



ASSET BACKED CRYPTO ECONOMY

Introducing Multi-Collateralized Smart Contracts and Price Stability
Mechanisms of the Ormeus Reserve Vault (ORV)

A WHITE PAPER

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VERSION 3.0

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2. LIMITED AVAILABILITY OF SUFFICIENT INFORMATION
3. REGULATORY MEASURES
4. CRYPTOGRAPHIC PROTECTIONS
5. ABANDONMENT OR DEVELOPMENT FAILURE
6. FLAW IN THE SOURCE CODE
7. UNPERMISSIONED, DECENTRALIZED AND AUTONOMOUS LEDGER
8. COMPROMISED SECURITY
9. "DISTRIBUTED DENIAL OF SERVICE" ATTACKS
10. INADEQUACY OF PROCESSING POWER
11. UNAUTHORIZED CLAIM OF ORME
12. LOSS OF PRIVATE KEY
13. FORKING
14. POPULARITY
15. MARKET LIQUIDITY
16. PRICE VOLATILITY
17. THE COMPANY'S EXPOSURE TO CRYPTOGRAPHIC TOKENS
18. CONFLICT OF INTERESTS
19. POTENTIAL CONCENTRATED OWNERSHIP OF THE ORME
20. POTENTIAL COMPETITORS
21. THIRD PARTY DEVELOPERS AND SUPPLIERS
22. POTENTIAL MISUSE OF THE ORME'S TECHNOLOGIES AND BRAND
23. PRIVACY AND DATA RETENTION ISSUES
24. GENERAL RISKS RELATING TO THE USE OF THE INTERNET OR OTHER ELECTRONIC MEDIUM
25. TAX MATTERS RELATING TO THE COMPANY'S OPERATIONS
26. TAX MATTERS RELATING TO PARTICIPATION IN THE CAMPAIGN
27. PERSONAL CONNECTIONS WITH PARTICULAR JURISDICTIONS
28. INCOMPLETE INFORMATION REGARDING THE ORME
29. FURTHER TOKEN SALES AND DEVELOPMENT AND SALE OF ADDITIONAL TOKENS
30. FAILURE TO OBTAIN LICENCES

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BACKED BY INDUSTRIAL CRYPTO MINING

ABSTRACT

Ormeus Coin (asset symbol ORME) is a collateral-backed cryptocurrency - the cornerstone of a new digital money system secured by one of the biggest industrial cryptocurrency mining operations in the world. The coin is currently being cryptographically linked to a publicly identifiable, fully-transparent currency vault funded by mining businesses located in North America and China. 40% of revenue from the mining farms is tied to the Ormeus Reserve Vault (ORV) through proof of asset technology and self-executing Blockchain smart contracts, (ERC20 compliant). The reserve vault is being enhanced to act as a DAO – Decentralized Autonomous Organization and the beta version of the vault is available to view at: <https://orv.ormeuscoin.com>. By using a proprietary Artificial Intelligence engine, the Ormeus mining hardware can be allocated instantly to mine a variety of mainstream crypto coins that use the same authentication hashing algorithm, encryption type: Sha256, Script, X11, Ethash. Ormeus Coin did not engage in an Initial Coin Offering (ICO), however the coin is already being stabilized by revenue from the 18th biggest Bitcoin mining business in the world. In the event of a Black Swan event or devaluation of Ormeus Coin, the vault will be programmed to buy from the market at a predefined trigger price, thereby offering support if predetermined levels are reached. The ORV aims to be over-collateralized by two or three times more than the market value of the coin itself via a diversified pool of currencies stemming from the privately owned mining operations. Full technical details of the smart contract rules, re-investment rules, predefined stabilization trigger values and autonomous feedback mechanisms are yet to be programmed and will be released shortly. The programmable smart contracts will ensure that Ormeus Coin stays linked to the real-world assets; transparent for all to see, without susceptibility to fraud, hacking or tampering. ORME can, therefore, be distinguished as a stable, next-generation digital currency and store of value backed by real-world assets.





(ORMEUS)
ORMEUS COIN

INTRODUCTION

In 1976, F.A. Hayek published his classic 'Denationalization of Money'¹, where he argued that money is no different than other commodities and should be supplied by competition among private issuers - not the government. Over 40 years after Hayek's thesis, IMF boss Christine Lagarde cautioned that cryptocurrencies can displace central banks, conventional banking and national monies in the long term. ² After two centuries of State monopoly money, private cash is re-emerging in the form of digital cryptocurrencies and has the potential to dominate.

Crypto money enables users to make transactions of electronic cash without going through a financial institution. This is accomplished through the use of Blockchain technology; a tamperproof distributed ledger system whereby one central database no longer controls all the information. Blockchains are secured and maintained by "miners", which are nodes of computers that validate and indelibly capture transactions using substantial computational power in return for a cryptocurrency reward. ³

Blockchains allow for the constant development of "smart contracts"⁴; a computerized transaction protocol that executes the terms of a contract . And it is this unalterable record with proof of asset technology that paves the way for new digital cash such as 'Orme' - a Medieval alchemist's term for turning base metal into gold.⁵



1: Hayek, F. A. (1978) 'The Denationalisation of Money, 2nd ed. London: Institute of Economic Affairs Tucker, Jeffrey (Sep 2017) Foundation for

2: Economic Education: 'IMF Head Foresees the end of Banking and the Triumph of Cryptocurrency'

3: Nakamoto, S. (2008). 'Bitcoin: A Peer-to-Peer Electronic Cash System,' <https://bitcoin.org/bitcoin.pdf>

4: Szabo, N. (1994) 'Smart Contracts'

5: Berstein, P. (2000) 'The Power of Gold: The History of an Obsession'

ASSET BACKED DECENTRALIZED ECOSYSTEM

The decentralized Blockchain ecosystem is still in its infancy, but we are already seeing a demand for price-stable cryptocurrencies. People require currencies that do not depreciate rapidly, with accessible counterparties who are willing to accept digital money at some point in the future.

If we are to pay wages denominated in Bitcoin for example, people should not wake up to discover that Bitcoin has lost 5% in value overnight. This scenario may sound like another normal day in crypto land, however for the receiving party, they will experience a loss that wouldn't have occurred had the transaction been conducted in fiat currency.

The Ormeus family is working towards a concept of Stablecoin – a class of crypto which is price-stable, or pegged to another unit of value. Stablecoins are created by locking up collateral in excess of the amount of coins created.⁶

For example, a company could generate USD\$100 worth of Stablecoins by locking up USD\$150 worth of Bitcoin. The collateral is held in a smart contract, where it can be accessed by paying back the Stablecoin debt, or can be automatically sold by the contract software if the collateral falls below a certain threshold.⁷ This allows for collateral-backed Stablecoins that don't require trust in a central party.

ORMEUS RESERVE VAULT: TOWARDS AUTONOMOUS STABILIZATION

The cryptocurrency world currently utilizes three main stablecoin concepts:

- ④ Centralized IOU Issuance
- ④ Collateralized On-Chain
- ④ Elastic Coin Supply

Ormeus Coin is setting out to model its strategy on a hybrid of 2 & 3 above. Collateralized on-chain creates stability using decentralized cryptocurrencies, however sudden dips in demand and collateral value can severely impact collateralized on-chain's ability to buy back and burn tokens. Ormeus Coin seeks to initially get around this risk with a concept known as over-collateralization, where the Ormeus Reserve Vault Reserve Vault is being programmed to maintain collateral balances at two to three times the parity value to compensate for future price variation.

With over-collateralization, the Ormeus Reserve Vault Reserve Vault will be programmed to maintain collateral balances at two to three times the parity value to compensate for future price variation.

The advantage of the Ormeus Reserve Vault system is that there are 25 different multi-signature wallets containing five different cryptos effectively diversifying to secure Ormeus Coin. The programmable smart contract rules will ensure that this purchasing power will be able to stabilize coin value, giving the public confidence that Ormeus Coin is the corner stone of a trusted money system.

6: Julian Kohtx, (March 2018) 'Stablecoins and the Story of Money'

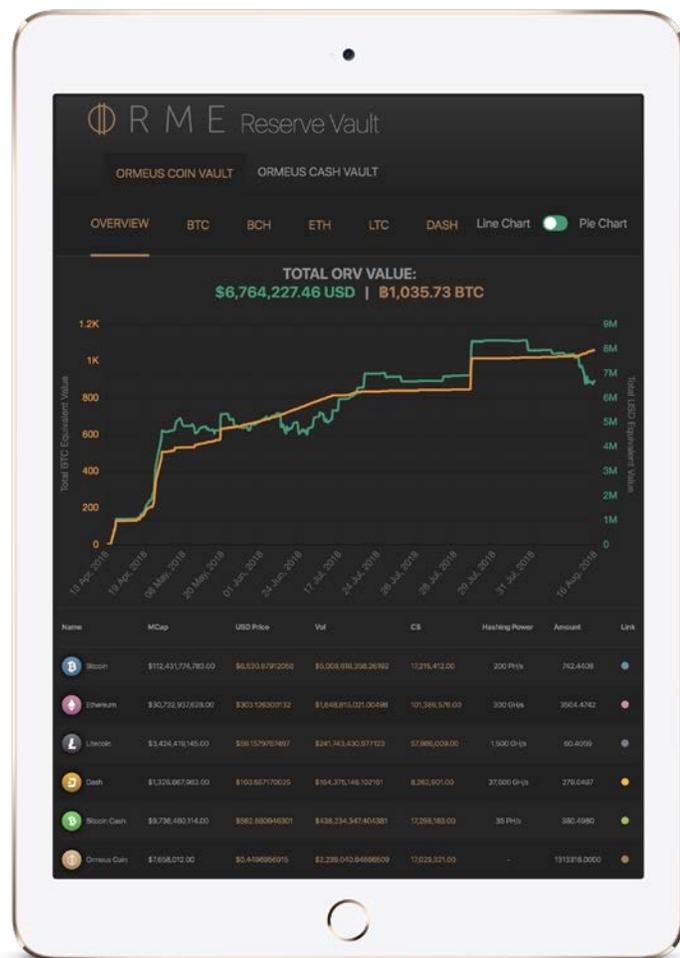
7: Myles Snider, (January 2018) MultiCoin Capital: 'An Overview of Stablecoins'

The mechanism that pins the value of Ormeus Coin to some other value is currently being developed. For example, one Ormeus Coin might be pegged to a USD value, or whatever the Decentralized Autonomous Organization (DAO) vault considers a fair hourly, daily or weekly USD value based on the market value of the various crypto assets in the vault.

The 40% revenue from the industrial mining business contained in the reserve vault can be viewed by the public and is currently in Beta mode at: <https://orv.ormeuscoin.com>. Furthermore, the public now has a further mechanism to monitor deposits from the mining operation at the secure Blockchain.com portal. The Ormeus Coin address is as follows: <https://www.blockchain.com/btc/address/3EUuYHDiSBft9fsXecGFUioerR4ye24aRG9>

Coupled with over-collateralization will be the concept of elastic coin supply⁸, where the protocol expands and contracts coin supply proportionally to demand in order to keep prices as stable as possible. This is ultimately how most national currencies create stability.

Added to this will be Ormeus Coin's advanced asset verification process with published, quarterly audits carried out by a leading accountants firm. The reason for this transparency is partly related to the Tether experience, which says its tokens are backed 1:1 by USD in an account at an as-yet-unnamed bank.



ORMEUS COIN IS SECURED BY A TRANSPARENT RESERVE VAULT WHICH IS NOW IN BETA AT [HTTPS://ORV.ORMEUSCOIN.COM](https://orv.ormeuscoin.com)

8: xMassimo Morini, (July 21st, 2014) 'Inv/Sav wallets and the role of financial intermediaries in a digital currency'

SMART ASSETS: ORMEUS INDUSTRIAL MINING EMPIRE

Extensive independent research reveals that Ormeus Coin is now backed by one of the biggest solely-owned Bitcoin and Crypto miners in the world. The following assets are being developed by Ormeus:



Privately Owned: Ormeus Coin is backed by a privately-owned mining enterprise, which means it does not act as a pool and does not share block rewards in proportion to contributed mining hash power. This exclusivity gives it the strength and depth to secure coins and tokens.



World Ranking: Even when considered against the backdrop of mining pools, which can be owned by thousands of individual miners, Ormeus Coin is currently the 18th biggest Bitcoin mining company globally.



200 Petahash: According to upcoming purchase orders and contractual obligations from third parties, the company looks set to break into the world's top ten miners. The latest company data shows that Ormeus will eventually command access to the equivalent of 200 Petahash. Ormeus recently acquired further 4,400 mining servers in a deal with a Chinese enterprise.



Energy Contracts: Ormeus has data centers in upstate New York, the American Mid-West, and has acquired new centers in China. Each of these facilities has secured long-term energy contracts. For example, the New York facility is using renewable energy from a hydro dam near the Niagara Falls on the American/Canadian border. It has collaborated with local authorities and the Moses-Saunders Power Dam, a colossal hydro project across the St. Lawrence River Valley. The hydro dam has 32 turbine generators, with 912 MW being operated from Massena (US) and 1045 MW run on Canadian side.⁹



Reserve Vault: It has been confirmed that 40% of profits from ongoing production at the mining centers are now permanently linked to a 'gold-standard' Ormeus Reserve Vault, (ORV), which supports the stability of the coin. An unalterable smart contract system currently verifies regular deposits from the mining, which is cryptographically linked to the publicly identifiable currency vault.¹⁰



9: Clean Technology Business Review, (March 16th, 2018), 'Ormeus to use renewable energy for crypto mining operation'

10: Press Association, (April 4th, 2018), 'Ormeus outsmarts other currencies with transparent proof of mining reserve vault'



Purchasing Power: Smart Contracts dictate that a further 40% of mining profits are re-invested into acquiring additional hardware rigs, energy, mobile miners, data warehouses and land.



Artificial Intelligence: The Ormeus proprietary AI engine optimizes mining activity by maximizing yield related to quantity and value of the currency mined.



Latent Value: A significant worth is attributed to unmined Bitcoin, Dash, Litecoin et al. A certain value is also attached to the mining rig hardware and the extensive computing power it can harness.



Future Assets: Internal company files suggest that Ormeus will continue to build its Reserve Vault through diversification of assets such as traditional gold mining, agriculture, health, property and insurance.



CASE STUDIES: CRYPTO MINING COMPETITION

As cryptocurrency prices begin to move in a positive direction, industrial miners are eager to secure hardware orders and raise capital in an effort to create new digital coins and earn fees. Below are three North American and Canadian companies that demonstrate how successful industrial crypto mining can be:

BitFury Group:

Founded in 2011, BitFury was originally backed by VC money and started as a Bitcoin mining operation. It generated USD \$93.7 million revenue in the fiscal year 2017 - a 70% increase on the previous 12 months and has an 11% market share. Of that revenue, earnings before interest, tax, depreciation, and amortization were USD \$24.7 million based on a 26 percent margin. In addition to Bitfury Group's revenue generated by Bitcoin transaction fees, the company also lists a total of 500,000 bitcoins generated to date from the protocol's block rewards, which at today's prices would be worth USD \$7.5 billion. By the year 2021, BitFury says it will be generating USD \$585 million in revenue, 52% of which will come from transaction fees.¹¹

HashChain Technology:

Having gone public on the Canadian TSX Venture stock exchange in December 2017, HashChain has raised USD \$20 million to date and invested in high-performance ASIC 100 Dash mining rigs and also purchased 770 ASIC Bitcoin rigs. The firm is following Ormeus with its flexible mining strategy of having equipment that can scale and mine across all major currencies. Overall returns to shareholders have been greater than 1,300 percent in the past 24 months.¹²

Hut 8:

After raising USD \$38 million of institutional capital in a private placement, Hut8 took control of 22 Bitfury BlockBox mining machines, (the same model as Ormeus has acquired), operating at 24.2 MW / 165 PH/s. In Q1 of 2018, a public listing on a Canadian stock exchange is expected and phase II of the deal is scheduled to be completed, increasing control to an additional 35 Block Box data centers operating at 38.5 MW / 262.5 PH/s.¹³

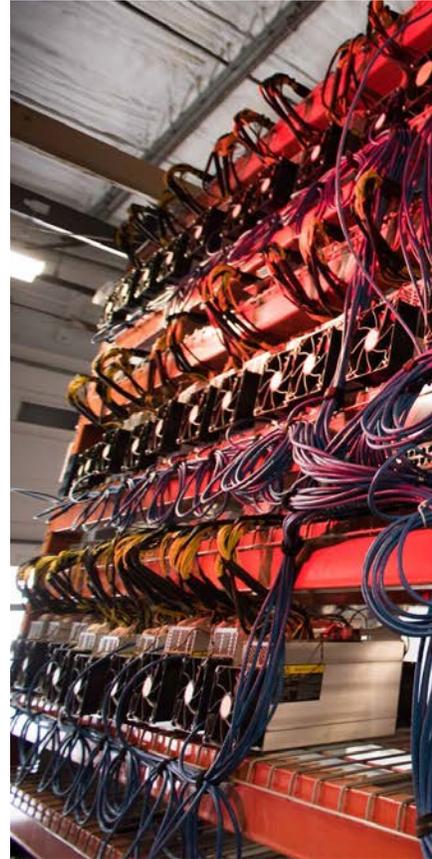
11: Del Castillo, M. (July 2017) Coindesk, 'Think Bitcoin is small business? Bitfury is making almost \$100Million annually'. www.coindesk.com/think-bitcoin-small-business-bitfury-making-almost-100-million-annually/

12: Financial Deals Tracker (Dec 2017) HashChain Technology to raise USD20m in private placement of units'

13: Journal of Engineering, (Dec 2017) Hut8 Partners with the Bitfury Group to Establish North America's Largest Bitcoin Datacenters

ORMEUS INDUSTRIAL CRYPTO MINING

Pursuant to purchase contracts signed in November 2017 and April 2018, the company has commenced the acquisition of mining rig infrastructure and is currently mining Bitcoin, Dash, and Litecoin via initial operations in North America and China. Hash rates, temperatures, rig status, and power consumption are being monitored through market leading software. Verified purchase receipts after the recent Chinese agreement suggest that Ormeus is on track to command access to the equivalent of around 200 Petahash of Bitcoin mining power.



HASHPOWER: RECENT IMAGES OF THE ORMEUS INDUSTRIAL MINING OPERATION IN THE USA.

The mining units include AC Air Cooled Mobile Datacenters. There are 179 miners in each 40-foot mobile data center, with each miner capable of working at up to 7.5PH/s of computer power served through 16nm ASIC. These containerized and modular mining units can be moved if required and sold on the secondary market for liquidation or ownership transfer.

Ormeus guarantees that 40% of the profits from mining operations shall be deposited on a daily basis and retained in a designated multi-signature digital wallet. This secure digital wallet will be used to store the digital currencies being mined and will be visible to the public via smart contract programming from the mining rigs to the currency reserve. The beta version of the Reserve Vault is available to view at: <https://orv.ormeuscoin.com>

Furthermore, Ormeus differs from other industrial mining operations in that it recently turned on a further verification at Blockchain.com. The public can also monitor deposits going into the reserve vault at the following address: <https://www.blockchain.com/btc/address/3EUuYHDiSBft9fsXecGFUioeR4ye24aRG9>

BLOCKCHAIN WALLET DATA API ABOUT

Bitcoin Address

Addresses are identifiers which you use to send bitcoins to another person.

Summary		Transactions	
Address	3EUuYHDiSBft9fsXecGFUioeR4ye24aRG9	No. Transactions	99
Hash 160	8c4f508ebe3db384e67f724a47a79791e1ee2e4	Total Received	322.5724548 BTC
		Final Balance	322.5724548 BTC

[Request Payment](#) [Donation Button](#)



DOUBLE VERIFICATION: THE PUBLIC CAN NOW ALSO VIEW
ORMEUS RESERVE VAULT DEPOSITS AT THE INDEPENDENT BLOCKCHAIN.COM PORTAL

The company will liquidate a further 40% from mining operations to re-invest into acquiring additional mining machines and energy. Ormeus will then allocate 10% of the mining revenue towards market making buy-back to benefit from price appreciation/volatility, and the remaining 10% goes towards back-end software development.

A custom built Artificial Intelligence (AI) engine optimizes mining activity for Ormeus by maximizing yield related to quantity and value of the currency mined. In its algorithmic paradigm, this AI system has a lot in common with the quantitative analysis deployed in high-frequency trading. Every few milliseconds, the engine demands a lookup request and finds the most profitable coin to dedicate processing power to from hardware GPUs.

Important future milestones for the company include launching DAO mechanisms along with an exclusive storefront for users to trade their cryptocurrency directly from Ormeus and enhancing the firm's monitoring software to scrutinize all aspects of mining, maximizing efficiency.

CRYPTO MINING WITH RENEWABLE ENERGY

As virtual currencies increase in value, so does their potential to expand and be transacted, which means more strain on power grids. If the Bitcoin network alone continues expanding at the current rate, it could draw over 14 Gigawatts of electricity by 2020, which is the same total power generation capacity as a country like Denmark.¹⁴

Since energy prices are vital to the mining process and the primary cost factor over time, Ormeus has conducted a microscopic evaluation of the energy market to identify the best power supply and the solution for Blockchain's carbon footprint. The findings of the company investigation are that mining with renewable energy is the only way forward for both profitabilities, avoiding regulatory and tax sanctions, and a sustainable healthful environment.

Verified reports show that Ormeus has data centers in upstate New York, the American Mid-West, and has acquired new centers in China. Each of these facilities has secured long-term energy contracts. For example, the New York facility is using renewable energy from a hydro dam near the Niagara Falls on the American/Canadian border. It has collaborated with local authorities and the Moses-Saunders Power Dam, a colossal hydro project across the St. Lawrence River Valley. The hydro dam has 32 turbine generators, with 912 MW being operated from Massena (US) and 1045 MW run on Canadian side.



ORMEUS COIN EXPANDS WITH COST-EFFECTIVE POWER FROM HYDRO DAM ON AMERICAN/CANADIAN BORDER

One independent commissioned report states that Ormeus works with "Wind, Solar, Hydro and other sources of power to lower the energy cost to support the different Blockchains". The report goes on to say that Ormeus leases, owns, and partners with low-cost power generators all over the world "constantly searching for low-cost power and to optimize operation support for the Blockchain".

Ormeus has secured agreements for 1GW of power from a number of renewable energy providers including a major hydropower station. This power load will be fully subscribed to by the end of the fourth quarter 2019. By 2020, the company will secure a further 2gW of energy.

Over time, crypto mining will vanish from all areas with higher energy prices. As a consequence, the best way to stay competitive is to avoid network costs and tax hikes by using inexpensive energy sources that are carbon friendly.



14: Ou, E, (Dec 2017) Bloomberg, 'No Bitcoin won't melt the polar ice caps'

INITIAL COIN OFFERING

It was labeled 'the year of the ICO'. In fact, 2017 was the year of 'the Great Crypto Heist'. The market was teeming with Frankenstein ICO projects pumping Blockchain concepts into dubious business plans raising almost USD \$5 billion according to Forbes. Estimates from Baker & McKenzie law firm in London suggest that approximately 80% of all Initial Coin Offerings were fraudulent.¹⁵ Against this backdrop, legislative watchdogs delivered legal half-measures resulting in haphazard 'rules'.

2018 should be the year where cryptocurrencies with identifiable tangible assets are in vogue. However, ICO Bench Listing¹⁶ reports that more than 180 new ICOs are already scheduled to launch this year, many of which are dipped in fiction. Investors, qualified or not, should begin to realize that investing in a mere idea from an ICO white paper without any proof of underlying assets is reckless folly. The refrain, "we've got a really strong team, a realistic project idea, and industry experience" should no longer justify or be a source of confidence or a rational reason for investment.

Ormeus Coin is not engaging in an ICO. Rather, the company raised seed money through founders' personal capital and private fundraising campaign. At the time of writing, the company is in 'soft launch' mode, gathering data and feedback regarding its virtual currency, mining operations, reserve vault rules, and acceptance in the marketplace. This pragmatic approach can be compared to the farcical pre-ICO stage of funding where companies peddle a future idea and drum up support for their public offering some months later.



15: Huertas, M. (2017) 'Regulators' Warnings Zoom in on Initial Coin Offerings'. Baker & McKenzie for Mondaq Business Briefing

16: ICO Bench Listing, www.icobench.com/icos?status=upcoming

LEGAL OPINION – COMMODITY, CURRENCY, SECURITY?

Whether or not a particular cryptocurrency is a security becomes crucial for participants in the market. If a cryptocurrency was found to be a security, then crypto exchanges, and special purpose vehicles formed to hold cryptocurrencies, would be subject to burdensome regulatory requirements and hefty penalties for failing to meet certain rules.

In June 2018, Mr. William Hinman, the head of the Division of Corporation Finance at the Security and Exchange Commission in the USA, shed some light on the SEC's position.

"Central to determining whether a security is being sold is how it is being sold and the reasonable expectations of purchasers," Hinman said in a speech at the Yahoo All Markets Summit: Crypto conference in San Francisco, USA. Mr. Hinman stated that if there is a centralized third party, along with purchasers with an expectation of a return, then the cryptocurrency is likely a security.

Hinman specifically said that bitcoin is not a security because it is decentralized: there is no central party whose efforts are a key determining factor in the enterprise. In addition, ether is also not a security because the Ethereum network is also decentralized.

Regarding ICOs, Hinman also acknowledged that some digital assets could be structured more like a consumer item than a security, particularly if the asset is purchased for personal use and not intended as an investment. He seemed to imply that these types of offerings; an investment in a book club, or a golf club membership, for example - were likely not securities.

Most legal and financial experts agree that digital currencies are similar to commodities such as gold. For example, the Goldman Sachs global head of commodities research Jeff Currie has stated that cryptocurrencies are commodities since "a security, by definition, has a liability attached to it".

"Take a dollar bill," Currie said, "it has a liability to the US government. Commodities do not have liabilities. They are bearer assets, and when you think about it in that context, you look at bitcoin, it's not that much different than gold".

Meanwhile, Bank of England experts have also reasoned that the popularity of cryptocurrencies , "largely derives from their ability to serve as an asset class. As such they may have more conceptual similarities to commodities, such as gold, than money".

SECURITIES LAW

The issuance and transfer of securities are highly regulated by similar laws from around the world. In the US for example, it is illegal to offer or sell securities unless the offer and sale are exempt under the federal securities laws or made pursuant to an effective registration statement filed with the Security Exchange Commission. One kind of a security under federal law is an "investment contract." An investment contract for purposes of the Securities Act as outlined in the 1946 Supreme Court decision in SEC v. W.J. Howey Co., means a contract, transaction, or scheme whereby a person invests his money in a common enterprise and is led to expect profits solely from the efforts of the promoter or a third party.

Courts often break the Howey test into four prongs to determine:

1. (i) whether there exists an investment of money;
2. (ii) whether there exists a common enterprise;
3. (iii) whether there exists an expectation of profits;
4. (iv) whether the expectation of profits is solely from the efforts of others.

If all prongs are satisfied, then a contract, scheme, or arrangement passes the Howey test and represents a security. If any one of the prongs is not met, the arrangement fails the Howey test and there is no security.

It is important to consider the facts of the Howey case: A hotel operator sold interests in a citrus grove to its guests and claimed it was selling real estate, not securities. While the transaction was recorded as a real estate sale, it also included a service contract to cultivate and harvest the oranges. The purchasers could have arranged to service the grove themselves but, in fact, most were passive, relying on the efforts of Howey-in-the-Hills Service, Inc. for a return. In articulating the test for an investment contract, the US Supreme Court stated: "Form is disregarded for substance and the emphasis is placed upon economic reality." So the purported real estate purchase was found to be an investment contract – an investment in orange groves was in these circumstances an investment in a security.

HOWEY/ORMEUS ANALYSIS:

The nutshell analysis in terms of Ormeus Coin and Howey suggests that the final prong of the Howey test cannot be satisfied. Ormeus fails this part of the test because even if purchasers of ORME buy in expectation of profits, they do not anticipate these profits to result from the action of the seller or promoter.

If the expectation of economic return is based solely on market forces, and not on the efforts of the promoter, then this prong of the Howey test is not satisfied and the instrument in question cannot be a security.

As the SEC commented in June 2018: "If the network on which the token or coin is to function is sufficiently decentralized – where purchasers would no longer reasonably expect a person or group to carry out essential managerial or entrepreneurial efforts – the assets may not represent an investment contract. Moreover, when the efforts of the third party are no longer a key factor for determining the enterprise's success, material information asymmetries recede".

Just like in the case of *Noa v. Key Futures*, purchasers of Ormeus Coin acquire a commodity like silver, the value of which may fluctuate, but based solely on market forces and not on the efforts of a promoter. Ormeus Coin cannot control the mining results of Bitcoin, Dash or Litecoin for example which feed its reserve vault. Ormeus cannot control the mining algorithm that selects the cryptocurrencies to be mined. Developing the DAO system will strengthen this position. In essence, Ormeus Coin can be used by anyone but can be influenced by no one since it is akin to Bitcoin - decentralized cryptocurrency controlled only by market forces.

SUMMARY

In February 2018, Securities and Exchange Commission Chairman Jay Clayton told a Senate Banking Committee that if companies engage in an Initial Coin Offering (ICO) - then a security is essentially being created. Ormeus Coin did not, or is not engaging in an ICO, which further strengthens its position as a non-security.

Securities law is not irrelevant to virtual currency investments, however, new legislation is required globally to reconcile the regulatory issues that currently engulf the virtual currency world. Without new laws - and with only comments or quotes from high ranking officials - entrepreneurs and virtual currency users encounter huge uncertainty regarding the lawfulness of their behavior and potential liability.

Still, even with a lack of solid legislative framework, we can work towards a definition of what Ormeus Coin actually is. It is a decentralized currency, with characteristics of a currency and commodity hybrid - a next generation payment option and a viable store of value.



CHALLENGES

The activities of Ormeus are subject to risks inherent in the cryptocurrency industry as well as the risks normally encountered in a newly established business.

The company is locking up certain assets required by the contract for payment of the additional data centers to avoid any risk to business expansion. That said, the Company's cryptocurrency inventory or reserve vault can still be negatively affected by market prices or malicious actions via hacking.

Other challenges can include the algorithm for cryptocurrencies changing, resulting in the company losing its competitive edge. Blockchain rewards may decrease resulting in the value of a cryptocurrency mined by or held in the company vault to decrease. This can fall to a level where there is not ample incentive for the company to continue mining.

The mining reward for Bitcoin is cut in half every 210,000 blocks for example, with the next 'halving' set to occur in 2020. Ideally, the price of Bitcoin will increase enough to outweigh the continuing decline of the mining reward.

The introduction of new services and technologies could render the company's hardware and equipment at its facilities obsolete and it may not be cost-effective to upgrade the company's hardware and equipment to remain competitive.

One of the most substantial overheads for industrial mining is the cost of electricity needed in both running the hardware and cooling systems. Ormeus has already contracted for a certain amount of renewable power, but future prices can rise and fall.

Furthermore, as mentioned in the previous section, there can always be changes in national and local government legislation with new crypto laws, taxation, controls or simply put political or economic developments in North America where the mining operations are currently situated.

The issue of fees, hashing, and difficulty also abounds. Around 75% of Bitcoin mining is in the hands of 5 mining pools.¹⁷ Two of these firms, Antpool and BTC.com, are run by one company, Bitmain.¹⁸

Finally, just like the computer mining nodes vote with their CPU power, the perception of the crypto start-up value is also generated by voter-like dynamics¹⁹ where opinions immediately form from information in a Telegram Group or Twitter feed. Adverse public relations events can always be a challenge for any company.

¹⁷: Blockchain Info: <https://blockchain.info/pools>

¹⁸: Joon, I., (Aug, 2017) Quartz Magazine: "China's Bitmain Dominates Bitcoin Mining"

¹⁹: Bornholdt, S., & Sneppen, K. (2014). 'Do Bitcoins make the world go round? On the dynamics of competing crypto-currencies'. Cornell University Library, Ithaca, USA

ORMEUS COIN & RESERVE VAULT SPECIFICATIONS

Ormeus Coin is built as an ERC20 Compliant²⁰ token on the Ethereum Blockchain, however plans are afoot to give the Ormeus family its own Blockchain to allow further decentralization with enhanced DAO characteristics.

All mining revenues and smart contracts can be viewed and confirmed on the public ledger in order to provide transparency and security. The Ormeus Reserve Vault is in beta version as a multi-signature wallet address where mined cryptocurrencies from the industrial mining operation are deposited as a back-up for the ORME digital currency.

The Reserve Vault is currently being upgraded to act as a Decentralized Autonomous Organization, (DAO). In short, Ormeus aims to hard-code certain rules that the company will adhere to and cannot be changed once deployed, i.e, setting aside a certain percentage of vault earnings. In the abstract, this is similar to how a normal company works - the big difference is that the rules of normal companies are not enforced digitally.²¹

The ORME Enhanced Smart Contract is now developing built-in functions to support:

- Ⓞ Verification of regular mining deposits from the Ormeus mine that serves as a "Proof of Mining" to validate the ongoing robust operation of the Ormeus mining operations;
- Ⓞ On-demand verification of the Ormeus Reserve Vault (ORV) crypto balance through direct query of the total available reserve;
- Ⓞ Functionality to programmatic-ally "lock" and "unlock" the Cryptocurrencies deposited to the ORV if it is necessary to buy Ormeus Coin on the market to stabilize price.
- Ⓞ Making Ormeus Vault a DAO - using the Blockchain to automate or "smart contractify" the existing Ormeus organizational structures and rules.

PRIVACY & SECURITY

The elements of privacy and security are of key importance and priority in the realm of Blockchain and many of the various implementations of the technology exhibit a diverse range of methodology and schools of thought. Ormeus Coin is fully secured with the same standards as are employed by the Ethereum Blockchain. The primary principles behind Ethereum security leverage the technology of public key cryptography²² to carry out all manner of functions. This form of cryptography is implemented in numerous ways to accomplish the desired functions of the smart contract.

Operating on the Ethereum Blockchain as an ERC20 token provides a great deal of privacy and security. In fact, with both the Ethereum and Bitcoin Blockchains, wallet addresses contain no explicit PII (Personally Identifiable Information). This helps to ensure a reasonable balance between the security of privacy and accountability of transparency.



20: 'ERC20 Token Standard', (Mar 2017), https://theethereum.wiki/w/index.php/ERC20_Token_Standard

21: Coin Desk, 'What is DAO': <https://www.coindesk.com/information/what-is-a-dao-ethereum/>

22: Public Key Cryptography: nrich.maths.org/2200

TECHNICAL SPECIFICATIONS

Ormeus Coin Ethereum contract wallet address:

0x516E5436bAfdc11083654DE7Bb9b95382d08d5DE

Ormeus Coin was created with the following transaction:

0xb259f99639bb16848f370b14c358d8e17d1c70cc99cca9984bcac78f946c3b76

The Ormeus Coin creation transaction was added to the Ethereum blockchain at block #4110554.

The following table of technical specifications for Ormeus Coin can be viewed and verified with the EtherScan tool located here:

<https://etherscan.io/token/0x516e5436bafdc11083654de7bb9b95382d08d5de>

ORMEUS COIN TECHNICAL SPECIFICATIONS

BLOCKCHAIN PLATFORM	Ethereum
CONTRACT TYPE	ERC20
TICKER SYMBOL	ORME
COIN NAME IN FULL	Ormeus Coin
DIVISIBILITY (DECIMAL PLACES)	8
INITIAL ISSUE AMOUNT	200,000,000



ROADMAP

The following table displays deliverable objectives which make up the core development roadmap for Ormeus Coin along with the corresponding timeframe targets (represented in quarters of the year). The current status of each item has also been verified and is presented as either "complete" or "pending".

	OBJECTIVE	TIMEFRAME	STATUS
2017	Build and initialize ERC20 Ethereum token, "ORME"	Q1-2017	COMPLETE
	Assemble the core team and design the Ormeus brand	Q1-2017	COMPLETE
	Deploy baseline mining infrastructure of 30 PH/s	Q2-2017	COMPLETE
	Construct and implement Ormeus Reserve Vault (ORV)	Q2-2017	COMPLETE
	Develop and release enhanced ORME smart contract	Q3-2017	COMPLETE
	Launch the ORME Initial Coin Offering	Q3-2017	COMPLETE
	Public Exchange Listing	Q4-2017	COMPLETE
	CoinMarketCap.com Listing	Q4-2017	COMPLETE
2018	30 Petahash	Q4-2017	COMPLETE
	60 Petahash	Q1-2018	COMPLETE
	100 Petahash	Q2-2018	COMPLETE
	150 Petahash	Q2-2018	COMPLETE
	200 Petahash	Q3-2018	COMPLETE
	Custom Branded Wallet	Q3-2018	COMPLETE
2019	1% ORME Foundation Charity Profit Donation	Q3-2018	COMPLETE
	AltCoin Smart Contract	Q2-2019	PENDING
2020	2% ORME Foundation Charity Profit Donation	Q4-2021	PENDING
	4% ORME Foundation Charity Profit Donation	Q4-2022	PENDING

CONCLUSION

For many people, it can be challenging to cope with the realization that the greatest gold rush of our generation is staring right at us. This is still the case, even when market values fluctuate; adding or subtracting billions from the crypto industry. Why? Because much of the new technology securing the industry actually works.

Still, people are right to be skeptical about cryptocurrency and should only introduce themselves to this new world by supporting virtual currencies which are secured by underlying assets and substantiated new operating systems and ledger technology.

Ormeus Coin is supported by industrial crypto mining and is being completed using programmable smart contracts with DAO characteristics - where there is always consistency. With Ormeus, real-world assets are tokenized and mining transactions obey smart contract rules where there can be no exceptions.



REFERENCES

- Ahamad, S., Nair, M., and Varghese, B. (2013). 'A Survey on cryptocurrencies', Association of Computer Electronics and Electrical Engineers. Protocol of the International Conference on Advances in Computer Sciences
- Ali, R, Barrdear, J, Clews, R and Southgate, J (2014), 'Innovations in payment technologies and the emergence of digital currencies', Bank of England Quarterly Bulletin, Vol. 54, No. 3
- Berstein, P. (2000) 'The Power of Gold: The History of an Obsession'
- Blockchain Info: blockchain.info/charts/hash-rate
- Blockchain Info: <https://blockchain.info/pools>
- Bloomberg, (Nov 29th, 2017) 'Goldman says the Bitcoin Haters Just Don't Get It'
- Bornholdt, S., & Sneppen, K. (2014). 'Do Bitcoins make the world go round? On the dynamics of competing cryptocurrencies'. Cornell University Library, Ithaca
- Del Castillo, M. (July 2017) Coindesk, 'Think Bitcoin is small business? Bitfury is making almost \$100 Million annually'
- 'ERC20 Token Standard' - The Ethereum Wiki, (21st Mar. 2017), https://theethereum.wiki/w/index.php/ERC20_Token_Standard
- Federal Reserve History, (Aug 1971): https://www.federalreservehistory.org/essays/gold_convertibility_ends
- Financial Deals Tracker, (Dec 2017), 'HashChain Technology to raise USD20m in private placement of units'
- Hayek, F. A., (1978), 'The Denationalisation of Money', 2nd ed. London: Institute of Economic Affairs
- Huertas, M., (2017), 'Regulators Warnings Zoom In On Initial Coin Offerings'. Baker & McKenzie for Mondaq Business Briefing.
- ICO Bench Listing: www.icobench.com/icos?status=upcoming
- Julian Kohtx, (March 2018) 'Stablecoins and the Story of Money'
- Joon, I., (Aug, 2017), Quartz Magazine: 'China's Bitmain Dominates Bitcoin Mining'
- Journal of Engineering, (Dec 2017), 'Hut8 Partners with the Bitfury Group to Establish North America's Largest Bitcoin Datacenters'
- Morini, M. (July 21st, 2014) 'Inv/Sav wallets and the role of financial intermediaries in a digital currency'
- Nakamoto, S., (2008), 'Bitcoin: A Peer-to-Peer Electronic Cash System': <https://bitcoin.org/bitcoin.pdf> Noa v. Key Futures, Inc., 638 F.2d. 77, (9th Cir. 1980)
- Ou, E, (Dec 2017) Bloomberg, 'No Bitcoin won't melt the polar ice caps'
- Pilot, R., Safe Haven Magazine, (Oct 18th 2017), 'The mind-boggling profitability of crypto mining' Public Key Cryptography: nrich.maths.org/2200
- Rauh, J, (2017), A Hoover Institution Essay: 'Hidden Debt, Hidden Deficits'
- SEC v. W.J. Howey Co., 328 U.S. (1946)
- Snider, M., (January 2018) MultiCoin Capital: 'An Overview of Stablecoins'
- Stanford University Encyclopedia of Philosophy, (2000), 'The Modern History of Computing'