

Thorium One Pager

About Thorium

Thorium aspires to implement Blockchain Technology in the global oil market. The decentralized ledger will streamline the payment process of refueling, processing or even purchasing oil products without having to rely on third-party financial institutions. We provide all kinds of payment related to gas stations, as well as oil imports and exports through this De-Banking system. We aim to increase transparency, cut costs, avoid unnecessary risks and increase the speed of financial transactions without compromising security. Companies using the Thorium platform have already recognized the lack of impeding intermediaries, such as the Swift network or Banks.

Oil market overview

The total revenue for the Oil & Gas industry is more than 2 trillion USD only in 2017. Also, this is only the number for the Upstream sector which is dealing with research, development, and operation of oil and gas fields. Additionally, the total revenue of the midstream and downstream sectors which are focused on transport, refinery and sales of oil and gas products is about 3 trillion USD. Overall market size is close to 6-8 percent of global GDP. This directly translates to the enormity of capital that is being shifted inside this whole industry.

Market	1st Stage	2nd Stage	Consequence
Upstream (Purchase and supply equipment, material for Oil Exploration, Drilling, Production)	<ul style="list-style-type: none"> ✓ Explore the existence of oil and gas on the land or at sea. a. 1 Drillship: 1 trillion b. Build and install oilfield facilities: 1 trillion c. The Conveying Pipes from sea to land: 500 billion 	<ul style="list-style-type: none"> ✓ Develop using drilling equipment and verify the oil and gas reserves and their productivity. ✓ Finally, produce oil and natural gas. 	<ul style="list-style-type: none"> ✓ BP, Total, Exxon Mobile, Shell, Chevron ✓ Global Oil Majors ✓ The core factor of Oil Industry ✓ High margin
Midstream (Pipeline, Storage)	<ul style="list-style-type: none"> ✓ Transport oil and gas using subsea pipelines to refineries. 	<ul style="list-style-type: none"> ✓ Store in storage facilities of refineries. 	<ul style="list-style-type: none"> ✓ Overlapped with Downstream: Heavy Industry, Shipbuilding Industry
Downstream	<ul style="list-style-type: none"> ✓ Commercialize 	<ul style="list-style-type: none"> ✓ Refinery > Oil pipe 	<ul style="list-style-type: none"> ✓ SK Energy, GS Caltex,

(Import, Purification, Transport, Sale)	various forms of crude oil. (Refining process) ✓ Before the stage of sales	> Reservoir > Gas Station > Consumer	S-OIL, Hyundai Oilbank ✓ Refining, Marketing ✓ Low margin
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Problems at the Global Oil Market

- High fuel prices
- Reference oil price manipulation / Market manipulation of oil price / Manipulated oil price
- The absence of a convenient oil exchange platform for small and medium volumes of fuel
- The inability to make purchases at a gas station with cryptocurrency
- Lack of transaction visibility
- Long cash cycle time
- A large amount of paperwork and reconciliation work increases the monetary and time costs of the transaction
- The oil and gas industries have the characteristics of multiparty investment and cooperation, meanwhile, the risks of fraud, error, and inefficiency in transactions are relatively high
- The third-party management costs in the oil and gas trade are relatively high while the trade negotiation process is inefficient and the exchange of critical data is slow
- Important data is at higher risks from cyber-attacks

Thorium Solution

- New Method of Payment in Trade

The multipurpose coin called TORI will allow companies to track data and plan KPI. It will also increase transparency and protect users from possible scam artists when importing, exporting and the rest of the operations.

- Thorium Secure

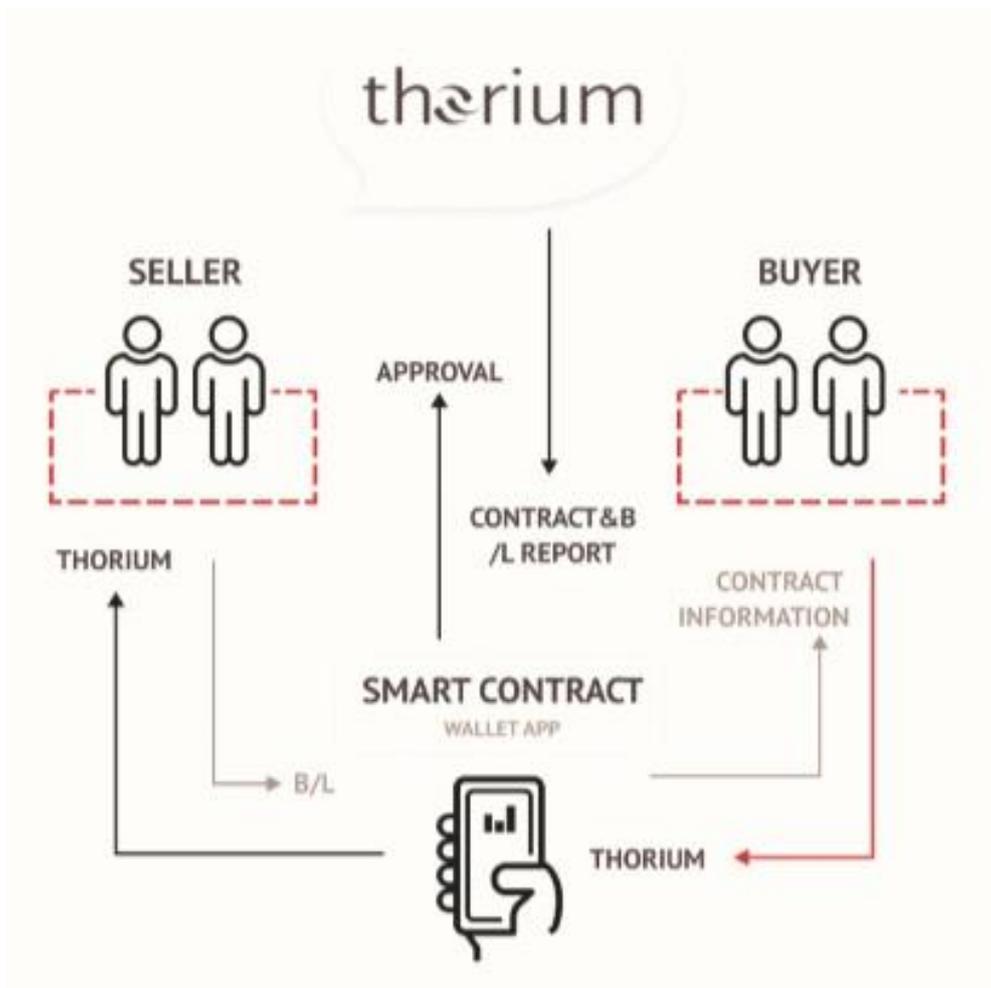
Thorium tokens use Ethereum-based ERC-20 token that has never been hacked in the world and is being evaluated as one of the safest technologies to this day by lots of security

companies including SWIFT.

- Thorium Smart contracts ecosystem

Thorium Smart contracts ecosystem increases transaction credibility and has no third parties, moreover, it is transparent and convenient. Ethereum's smart contract made possible to eliminate unfair payment practices and gather professional users.

Thorium's main net will adopt the Proof of Stake method rather than the Proof of Work. When users wish to mine, they will have to "stake" TORI currency to be able to do so. As a result, it will bring stability to the TORI value.



Thorium Ecosystem features

P2P payments and smart-contracts	Complete transparency	High speed of transactions	Reduces expenses of production and	Low commissions	Minimizes the risk of being scammed	Rewarding system
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support			logistics			
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Business Value

We believe that existing operational approaches and legacy business processes must be re-evaluated. Leaders in the oil and gas sector require transformational and innovative ideas because technology today could not be guaranteed that it will be adapted and succeed in the future. In fact, without proper development, their business model will soon become obsolete. This is why Thorium starting to look at the role of digital and decentralized technologies across the upstream, midstream and downstream value chain.

Performance improvement areas for the oil industry:

- Oil distribution systems still have been recognized by only officials of a few major Upstream and VVIPs.
- The system of oil distribution is very demanding and backward.
- Lack of transparency: banks and credit card companies have been making a lot of profit for a long time without any effort.
- The profits from banks or credit card companies are taken from a large number of hard-working users, not from oil producers or a handful of elites.



<p>With the help of blockchain technology, the Thorium project seeks to create a world in which people could share oil distribution margins with oil consumers (automobile operators) and small business owners.</p>	<p>As Thorium's energy trade platform and the TORI to be used in the pension system are verified in the real market, it will be supplied abundantly to Korea's oil refiners and oil countries, as well as the world's resources.</p>	<p>However, Downstream companies and its traders are difficult to live in, and thus we will inform the need for the development of the oil market and blockchain technology by allowing them to use our platform.</p>
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Consumers can get a 2 to 3% discount on their gas spends if they pay with a TORI Token. For example, they pay 4.85 dollars to fill 5 dollars of fuels in the gas tank.

Small/Medium-sized gas stations and traders can take in more than 2% of their revenue even when their sales are the same as usual. In other words, they can take 60,000 USD when the annual sales are 3,000,000 USD.

Thorium's Gas Station TORI Payment Solution (GTPS) allows eliminating all the intermediaries that are not related directly to Downstream, thus cutting costs on commissions and time.

Another Thorium's TORI World Trade Platform (TWTP) minimizes L/C commissions or currency exchange costs incurred in trading, therefore protect Downstream people who have relatively low income than the Upstream people.

Most importantly, by collecting data from all the transactions going on the Thorium platform, oil producers will be able to predict the appropriate volume of consumption adjust the demand-supply accordingly.

Roadmap

- ① Launching Apps to order oil from oil field company at gas station (payment TORI) QR solution (counterfeit prevent determination)
- ② An app (payment TORI) in which oil field or gas station orders oil from Thorium (termination TORI) QR solution (truth determination)
- ③ Sell oil legally to Korea's gas stations such as Oil Field Co., Ltd. or Thorium Korea Co., Ltd. has licensed from the Ministry of Trade, Industry, and Energy.
- ④ The TORI World Trade platform(TWTP) for ordering oil products from Korea's Thorium Petroleum Import Co. to Singapore's Thorium Trading Co. (using the TORI payment)
- ⑤ Korea's oil importers also obtain permission from the Ministry of Trade, Industry, and Energy. A solution for international oil trading companies that order oil from Malaysia Petronas among the Trading Companies of Singapore's Thorium Foundation, and sell in Singapore spot market (payment USD). Refiners registered in the Singapore spot market: Japan Cosmo Oil Co., Malaysia Petronas, SK Energy Co., GS, S-OIL, Hyundai Oilbank Co., China Sinopec Co., Ltd.
- ⑥ Oilfield Co.

Oilfield Co. has 220 million dollars in annual sales. The company manages more than 100 of its brands and 1,041 customers of direct-operated gas stations and wholesale and retail.

⑦ Universal Oil Co.

Universal Oil is an international oil company that operates wholesale and retail, import and export, trade, real estate leasing business, and manufacture of lubricant, etc.

- Nexen Tire Racing Sponsor Company in 2018
- Establish a payment platform using TORI through the proxy for 382 units who are contracted with Universal Oil (QR introduced)
- Manufacture and export of all lubricants related to the industry as well as engine oil (EXXA, own brand)

How Thorium payment system works

User, lower price >> Payment (using QR code), consumer pay 0.08 USD for a one-time fee to ETH.
>> Margin of \$0.15 for filling 5\$ of gas from the discount, gas station doesn't have to pay 1.5% of the card fee to the card company anymore, order oil with paying 0.5% of the fee to TORI DAPP. >> Oil-producing regions get large of margin through TORI DAPP. >> Pay with TORI to Thorium of Korea. >> TORI Trade Platform offers the lowest fee and 4% higher gross than original total gross >> Thorium of Singapore Trading Company or Partner companies and Affiliates use TORI(pay with USD). >> Singapore spot, future oil companies

Current Payment System value chain

User >> VAN(fee) >> Card company(fee) >> Gas station(margin) >> Bank(fee) >> Distributors(margin) >> Bank(fee) >> Refinery branches(expense for operating and payroll) >> Bank(fee) >> Importer or refinery >> Open account of L/C(fee), credit rating, bank(processing fee) >> Bank(Korea, ₩) >> USD for exchange(fee) >> Bank(Singapore)(fee), USD >> Exchange currency between each supplying companies and each countries in China, Japan, Malaysia, Korea, etc.. >> USD Bank >> Bank and each countries >> Exchange

Oil supplying companies(Korea) >> Open L/C account, Expenses, Credit rating, Bank(Handling fees) >> Bank, KRW >> USD fee for exchange >> USD >> Bank(Singapore) fee, USD >> Chian, Japan, Malaysia, Korea, etc. / Each Oil supplying companies, each countries, exchange >> USD Bank >>

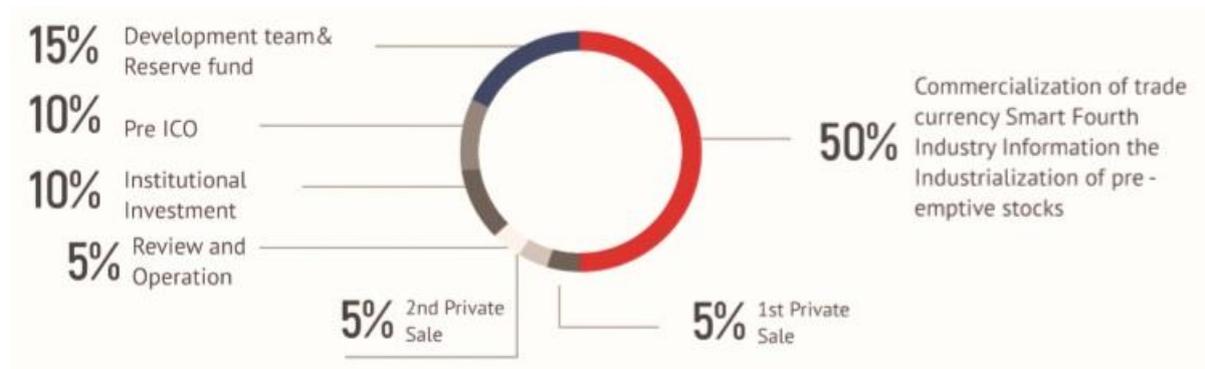
Bank / Each countries >> Exchange

Gas Station TORI Payment Solution(GTPS) in Korea >> TORI World Trade Platform(TWTP) in Singapore >> Importers has licensed from the Ministry of Trade, Industry, and Energy in Korea >> Distributors or gas stations

Partners

- Universal Oil Co., Ltd.
 - Universal Oils Co., Ltd. established in 2004 and produces lubricant and grease bases in Gimhae-si, Gyeongsangnam-do. Universal Oils Co. is responsible for supplying products and services via a domestic sales network of over 300 sales agencies(Seoul / Cheonan / Daegu / Changwon branch offices). To enter the Asian market, they have also started their supply paths to Indonesia.
 - Usually, banks charge 4% from the buyer as well as from the seller, which gives us a sum of 8% total. However, in the case of Universal and Thorium, the percentage is extremely low and only 1% total, which splits into 0.5% for buyer and seller.
- Oilfield Co., Ltd.
 - Oilfield Co., Ltd. is a mid-sized company as an oil distributor that operates 150 gas stations with own brand. The company has 1,041 gas stations as costumers and annual sales of 250 billion won and is affiliated with Shinhan Card and Industrial Bank of Korea.
 - The fee doesn't occur to the seller. Instead, a card company takes 1.5% from it, however, in the case with Thorium is different. The whole picture changes since the franchisee gas stations contracted with Thorium make it to 0.5%.

Token Sale



Token Sale Details

1,039,990,000 ERC20 tokens(TORI)

Thorium has issued 1,039,990,000 ERC20 tokens(TORI) using ethereum-based blockchain technology and has enabled secure and reliable trade transactions using smart payment system. After the main Token sales, 300,000,000 tokens will be distributed through airdrops or supplied a reward for an activity in sustainable development support project.

Token Reward System

1. The consumer will be provided 3% discount on oil price at Thorium gas stations. TORI users will be also rewarded with special pricing on daily items such as coffee, tea, bakery, pizza, energy drinks, tobacco, and fuel purchases.
2. Members can receive special rewards by downloading Thorium mobile app to redeem points on engine oil or any car-related goods.

Team

- Park Ki Ho, CEO

CEO of EN Networks Co., Ltd.

Director of Korea Asian Affairs Co., Ltd.

Executive Director of Universal Oil Co., Ltd.

Co-CEO of Thorium Pte. Ltd.

- Son In Ho, Advisor

Deputy General Manager of BP Korea Co., Ltd.

General Manager of Kuwait Oil Korea Co.

Responsible for Oil and Technology in Hyundai Motors, Hyundai Jeong Gong, Volvo Korea, Posco, etc.

Responsible for Technology of Oil in Samsung Techwin, Doosan Heavy Industries, Daewoo Shipbuilding.

Responsible for Technology of Oil in Samsung Electronics, LG Electronics & LG Cable, Nexen.

CEO of Universal Oil Co., Ltd.

- Lee Eui Woo, Advisor

Managed Oil City Co., Hanyoung agency

Oil supply contract settlement with SK Energy, Sami Corp., GS E&R, S-OIL

Operated Oilfield agency

CEO of Oilfield Co.