

OilXDec

TOKENIZED OIL

ENABLING SEAMLESS

ENERGY ASSET LIQUIDITY



INTRODUCTION



OilXDec aims to bring real-world energy assets, particularly oil, into the blockchain ecosystem by tokenizing physical crude oil. This initiative bridges commodity markets with digital finance, leveraging blockchain technology to transform oil trading. The tokenization of real-world assets (RWA) has emerged as a key trend in the blockchain space. Institutions like BlackRock have already tokenized nearly \$2 billion in U.S. Treasury bonds using blockchain. However, in the commodities sector, only gold-backed tokens have achieved significant adoption, with the total market capitalization of commodity RWAs stagnating at around \$800 million over the past two years. Attempts to tokenize other commodities, such as uranium, have seen minimal trading activity, with daily volumes below \$5,000. These challenges highlight that for oil and other commodities to be successfully tokenized, a project must excel in compliance, liquidity, and technical infrastructure.



The global crude oil market is among the most influential commodity markets, with a scale of trillions of dollars, affecting economies, energy security, and geopolitics. OilXDec is designed to address inefficiencies in traditional oil trading and the RWA sector. By leveraging the transparency, efficiency, and decentralization of blockchain, OilXDec aims to build a global crude oil tokenization platform powered by the OICDX token. By ensuring institutional-grade compliance while lowering entry barriers for retail investors, OilXDec serves as a bridge between the traditional oil market and digital finance.

MARKET BACKGROUND & OPPORTUNITIES



Challenges in the Traditional Oil Market

● High Barriers to Entry

Spot and futures trading of oil often require professional qualifications and substantial capital, making it difficult for ordinary investors to participate directly. Futures contracts require substantial investment ; (e.g., WTI crude oil futures at 1,000 barrels per contract), preventing small-scale investors from entering the market.

● Limited Liquidity & Trading Hours

Oil trading occurs on regulated exchanges, subject to specific hours and geographic barriers, restricting 24/7 access and limiting the ability of traders to react to real-time global events.

● Complex Settlement Processes

Physical oil trading involves storage, transportation, and delivery logistics, making settlement time-consuming and costly. Even financial derivatives face liquidity issues and risks such as short squeezes, as seen during the 2020 oil price crash.

● Lack of Transparency

Traditional oil trading involves long, complex supply chains with multiple intermediaries. The process lacks transparency, relying heavily on intermediaries and contractual enforcement to establish trust. This inefficiency increases transaction costs and introduces potential default risks.

● Limited Access for Retail Investors

Retail investors typically have no direct access to physical oil assets and can only gain exposure through indirect methods, such as energy-focused funds or related equities. These alternatives come with higher costs and do not grant direct ownership of oil as a tangible asset.





The Rise of RWA Tokenization

The tokenization of real-world assets (RWA) has emerged as a key trend in the crypto industry, bridging traditional finance and blockchain technology. By digitizing assets such as real estate, bonds, receivables, and commodities on-chain, it enhances liquidity, lowers investment barriers, and optimizes trading efficiency.

Despite the growing interest in tokenized commodities, the market remains in a wait-and-see mode, requiring innovative models to unlock demand. On the other hand, the regulatory environment is also driving the development of RWA (Real World Assets). While traditional DeFi protocols face increasing scrutiny due to the lack of real-world backing, RWA tokenization is considered as a “regulatory-friendly” narrative to the crypto industry by anchoring digital assets to tangible reserves.

Market Opportunities

Massive Market Potential

The global oil market sees daily trading volumes in the hundreds of billions of dollars. Even a small fraction of this liquidity shifting on-chain would be a tremendous increase for the crypto market.

Financial Inclusion

Retail investors can gain direct exposure to oil assets with minimal capital, benefiting from price fluctuations that were previously accessible only to institutional players.

Innovative Business Applications

Beyond investment, tokenized oil can serve as a financial instrument for supply chain financing and trade settlements. For example, OilXDec tokens can facilitate instant spot settlements between trade participants, accelerating capital turnover and reducing forex risks.

Hedge Against Inflation and Geopolitical Risks

Oil prices are closely tied to macroeconomic trends and geopolitical developments, offering a diversification option with low correlation to digital assets. Tokenized oil provides crypto investors with a hedge against systemic risks in the purely digital asset space.

Enhancing Commodity Trading efficiency

Blockchain technology enables 24/7 trading and peer-to-peer transactions, bypassing traditional market constraints such as time zones and regional regulations. Real-time pricing and settlement improve capital efficiency and liquidity.

OILXDEC: PLATFORM POSITIONING & VALUE PROPOSITION



Vision & Objectives

The vision of OilXDec is to establish itself as a leading global platform for on-chain oil trading and settlement. We believe that by integrating real-world crude oil assets into blockchain, it not only introduces tangible value to the crypto ecosystem but also enhances efficiency in the traditional oil market.

Empowering the Digitalization of Oil Assets

Through the OilXDec platform, crude oil and other energy assets can be seamlessly tokenized, traded, and settled, enhancing transaction efficiency.

Lowering Market Entry Barriers

It allows more investors, whether institutions or individuals, to participate in oil market investments fairly and share the benefits of resource allocation.

Ensuring Asset Security and Compliance

By maintaining a 1:1 peg between tokens and physical assets, it establishes a robust risk control and compliance framework, gaining trust from both regulators and users while setting industry standards for RWA.

Driving Industry Innovation

By integrating IoT, smart contracts, and cross-chain technology, OilXDec explores new models for energy trade. It is not just a trading platform but an experimental hub where the traditional energy sector converges with the Web3 ecosystem.

Market Positioning

Within the RWA sector, OilXDec focuses on commodities, using crude oil as its entry point to build an extensive ecosystem. Unlike some competitors that target only institutional clients or specific regions, OilXDec adopts a "dual-driven strategy":

Institutional-Grade Compliance

To meet the needs of large traders, energy firms, and accredited investors, OilXDec operates within a legal framework, offering custodial services, audit reports, KYC/AML compliance, and regulatory support. OilXDec will engage with regulatory bodies to ensure institutional clients receive fully compliant services.

Retail Accessibility

OilXDec equally prioritizes the retail market by lowering the minimum investment threshold, enabling ordinary investors to buy and hold oil assets. In a regulated environment, OilXDec will issue OICDX tokens to the public while requiring users to complete KYC verification. This approach balances compliance with accessibility, making OilXDec attractive to both accredited and general investors.

User Value Proposition

Real Asset Endorsement, Reduce Investment Risk

OICDX is fully backed by physical crude oil, with each token corresponding to a specific quantity of stored oil. Unlike algorithmic stablecoins or crypto assets without tangible backing, OilXDec provides a security margin supported by real-world assets. Holding OilXDec tokens effectively grants users ownership of an equivalent amount of crude oil, with the right to redeem physical oil or receive yield distributions according to predefined rules.

High Liquidity and Instant Trading

Leveraging blockchain technology, OilXDec enables 24/7 trading of tokenized oil assets. Users are not constrained by traditional market hours or geographic limitations, allowing them to buy or sell OICDX at any time in the secondary market.

Transparency and Trust

All OilXDec token issuance and circulation records are publicly visible on-chain, reducing information asymmetry and intermediary costs. We will conduct regular audits of oil reserves in collaboration with independent third-party institutions to enhance user confidence. Additionally, smart contract execution eliminates human settlement errors, ensuring the system operates according to predefined rules.

Competitive Advantages & Innovations

Physical Settlement Mechanism

OilXDec integrates a "storage-logistics-settlement" one-stop system, offering redeemable physical crude oil withdrawal services, a rare feature among similar projects. Eligible token holders can apply for physical delivery, while institutional investors can access spot settlement services. This mechanism ensures OilXDec tokens remain tightly pegged to spot crude oil prices, mitigating depegging risks and providing a stable and reliable investment instrument.

Cross-Chain Compatibility & Multi-Chain Ecosystem

OilXDec adopts a cross-chain strategy, initially launching on Binance Smart Chain (BSC), with plans to expand to Solana, Polygon, and other high-performance blockchains via cross-chain bridges and multi-chain deployment. This ensures broader liquidity for the token while supporting the asset management needs of users across multiple ecosystems.

Comprehensive Closed-Loop Trading Platform

OilXDec is building a fully integrated oil trading ecosystem to ensure tokens remain intrinsically tied to the value of physical crude oil. The OilXDec Marketplace serves as a matching platform connecting buyers and sellers, improving market liquidity and transparency. The custody mechanism allows oil producers to deposit crude oil in exchange for tokens, ensuring all assets undergo rigorous due diligence and quality verification before settlement. Digital wallets and account management enable users to securely store, transfer, and trade oil-backed tokens, creating an efficient, secure, and seamless trading experience.

High Compliance Standards & Trust Framework

We collaborate with industry-leading storage and auditing firms, utilizing multi-signature security measures and off-chain legal oversight to ensure secure custody and transparent disclosure of crude oil reserves. Security audits are a top priority, before deploying smart contracts, we engage renowned cybersecurity firms for code audits, ensuring all core contracts meet industry-recognized security standards before public release.

Core Functions & Product Architecture



OICDX

1:1 Asset-Backed Reserve

Each issued OICDX token is fully backed by an equivalent amount of crude oil in reserve, ensuring no over-issuance.

Value Pegging

The value of OICDX is pegged to international crude oil market prices (e.g., Brent crude spot prices). Through arbitrage and redemption mechanisms (see Physical Delivery section), the market price of OICDX will remain closely aligned with its underlying oil value, minimizing deviations between secondary market pricing and real asset valuation.

Perpetual Validity

Unlike futures contracts that have expiration dates, OICDX serves as a spot oil certificate and remains valid indefinitely. Holders can benefit from oil price appreciation over the long term or choose to trade/redeem at any time. There are no holding costs for token holders—actual storage fees are deducted through a minimal on-chain management fee, ensuring reserve maintenance while keeping costs low to preserve user profits.

Divisibility & Transferability

OICDX supports up to 18 decimal places, allowing users to trade oil in fractional amounts with high flexibility. Tokens can be freely transferred to any compatible wallet address.



Trading & Liquidity

Official Trading Platform

OilXDec will launch its official trading platform with an order-matching mechanism similar to a centralized exchange, allowing users to place orders and trade OICDX in real-time.

Decentralized Exchange (DEX) Listings

OICDX will also be listed on decentralized exchanges (DEXs) such as Uniswap.

Centralized Exchange (CEX) Listings

When market conditions and regulatory approvals align, we will facilitate OICDX listings on major centralized cryptocurrency exchanges to expand investor accessibility.

Physical Delivery & Redemption

Delivery Eligibility

The minimum withdrawal unit is 100 barrels, and applicants must hold sufficient OICDX tokens and pass KYC/AML verification to meet regulatory compliance.

Application Process

Eligible token holders submit delivery requests via the OilXDec platform, specifying quantity and delivery location. After submission, the equivalent OICDX tokens are locked, and after approval, delivery arrangements are confirmed.

Storage & Logistics

OilXDec collaborates with global crude oil storage and logistics providers, with partner storage facilities in Rotterdam, Singapore, and Houston to ensure fast and secure fulfillment of delivery requests. All transportation is handled by certified logistics providers.

Token Burn & Settlement

Upon successful physical delivery, corresponding OICDX tokens are burned, ensuring that the circulating supply decreases accordingly. Delivery fees can be settled in fiat currencies or OICDX tokens. Smart contracts automate the burn process upon confirmation of successful delivery and record the transaction as proof of settlement.

Small-Scale Liquidation

Users can redeem OICDX for fiat currencies or stablecoins, and the platform will sell the equivalent crude oil on the spot market and burn the redeemed tokens to maintain liquidity, which allows small-scale holders to cash out flexibly without requiring full-scale oil delivery.

Smart Contract Architecture

OICDX Main Contract

Built on the BEP-20 standard, the main contract handles minting, burning, and transferring of OICDX tokens. Minting is restricted to authorized modules, while burning is only triggered upon completed physical delivery. The contract includes an emergency pause function to protect user assets in case of unforeseen risks.

Reserve Management Contract

Maintain the on-chain record of physical crude oil reserves and token issuance. New inventory can be added only after an audit, with additional tokens minted via multi-signature (multi-sig) approval. When physical delivery or redemption occurs, the system automatically burns the corresponding tokens. All reserve data—including total inventory, warehouse stock levels, and custodian signatures—are transparently recorded on-chain.

Delivery Request Contract

It processes user withdrawal requests, locking the corresponding tokens and notifying the backend for review. Once approved, the contract triggers logistics execution. Upon successful delivery, the tokens are either unlocked or burned. The entire process is tracked in real-time using blockchain event mechanisms.

Governance & Upgrade Contract

Supports community governance and contract upgrades. Initially controlled by multi-signature authority involving the core team and advisors, but it will later be opened for OICDX holders to vote on key parameters (e.g., transaction fees, delivery policies), and it uses a proxy contract model to support seamless upgrades and adaptability to market demands.

Cross-Chain Compatibility Solutions

Native Multi-Chain Deployment

OICDX contracts will be deployed directly on multiple blockchains, with tokens issued on each chain based on locked assets on the mainnet. A cross-chain management protocol will be developed to ensure that the total supply across different chains never exceeds the actual physical reserves.

Inter-chain token transfers will be executed via trusted relayers or bridge contracts, allowing users to choose their preferred blockchain for transactions and move assets between chains effortlessly.

Cross-Chain Bridging

It will integrate with established cross-chain bridge providers, such as Chainlink, to enable seamless inter-chain interoperability of OICDX. Users locking tokens on the source chain in the bridge contract will receive wrapped tokens on the target chain. OilXDec will manage bridge liquidity and security. This bridge approach saves us the need for complex contract deployment on every chain while allowing the coverage of main blockchain accessibility and the adaptability to evolving cross-chain technologies dynamically.



Security & Risk Management

Smart Contract Security

All smart contracts will undergo extensive security audits by at least two independent security firms before deployment. Audits will include vulnerability scanning, manual code reviews, and formal verification. Audit reports will be publicly accessible to maintain transparency and community trust.

Multi-Signature Authorization

Critical contract operations (e.g., minting new tokens, adjusting parameters) will require multi-signature approvals from multiple core team members and independent custodians. This ensures that no single entity has unilateral control, mitigating centralized risk. Over time, multi-sign governance will diversify, incorporating community representatives and financial institution partners to enhance system stability.

Custodial Monitoring & Transparency

In terms of off-line oil inventory, we will implement IoT-based inventory tracking linked to blockchain oracles to ensure real-time verification of physical oil reserves on-chain. Warehouse sensors and inventory records will be automatically reported on-chain, allowing token holders to monitor reserve fluctuations. For example, whenever a delivery occurs and tokens are burned, the oracle will update on-chain inventory records, providing double-layer verification to ensure asset consistency. This technological approach enhances transparency and minimizes moral hazard risks.

Risk Reserve Fund

OilXDec will allocate a portion of its revenue to a risk reserve fund, designated for emergency response in extreme situations. In cases of force majeure events leading to inventory losses or temporary liquidity shortages caused by severe price volatility, the reserve fund can be used to compensate users or stabilize the market. Additionally, OilXDec will secure commercial insurance for storage and transportation, minimizing potential risks to the greatest extent possible.

ADVANTAGES OF THE TECHNICAL SOLUTION



Asset-Specific Adaptability

Unlike solid commodities such as gold, crude oil presents challenges in storage and quality variations. OilXDec addresses these issues by collaborating with professional storage firms and implementing on-chain quality certification reports, ensuring that each tokenized barrel meets industry quality standards. This tailored approach gives OilXDec a competitive advantage over generic commodity tokenization models, making it more aligned with the unique characteristics of the oil industry.

High-Performance Trading Support

Given the high volatility and large number of market participants in the oil sector, trading performance is our key priority. OilXDec has strategically integrated Layer 2 solutions and high-performance blockchains to ensure near-instant, low-cost transactions. This multi-layer architecture enables the system to handle large trading volumes during periods of high market volatility, preventing network congestion that could otherwise hinder users from closing positions timely trades.

Optimized User Experience

The technical solution is designed not only for backend efficiency but also for seamless user interaction. We feature an intuitive user interface, allowing users to easily track their tokenized oil holdings, monitor real-time oil prices, and view portfolio performance.

Flexible and Scalable Architecture

The modular architecture of OilXDec enables rapid adaptation to new market demands. For instance, if the platform decides to support additional commodities such as natural gas, refined petroleum products, or metals, we can seamlessly integrate new token contracts and settlement modules within the same framework, ensuring that existing OICDX operations remain unaffected.

STRATEGIC PARTNERSHIPS



TOKEN ECONOMICS



OICDX serves as the core token of the OilXDec platform, designed to establish an efficient, secure, and transparent ecosystem for tokenized crude oil assets. Acting as a bridge between blockchain technology and the global energy market, OICDX facilitates oil asset investment and trading while also playing a role in DeFi applications, governance, and revenue distribution.

Token Symbol: OICDX

Total Supply: 5 billion

Token Burn Mechanism

A portion of the transaction fees and data subscription revenue of the platform will be used for periodic buybacks and OICDX token burns, gradually reducing the circulating supply and increasing scarcity. All burn transactions will be fully transparent and recorded on-chain.

Use Cases

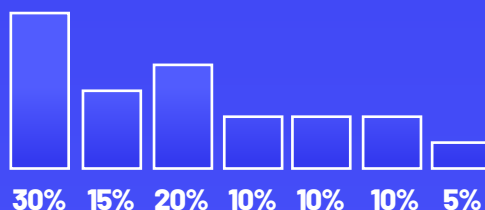
Crude Oil Investment & Trading: Holding OICDX represents an investment in tokenized crude oil assets, and tokens can be used to trade oil spot markets.

Revenue Sharing & Dividends: OICDX holders are eligible for platform revenue distributions.

Physical Oil Redemption: Certain users can redeem OICDX for warehouse receipts, enabling them to take physical delivery of crude oil.

DAO Governance & Voting: OICDX holders can participate in decentralized governance, voting on major decisions such as token issuance, revenue allocation, and platform upgrades.

Token Allocation



Presale (30% / 1.5 billion)

Allocated for early investors and community building. Buyers will receive a discount but must comply with KYC/AML requirements.

Team & Advisors (15% / 750 million)

Subject to long-term vesting and linear release to align the interests of the team with the long-term success of the project.

Ecosystem Rewards (20% / 1 billion)

Incentives for staking, liquidity mining, bug bounties, and other activities that foster community engagement and platform security.

Marketing (10% / 500 million)

Dedicated to brand promotion, online/offline events, and global market expansion.

Liquidity Reserve (10% / 500 million)

Used to provide initial liquidity and manage ongoing liquidity, ensuring deep order book support on exchanges.

Development & Operations (10% / 500 million)

Continuously advances platform improvements and user experience enhancements. A portion will also support infrastructure expansion and talent acquisition.

Legal & Compliance (5% / 250 million)

Covers expenses for legal consulting, compliance verification, and regulatory engagements to ensure OilXDec operates within a legally compliant framework.

Team & Advisors



Alexander Veyron

CEO

Former Vice President of Global Oil Trading at TotalEnergies, responsible for crude oil supply chain strategy. Later he joined Mercuria Energy, leading its energy trading team. Specializes in energy digitalization and spearheading blockchain adoption in the oil market.

Cedric Lemaître

CTO

Former blockchain security architect at Ledger, contributor to the EIP design of Ethereum Foundation, and previously led enterprise blockchain development at Hyperledger Fabric. Expertise in smart contracts, Layer 2 scaling solutions, and decentralized identity (DID) technologies.

Eleanor Van Dijk

CFO

Former Head of Commodity Trade Finance at ING Bank, overseeing derivatives risk management at Rabobank Futures Market. She played a key role in the development of the blockchain trade finance solution of Komgo. Extensive experience in structured finance and token economy design.

Viktor Salonen

COO

Former Nordic Supply Chain Director at Neste Oil, managing crude oil logistics and terminal sales. He led crude oil imports and cross-border distribution at Vitol. Focuses on supply chain optimization and blockchain-based logistics tracking systems.

Dario Monticelli

General Counsel

Former Head of Energy Law at Clifford Chance and Legal Counsel at Shell, specializing in Middle East and North Africa (MENA) energy contracts. Deep expertise in international energy regulations, anti-money laundering (AML), and digital asset compliance.

Annika Henschel

Director of Marketing & Ecosystem Expansion

Former Head of Web3 Business Expansion at Chainalysis, previously led B2B digital energy trading at BP Trading. Responsible for the global market expansion and strategic partnerships of OilXDec.

ROADMAP



▼ 2024 Q3

Project launch and market research, and the core team was fully assembled. Partnership agreements with storage providers and legal firms were signed. Whitepaper drafting and economic model design were completed.

▼ 2024 Q4

Seed round financing and product prototype development. OilXDec Alpha testnet launched, enabling basic OICDX minting and transfer functionality. Initiation of smart contract security audit. Community engagement and pre-launch preparation.

▼ 2025 Q1

Beta testnet release, opening participation for selected users, including simulated physical delivery processes. System performance and user interface optimizations based on testing feedback. Initial warehouse inventory deposits completed, integrated with oracles to enable on-chain inventory tracking. Compliance framework assessment conducted in preparation for official operations.

▼ 2025 Q2

Mainnet launch & product release event. Official issuance of OICDX and commencement of trading on the official platform. Completion of the first round of physical delivery applications, with audit reports published to verify reserves. Large-scale marketing initiatives roll out in collaboration with strategic partners.

▼ 2025 Q3-Q4

Feature expansion and ecosystem development. Deployment of the user dashboard. Community governance discussions initiated, introducing an early-stage voting mechanism. Feasibility study begins on the next commodity category for tokenization.

▼ 2026 & Beyond

Expansion phase begins, with a long-term goal to establish a comprehensive tokenized commodity asset platform. Continuous expansion of tradable assets (energy, metals, etc.), enhancement of cross-chain compatibility, and adaptation to evolving market demands and regulatory environments to solidify global market positioning. The platform will gradually evolve towards a decentralized autonomous organization (DAO) model, allowing the community of token holders to jointly shape its future.

CONCLUSION



The oil tokens, as an innovative real-world asset digitalization solution, is dedicated to bringing the multi-trillion-dollar oil commodity market into the blockchain era. This whitepaper demonstrates that OilXDec strictly adheres to industry-leading standards in structural design, technological implementation, and market strategy, while incorporating innovative optimizations specific to the unique demands of the oil industry. Its clear layered architecture, refined functional modules, and strong competitive advantages give OilXDec the confidence to stand out in the RWA sector. The OilXDec platform provides users with a reliable investment channel for oil assets, allowing them to enjoy the high liquidity and convenience of blockchain technology, while benefiting from the security and value support of physical assets.

As traditional finance and the crypto world accelerate their integration, OilXDec is poised to become a crucial bridge between the two. We will continuously optimize our technology, expand our ecosystem, and collaborate with partners to promote industry-standardization efforts. The ultimate vision of OilXDec is not just to be an oil tokenization platform, but to establish a community-driven open financial network for energy assets. Within this network, various energy and commodity assets can achieve free circulation and fair pricing, enabling global users to share in the benefits of digital and traditional economic integration.

