



BUSINESS
MODEL

AFFINITY MINING ECOSYSTEM *ICO*



Introduction



The Affinity Ecosystem (“AE”) is a new generation crypto-mining suite of hardware and software products. Cryptomining is an extremely profitable activity when done on a large scale, by mining professionals with the necessary education, training and experience. AE of products has been designed with this concept in mind. The AE creates synergies between related products that creates super-profitability, because each product supports the cashflows generated by the other one in the AE.

Affinity Renewable Mining (ARM) is the cryptomining division of the AE. This product has negotiated long term access to large amounts of the lowest-cost, industrial-scale Scandinavian renewable energy. Combined with brand new mining infrastructure, cold ambient temperatures, and a team with a combined experience of 28 years in cryptomining operations, ensures the highest levels of mining profitability. Affinity Mining Ltd will, further refine the existing proprietary mining-profitability algorithms to further monetize this part of the Affinity Ecosystem.

In order to achieve the milestones described below, Affinity Mining will raise the necessary funding through an ICO (or Token Generating Event). The token offers regular annuity income to token holders by sharing profits in the form of Ethereum paid quarterly. This type of financial structure is an ideal crypto-approach as it offers the token holder both annuity income in the form of profit share, capital growth on the increasing value of the Ethereum crypto-cashflow, and capital growth on the Affinity Mining Tokens purchased. The AE is designed in a way that the various products launched gain support, synergise and acquire economies of scale.

The Affinity Ecosystem concept combines a number of emergent complementary crypto-mining technologies created by Affinity Mining. These technologies feed off each other to maximise the economies of scale of large-scale crypto-mining operations. These technologies or activities include:

- Affinity Renewable Mining (ARM) is the core of the Affinity Ecosystem and will deploy the latest, most advanced ASIC (SHA 256, Scrypt and x11) miners in Scandinavian countries that are specifically preparing for the immense green energy requirements of crypto-mining.
- Everywhere Mining™ is a unique software application that users can use to earn cryptocurrency from the “down time” of their machines. This is install and forget software that mines when you are not using your machine.
- Affinity Fractional Remote Mining (AFRM) provides a platform to third-party customers to purchase into professional mining-rigs, also pooled into the above ecosystem, further adding to the scale of the mining operation. The user GUI has already been created and tested for this project.
- The Zero-Kelvin (0K) Multicrypto Wallet is an ingenious crypto-solution that integrates with the Affinity Ecosystem mining solution allowing the user to hold and switch between the supported newly mined cryptocurrencies.
- Wallet Integration directly with the exchanges via APIs will create a fast, easy way to trade cryptocurrencies without having to use exchanges directly.



Renewable energy cryptomining

Affinity Renewable Mining ("ARM") is the core of the *Affinity Mining Ecosystem* and will deploy the latest, most advanced ASIC miners in Scandinavian countries that are specifically preparing for the immense power requirements of present and future cryptomining. Scandinavia is ideally situated for crypto-mining as the ambient temperatures are low and there is an abundance of cheap, green energy.

ARM has been created to deal with the energy consumption problem that the Bitcoin (and other proof-of-work cryptocurrencies) ecosystems have created. Some publications claim that energy consumption of the Bitcoin ecosystem could reach the total production of Denmark by 2020. In future other cryptocurrencies will follow the same path as Bitcoin. *Affinity Mining Ltd* will make an early intervention into this energy problem, by shifting global hashrate into using renewable energy. This shift in energy production is essential for the longer-term survival of the various Proof-of-Work (POW) crypto-ecosystems. POW crypto-ecosystems will be a major contributor to greenhouse gas emissions in the near future unless something is done now. This ICO aims to improve mining profitability through the consumption of low cost, renewable of energy.



Everywhere Mining™ program and mining pool

Everywhere Mining™ is a unique profitable twist on GUI mining, that uses GPU cards and mining profitability pool algorithms to significantly improve the profits available for GUI miners to earn. Globally, there are millions of PC's with powerful graphics cards standing idle for large parts of the day.

Gamers and the like can use *Everywhere Mining™* to earn cryptocurrency from the "down time" available on their machines. *Everywhere Mining™* connects into one of Affinity's mining pools and uses the spare capacity on the machines graphics card(s) to mine at scale. Initial calculations indicate that this type of "gold dust" mining could become one of the world's largest GPU mining pools if done properly.

Affinity Mining Ltd has also developed software algorithms that automatically calculate the most profitable cryptocurrency to mine at the time providing market-leading returns on investment for *Everywhere Mining™* customers. *Affinity Mining Ltd* will operate the *Everywhere Mining™* Meta Pool to capitalize on the significant arbitrage opportunities that present themselves daily in the GPU mining market. These temporary arbitrage windows are arguably the most significant market inefficiencies which can be exploited for risk free profits at any given time.



Fractional Ownership Remote Mining

Affinity Fractional Remote Mining (AFRM) is a new twist on customers that want to mine but do not have enough cash to fund and house their own mining rigs. *Fractional Remote Mining* is not the same as cloud mining. Customers buy into fractional ownership of mining rigs. The hashrate of these mining-rigs are also added into the *Affinity Mining* pools and the customer benefits from a pro rata share of the mining rewards for their mining rig. Combined with world-class leading mining strategies, the customer has an upside not seen in other cloud mining pools in that they participate in the sale of used mining hardware when old rigs are upgraded and sold for cash. All profits and monthly expenses will be posted on the Affinity Mining website and blockchain for full transparency to the customer.



Zero Kelvin (0K) Wallet and Crypto-exchange API

The *0K Wallet* is a multi-cryptocurrency wallet that *Affinity Mining Ltd* customers can use to store and exchange their mining profits. This wallet uses *Shapeshift™* to switch one token into another in a quick seamless fashion. In addition, the *0K Wallet* is designed to seamlessly interact with the other AE products creating a fast reliable mining solution for all possible customer needs. Affinity intends to provide the wallet to crypto-currency users in order to entice new entrants into crypto-mining. All customers will be provided with an *0K Wallet* to house their newly minted cryptocurrencies paid quarterly in ETH for *Affinity Mining Token* Holders.

Although there are many multi-currency wallets available currently, the *0K Wallet* also has some unique features, proprietary software and security measures.



Security/Authentication/Encryption features

- Two Factor Authentication (2FA)
- Domain validated Secure Sockets Layer (SSL) certificates
- Salted Password Hashing
- Secure Private Cryptographic Key - ProvSecN
- Multi-Signature Fund Wallet
- SMS validation/authentication

Affinity Mining Ltd has gone to great lengths with their accounting and actuarial staff to ensure that the projections made for the business model are conservative in nature.

These include very conservative consideration of the following:

1. The increase in value that cryptocurrencies will accrue each year. Bitcoin, perhaps the most stable cryptocurrency, has increased on average 691 % over the last two years and it is unlikely to slow for the foreseeable future.
2. Profits made from the global GPU mining pool.
3. Reductions in the cost of mining equipment due to large volume orders.
4. Profits made from new Affinity Fractional Remote Mining customers.
5. Transaction fees generated by the Zero Kelvin (0K) Wallet.
6. Value created by assembling complete miners onsite.

Affinity Mining Ltd has been working on the intellectual property of monetizing the *0K Wallet*, developing the GPU global mining software, and creating a unique mining profitability sniffer algorithm for over two years. The findings in their research and development provides a strategic advantage for them over their nearest competitors.



ICO Overview

Due to the nature of crypto-mining and other business concerns, *Affinity Mining Ltd* has broken the ICO process into five distinct ICO milestones. This phased roll out considerably reduces the risk of the token purchaser as the initial amounts required are low and it gives Affinity an opportunity to prove its results publicly.

Milestone 1 Raise initial USD 1 000 000

The first ICO milestone is aiming to raise a minimum of USD 1 Million. Seventy percent of the funding of this milestone will be immediately used to purchase the most current mining hardware (USD 700 thousand). Both SHA256 ASICs, Script-capable GPU's/ASICs and x11 ASICs will be part of the initial mining-rig purchase order. This mining hardware will be flown directly from the manufacturers to our mining farms in Scandinavia.

Mining is expected to commence approximately 8 -12 weeks from the close of the ICO, this date is entirely dependent on manufacturer's delivering the mining units on time. The *Affinity Renewable Mining* process will produce the Gross Revenue stream seen in the second line of the table below. Any excess funds will be held for innovation and reserves. *Affinity Renewable Mining* will start to generate positive crypto-cashflow within hours of going live at a conservative expected rate of 15% of investment per month.

The second revenue stream seen in line 3 in the table below, is the *Everywhere Mining™* Gross Revenue will be collected from a user at a flat fee of 10% of mining operating profits from all contributing client GPU hashrate. The balance (90%) of the "dust-mining" profits will be allocated to *0K Wallet* of the owner of the GPU card.

We will collect the transaction fees earned from this pool as the pool grows with time. The marketing budget for this product will come out of the USD 300 hundred thousand left over after mining-rig purchases, after operating expenses have been deducted.

○ Table 1: Milestone 1

In USD millions	2017	2018	2019	2020
Affinity Renewable Mining Gross Revenue	0.00	1.26	1.68	2.35
<i>Everywhere Mining</i> TM Gross Revenue	0.00	2.50	3.33	4.66
Total Revenue	0.00	3.76	5.01	7.01
Operating profit margin	N/A	40%	40%	40%
Operating profits (USD millions)		1.50	2.00	2.80
Operating profit for token holders (30%)		0.45	0.60	0.84
Cumulative operating profit for token holders		0.45	1.05	1.89

Assumptions:

1. Mining revenue calculated at 15% of investment per month on 70% of the milestone total. (USD 700 000 x 0.15 x 12 months).
2. *Everywhere Mining*TM revenue calculated as 10% of all mining profits generated by the sum total of all the customers GPU hashrate that is pointed towards the most profitable mining pool.
3. Operating profits can be maintained in the presence of difficulty increases due to efficiencies gained by;
 - a. bulk miner procurement practices that reduce the price of each mining unit,
 - b. bulk green energy purchases,
 - c. the Affinity developed Scrypt mining efficiency algorithms,
 - d. blockchain forks
 - e. re-sale of old mining equipment back to the manufacturers.

These assumptions do not consider:

1. advancements in technology that should improve the hashrate produced per joule of energy in future,
2. an increase in the number of machines mining year on year due to the reinvestment of some of the profits,
3. the possible effects of as yet un-developed disruptive technologies (such as quantum computers),
4. the possible effects that the community might vote for such as hybrid, proof-of-work and proof-of-stake possibilities negatively affecting the profitability of proof-of-work mining as seen in its current form.

Milestone 2 USD 3 000 000

Procure USD 3 Million through a second milestone ICO and again, apply 70% thereof directly into mining rigs of various types into the Scandinavian infrastructure performing, also performing at 15% return on investment per month.

Affinity Renewable Mining will launch the *Affinity Fractional Remote Mining* product as part of the second milestone. The technologies needed to receive client's funds and report on mining pool profits have already been developed at time of writing and are being tested during Milestone 1 for roll out in Milestone 2. *Affinity Mining Ltd* will use the techniques learnt over many years of crypto-mine operation by the Founders and Team. We use custom algorithms to manage the mining operational efficiencies in the new, global mine operation market. See the whitepaper for screen shots of this CRM.

The remaining 30% of the funds raised will be used on marketing costs aimed at monetizing the *Fractional Remote Mining* (ARM) to customers, this CRM functionality has already been built and tested. We will also complete the development of the *Everywhere Mining™* software application, cover operating expenses until the mining hardware produces its first monthly turnover.

○ Table 2: Milestone 2

In USD millions	2017	2018	2019	2020
Affinity Renewable Mining Gross Revenue	0.00	3.78	5.29	7.40
<i>Everywhere Mining™</i> Program Revenues	0.00	6.50	8.99	11.98
Affinity Fractional Remote Mining customer revenues	0.00	1.50	2.20	3.60
Total Revenue	0.00	11.78	16.48	22.98
Operating profit margin	40%	40%	40%	40%
Operating profits (USD millions)		4.71	6.59	9.19
Operating profit for token holders (30%)		1.41	1.98	2.76
Cumulative operating profit for token holders		1.41	3.39	6.15

2018 profits from *Affinity Mining Ltd* Gross Revenue calculated as (USD 2 100 000 x 0.15 x 12 months).



Milestone 3 USD 5 000 000

Procure USD 5 Million through the third ICO stage and again, apply 70% thereof directly into mining rigs of various types into the Scandinavian infrastructure, performing at 15% return on investment per month.

The *Affinity Mining Ltd Centralized Multi-Coin/Multi-Asset Desktop Wallet* is built on the Ethereum Blockchain using Smart Contracts. The *Zero Kelvin (0K) Wallet* will be developed should the third funding milestone be reached during the fourth quarter of 2018.

Security/Authentication/Encryption features of the wallet include:

- Two Factor Authentication (2FA)
- Domain validated Secure Sockets Layer (SSL) certificates
- Salted Password Hashing
- Secure Private Cryptographic Key - ProvSecN
- Multi-Signature Fund Wallet
- SMS validation/authentication
- Business tools and enterprise integration

○ Table 3: Milestone 3

In USD millions	2017	2018	2019	2020
Affinity Renewable Mining Gross Revenue	0.00	3.78	5.29	7.40
<i>Everywhere Mining</i> TM Program Revenues	0.00	6.50	8.99	11.98
Affinity Fractional Remote Mining customer revenues	0.00	1.50	2.20	3.60
Total Revenue	0.00	11.78	16.48	22.98
Operating profit margin	40%	40%	40%	40%
Operating profits (USD millions)		4.71	6.59	9.19
Operating profit for token holders (30%)		1.41	1.98	2.76
Cumulative operating profit for token holders		1.41	3.39	6.15

2018 profits from *Affinity Mining Ltd* Gross Revenue calculated as (USD 3 500 000 x 0.15 x 12 months).



Milestone 4 USD 8 000 000

Procure USD 8 million through a fourth ICO stage and again, apply 70% thereof directly into mining rigs of various types into the Scandinavian infrastructure performing, also performing at 15% of investment per month.

The OK Wallet solution will be integrated with all the partner exchanges to allow seamless trading across most cryptocurrencies. This crypto-exchange process will create the additional revenue stream (Wallet Exchange Commission) as seen below.

○ Table 4: Milestone 4

In USD millions	2017	2018	2019	2020
Affinity Renewable Mining Gross Revenue	0.00	14.40	19.15	25.47
<i>Everywhere Mining</i> TM Program Revenues	0.00	16.80	23.52	32.92
Fractional Remote Mining customer revenues	0.00	4.80	6.72	9.40
Wallet Transaction Fees	0.00	1.45	2.03	2.84
Wallet - Exchange Integration	0.00	1.25	1.88	2.81
Total Revenue	0.00	38.10	53.30	71.44
Operating profit margin	40%	40%	40%	40%
Operating profits (USD millions)		15.24	21.32	28.58
Operating profit for token holders (30%)		4.57	6.40	8.57
Cumulative operating profit for token holders		4.57	10.97	19.54

2018 profits from *Affinity Mining Ltd* Gross Revenue calculated as (USD 5 600 000 x 0.15 x 12 months).



Milestone 5 USD 27 500 000

Procure USD 27.5 million through a fifth ICOs stage and again, apply 70% thereof directly into mining rigs of various types into the Scandinavian infrastructure performing, also performing at 15% of investment per month.

We project an additional 2% profits due to efficiencies gained in large procurement orders of ASIC miners and bulk orders of cards for GPU mining activities. We will assemble these units in the country where the mines are to be housed to reduce the cost of miner production which will contribute to the improvement in profitability seen below.

○ Table 5: Milestone 5

In USD millions	2017	2018	2019	2020
Affinity Renewable Mining	0.00	34.65	46.08	64.52
Gross Revenue				
<i>Everywhere Mining</i> TM Program	0.00	55.32	71.91	93.49
Revenues				
Fractional Remote Mining	0.00	18.30	19.89	25.86
customer revenues				
Wallet Transaction Fees	0.00	8.23	10.70	13.91
Wallet - Exchange Integration	0.00	8.80	11.44	14.87
Total Revenue	0.00	125.3	162.89	211.78
Operating profit margin	42%	42%	42%	42%
Operating profits (USD		52.63	68.42	88.95
millions)				
Operating profit for token		15.79	20.52	26.68
holders (30%)				
Cumulative operating profit		15.79	36.31	62.99
for token holders				

2018 profits from *Affinity Mining Ltd* Gross Revenue calculated as (USD 19 250 000 x 0.15 x 12 months). Note the increase in profitability from 40% to 42%.

Profit share will be paid pro rata, and quarterly to *Affinity Mining Token Holders* (AMT). The token will be traded freely on some of the exchanges within the first 3-6 months of operation of the organization.

