integrated in the **Nexus Carbon Hub platform.**

Tangible benefit: average saving of €2-4/t versus isolated spot-market purchase, equivalent to reducing annual regulatory cost by **5-8 %**.

6.2. Independence: no conflict with speculative traders

- **Neutral corporate structure:** Nexus holds no proprietary trading positions; all purchases are made against firm client orders.
- **Internal risk-management codes:** prohibition of trading purely financial derivatives that could artificially influence EUA prices.
- **"Best Execution" policy audited** by a third party: each transaction backed by three archived market quotations for 10 years.
- Avoidance of **front-running** or collusion risks that could inflate final price or trigger market-abuse penalties.

Result: total transparency – the client knows every euro paid is exclusively dedicated to fulfilling its climate obligation, not to financing a trader's speculative positions.

6.3. Smart hedging that reduces the effective carbon cost

- Modular hedging architecture: fixed forward contracts, asymmetric collars, digital options, and EUA loans to defer outlays.
- Monte Carlo risk models (50,000 simulations) combining EUA-gas TTF-Brent correlations to determine optimal instrument mix.
- Possibility of blending with Energy Savings Certificates (CAE) or selling CBAM surpluses to finance part of EUA purchases.
- Implementation of hedging-efficiency KPIs (Cost-at-Risk, Delta % vs Spot, CFaR at 95 %) reviewed quarterly with the client's CFO.

Typical impact: between 1 % and 3 % additional savings on total carbon cost and greater budget visibility at 3-5 years.

6.4. Multidisciplinary legal, technical and financial team

Area	Specialists	Added value
Legal & Compliance	EU ETS, CBAM, AML/KYC lawyers	Solid contracts, zero sanctions, defense in inspections.
Process engineering	Chemical and energy engineers	Optimization of emission factors, BAT projects.
Carbon markets	Senior ICE/EEX traders, risk analysts	Efficient execution, hedging structuring.
Sustainable finance	CFA, ESG experts	Integration into CSRD reporting, access to green bonds.

- Internal collaboration under **"single-desk"** mode: each client has an **Account Lead** coordinating the four teams and reporting to the plant's Environmental Director.
- Extensive experience in **MRV audits**, free-allocation expert assessments, and technical defense before regulatory bodies.

6.5. 360° service: from strategy to regulatory accountability

a. **Initial diagnosis**
- Express emissions audit and 2025-2035 deficit projection.
- Cost benchmark vs European competitors.

b. **Strategy and contracting**
- Design of purchase-hedging curve.
- Signature of **Master Agreement** with tailored guarantees.

c. **Execution and reporting**
- EUA acquisition in market (spot/forward) with DvP settlement.
- Automatic upload of transactions to the **URT Registry and client ERP.**

d. **Monitoring and optimization**

- Quarterly performance meeting (financial KPIs + ESG indicators).
- Dynamic adjustments to production or carbon-price changes.

e. e. **Annual MRV closure**

- Coordination with accredited verifier (SGS, Bureau Veritas).
- Submission of emissions report and EUA surrender before 30 April.

Global advantage: the client outsources 100 % of the climate-compliance cycle, retains strategic control, and frees internal resources for its core business.

Conclusion: The combination of direct market access, operational independence, advanced hedging strategies, a multidisciplinary team, and a 360° service makes NEXUS GREEN ENERGY the most solid and efficient partner for ceramic and glass companies seeking to minimize their regulatory cost and accelerate their transition toward low-carbon processes.

7. SUCCESS CASES AND TESTIMONIALS

7.1. Ceramic industry – 5-year hedge with significant savings

A company in the ceramic sector, with a structural emission-allowance deficit, requested a solution that would provide medium-term visibility and smooth out the carbon budgetary impact. Nexus proposed a combined fixed-forward and collar strategy that made it possible to lock in reasonable prices over a five-year horizon.

Key elements of the applied solution:

- Coverage of 60 % of the forecasted volume with fixed-price forwards.
- Remaining volume covered with collar-type options to limit exposure without paying a high premium.
- Semi-annual review of the covered volume according to production variations.
- Operations executed during periods of low market pressure (auctions + OTC).

The result was a substantial reduction in the effective carbon cost and improved capacity for medium-term financial planning.

7.2. Hollow glass – Spot-forward swap to avoid price spikes

Faced with high exposure to EUA price volatility, a company in the glass sector adopted **a swap strategy between spot and forward positions** to reduce the impact of annual deliveries concentrated in months of high demand.

Nexus solution:

- Temporary transfer of spot EUAs in exchange for future return (18 months) under agreed conditions.

- Automatic activation of repurchase clauses if the market price dropped beyond a defined threshold.
- Monthly financial settlement and full traceability in the URT.

This solution made it possible to avoid treasury stress without compromising the regulatory allowance-delivery deadline.

7.3. Cement and metallurgy – Pooled EUA purchases

Companies from various regulated industrial sectors decided to **centralize their emission-allowance purchases** under a coordinated structure, without merging their accounts or losing individual autonomy.

Nexus solution:

- Creation of an **operational purchasing pool** with joint tendering of EUA blocks.
- Individual allocation per company, with separate invoicing, delivery, and documentation.
- Block negotiation with OTC counterparties to reduce unit spread.

The aggregation enabled higher-volume operations under better market conditions, faster execution, and significant reductions in transaction costs.

7.4. Climate-neutrality projects with certification

Nexus has supported highly energy-intensive industries in **designing climate-neutrality strategies** under recognized standards (e.g. PAS 2060, ISO 14068), combining market mechanisms and energy-efficiency actions.

Typical components of the service:

- Decarbonization roadmap for Scope 1 and 2.
- Optimization of free allocation through BAT compliance.
- Deficit coverage with EUAs and offsetting of residual emissions using high-integrity voluntary credits (Gold Standard, VCS).
- Documentation preparation for certification by an independent third party.

These strategies have enabled clients to improve their positioning with buyers, regulators, and financiers.

7.5. Client feedback and satisfaction KPIs

Nexus maintains a client-service model that combines technical rigor with operational agility. Feedback from industrial clients shows a high level of service appreciation.

Service-quality indicators (last 12 months):

- **Overall satisfaction level above 95 %.**
- **Average response time under 4 working hours.**
- **EUA deliveries within the regulatory deadline in 100 % of operations.**
- **Contract-renewal rate above 90 %.**

✓ Conclusion

The presented cases reflect Nexus Green **Energy's flexibility to adapt to the real needs of each industrial facility**, as well as its capacity to deliver tangible results in **financial efficiency**, climate compliance, and sustainable value creation.

- **Average savings** achieved over the regulatory carbon cost: **11–19 %**, depending on sector and tool used.
- **Intangible added value:** regulatory peace of mind, improved ESG rating, and enhanced ability to attract green financing.
- These cases demonstrate Nexus Green Energy's **versatility and results-driven orientation** across ceramics, glass, cement, and metallurgy sectors.

8. CUSTOMIZED PROPOSAL FOR YOUR PLANT

8.1. Express audit of historical emissions (last 3 years)

Before designing any supply or hedging strategy, Nexus performs a quick technical audit to assess emission trends and influencing factors.

Applied methodology:

- Review of verified MRV reports (last three years).
- Analysis of energy consumption, physical production, emission factors, and free allocation.
- Identification of anomalies or improvement opportunities:
  - significant deviations between production and emissions,
  - thermal inefficiencies,
  - technical non-compliance with any BAT.

Deliverables:

- Summary report with year-by-year comparative charts.
- Analysis of emission intensity (kg CO_2/t) versus sector benchmarks.
- Immediate recommendations to improve future allocation.

Delivery time: **3–5 working days** after receipt of basic data.

8.2. Calculation of EUA deficit/surplus 2025–2030

Based on the previous diagnosis, the **projected emission-allowance balance** for the coming years is calculated, considering:

- Estimated production (normal, high, and low).
- Average emission intensity (current and BAT target).
- Expected evolution of free allocation according to sector benchmark (annual reduction until 2030).
- Compliance thresholds and safety margins.

Expected result:

An Excel model or web platform with **annual projections of EUA** deficits or surpluses, accompanied by a table such as:

Year	Production (t)	Expected emissions (t CO_2)	Estimated allocation (EUAs)	Deficit or surplus
2025	100,000	25,000	10,000	-15,000 EUAs

This analysis is key to anticipating the **financial impact** of compliance and serves as a basis for structuring hedging or staggered-purchase contracts.

8.3. Recommended purchase strategy (spot / forward / structured mix)

Based on the plant's emission profile, financial situation, and risk appetite, **an optimal EUA-acquisition strategy is proposed,** tailored to the following variables:

- Planning horizon (1, 3, 5 years).
- Available liquidity for advance purchases.
- Carbon-price volatility.
- Regulatory trends (ETS2, CBAM, reduction of free allowances).

Integrable options:

- **Spot purchase:** short-term tactical coverage.
- **Forward contracts:** price lock for the next 12-36 months.
- **Collar/Cap-Floor structures:** limit maximum price without forgoing benefit if the market drops.
- **Spot-Forward swaps:** for companies with short-term cash constraints.

Example of recommended proposal:

Modality	Volume covered	Horizon	Expected price	Key advantage
Fixed forward	60 %	2025-2027	76 €/t	Stability
Collar	20 %	2026-2028	Cap 90 €/t / Floor 70 €/t	Flexible hedge
Spot	20 %	2025	market-dependent	Operational adaptability

8.4. Budget, milestone calendar, and deliverables

Nexus structures its proposal with **maximum financial and operational clarity**, presenting:

- **Detailed budget**, including breakdown of:
  - price per EUA tonne,
  - execution and custody costs,
  - applicable guarantees or insurance,
  - additional services (MRV, reporting, CAE/CBAM consultancy).

- **Milestone calendar:**

Milestone	Estimated date	Responsible	Observations
Master contract signing	T0 + 3 days	Nexus + Client	
Technical audit	T0 + 7 days	Nexus	Historical data required
1st Spot operation	T0 + 10 days	Nexus	100 % traceability
Forward planning	T0 + 20 days	Nexus	Optional
First quarterly report	T0 + 90 days	Nexus	Includes KPIs

- **Standard deliverables:**
  - Annual compliance plan.
  - Proof of EUA delivery (URT).
  - Technical-financial hedging report.
  - Traceability document for MRV verifier.

8.5. Complementary options: CAE, CBAM, and internal abatement projects

In addition to EU ETS compliance, Nexus identifies complementary opportunities to optimize the plant's climate and financial performance.

□ Energy Savings Certificates (CAE)

- Identification of eligible actions (motors, burners, heat recovery).
- Calculation of standardized savings (kWh) and conversion into marketable CAEs.
- Possibility of selling CAEs to generate liquidity or offset EUA purchases.

□ CBAM (Carbon Border Adjustment Mechanism)

- Advisory on correct declaration of CBAM-affected products.
- Simulation of financial impacts from import/export.
- Management of CBAM certificates and linkage with MRV data.

□ Internal abatement projects

- Technical and financial assessment of:
  - kiln electrification,
  - biomethane or hydrogen use,
  - reduction of thermal leaks or improved thermal efficiency.

- Integration into corporate decarbonization plans and access to green financing (PERTE, Innovation Fund).

✓ Conclusion: a turnkey proposal

The customized proposal from Nexus Green Energy enables each industrial plant to:

- Comply with EU ETS **with no risks or penalties.**
- Optimize its annual carbon cost with sophisticated financial tools.
- Integrate its climate strategy into a broader roadmap for decarbonization and competitiveness.

All under a **transparent, flexible, and fully documented** approach for auditors, verifiers, and regulators.

9. IMPLEMENTATION PLAN

9.1. Kick-off with management and technical team

Objective: Align expectations, responsibilities, and schedule from the start.
Participants: General management, financial department, plant technical area, environmental manager, and assigned Nexus team.

Initial session content (approx. 2 h):

- Presentation of roles and communication channels.
- Review of current emissions status, free allocation, and reporting.
- Preliminary review of regulatory and financial risks.
- Confirmation of service scope contracted (spot, forward, MRV, CAE, CBAM, etc.).
- Review of EUA-delivery calendar and critical EU ETS deadlines.

 Deliverable**: Meeting minutes with validated operational schedule.**

9.2. Configuration of EU Registry access and KYC

URT (Union Registry Transaction Log):

- If the **plant already has an active UPC** account: access and authorizations are validated.
- If **not, Nexus assists** in:
  - Formal application before the Spanish Office for Climate Change (OECC).
  - Preparation of documentation and official forms.
  - Identification of authorized persons and security measures (electronic signature, dual verification).

KYC process (Know Your Customer):

- Verification of client identity in accordance with AML5 (Anti-Money Laundering Directive).
- Request for corporate documents, beneficial-ownership declaration, and **Due Diligence Form signature.**

 Deliverables:

- URT access and management manual.
- KYC compliance confirmation validated by Nexus's legal team.

Operational activation:

- Client registration in the Nexus Carbon Hub system.
- Assignment of **Account Manager** and dedicated technical support.
- ERP integration if applicable (optional).

 Deliverable: Executed master contract uploaded to shared digital workspace.

9.3. Execution of EUA purchase and delivery operations

Tactical phase of the climate-compliance plan, adapted to the plant's risk profile and cash-flow needs.

Standard flows:

a. Confirmation of volume to be covered and modality (spot, forward, structured).
b. Submission of signed offer and technical and financial validation by both parties.
c. Execution of **Delivery versus Payment (DvP)** transfer:
   - Bank settlement (SEPA/SWIFT).
   - Accounting transfer of EUAs in the URT.
   - Delivery confirmation and certificate (if applicable, notarized).

Typical timeframes:

- Spot: delivery in 1-3 business days.
- Forward: delivery per agreed schedule.

 Deliverables:

- Operation confirmation (Annex II).
- Official EU Registry proof.
- Invoice, delivery note, and cost summary.

9.4. Continuous monitoring and annual MRV-cycle closure

Once underway, Nexus ensures **comprehensive compliance monitoring,** providing support up to official MRV report submission and EUA delivery before 30 April each year.

Key components:

- Personalized dashboard in Nexus Carbon Hub showing real-time status of emissions, allowance coverage, deadlines, and account balance.
- Automatic alerts and reminders before each key milestone (reports, deliveries, payments).
- Documentary support for accredited verifiers:
    - MRV tracking Excel template,
    - carbon-operation evidence,
    - technical sheets of avoided emissions.

Cycle closure:

- Supervision of official verification.
- Assistance in annual EUA delivery to regulator.
- Issuance of compliance report for management and external auditors.
- Annual evaluation meeting with client to:
    - review performance,
    - update forecasts, and
    - adjust 2026–2030 strategy.

Deliverables:

- Annual technical-financial compliance report.
- Validated EUA-delivery certificate.
- Action plan for the next fiscal year.

✓ Conclusion

This phased, agile, and **fully documented implementation plan** enables any industrial plant—even without prior EU ETS experience—to comply with its climate **obligations from the first implementation quarter,** with full traceability, legal security, and economic control.

10. CONCLUSION: 360° VALUE PROPOSITION

10.1. Elimination of regulatory and sanction risk

Compliance under the EU Emissions Trading System (EU ETS) is not optional:

- **Failure to surrender EUAs** on time implies automatic fines of **€100 per uncovered tonne**, in addition to the obligation of later delivery.
- Any **errors in MRV reports** can invalidate annual verification and expose the company to inspections, fines, and loss of future free allocation.
- The new regulatory framework (ETS Phase 4, CBAM, CSRD) requires full **traceability, documentation, and consistency.**

With Nexus Green Energy, the company:

- Outsources the most critical and complex compliance-cycle tasks.
- Receives **reports, contracts, and documents validated** by technical and legal experts.
- Avoids any non-compliance, operational error, or sanction.
- Has an **immediate-response team available** in case of audit or regulatory inquiry.

Result: **practically eliminated regulatory risk.**

10.2. Optimization of carbon cost and margin preservation

Carbon is no longer merely an environmental factor:

- It has become a variable operating cost that can represent **3–15 %** of total production cost.
- Its volatility can directly affect each plant's profitability and competitiveness.
- Annual planning without hedging leaves companies vulnerable to rising prices or external shocks.

With Nexus, the company gains:

- Professional hedging tools: forwards, collars, swaps, structured derivatives.
- Access to primary and OTC markets without intermediaries, with minimal spreads.
- Strategies tailored to its production and financial profile, adjustable quarterly.
- Integration of complementary tools such as CAE, CBAM, or abatement projects.

Result: **significant reduction in effective CO_2** cost, greater predictability, and protection of operating margin.

10.3. Improved climate reputation and access to green finance

Clients, banks, investors, and regulators increasingly demand:

- Evidence of real, verifiable environmental compliance.
- Transparency in carbon management (EU ETS, CBAM, ESG).
- Concrete actions toward climate neutrality.
-

Working with Nexus delivers:

- **Annual compliance certificates** ready for external auditors or ESG verification.
- Integration of emission and decarbonization data into **CSRD and EU Taxonomy reports**.

- Preferential positioning with investment funds, development banks, insurers, or corporate clients.

Result: **stronger corporate image, access to cheaper green financing, and greater commercial resilience.**

10.4. Roadmap toward carbon neutrality 2040

Beyond immediate compliance, Nexus supports clients in strategic **planning of their climate transition:**

- Diagnosis of Scope 1 and 2 emissions.
- Definition of **realistic intermediate targets** (e.g. 30 % reduction by 2030).
- Evaluation of **viable technological projects** (electrification, biogas, hydrogen, thermal efficiency).
- **Incorporation of voluntary offset instruments (VCUs)** with climate integrity.

This roadmap:

- Aligns with international commitments (Paris Agreement, European Green Deal).
- Serves as a **foundation for PAS 2060** or other recognized certifications.
- Enables communication of progress to internal and external stakeholders.

Result: a **company that not only complies but leads the energy transition in its sector.**

10.5. Preparation for stricter ETS scenarios and expanded CBAM

The coming years will bring structural changes to the regulatory framework:

- **Accelerated reduction of the emissions cap (LRF).**
- **Gradual phase-out of free allocation** from 2026 for CBAM sectors.
- **Application of ETS2 (transport, buildings, fuels)** from 2027.
- Expansion of CBAM to complex products and intermediate components.
- Review of sectoral benchmarks in 2026 and 2029.
- Strengthened control over reporting accuracy (CSRD, ESG audits).

Nexus prepares its clients through:

- Regulatory and financial impact simulations.
- Gradual adaptation strategies.
- Automatic contractual and technical updates with each new regulation.
- Technical representation and defense before regulators, if required.

Result: **resilience under future regulatory pressure**, without operational disruption or budget imbalance.

✓Final Conclusion

With **Nexus Green Energy**, your company gains a comprehensive, transformative solution that covers all dimensions of climate compliance:
✓ Legal and regulatory security.
✓ Structural financial savings.
✓ Strengthened climate brand.
✓ Long-term strategic planning.
✓ Continuous adaptation to a changing regulated environment.

A 360° proposal, designed to compete, grow, and lead in a low-carbon economy.

It's time to act!

Anticipate the 2026 obligation, secure competitive prices, and strengthen your regulatory compliance with **Nexus Green Energy**.

Nexus Green Energy, SL

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