

FRED ENERGY

STELLAR
BRIDGE APP
UPDATE

JUNE 22

Whitepaper v1.8

ABOUT

Developing green energy projects
using blockchain and
crypto tokens



INTRODUCTION

The FRED Project was founded in 2018 and started out as a mineable coin on its own blockchain (FRED Energy). The idea, to use cryptocurrencies and blockchain in accelerating the development of renewable and carbon-neutral energy devices.

This we termed Funding Research into Energy Devices (FRED).

FRED Energy later switched to the more ECO friendly blockchain Stellar in 2019. In February 2020 we launched our shop.fredenergy.org marketplace where consumers can buy green energy related products using cryptocurrencies.

In January 2021 the project launched FREDX an ERC-20 token alongside its Stellar based token (FRED) to increase awareness and liquidity of its green energy related projects. Due to high gas fees, a number of ERC-20 tokens were bridged onto the Binance Smart Chain (BSC) and Polygon network.

FRED Energy has one of the first operational bridges to and from the Stellar network. Interoperability between networks is becoming a rising trend and provides greater access to DeFi, swap pools and yield farms to our users.

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● A GREEN ENERGY FOCUSED COMPANY

FRED ENERGY LTD



Founded: 2018

Team: 5

Community: 4000+

The FRED Project aims to promote and facilitate greater adoption and generation of alternative energy by consumers and Fund Research into Energy Devices (FRED)



Goals

- Be recognised as a key player in green energy projects using blockchain technology and crypto assets
- Become a brand associated with green energy products and services that target consumer needs
- Aid in the acceleration of alternative energy usage and generation by consumers
- Enable an all inclusive access to energy sources
- Be the main online market place for alternative energy products accepting cryptocurrency
- Bring new energy saving and generation devices to market via innovator partnerships

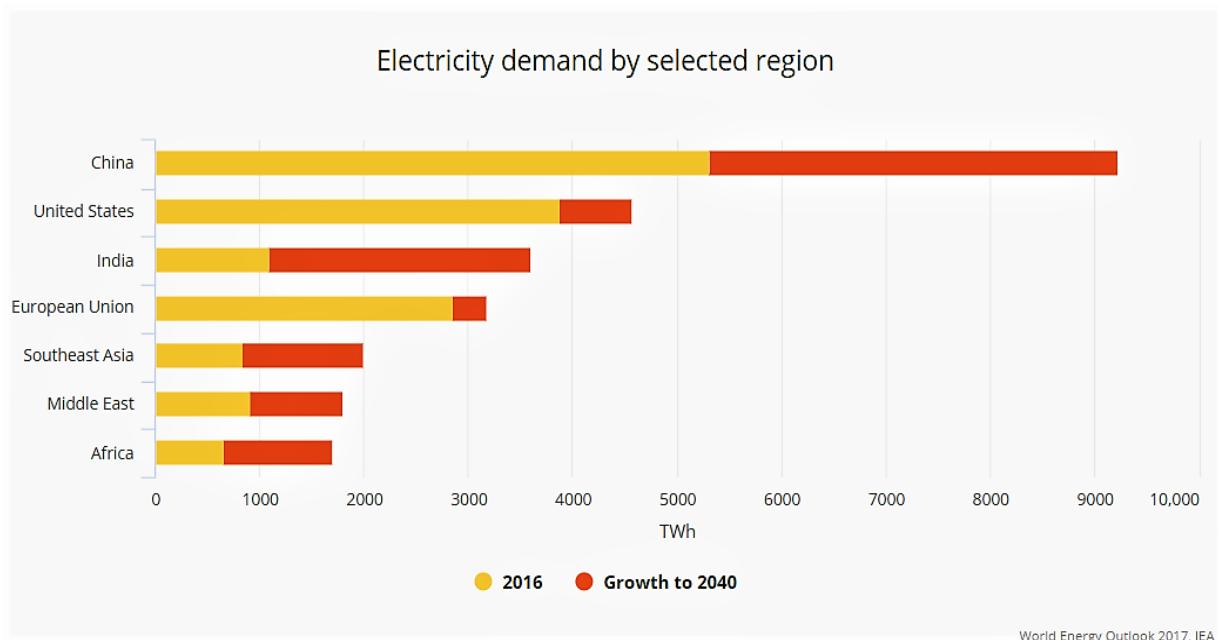
Objectives

- To raise funding via FRED Energy (FRED, FREDX) token sales and private investment enabling the achievement of identified business opportunities
- To create an online alternative energy product marketplace
- To bring our JV products to market
- To source viable energy projects for investment funding via our platform
- To create long term partnerships that will aid in reaching our goals
- To incentivise energy generation and storage by consumers

● THE FUTURE IS ELECTRIC

OVERVIEW

We are moving towards a new era in energy usage and it will be electric. It is estimated that global energy usage is expected to grow by 30% by 2040 mainly due to industrial and population growth in emerging economies with electricity being the largest consumer growth area (iea.org, 2017).



Due to supply and demand, this will contribute trillions of dollars to the energy corporates but will lead to above inflation price increases for consumers. The overall effects will be felt by all of us but those most vulnerable such as low-income earners and the elderly will be unable to meet the growing energy costs causing them to fall into what is termed “fuel poverty”. Energy suppliers are forecast to move towards greener alternative energy sources and this is great news for the environment, but it will have little effect on the consumer at cost level.

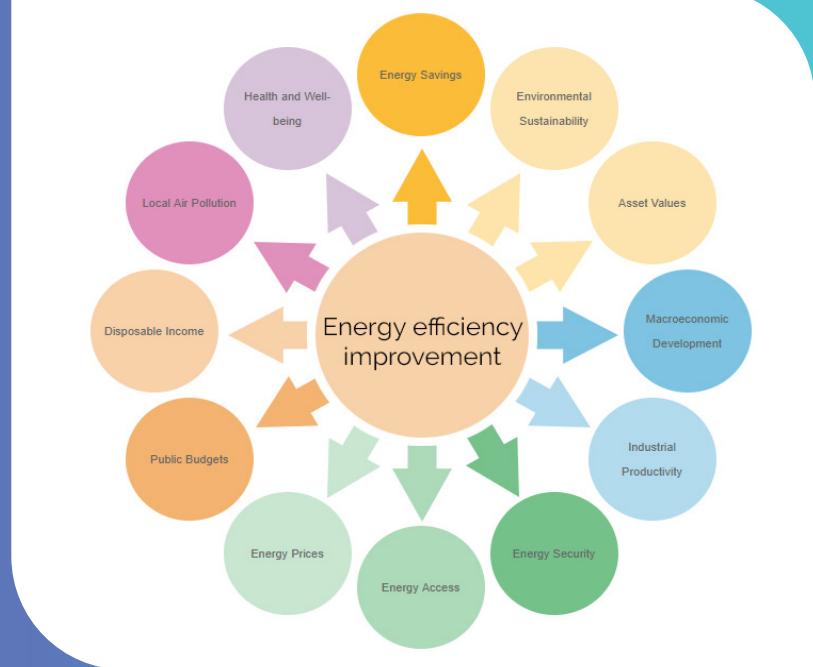
An increasing population and the industrialisation of emerging economies continues to have a huge impact on global energy demands and the environment. Over the next few decades the global population will rise, technology will evolve, and energy consumption will increase massively having a detrimental effect on our planet and society.

We believe that this cycle can be disrupted by reducing energy demand at the consumer level and raising awareness to the benefits of energy efficiency, with consumers generating and storing their own electricity using alternative energy sources.

Our project is ethical in nature, yet business focused, The FRED Project aims to achieve its goals by participating in green energy projects helping to create a cleaner and greener future for our children and the generations to come.

● BENEFITS TO SOCIETY OF ENERGY EFFICIENCY

Simple changes by consumers can lead to meaningful impacts, "By 2027, widespread use of LEDs could save about 348 TWh of electricity, This is the equivalent annual electrical output of 44 large electric power plants (1000 megawatts each), and a total saving of more than \$30 billion at today's electricity prices." (Energy.gov).



According to research by the International Energy Agency (IEA 2018), there is a wider perspective of energy efficiency which goes "beyond the traditional measures of reduced energy demand and lower greenhouse gas (GHG) emissions". This wider perspective reveals the potential of energy efficiency "to support economic growth, enhance social development, advance environmental sustainability, ensure energy-system security and help build prosperity".

In essence, what the report highlights is that by educating consumers in energy efficiency, there are many benefits apart from reducing costs, increasing disposable income and lowering harmful emissions. The impacts and benefits are felt not only by the consumer but across society as a whole.

FRED Energy firmly believes that society can be better informed on how to change their energy consumption habits. Our project promotes the move towards greener energy usage and generation, not only for the environment but for the future benefit of the consumer.

THE BUSINESS MODEL

FRED



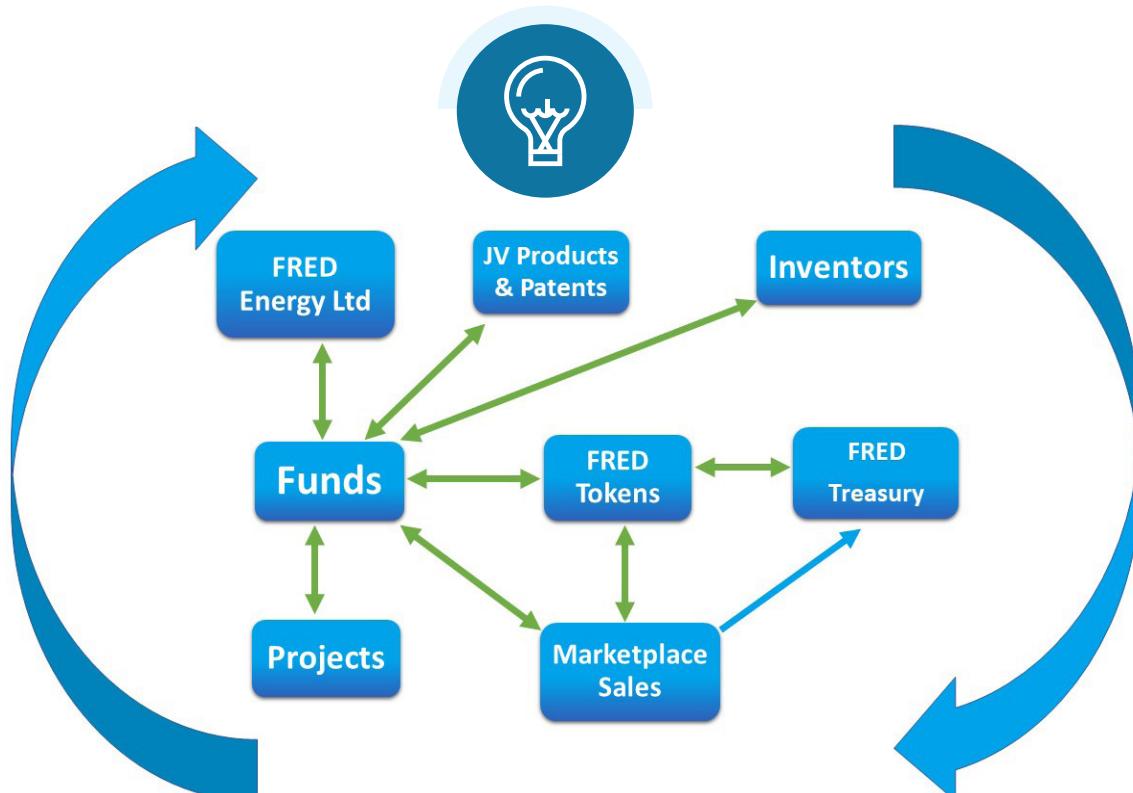
Our business model utilises blockchain and crypto tokens to enable the development of green energy focused projects. Blockchain and cryptocurrencies are gaining mainstream popularity and may seem at odds against energy efficiency, but they are disruptive technologies. For our project they offer an alternative entry point into raising awareness and funding towards projects that will create positive long-term change.

We believe diversification will be the key to our success and where we find an eco-focused market opportunity, we will aim to be part of that market, growing the brand into an all round player in the green energy sector. Projects mentioned in this document are our starting point and the Marketplace is our Minimum Viable Product (MVP) which went live in Q1 2020. The Marketplace alone has great potential in this new green era of becoming a future goto place for clean energy products.

FRED Energy is focused on innovation that aids in the acceleration of alternate energy generation and usage. The FRED treasury is a funding mechanism that seeks interesting and viable innovations for funding in exchange for Joint Venture (JV) partnerships. This enables the project and idea to move forward increasing the chances of bringing the product to market.

In April 2022 we launched our sub-project Sol-bank aimed towards the African/Asian markets where access to energy is limited or non-existent. The Sol-bank project has a strong focus on social good.

The core idea behind our funding system is to be circular, for each JV partnership that leads to a product, patent or profit, a percentage will go towards the next JV funded venture.



● STELLAR TOKEN FRED

404 M Supply

10M moved to Swap pool

Token supply is
404,000,000 FRED Energy
Stellar based Tokens with
the Ticker FRED



There were 808M tokens created during contract deployment, 404 Million have now been burned to ensure the maximum supply of 808M across blockchains. A swap pool of 10M of each token will be used to manage total in circulation ratios where swaps from one side may be halted until deposits from the other side have taken place. This enables a push pull effect to and from each network.

Burn address - GCA73U2PZFWAXJSNVMEVPNPPJCZGETWPWZC6E4DJA1WP3ZW3BAGYZLV6
Transaction id - <https://stellar.expert/explorer/public/tx/71c0adbf2073d2bb59fa1dfbf7629d2a6c4d5e5223c8a7ccfd052946a2c4e159>

A list of our project wallet addresses;

Distribution - GBDQSZLNSCBHK2RLQGUXY6TK5SM2B3B7YVEUBJ5T3ODH4IYHMOFOHUQQ
Swap Pool (10M) - GDBTQ7V63WLGFKUQMWNKJLOFGXVT7XXWBNCF2UULAWJ54Y4X6GVDSWAP
Project Reserve - GDKUL2IYC53GAKN2B4ZXGZ6CJNZ4I75FUETP2FDFVXH3NE6YQULO2BSK
FRED Treasury - GC3Z6FKDSGL4XKFZRK25XSJAOTVP15DRY2YXJXXJFYIW37KH2UFNXOJ
Team - GDBGVWLC54EM7EXJU4Z4QSOIGUYTI2FABRJURFBHKRDFEZJ5I5H5CPH2
Founder - GCM5AZLIVNAZZYZWGMPV6KJ6S6QYCFSNUNUYKF2YNKK3FFT7OADSTPMC
Advisors - GCKCLEFI3I6K4FYQ5ZGIZIQDT453XSHJMG4ZPXAMDMPBSCYXD2GWZ4DJ

Tokens can be obtained from the Stellar DEX
<https://stellar.expert/explorer/public/asset/FRED-GCA73U2PZFWAXJSNVMEVPNPPJCZGETWPWZC6E4DJA1WP3ZW3BAGYZLV6>

- ERC-20 TOKEN TO FACILITATE BRIDGING NETWORKS

FREDX

404 M Supply

10M moved to Swap pool

Token supply is
404,000,000 FRED Energy
ERC-20 Tokens with the
Ticker FREDX



808M tokens created during contract deployment, 404 Million have now been burned to ensure the maximum supply of 808M across blockchains. As with our FRED token, a swap pool of 10M FREDX will be used to manage total in circulation ratios where swaps from one side may be halted until deposits from the other side have taken place. This enables a push pull effect to and from each blockchain.

Burn address - 0x00dEaD

Transaction id - <https://etherscan.io/tx/0x6ba2e1d6427df532281832d442c3345e9e3dc1c180c9c89e5af>
b9ae9287a324a

Contract address;

<https://etherscan.io/token/0xd8e2b153e94daeC5fE657A49FF59bb68fA67f126>

A list of our project wallet addresses;

Distribution - 0x6dD0559E9FB958568e466Bd68565616c3F54988a

Swap Pool (10M) - 0x3dfe6c5eA62be861D3fd8cb2a5A039F1f40312f7

Project Reserve - 0x0ae652F4Ad787ba8911e38a2496066AE9F205C63

FRED Treasury - 0x64905e84bed8317d78f3de8BA9Be6484bD2FbFCF

Team - 0xBBBD7E6De6aB68e1022bAD00920F8701bBCeDE17F

Founder - 0xD9F234aB4f9fc4379d32C8FdD42182168C703cc9

Advisors - 0x7Af4F6929D3E0a5ff41fd9155267235C38729aBE

● BRIDGED TOKENS

BFREDX, PFREDX

100 M Supply

Bridged ERC-20 tokens on the BSC and Polygon Networks



bFREDX tokens are bridged FREDX tokens on the Binance Smart Chain (BSC). Supply is taken from the FREDX ERC-20 token supply, 100M tokens were bridged and 10M being reserved for the swap pool.

pFREDX tokens are bridged FREDX tokens on the Polygon network. Again supply is taken from the FREDX ERC-20 token supply, 100M tokens were bridged and 10M also being reserved for the swap pool.

The reason for bridging tokens onto the Binance Smart Chain and Polygon network is to take advantage of interoperability benefits between other networks, these include low cost transactions and wider DeFi opportunities for our users.

Our swap app currently bridges Stellar, BSC and Polygon networks and can be found at <https://swap.fredenergy.org>

bFREDX contract address;
<https://bscscan.com/token/0x321614eb36245bf2e2f2e58badaaaad1475e1026>

pFREDX contract address;
<https://polygonscan.com/token/0x8f6406db71cd86ad0e58f3ae3404fd384b287575>

● NETWORK INTEROPERABILITY (BRIDGES)

LIQUIDITY PLAN

In January 2021 the project launched an ERC-20 token (FREDX) alongside its Stellar based token (FRED) to increase awareness and liquidity of its green energy related projects. Due to high gas prices on the Ethereum network, a number of ERC-20 tokens were bridged onto the Binance Smart Chain (BSC) and the Polygon network. Interoperability between blockchains is becoming a rising trend and provides greater access to DeFi, swap pools and yield farms to its users.

FRED Swap enables swaps between Stellar, BSC and Polygon networks with ETH being added once gas fees become more reasonable. This will have a push/pull effect on movement between the assets and their respective networks.

The total maximum supply is now 808M across all networks. A swap pool of 10M from each token will be used to manage swap ratios where swaps from one side may be halted until deposits from the other side have taken place.



Benefits

Access to new investors

There are now over 130M ETH addresses with over 700K daily active wallets on the Ethereum blockchain. Binance Smart Chain has seen incredible growth since launch

Increase liquidity

Our liquidity and daily trading on the Stellar DEX suffer's from a small number of available investors, investor interest and awareness. We will gain access to the ETH/BSC DEX, DeFi and pools

Community Airdrop

We will Airdrop FREDx tokens to those who have supported the project based on an incremental percentage based on current holdings

Increase project awareness

Having a token on multiple blockchains will increase our exposure to investors and bring greater awareness of our project

Supply reduction

50% of the XLM total supply will be burned and 10M moved to the swap pool

Cross chain swaps

Once development of the swapper pool is complete, users will be able to swap XLM/FRED for ETH/FREDx and vice versa

fredenergy.org

700k

The number of daily active wallets on the Ethereum blockchain

3.5k

The number of daily active wallets on the Stellar blockchain

19,900%

The number of daily active wallets on the Ethereum blockchain

Binance Smart Chain One of the fastest growing blockchains in terms of users and DAPPS

PLAN OVERVIEW

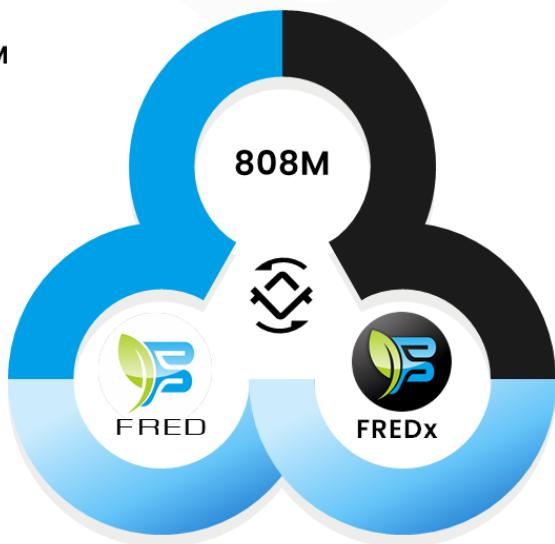
FREDx liquidity plan

Total in play supply 808M

There can only be a maximum total supply of 808M tokens at anytime from both sides

FRED Stellar Blockchain

404M FRED XLM tokens burned



FREDx Ethereum Blockchain

808M FREDx ETH tokens created.
100M bridged to Binance Smart Chain (bFREDx)
404M Burned. Remaining tokens allocated as per XLM side

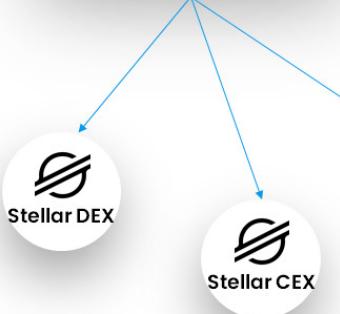
fredenergy.org

Plan Overview

**XLM/FRED
440M (initially on each side)**

Swap pool holds approx. 10M FRED and 10M FREDx. There can only be a max of 808M total at anytime from both sides.

E.g. 500M FRED/308M FREDx from swaps



**ETH/FREDx/bFREDx
440M (initially on each side)**



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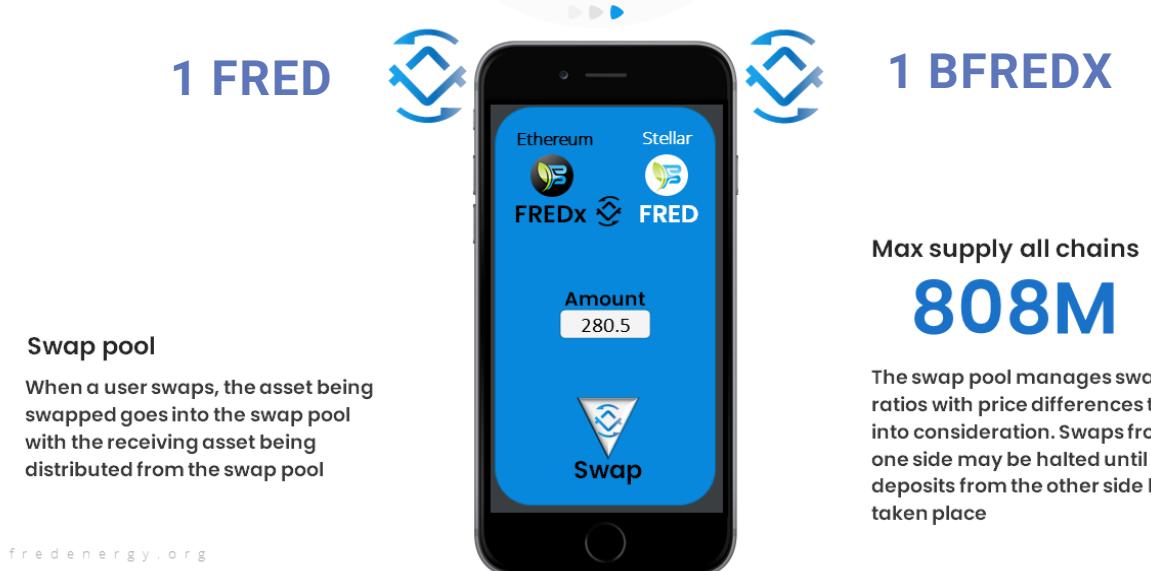
● THE SWAP POOL APP

The number of tokens initially created on each blockchain was 808 Million, 404 Million tokens from each asset have now been burned. This means that the total maximum supply across networks is 808M. bFREDX and pFREDX tokens are bridged FREDx ERC-20 tokens and are taken from the FREDx supply.

An initial swap pool of 10M of each asset will be used to manage total in circulation ratios where swaps from one side may be halted until deposits from the other side have taken place. This enables a push-pull effect to and from each blockchain.

FRED Swap app (<https://swap.fredenergy.org>) is now live and enables holders of FRED (Stellar) to swap their tokens for bFREDX (BSC) and pFREDX (Polygon) quickly and easily providing access to both networks. Swapping of FREDX (Ethereum) will be enabled once network fees are more realistic.

Swap App Overview



Push

Tokens and users are pushed towards the opposite blockchain

Pull

Tokens and users are pulled towards the opposite blockchain

TOKEN ALLOCATION

Tokens from FRED (Stellar) and FREDx (ETH) have been reallocated to their respective wallets as per the table below.

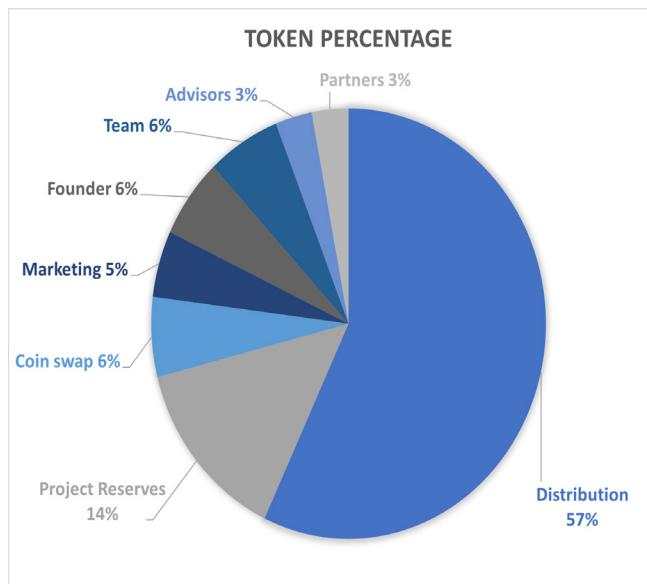
Approximately 320M FRED tokens (Stellar) are currently in circulation and distributed to more than 7500 wallet holders.

Distribution of FREDx tokens began with a community airdrop in February 2021 with an initial exchange launch followed by Uniswap and other ETH based liquidity pools.

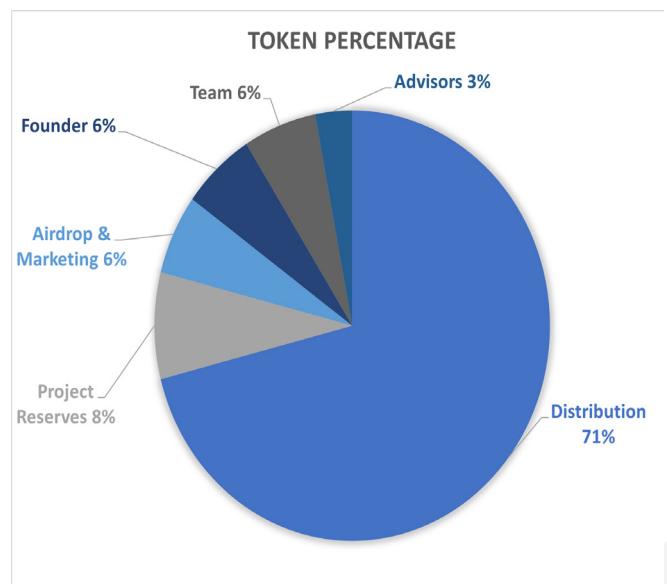
Liquidity pools for bFREDx and pFREDx have been seeded enabling users to swap with any other asset on the respective network.

XLM Wallets	Current XLM/FRED	XLM/FRED Moved to Swap pool	ETH Wallets	FREDx	ETH/FREDx Moved to Swap pool
Distribution (sales)	147,254,486		Distribution (sales)	286,840,000	
Reserve (swap reserves, treasury)	32,320,000	10,000,000	Reserve (swap reserves, treasury)	32,320,000	10,000,000
Founder (locked Q1 2022)	24,240,000		Founder (locked Q1 2022)	24,240,000	
Team	20,558,500		Team	20,558,500	
Partners			Advisors	8,870,000	
Advisors	8,870,000		Used for Airdrop, Marketing	24,240,000	
Marketing					
Totals	233,242,986	10,000,000	Totals	397,068,500	
			Initial Total supply	808,000,000	
Currently in Circulation	170,757,014				
Available after reduction	233,242,986				
In Circulation + Available	404,000,000				
Tokens Burned	404,000,000		Tokens Burned	404,000,000	

THE TOKENOMICS



FRED (XLM) Original Token Allocation



FREDX (ETH) Token Allocation
(includes bFREDX, pFREDX)

The above FRED (XLM) token allocations are taken from the original FRED tokenomics. FRED tokens remaining from Partners and Marketing allocations have both been burned. Founder, Team, Advisor and Project Reserve have been reduced by approx 50% to allow for the tokens created on the ETH blockchain (FREDX) and to enable a total token burn of 404 Million.

FREDX (which includes bFREDX, pFREDX) are allocated as per the pie-chart with allocations for Founder, Team, Advisor and Project Reserve matching those of FRED (XLM). Approximately 8M FREDX tokens were Airdropped to existing holders of FRED tokens.

Funding raised will be allocated as follows;

- Project Accelerate & Project Energise 35%
- Product & App Development 20%
- Funding Research into Energy Devices 20%
- Online Marketplace 10%
- Marketing 10%
- Legal and Company fees 5%

● THE

ROADMAP

2019 - 2020

Switch to custom asset on Stellar blockchain

Q3 2019

Swapped FRED coins to Tokens

Q3 2019

Marketplace goes live

Q1 2020

Exchange listing

Q3 2020

First JV product development complete
FRED listed on exchanges & CMC and Coingecko

Q3/4 2020

2018

- Q3 2018 Project initiated
- Q3 2018 Blockchain launched

2021-2022

- Q1 2021 Launch of FREDX (ERC-20)
- Q1 2021 List FREDX, bFREDX on exchanges, CMC, Coingecko
- Q2 2021 Begin testing of JV products
- Q1 2022 Sol-bank project launch
- Q3 2022 FRED Swap app release
Eco-bank ready for crowdfund campaign
- Q4 2022 JV products manufactured, tracked using blockchain
Innovator platform to go live

2022

Expected progress and milestones

- Increase investor base
- Gain liquidity across blockchains
- Increase Marketplace sales
- FRED Energy branded products

- Sol-bank user growth
- Funding generated for more projects
- Project accelerate
- Scope new JV partnerships

PROJECTS

MARKETPLACE

LIVE Q1 2020

Manufacturing and wholesale costs for renewable energy generation and storage systems continue to fall and this is helping to bring down costs for the consumer. In addition, the move towards Electric Vehicle (EV) adoption is accelerating as prices are also becoming more attractive to the consumer. The transition towards renewable energy generation, storage and EV adoption by consumers will go hand in hand.

Consumers purchasing an EV will be more likely to consider generating their own electricity to offset rising costs and provide future energy security.

What this means is that retail sales of green energy related products will see a continuous upward trend as the technology becomes more affordable and more widely accepted. For example, each new EV purchased will require a home EV charger capable of meeting the consumer's needs. EV chargers will need to be able to charge based on off-peak times and with dual speed options. The importance of consumer needs is also shared by the recently formed organisation User-Centred Energy Systems by the EIA, "people use technologies to convert energy into the services they want. To do this, technologies must be useable, and their services must satisfy user needs". Additionally, consumers will look to source additions or replacements to their existing system and become more energy efficient, for example replacing traditional incandescent bulbs with modern low cost efficient LED bulbs.

The screenshot shows the FRED Marketplace homepage with a dark background. At the top, there are social media links (Facebook, Twitter, Pinterest, LinkedIn, YouTube), a contact email (shop@fredenergy.org), and a free shipping offer ('FREE SHIPPING') with a value of '\$150'. The main navigation menu includes 'HOME', 'MARKETPLACE' (with a dropdown menu for 'CATEGORIES'), 'NEWS', 'FAQS', 'ABOUT US', 'VENDOR REGISTRATION', 'FACT', 'LOGIN / REGISTER', a shopping cart icon showing '0 / \$0.00', and language selection ('English / FR / ES'). Below the menu, the word 'Marketplace' is prominently displayed in large white letters. A secondary navigation bar lists categories: 'AMAZON ELECTRONICS', 'FRED MERCHANDISE', 'BATTERY STORAGE', 'ELECTRIC VEHICLES', 'ENERGY SAVING', 'EV CHARGERS', 'INNOVATIONS', and 'SOLAR'. Under 'ENERGY SAVING', there is a sub-section for 'WIND' with '1 Product'. On the right side, there are buttons for 'USD' and 'GBP'. At the bottom, there is a breadcrumb trail ('Home / Marketplace'), a product search bar ('Show: 9 / 24 / 36'), and a sorting dropdown ('Default sorting'). Below the search bar, four product thumbnails are shown: a stack of white LED lightbulbs, a 'Solar Camping Kit' (a solar panel and a portable generator), a single LED lightbulb, and a 'Wattz White 2000' solar panel.

The Marketplace will provide a greater use of FRED, FREDX and bFREDX as a utility token and promote the use of cryptocurrency and utility token payments. An all inclusive platform, it enables the unbanked to access products normally out of reach. The marketplace is our Minimum Viable Product (MVP) and is available at <https://shop.fredenergy.org/shop/>

MARKETPLACE DETAIL

The marketplace currently features our partner products and eventually will feature our own high quality, eco-focussed branded products.

Our marketplace includes green energy related products such as home EV chargers, solar and wind energy generation systems, battery storage systems, alternative electric vehicles, LED bulbs and other related gadgets.

Alongside traditional payment options we have implemented the option of payment for products using cryptocurrencies. FRED Energy tokens FRED, FREDX, bFREDX will be added to the list of payment methods in the near future.

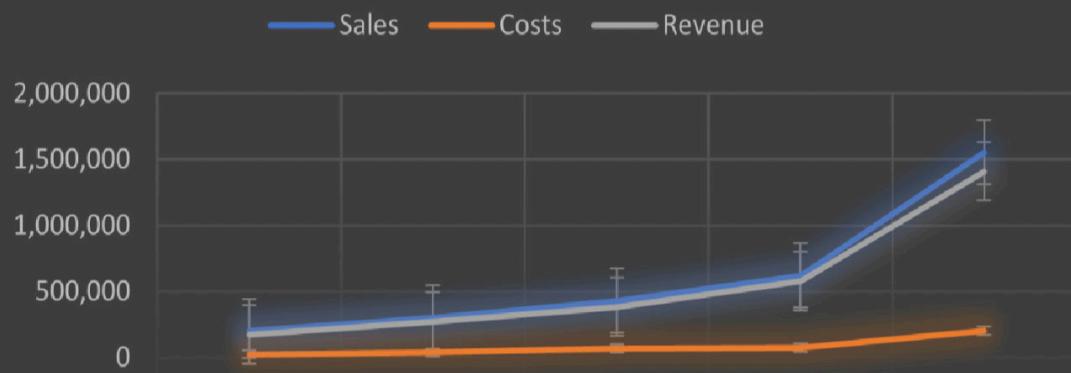
A loyalty rewards system provides purchasers with £1 worth of FRED tokens per £10 spent on products with the ability to earn more rewards via social media tasks and referrals.

The marketplace will also be a launchpad for innovator products sourced from around the world.

USP of our marketplace

- Unique green energy product focussed marketplace
- Accepts cryptocurrency payments leading to greater mass adoption
- Provides the unbanked access to products via their cryptocurrency wallets
- Aids in the acceleration of consumer energy efficiency, saving and generation
- Energy efficiency and energy generation systems information via content creation
- Our own branded products
- Real consumer product ratings
- Consumers can earn loyalty rewards in coupons or FRED tokens

Marketplace projected costs and revenue



	Year 1	Year 2	Year 3	Year 4	Cumulative
Sales	198,900	302,660	430,260	620,760	1,552,580
Costs	24,600	36,800	67,000	72,000	200,400
Revenue	174,300	273,310	383,260	578,760	1,409,630

PROJECTS

PRODUCT DEVELOPMENT

FRED (Funding Research into Energy Devices)

We will continue to look for new energy saving and generation innovations worthy of partnerships and funding.

Many of the world's greatest inventions have been made by people who had little scientific expertise but developed their inventions through trial and error.

Today, there are engineers, scientists and hobbyist inventors developing technologies that will one day change the way we generate, consume and store energy. The greatest problem many of them face is the lack of resources or funds to fully realise their inventions and get them to market.



Our pledge to help those off the grid

A recent article by Bill Gates highlighted the problems faced by those living off-grid or with unreliable access to electricity. A simple solar or mechanical powered charging device can massively improve the quality of life for many.

Examples of simple life improving devices are small solar powered light and phone chargers with Deciwatt's Gravity and Nowlight being capable of providing light without relying on the sun.

Our project pledges to purchase or provide one of our own devices per \$1000 of funding raised (see our promotional video by David Pakman) and give it free to someone in need. Supporting our project helps us to implement our green energy projects and will provide life changing benefits to some of those living off-grid.



Source: <https://deciwatt.global/gravitylight>

PROJECTS

ECO-BANK OUR FIRST DEVICE

Investors of our project will also be investing in the development of new energy generation and storage methods including our first prototype device which is fully assembled and working. We now need to complete the circuit designs, testing, regulatory compliance and bring it to market.

The device is aimed towards the off-grid, camping, outdoor markets and can be solar charged. It is estimated that the global camping equipment market is expected to reach \$ 27.8 Billion by 2028. There are many such devices on the market, however, there are several unique features not found in similar devices. Boasting a 220V output, USB-C outputs, extremely fast charging/discharging and a very long battery life-cycle (10-20 years). The battery pack is designed for reuse which will have less impact on the environment.

Products developed and manufactured by FRED Energy will be unique in that their lifecycle will be tracked using the Stellar blockchain, this enables reuse of battery packs and lessens the environmental impact of our products.

This device is perfect for unreliable grid, off-grid, outdoor camping use and as an emergency power supply.



Initial Specifications

Output: 20-22 Ah a larger 200Ah version is now prototyped

220v DC can power a small fan, lights, laptop and other lower wattage devices (<200W), Inbuilt LED light

Output: 220v, USB-C x2, USB-2 x2, 12V

2.1mm Jack

Input: optional 220V AC, 5V via 7-10 W inbuilt solar panel or via 10-100W external solar panel, 12V DC 2.1mm Jack

Charge time: 15 min-1 Hour AC, 4-8 Hours solar panel.

Weight: approx. 1.5kg

Dimensions: approx. 23cm x 19cm x 5cm



Progress facts:

- Two prototype products, a 20-22Ah and larger 200Ah device are exceeding performance expectations
- Further testing and compliance to be conducted
- Possible patent application for novel charge method
- Expected to be ready for market Q4 2022

PROJECTS

SOL-BANK

Sol-bank is a sub-project launched in April 2022.

It is aimed towards the African/Asian markets where access to energy is limited or non-existent and supplied as a bundle consisting of a Sol-bank, LED lamps and a solar panel.

Consumers of Sol-bank receive daily SOLS tokens which can be exchanged for other assets on the Stellar Decentralised Exchange (SDEX). The incentive of SOLS token rewards is that it can dramatically reduce the cost and time of product ownership.

Sol-bank provides those living in rural communities with unreliable access to energy a simple means of light and mobile phone charging facilities powered by solar energy. In addition, we plan to bring awareness to the Stellar blockchain and cross-border payment systems to the unbanked.

Initial deployment is in Uganda and the project is seeing a modest but steady growth. One of the main issues is access to funds for Sol-bank deposits, and smartphones for money management via the wallet app. There is also the lack of trust surrounding crypto assets, however, we aim to educate our users along the way and focus on the benefits of quick and easy transfers between fiat, crypto and phone credits.

The screenshot shows the Sol-bank website homepage. At the top, there is a navigation bar with links: HOME, STATS, SOL-BANK, SOLS-TOKEN, LIGHTPAPER, BLOG, and TEAM. Below the navigation bar, there are three large statistics boxes: "SOL-BANKS IN USE" (16.00), "WH GENERATED PER DAY" (2160.00), and "REWARDS PAID PER DAY" (129600.00). Below these statistics, there is a yellow section titled "SOCIAL GOOD FUND" with a paragraph explaining its purpose: "The Social Good Fund is used to help people and communities prosper where there is little opportunity. This will range from solar energy systems to simple tools and resources that foster and enable self sufficiency". To the right of this text, there is a photo of a smiling woman holding up a smartphone displaying the Sol-bank app interface.

Quick facts:

- Daily SOLS rewards for Sol-bank users
- Bi-monthly SOLS rewards for SOLS token and liquidity providers
- NFT's with SOLS rewards

PROJECTS ACCELERATE

Implementation of Project Accelerate is funding dependant and will build on current available technology.

Across Asia, Tuk-Tuks and motorcycles are a popular method of transport but suffer from fuel efficiency and contribute massively towards air pollution. Over the last few years there has been steady progress in the adoption of electric transportation, but there are still barriers to adoption; the cost of a new vehicle, lack of awareness to the benefits and a shortage of charging stations.

India has approximately 1.5 million Tuk-Tuks (rickshaws) and over the last few years has begun to adopt all electric versions in efforts to reduce pollution, creating a new billion dollar market.

Our objective is to purchase a number of novel EV's to promote green energy transportation and increase brand exposure. Each vehicle sponsored will bear the FRED Energy logo to be maintained on the vehicle for an agreed period of time to promote and raise awareness of our project. Fare and ride payments in our tokens will be promoted to further increase token utility and liquidity. We have initially selected six cities for our project targeting taxi and delivery drivers located in city and tourist areas in Asia and the EU. Project accelerate will set the stage for our future project Energise.

Benefits of the project;

- Provides the driver with higher earnings by reducing operating costs
- Reduced operating costs gives the driver an incentive to use greener transportation
- Increases overall awareness of alternative energy usage
- Reduces carbon emissions leading to a cleaner healthier environment for all
- Promotes and markets FRED Energy as an innovative green energy brand that works with communities for the benefit of the community
- Provides a greater utility with fare and ride payments in our tokens
- Sets the stage for Project Energise in Asia and the EU



Solar Tuk-Tuk Source: c-fee.com



Source: bzzt

PROJECTS

ENERGISE

Project Energise will focus on Electric Vehicle (EV) charging stations. We aim to increase the number of charging stations where there is a demand now and in the future.

Implementation will initially look towards the EU with further plans to target the emerging EV markets in Asia. EV charging stations that are strategically sited can become community hubs benefiting other service providers and the public, offering great long-term prospects.

The community hub model would provide a central base and include a larger number of charge points enabling top-ups between jobs. Charge stations will be part ownership or fully owned by FRED Energy and use an app based PAYG scheme with the aim to facilitate payments in local currency, and FRED Energy Tokens (FRED, FREDX).

After reaching ROI, income from charging stations will then be used to expand the charging network into other niche areas and used to fund further projects.

EV charging stations bring further possibilities of partnering with other blockchain platforms that offer peer-to-peer (P2P) renewable energy trading. The global electric vehicle infrastructure market is forecast to be worth \$144.97 billion by 2028 (GVR, 2021) and FRED Energy is looking to be part of this new ecosystem.



It is estimated that around 60% of EV charging will be at the home and this segment has been identified as having great potential. Not all home EVSE's are made equal and providing the consumer with the right type of EV charger at home is another market entry point for FRED Energy via our marketplace.

It's important to note that there will of course be a point where electricity providers are no longer able to offer off-peak rates due to overnight charging demands. This is where our project aims to raise awareness and encourage consumers to consider generating and storing their own electricity. This will help to offset rising energy prices that are already impacting the quality of life for many.

BUSINESS SUMMARY

The world's energy demands are rapidly increasing and the move towards greener alternative energy generation and usage is accelerating. Major corporations including the big oil giants are investing heavily into green energy initiatives in preparation for the growing change of energy requirements and demands.

Whilst the large corporations are monopolising many future prospects, there is still great potential and need for smaller independents to enter the green energy space in order to fill certain niche segments, this is where our project aims to utilise blockchain and crypto tokens to fill the gap.

Projects overview

The marketplace is our minimum viable product (MVP) and went live as scheduled in Q1 2020 with the first product purchase taking place with cryptocurrency. Commission from sales are between 10-35% depending on the product value.

We are currently developing Eco-bank with our innovative partner (DSA) which is aimed at the outdoors, camping market and those living off-grid. Eco-bank is based on a small solar powered light and phone charging device with design modifications to enable greater functionality and usability. Our JV developed and manufactured products will be unique in that their lifecycle will be tracked using the Stellar blockchain to enable recycling, reuse and lessen their impact on the environment.

Funding Research into Energy Devices (FRED) already has its first partner and innovator (DSA). Our partner develops energy generation devices and maximises energy storage using new efficient methods. Several prototypes of energy generation and storage devices have been developed and we are looking towards a patent application for one in particular.

Project Accelerate is effectively a marketing strategy and has the potential to bring enormous added value to the project via brand awareness, product sales and market capitalisation of our tokens.

Project Energise focuses on the rapidly growing EV charging market (funds dependant). There are many niche segments that have been identified in Asia and Europe where there exists great potential for early investment into Electric Vehicle Charging Stations (EVCS) in preparation for the gradual change of consumer requirements. For us to be a successful Charge Point Operator (CPO), we require a high level of funding and therefore this project will be a future aim.

Getting the job done

We understand that each project requires expertise in certain fields, acquiring the right people for the task is something that can be achieved with working capital. When a start-up project or company receives investment, it is then able to hire the right people for the job.

Target Markets

The global EV charging infrastructure market is expected to be worth \$144.97 billion by 2028 with the EV home charger market forecast to be worth \$35 billion by 2027.

Sales of consumer grade renewable energy generation and storage systems are forecast to see similar growth figures as they become more affordable enabling consumers to offset rising energy costs.

Additionally, the global camping equipment market is expected to reach \$5 Billion by 2020.

The global power bank market size is anticipated to reach \$27.8 billion by 2027 with a CAGR of 18.4% from 2020 to 2027

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DISCLAIMER

Please read this disclaimer very carefully. If you have any doubts you should consult financial, Legal, Taxation or other related professional advice.

The FRED Project and FRED Energy are projects controlled by the "Company" FRED ENERGY LTD registered in England and Wales with Number 12054644.

The holder of FRED Energy tokens undertakes that she/he understands this whitepaper, has an understanding and experience of cryptocurrency, blockchain systems, and services, and that she/he fully understands the risks associated with IEO/ICO/IDO campaigns including those related to the use of cryptocurrencies and utility tokens, including secure storage.

This information contained in this whitepaper is a summary of The FRED Project and FRED Energy's future projects and business models, it provides an introduction to FRED Energy Tokens, the associated features and future targets. The FRED Project will use its tokens to raise funds for the development and commercialisation of projects and eventual services as described in this whitepaper.

Information contained in this whitepaper is of descriptive nature and is subject to change and not binding. This whitepaper includes information sourced from relative industry and market forecasts that have been obtained from internal or publicly available publications. Whilst the sources are believed to be reliable, The FRED Project and FRED Energy Ltd provides no assurance or guarantee as to the accuracy or completeness of such information and forecasts.

Compliance and regulatory measures or actions may impact our projects and future services which could limit or prevent them from being developed or implemented. Our business models may change due to these new regulatory and compliance requirements from the associated applicable laws in certain jurisdictions.

FRED is a custom asset on the Stellar (XLM) network and is not classed as a share or intended as a security or investment asset. FREDX is an ERC-20 token on the Ethereum (ETH) network and is not classed as a share or intended as a security or investment asset. bFREDX is a BEP-20 token on the Binance Smart Chain (BSC) and is not classed as a share or intended as a security or investment asset. pFREDX is a token on the Polygon network and is not classed as a share or intended as a security or investment asset. FRED Energy Tokens are utility tokens of The FRED Project and its associated projects. FRED Energy Tokens (FRED, FREDX, bFREDX, pFREDX, SOLS) do not represent tangible or physical assets that exist outside of the FRED Project platform and ecosystem.

FRED Energy Tokens do not represent equity, shares, royalties or rights to capital, dividends, interest, profit or income in the entity that issues Tokens or any other entity in any jurisdiction. FRED Energy Tokens are not designed or intended to have a particular value outside The FRED Project platform and ecosystem. FRED Energy Tokens shall not be used or purchased for speculative or investment purposes. By holding FRED Energy Tokens, you are not in provision of rights with respect to the company, revenues or assets. This includes but is not limited to voting, intellectual property (proprietary) or any other legal or financial rights.

This whitepaper is not an offer or solicitation

The FRED Project and FRED Energy do not offer any securities or assets for investment purposes. This whitepaper is not to be intended as a financial service offering document or a prospectus of any kind. This whitepaper is not a solicitation for investment and does not pertain in any way to an offering of securities, shares, options or futures in any jurisdiction. This whitepaper provides an overview of The FRED Project's aims, future products and services and where the utilisation of FRED Energy Tokens can be used within The FRED Project's platforms and ecosystem.

DISCLAIMER CONTINUED

This whitepaper is not a recommendation or advice

The FRED Project and FRED Energy do not and cannot guarantee that participants in FRED Energy Tokens will make profits or will not incur losses. The tokens and their use as discussed in this whitepaper have not been reviewed by any regulatory authority and there are currently no plans for regulatory review under any laws or regulations of any jurisdiction.

Restrictions

There may be restrictions on territories where FRED Energy Tokens are not offered to citizens and residents which may include US, Canada, Algeria, Bolivia, Vietnam, Indonesia, Kyrgyzstan, Lebanon, Morocco, Namibia, Nepal, Pakistan, Ecuador. Where restrictions are stated, participants should not participate in token sales and purchases of FRED Energy Tokens. Participation in FRED Energy token sales or purchases may also be restricted to residents of other countries and territories. All participants shall make sure they act in conformity with their applicable laws, and they have learned the position of the regulatory authority in their jurisdiction.

Limitations of liability

It is your responsibility to the decisions you make based on the information contained in this whitepaper. The FRED Project, It's Founders, Team Members, Advisors and any other Third Parties involved in the FRED Project and it's resulting projects shall not under any circumstances be liable for any loss or damage you or anyone else incurred as a result of activities that you or anyone else engages in, based on any information contained within this whitepaper and includes but is not limited to the incapacity to use FRED Energy Tokens.

Disclaimer of warranties

All information contained in this whitepaper is provided "AS IS" without warranty of any kind. The FRED Project and FRED Energy make no representations and disclaims all express, implied and statutory warranties of any kind to you and /or any third party. This includes warranties as to accuracy, opinions, completeness or fitness for any particular purpose.

Transaction Laws

You understand and agree that The FRED Project and FRED Energy are not responsible for the choice of applicable transaction laws, and that applicable laws may include but are not limited to anti-money laundering laws, the Securities and Exchange Act, and local tax laws. You understand and agree that you will be responsible for all applicable transaction laws. Without violating the above, you understand and agree to bear sole responsibility for all tax liability incurred during any purchases of FRED Energy Tokens, and that The FRED Project or FRED Energy Ltd does not directly or indirectly bear any of said tax liability. You will agree not to use our tokens for any illegal operation, including but not limited to financing of terrorism or money laundering.

Full terms and conditions regarding our Tokens can be found at

<https://fredenergy.org/news/terms-and-conditions/>

PROJECT LINKS

Website: <https://fredenergy.org>

Marketplace: <https://shop.fredenergy.org>

Sol-bank: <https://solsbank.com>

Discord: <https://discord.gg/uhAjg9w>

Telegram: <https://t.me/FREDEnergycommunity>

Facebook: <https://www.facebook.com/TheFredProjectOfficial/>

Twitter: https://twitter.com/energy_fred

Medium: <https://fredenergy-org.medium.com/>

All project links: <https://linktr.ee/fredenergy>

Email for investor enquiries hello@fredenergy.org

