# INTRODUCING THE KWATT COIN

~ TOKENIZED ELECTRICITY ~

# **POWERED BY**



A UK-Based Company

Company Number

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### **DISCLAIMER**

This document and any other 4NEW documents do not constitute a prospectus of any sort and are not a solicitation for investment. The KWATT Coin does not represent an ownership or share in ANY public or private corporation, or other entity in any jurisdiction. The KWATT Coin is a coin that can be used to purchase goods and services within the 4NEW ecosystem.

Acquisitions of KWATT Coins through the initial coin offering are non-refundable. KWATT Coins are only to be used in connection with 4NEW. Any acquisition and use of KWATT Coins carries significant financial risk, including the use of experimental software.

Except where specifically indicated, the statements and information set forth in this Whitepaper are not intended to recite current or historical facts, and constitute forward-looking statements. Forward-looking statements may include the words "may," "will," "could," "should," "would," "believe," "expect," "anticipate," "estimate," "intend," "plan" or other words or expressions of similar meaning. These forward-looking statements are based on the current beliefs, plans, objectives, goals, expectations, anticipations and/or intentions of 4NEW with respect to future events. Although 4NEW believes that the expectations reflected in the forward-looking statements are reasonable, 4NEW cannot guarantee the successful establishment or operation of its systems and business or any future results, level of activity, performance or achievements.

Many factors discussed in this Whitepaper or otherwise affecting the matters discussed herein, some or all of which may be currently unknown to 4NEW or beyond 4NEW's control, will be important in determining the ability of 4NEW to establish and operate its systems and business. Consequently, actual results may differ materially from those that might be anticipated from the statements and information set forth herein. In light of these and other uncertainties, the statements and information set forth in this Whitepaper are for informational purposes only, should not be relied upon in making any purchase or other decision, are subject to change, and are not intended to establish or indicate any representation, warranty, commitment, undertaking, promise or contract made on the part of 4NEW to any person. 4NEW does undertake any obligation publicly update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. Additional risks highlighted on website.



### **LETTER FROM THE FOUNDER & CHAIRMAN**

### Ladies and Gentlemen:

The team at 4NEW is proud to announce the world's first coin ever that embodies electricity. Our product is grounded in necessities, solving three global & social problems; waste surplus, energy shortfall and voracious energy consumption of cryptocurrencies.

Our blockchain platform will enable the staking of KWATT tokens that will, for the first time ever, facilitate tokenized electricity to transact over the block chain network. This revolutionary application and utilization was only possible with the advent of the blockchain technology.

Given the utilitarian nature of our services, it is our belief that 4NEW will successfully integrate the blockchain network within the real world applications of energy consumption of the crypto community leading to widespread mainstream adoption.

Our seasoned management team, with over 300 years of collective experience, brings a vast and diverse perspective that has enabled 4NEW to explore rare and unique opportunities. We are excited to present a solution such as ours that will revolutionize and standardize three industries, Crypto-mining, Waste Management and Energy, creating disruptive economies of scale on a global level.

Regards,

### Varun Datta

Founder & Chairman



### **OBJECTIVES**

- Make electricity distribution globally scalable.
- Utilize renewable energy sources such as Waste to Energy (WTE) power plants as master nodes to generate electricity at breakeven cost.
- Acting as master nodes, WTE power plants will enable a digital grid that will utilize
  the blockchain technology whereby the entire output capacity of the power plant
  will be dedicated and recorded using advanced smart meter technology on a
  distributed, decentralized, public ledger network.
- An ERC20 or a similar blockchain technology will be adopted to encapsulate the electrical unit within the token. In this manner the token will embody a unit of electricity that will be globally distributed.
- The electricity generated by the WTE power plant will act as an electricity bank whereby onsite electricity consumption or national grid sales will enable the consumption of power produced by the renewable or WTE power plants.
- Application of electrical units to an onsite cryptocurrency mining farm will enable production of various cryptocurrencies. Number of electrical units consumed to produce 1 unit of the mined cryptocurrency will help measure, monitor and exchange electricity into monetary units.



### INTRODUCTION TO THE PROBLEM

The world today is faced with 3 major challenges: an abundance of waste; climate change as a result of greenhouse gas emissions; and energy infrastructure unable to with the increased demand of new technologies. This is all exacerbated by exponential increases in population.

According to Kevin Sieff in an article published on Washington post, the world now produces more than one billion tons of garbage per year. The majority of countries incinerate, landfill, or exportthis waste. The UK exportsover 2.4m tonnes of waste per year to countries in Africa, and China – who has recently closed its doors to all waste imports. In New York, barges transport up to 3,600 tons of waste down the Hudson River every day. In the Netherlands, which has a sophisticated recycling system, residents throw away the equivalent of more than 400,000 loaves of bread per day. In Jakarta, residents refer to the growing landfill in the city of Indonesia simply as "the mountain."

The global garbage crisis, documented for two years by photographer Kadir van Lohuizen, is expected to grow exponentially in the coming decades as people get richer and move more and more to urban areas. By 2025, according to a World Bank study, waste produced by cities worldwide will be enough to fill a 3,100-mile-long line of garbage trucks every day.

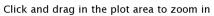
With the growth of the world's population (increasing from 6b to 7.6b since 2000 and expected to 10b by 2050) coupled with increasing industrialization in developing nations, humanity's hunger for energy has reached unprecedented levels. More than half of our energy comes from fossil fuels extracted from the depths of the earth's crust. It is estimated that since commercial oil drilling began in the 1850s, we have absorbed more than 135 billion tons of crude oil to drive our cars, power our power stations and heat our homes. That number increases every day, despite dwindling resources – we used more oil than we produced in 2017, this will oil prices to rise as this finite fuel source is exhausted.

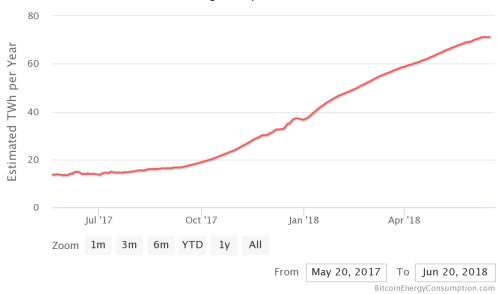
Our gasoline consumption in the last 150 years has had a devastating effect on our world. The burning of coal, oil and gas has been inextricably linked to the increasing levels of greenhouse gases in the Earth's atmosphere and is one of the main contributors to climate change.

Blockchain technologies are adding pressure to energy production infrastructure, at an exponential rate, and cryptocurrencies have in their own right have become an environmental disaster. As of the 30th of September 2017, a single Bitcoin transaction consumed as much power as 7.5 US households use in a day. As of July 2018, this reached the equivalent of 35 households (source: Digiconimist, 2018). These transactions now consume as much power as the whole of Chile, Luxembourg, Iceland or Singapore. Where this value didn't exist several years ago, it now consumes more than whole economies, and it is growing fast.



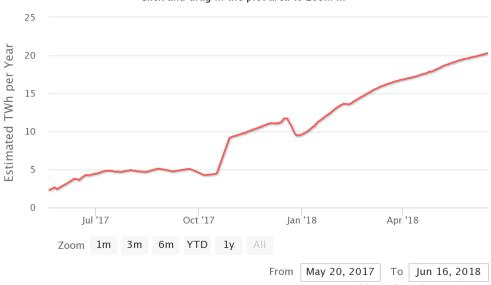
# Bitcoin Energy Consumption Index Chart





# **Ethereum Energy Consumption Index Chart**

### Click and drag in the plot area to zoom in



EthereumEnergyConsumption.com



### **KEY NETWORK STATISTICS**

Data as of April 18, 2018. Data provided by Digiconomist Energy Consumption Index. https://digiconomist.net,

KEY NETWORK STATISTICS	BITCOIN	ETHEREUM
Network's current estimated annual electricity consumption* (TWh)	61.4	17.47
Annualized global mining revenues	\$6,286,999,397	\$4,585,067,177
Annualized estimates global mining costs	\$3,070,065,124	\$2,095,884,598
Country closest to in terms of electricity consumption	Switzerland	Jordan
Electricity consumed per transaction (kWh)	957	76
Number of US households that could be powered in a year	5,685,306	1,617,195
Number of US households powered for 1 day by the electricity consumed by a single transaction	32.34	2.57
Electricity consumption as a percentage of the world's electricity consumption	0.27%	0.08%

At the current rate of consumption, next year Bitcoin mining will consume enough energy to be listed as the twentieth country in the world by energy consumption. The model is simply unsustainable. The world relies primarily on the production of energy from the burning of coal and oil, which not only damages the environment, but the economy as a whole. If Bitcoin has a great enough impact on the world's coal and oil supplies, the cost of a kilowatt will rise globally. The more valuable one Bitcoin becomes, the more energy will be used to mine that coin, therefore with price spikes, come energy spikes. This will go on until energy around the world will cost much more than it does currently, as a result of increased demand from miners globally.

Coupled with massive amounts plastics filling up our oceans, wildlife and countryside. the world's scientists agree that we are on the road to a disaster: something which can only be averted by curbing our fossil fuel habit. But that leaves us with a problem. How do we address these massive challenges in an economically sustainable and scalable way?

The solution is waste to energy – thanks to 4NEW.



### **SOLUTION**

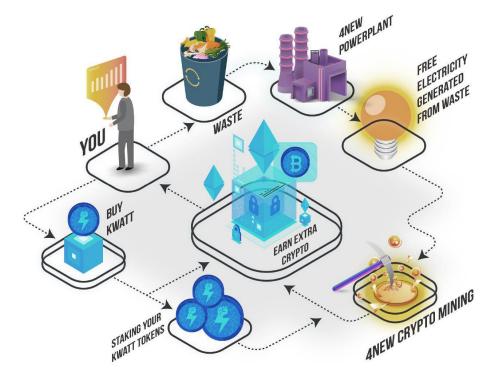
4NEW is the world's first eco-friendly, tangible, blockchain ecosystem powered by waste to energy power plants.

The concept is not new: all matter contains energy. This can be harnessed, for the production of electricity which is then leveraged to either be sold to the national grid or applied to operate mining processes at an onsite mining farm.

The cost to produce the energy is met through the revenue generated from the waste collection services and sale of byproducts facilitating a sustainable operation at breakeven or a marginal profit. Therefore, the energy produced is unencumbered and freely available for utilization or sale to the national grid.

4NEW is an actual producer of energy, converting waste into electricity with emissions which meet the most stringent regulations in the world. 4NEW's power plants earn enough revenue from cleaning up city waste and governmental incentives, to cover the entire running costs of the power plant. 4NEW's real innovation is to take this electricity that is generated from the waste and use it to power a massive crypto mining farm.

**Figure: How the KWATT Coin works** 



Historically, the price of 1 kilowatt has been very stable for the past fifty years at approximately \$0.15 globally, inflation adjusted. This trend is expected to continue for the foreseeable future in lieu of technological innovations. However, the wild card that not many have truly evaluated is the exponential acceptance of the blockchain worldwide leading to a massive spike in energy consumption by cryptocurrency mining that could drive the price of electricity up.



4NEW has the unique opportunity to apply this finite lifetime supply of energy to its coin, namely, KWATT. The 4NEW coin symbol is KWATT. Each KWATT Coin embodies within it, 1 kilowatt hour of electricity for a year.

The 4NEW solution powers the mining process without drawing from national energy resources, whilst diverting waste from landfill.

Purchasing the 4NEW KWATT token gives the owner a a unit of electricity, which they own and lease back to 4NEW for mining purposes, which is repaid using the revenue earned from the 4NEW crypto mining farm. 4NEW is not an energy exchange platform.

### **4NEW'S KWATT COIN FEASIBILITY**

The KWATT Coin will represent a certain hashing capacity per coin. This concept is not new; Companies such as Giga Watt have offered similar mining items for lower costs, however, KWATT Coin is extremely unique in scope. We do not charge energy fees for mining, the only cost to a coin holder is the cost of the coin. This means that a coin holder will be able to mine all cryptocurrencies for the lifetime without spending an additional penny for their energy bill. The energy is free to us, so it is free also to the coin holders.

### How does 4NEW sustain itself?

4NEW relies upon the waste to energy model. In this model we are paid for the waste that we process, and the sale of byproducts such as fertilizer, organic materials and clean water. The startup costs to this mechanism are funded by the coin sale, and the plant's overhead is funded by cash flow generated from collection of waste and revenue from sale of byproducts. Additionally, 4NEW, and the 4NEW team will retain a portion of the KWATT Coins (and their associated mining capacity) which will provide an additional revenue stream moving forward.

### The Mining Capacity of a KWATT Coin

The most difficult part of the KWATT Coin design has been determining a model to correlate with the increase in mining difficulty. We understand that one hash today can represent half of its mining power a month from now. To solve this issue, we have decided to have the coin represent a fraction of the total mining capacity of the 4NEW network rather than a fixed mathematical rate. This concept allows 4NEW to expand their mining capacity to match a competitive rate on the network. This rate of exponential expansion will be a predetermined reinvestment strategy of the funds received through



4NEW's own mining portfolio, in addition to the profits from the other revenue streams. This model not only guarantees the longevity of free energy, but long-term competitive advantage.

### **Portfolio Customization**

Users will have the ability to decide which coins or coins they would like to put their KWATT Coin power towards to mine. The options will consist of the top minable coins, this decision will automatically point the necessary amount of hash rate towards mining that coin, and the yield will be transacted to the account associated with your 4NEW Wallet.

### Proof-of-Work / Proof-of-Stake

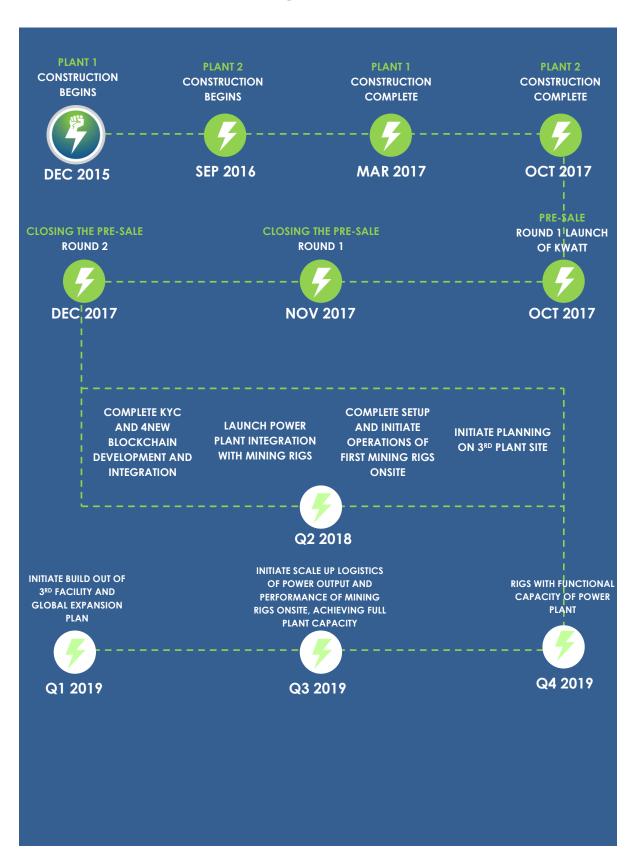
In recent months, Ethereum has taken steps towards a Proof of Stake system that will be fully implemented some-time in the following years. At 4NEW we fully support these steps and understand that more efficient systems are necessary for the sustainability of cryptocurrency in the long term. Yet, we also understand that Proof of Work will not likely be fully removed from cryptocurrency within the next decade. For this reason, additional precautionary steps must be taken to reduce the economic and environmental effects of the inefficiencies associated with Proof-of-Work mining, and our mission is to be on the vanguard of these efforts. Even if Proof of Work was completely removed and Bitcoin mining non-existent, the energy embodied within the coin can still be either applied to a greater volume of Proof of Stake mining operations or the national grid, given severe energy shortfalls already prevalent within the world.

### **Management and KWATT Coin Holder Interests aligned**

Given that the Waste to Energy plants will sustain operations at breakeven from revenue generated from the sale of waste collection services and/or byproducts, the energy produced is free. This lifetime supply of free energy is being purchased by the coin holder in the crowdsale. Any revenue generated from the administrative and facilitation fees the company will charge to either sell the energy to the national grid or apply it to the cryptomining farm on behalf of the coin holders will allow for future growth and expansion strategy. Therefore, increasing the overall demand for the coin. With three plants, the total output capacity rises to roughly 300 million kilowatt hours per annum. This will enable a market capitalization of the coin to rival most successful cryptocurrencies. 2 KWATT Coin was formerly named FRNCoin, it is the same coin, just a different coin symbol.



### **ROADMAP**





### **4NEW'S WTE PLANT**

4NEW creates electricity, for use in both mining and sale to the UK National Grid, with a focus on utilizing waste to energy processes for added profitability and sustainability. This electricity is then tokenized and sold all over the world in smart contracts, to pay for the electricity usage of domestic, commercial and industrial users.

Energy from waste includes a number of different technologies and processes, including Combustion, Gasification, and Anaerobic Digestion. The benefit to these processes is not only that they are reducing waste to landfill, but they offer additional revenue streams in the form of gate fees, Renewable Obligation Certificates (ROC), Feed in Tariffs (FiT), and Renewable Heat Incentives (RHI) depending on the setup of the plant. These present profitable models before the use of surplus electricity, and as an additional benefit, when properly maintained they run consistently with minimal downtime for 92% of annual hours without intermittency.

The revenue streams include:

- Waste Gate Fees
- Feed in Tariff
- Renewable Heat Incentive
- Renewable Obligation Certificates
- Sale of Electricity
- Sale of Heat
- Mining revenues
- By-product sale (including sale of bioethanol and dried biocal)

Although this may seem like a wide variety of revenue streams, they are interlinked in many ways. Not all revenue streams apply to every plant. The potential incomes of a plant depend on the technology and setup of the plant, available space, planning restrictions, local businesses, and date of construction.

The three main set-ups are as follows:

### **Combustion-Incineration**

This is not a process which is in the road map for 4NEW. Traditional combustion, sometimes called incineration, often used in mass-burn plants, requires vast amounts of air to pass over the flame in order to maintain the burn, as huge volumes of waste at different consistencies pass through it every hour. In this scenario, two seconds of burning means the emissions have travelled a great distance from the flame, so the plant needs to be extremely large, and still there is a lot of particulate matter travelling in the flue gases. This usually means large sites needed to process the emissions through a wet electrostatic precipitator. Cleaning processes which use water creates a new waste which must be the re-cleaned at further capital cost; this is why the larger waste processing



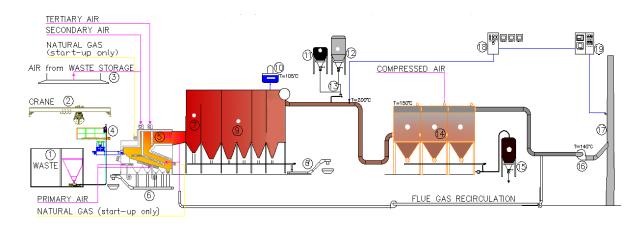
sites require water purification plants. The requirement to undertake this additional step reduces the overall efficiency and profitability of the site.

# **Close-Coupled Secondary Gasification**

Gasification is a process that converts materials contained within the waste material into methane (CH4), Carbon monoxide (CO) and Hydrogen (H2) by reacting the material at high temperatures with a controlled amount of air. The resulting gas mixture is called syngas and can be further used as a fuel. Close Coupled Secondary Gasification is an example of this, which involves the waste and recycled flue gases being fed into the Primary Chamber, where it is moved down a step-grate furnace, drying as it descends to the point of gasification. As the waste is heated, combustible syngases are released, and pass into a cavity above the Primary Chamber, called the thermal reactor. Here, a secondary supply of oxygen is mixed with the syngasesin order to oxidize the gases, and this mixture then burns very well at the required 850oC temperature. During periods of start-up, this gas mixture can be substituted by natural gas in order to ensure the fuel is adequately dried and the correct temperature is maintained from minute one of the process, as required by the Waste Incineration Directive (WID). The heat from the thermal reactor passes into the boiler where steam is produced to drive the turbine, in order to create the electricity.

Emissions must still undergo Continuous Emission Monitoring (CEM) and flue gas cleaning in the form of bag filtration with added absorbents and carbon filtration.

**Figure: Close Coupled Secondary Gasification** 



1	WASTE STORAGE	6	BOOTOM ASH EXTRACTION	11	ACTIVATED CARBON STORAGE	16	FLUE GAS FAN
2	CRANE	7	SECONDARY CHAMBER	12	ADITIVE STORAGE	17	STACK
3	AIR SUCTION FROM RDF STORAGE	8	FLY ASH EXTRACTION	13	DOSING SYSTEM	18	CENTRAL CONTROL SYSTEM
4	DAYLY STORAGE	9	BOILER	14	BAG FILTER	19	EMISSION MONITORING SYSTEM
5	GASIFICATATION PART	10	FEED WATER SYSTEM	15	FGT STORAGE		



## **Table: Specification**

Per Plant		
Waste Input	50,000	tonnes/annum
Price RDF (gate fee)	£80	Per tonne
Calorific Value	4,000-5,000	kW/tonne
Heat Output	26.0 gross, 22.1 nett	MW/hr
Electrical Output	4.95 gross, 4.00 nett	MW/hr
Operational Hours	7,800	hrs/yr

### **Table: Average Gate Fees 2017**

Feedstock	Tonnes/Yr in 8MW Plant	Rate Per Ton
RDF/SRF	40000	£85.00
Waste Plastics	10000	£50.00
Tyres	1500	£25.00
Plastics From AD Plants	5000	£100.00
Organic Fines From MRF	35000	£45.00

### **Pollution Control**

Operation of the plant is regulated based on the emissions, which is assessed by the local council, to be in accordance with the EU Emissions Directive. The Environment Agency would also be required to monitor the emissions from the plant at the intended capacity. With this in mind, as the plant meets emissions directive levels, operation would only be restricted by the volume accepted, before additional regulation is required.

**Table: Emissions Levels** 

	Unit	Ours (Measured)	Allowed EU
СО	mg/m <sup>3</sup>	2.15	< 50
TOC	mg/m <sup>3</sup>	0.56	< 10
NOx	mg/m <sup>3</sup>	115.79	< 200
Dust	mg/m <sup>3</sup>	1	< 5
SO2	mg/m <sup>3</sup>	0.62	< 50
HCl	mg/m <sup>3</sup>	0.34	< 10
HF	mg/m³	0.18	<1
Dioxin	Ng/m3	0.002	< 0,1

# **Anaerobic Digestion**

Anaerobic Digestion is a controlled fermentation process used for recycling organic materials and extracting the maximum resource from the waste. It is created from substrates predominantly made up from four groups: food waste, manure, sewage and crop residues. The substrates are collected from homes and businesses, and are delivered into reception tanks, where they are assessed for quality and contents, before they are mixed with solid matter and fed into the primary and secondary fermenters, where they are held for 65 days at 35-55 degrees. Microorganisms then break the substrates down into biogases made up of methane, carbon dioxide and water – this is

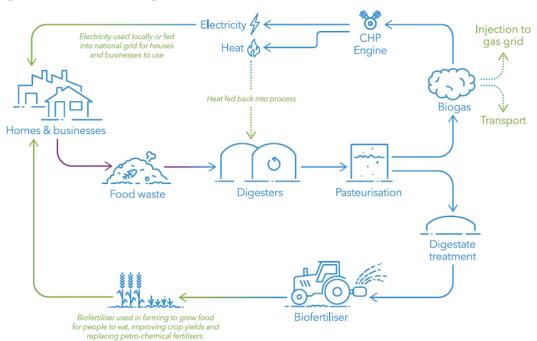


known as anaerobic digestion. These gases rise into the half-sphere flexible top part to the plant, before they are cleaned, compressed, and are run through CHP engines. This release of gases continues for 65 days through to the pasteurisation process, where the substrates are then further heated to over 70 degrees, in order to kill any harmful bacteria. Following this, the "digestate" - the matter left behind after the biogases have been extracted - is stored until it can be spread as fertiliser on agricultural land.

Now that the gases have been captured, they are able to be run through a Combined Heat and Power (CHP) engine. 30% of the heat is utilised by the plant to assist in the fermentation process, and the electricity is either utilised on site, or exported to the grid.

Approximately 8% of the electricity and 30% of the heat is utilized by the plant for maintaining process functions, and the remainder of the electricity can be used or sold.

### **Figure: Anaerobic Digestion**



### **Table: Specification**

Per Plant		
Waste Input	100,000	tonnes/annum
Calorific Value	300-400	kWh/tonne
Electrical Output	5 gross	MW/hr
Operational Hours	8,000	hrs/yr



**Table: Gate Fees** 

Feed Type	Value/cbm	Tonnes/wee k	Total Gas/week	Cost £/tonne	Revenue £/tonne
Mong	466	162	75,492	£53.00	£0.00
Fruit	120	650	78,000	£12.00	£0.00
Coleslaw	245	80	19,600	£12.00	£0.00
Marlow	25	0	-	£0.00	£6.00
Argent Soup	200	100	20,000	£23.00	£0.00
Biosludge	53	0	-	£0.00	£28.00
Cow Dung	57	0	-	£10.00	£0.00
CG Soup	500	27	13,500	£0.00	£50.00
Bones	225	40	9,000	£0.00	£20.00
Coors	20	0	-	£0.00	£3.00
Jam	900	40	36,000	£50.00	£0.00
Ensus Gran	359	0	-	£0.00	£16.50
Greaves	170	0	-	£0.00	£5.00
Fat traps	6	0	-	£0.00	£16.50
Filter Cake (Beer)	70	250	17,500	£0.00	£3.00
Blood	100	0	-	£0.00	£8.00
Oranges	120	20	2,400	£0.00	£12.00
Nestle	19	0	-	£0.00	£8.00
Chicken Litter	330	200	66,000	£19.00	£0.00

### **Pollution Control**

Biogas is mainly comprised of methane (CH4), carbon dioxide (CO2) and small amounts of hydrogen sulfide (H2S), and water vapour.

Hydrogen sulfide (H2S) is a colourless, poisonous, flammable gas formed in the fermentation process by the transformation of sulphur-containing proteins, often found in manure. The issue that this causes, is the sulphuric acid which forms will quickly degrade and corrode an engine.

There are a number of techniques which can be adopted for desulphurisation, of which Plant 1 and 2 utilise activated carbon filters. These work by forcing biogas through the remaining digestate; during this process the porous structure of the digestate traps the  $H_2S$  molecules, and the  $H_2S$  breaks down into elemental sulphur,  $CO_2$ ,  $H_2O$  &  $K_2SO_4$ .

### **Heat Output**

Heat output accounts for approximately 80% of the energy output of the plant, and not only reduces the effective electricity cost, it offers a negative cost, whereby all electrical outputs are created at profit through the primary operations of the plant. This can add profitability in a number of ways, though the exact mix of technologies has not been selected for each location; this will be done based on the resources and restrictions of each site. The primary uses will be absorption chilling and bioethanol production, though other heat uses are currently under advisement for potential integration.



Absorption chilling is the process by which heat produced by the cogeneration plant is used to generate chilled water for air conditioning or refrigeration by utilizing the heat to separate and recombine fluids, usually through NH3-H2O or LiBr). In the first circumstance, the water acts as the absorbent while ammonia water solution acts as the refrigerant. In the second circumstance lithium bromide is the absorbent and water the refrigerant. In short, the absorption cycle dissolves this vapour in a liquid (called the absorbent), pumps the solution to a higher pressure (with much less work input than required by a compressor) and then uses heat input to evaporate the refrigerant vapour out of the solution. This has the potential to vastly reduce the energy requirement for cooling of the cabins, and therefore the associated cost.

Bioethanol production offers a highly lucrative heat offtake option in the UK. With the introduction of additional CapEx, funded through the profit allocation of the mining revenues, a bioethanol processing plant can be situated on site, which will utilize 5MW of the heat output for production of fuels, which assist in achieving the UK Renewable Transport Fuel Obligation (RTFO) policy for reducing greenhouse gas emissions from vehicles through encour-aging the production of biofuels that don't damage the environment. A model of this process demonstrates that with full CapEx paid off in 2.7 years, the income retained through sale of biocal, acetic acid and bioethanol leaves a net profit of \$35m per annum.

### PATENT INFORMATION

### Our process is patent pending, application number 62674053.

4NEW has applied for a patent to cover its ecosystem of tokenizing electricity using renewable energy, in order to represent hashing power of a coin.

### The abstract is as follows:

A blockchain based ecosystem whereby energy produced by power plants, renewable or non-renewable or Waste to Energy technologies, is applied to a digital asset, digital protocol or a smart contract for delivery to cryptocurrency mining farms. The digital asset or the smart contract would act as a measure of the amount of electrical consumption to generate 1 unit of the respective underlying cryptocurrency mined. The power plant performs as a master node whereby the entire electrical output of multiple power plants flow within a centralized or decentralized public ledger flowing the value of electricity to various mining farms globally.



### **4NEW'S BLOCKCHAIN**

Electricity is an intangible commodity. Nevertheless, it is not practical or feasible to scale access to electricity globally due to its dependence on tangible infrastructure that tends to be localized and dependent on jurisdictional laws and local supply demand economics.

With the advent of the blockchain technology, for the first time in human history, we have the ability to scale a localized, intangible commodity such as electricity, globally. Historically, power providers would structure Power Purchase Agreements with large consumers of power such as factories or manufacturing lines. This would allow the consumers of power to negotiate deeply discounted prices due to the collective bargaining strength of their unique vantage point.

The KWATT Coin allows us to fractionalize the output capacity of a power plant down to the most fundamental and basic unit, which is the kilowatt hour. Moreover, by pegging the power unit to the coin, for the first time we can make power mobile as long as the power plant has the supply of electricity to back it up.

4NEW has successfully configured the KWATT coin to be pegged with electricity since we are a power producer not an exchange.

Furthermore, the 4NEW blockchain will enable holders of the KWATT coin to stake their tokens on the network allowing consumers of power to utilize the staked coins in order to process crypto transactions for currencies such as Bitcoins, Bitcoin Cash, Ethereum and Dash amongst others. In this manner the 4NEW ecosystem including the power plant and the mining farm will operate on the underlying blockchain technology making kilowatts mobile and scalable globally.

The 4NEW decentralized, distributed ledger is also where all actors in any industry will be able to transact using the KWATT coin. The coins are smart contracts which establish a binding relationship between transacting parties and provide a value for each transaction.

The ledger will provide an immutable and auditable journal of all transactions related to purchase and sale of goods and services on the blockchain. With all parties to each transaction being able to see the same ledger entry, costs of reconciliation and potential issue of disputes and revenue leakage are controlled to a very large extent.



# **4NEW'S KWATT TOKENOMICS**

KWATT Token currently is an ERC20, Ethereum based smart contract. Upon completion of the blockchain development, the token will be swapped to the KWATT Coin that will interact with our blockchain.

The total coin offering is for three hundred million coins (300,000,000).

Our first two plants will launch with a capacity of generating 10 megawatts of power every hour. Upon extending the plant operations, our infrastructure will be able to increase output capacity to 40 megawatts per hour. 1 megawatt is equivalent to 1000 kilowatts. 1000 kilowatts powers approximately 650 households for one day. Peak or off-peak usage of the power at different times of the day can cause this average to deviate.

The maximum annual output capacity of the plant is 346 million kilowatts per year. Due to maintenance and general down time for repairs to the plant, expected annual output capacity is estimated at 300 million kilowatts per year realistically.

Each KWATT Coin embodies an annual supply of 1 kilowatt of electricity within it.

A typical Waste to Energy plant depreciates to its salvage value over 50 years. Regular maintenance and upkeep will allow us to extend life beyond that.

This means holder of KWATT Coin will be able to apply their energy to one of two places each year for the next 50 years. They can either sell their energy to the UK National Grid or they can choose to apply it towards 4NEW's cryptocurrency mining farm.

The price of 1 kilowatt for electricity is a very stable metric. Over the past 50 years, the global average retail price is approximately \$0.15 USD per kilowatt, inflation adjusted.

4NEW will never authorize any additional coins issuance over and above the three hundred millions coins being launched in this initial coin offering. Therefore, any future growth in 4NEW plant sites will always rely on the supply of the coins being issued in this offering.

Each year management will apply 35% of its net profits towards a reinvestment strategy to enable future development of plants. This will ensure longevity and scalability to 4NEW over a sustained period of time.

4NEW Insiders and Founders will be restricted from selling any coins until January 1st, 2019.

Any KWATT Coins not sold in the offering will be burned. For the avoidance of doubt, all burned coins will release the supply of the energy that was embodied within the coin, allowing that unencumbered energy to be freely sold to the UK national grid or applied towards the mining farm at management's discretion.



At the start of each year, KWATT Coin holders will be able to choose a desired application of their energy the coin holder owns as represented by the total amount of KWATT Coins in their control at the time of this election. Therefore, if the coin holders desire to sell their energy to the UK national grid then the respective option can be selected. Alternatively, if the coin holder were to select the mining farm then the energy will be applied to the mining farm. Any decisions not made within the allotted time frame at the start of each year, will leave the management the right to determine the allocation of the energy at its discretion.

Management, at its sole discretion, may decide to extend the ICO ending date to an uncertain end date.

This document and any other 4NEW documents do not constitute a prospectus of any sort and are not a solicitation for investment. The KWATT Coin does not represent an ownership or share in ANY public or private corporation, or other entity in any jurisdiction. Acquisitions of 4NEW through the initial coin offering are non-refundable. KWATT Coins are only to be used in connection with 4NEW goods and services within its ecosystem only. Any acquisition and use of KWATT Coins carries significant financial risk, including the use of experimental software.



# **4NEW ALLOCATION DISTRIBUTION**





### **MINING**

4NEW mining rigs will be set up with retrofitted shipping containers. In this fashion, the shipping containers provide mobility which translates into scalability as the company grows and expands internationally.

4NEW has currently contracted prototypes already under development and scheduled for delivery in July 2018 to its plant site.

Containers can hold either up to 432 Antminers for bitcoin mining or 2700 GTX 1060 GPU for mining most crypto-currencies

The dimensions of each container are as follows:

Width: 7'6" and 5/16Height: 8"4" and 11/16Length: 38' and 19/64

Our mining efforts will be focussed on S9 Antminer ASICS and GTX 1060 GPUs.

Our waste to energy power plant operates at breakeven given the revenue generated from waste collections process. Consequently, energy produced is free. This translates into a unique and significant competitive edge over all the competition even though mining difficulties are expected to rise in the near future.

Our competitive edge and first mover advantage will enable an industry wide pattern to emerge whereby production will meet consumption within the same ecosystem.



# **RETURNS PER UNIT**

The below returns are based on the stated assumptions and may vary widely with changing assumptions.

An interactive copy of this table is available to download, which may be requested from the 4NEW team.

	GTX 1060 6GB	ASIC Antminer S9
Unit Cost	\$400.00	\$2,000.00
Mining	Etherium	Bitcoin
Kilowatts/unit/hr	0.09	1.375
Kilowatt hours/month	60.0	916.7
Kgs Waste/hr usage	0.020	0.306
Monthly Waste Income (\$)	1.60	24.44
Plant Expenditure/MWhe (\$)	12.00	12.00
Plant Expenditure/month (\$)	0.72	11.00
Electric Cost/month (\$)	-0.88	-13.44
Crypto Mined/month (units)	0.051	0.038
Revenue Projections /Month (\$)	48.60	365.21
Revenue Projections /yr (\$)	583.22	4382.46
Net Figure (\$)	593.78	4543.79
Payback Period (years)	0.71	0.44



### **WORKED EXAMPLE**

The following example uses the stated assumptions to create a model which may be upscaled with the increased power availability, as the 4NEW model is one that may be extended continuously with added production capacity.

	GTX 1060 6GB	ASIC Antminer S9
Megawatts	5	5
Units Supported	55555	3636
Waste Incomes/yr (\$)	\$1,066,666	\$1,066,666
Plant Expenditures/yr (\$)	\$480,000.00	\$480,000.00
Electricity Cost/yr (\$)	-\$586,666	-\$586,666
Crypto Mined /Month	2842.2	136.9
Revenue Projections /Month	\$2,700,111	\$1,328,018
Revenue Projections /Year	\$32,401,333	\$15,936,218
Net Figure	\$32,988,000	\$16,522,885
Capital Cost	\$22,222,222	\$7,272,727
Payback Period	0.7	0.4



### COMPLIANCE

### **UTILITY OR SECURITY?**

The KWATT Coin is defined as a Utility Token. This is because you own the energy, and lease it back to us for mining purposes. You are paid for the value of electricity, so your one-time contribution can be allocated to paying the cost of your electricity long-term.

We have had a legal opinion letter from Carter Reymann Law, that according to the HOWEY Test standards, the KWATT is defined as a utility, not a security.

### **ACCOUNTING**

4NEW's accounting financial statements will be maintained at Zucker Forensics P.A. Zucker Forensics is a credentialed forensic accounting firm with accredited US Certified Public Accountants. With over 35 years of forensic accounting experience in identifying fraudulent accounting practices, the management at 4NEW deemed it necessary to retain such a capable team to manage its books and records.

### **INDEPENDENT AUDITOR**

4NEW's independent auditor is Daszkal Bolton LLP. Founded over 26 years ago, Daszkal Bolton maintains an illustrious track record of thorough audits of high growth companies in every sector. In an effort to abide by the highest ethical standards, 4NEW Management will submit to annual audits to help secure our investor's trust and confidence.