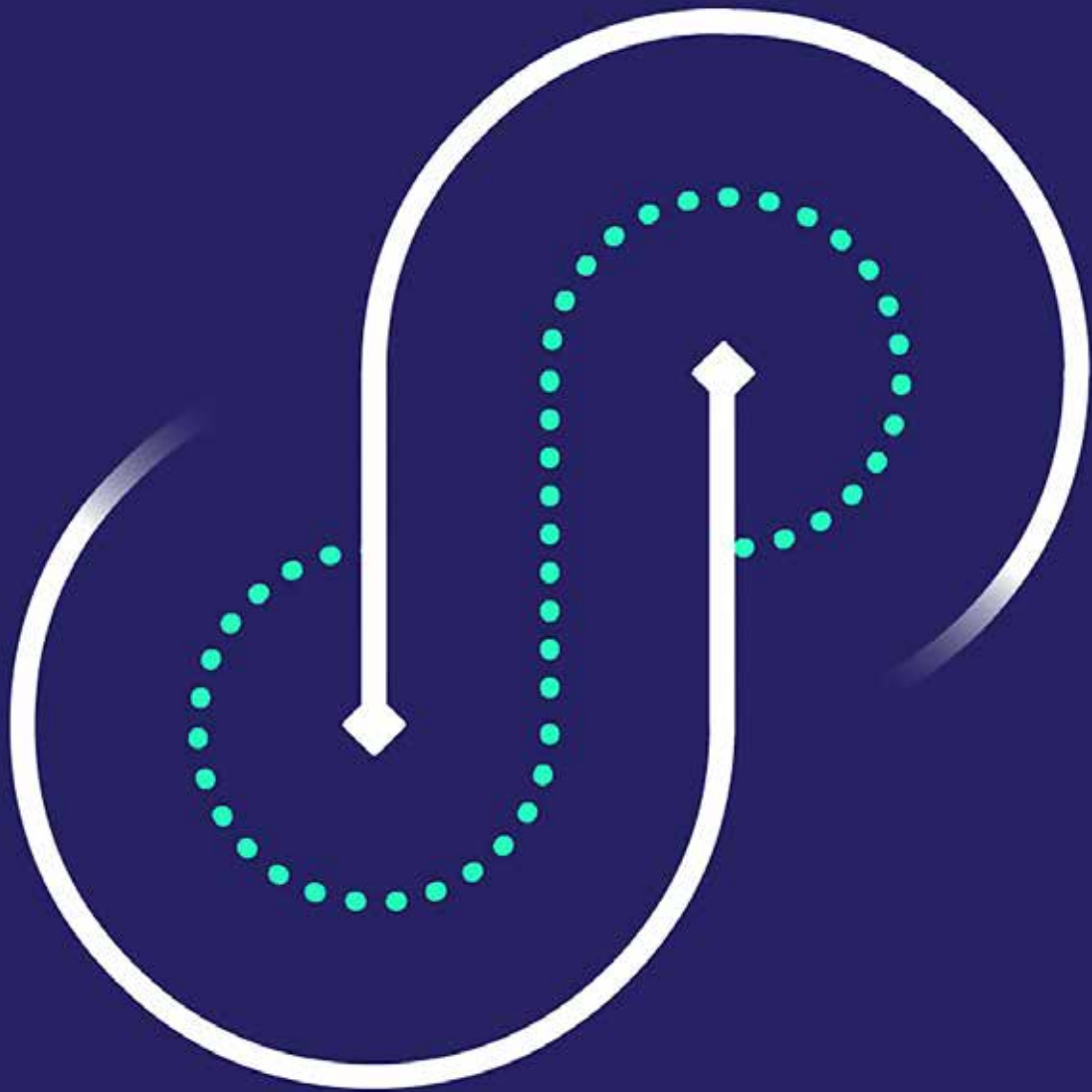


# **SOLPLEX PROJECT**



**WHITEPAPER**

# CONTENTS

<b>1 EXECUTIVE SUMMARY</b>	<b>3</b>
<b>2 PROBLEM AND SOLUTION</b>	<b>3</b>
<b>3 PROOF OF GENERATED ENERGY (POGE) PROTOCOL</b>	<b>4</b>
<b>4 USE CASES</b>	<b>5</b>
<b>5 BUSINESS MODEL</b>	<b>6</b>
<b>6 TECHNICAL DESCRIPTION</b>	<b>7</b>
<b>7 TOKENOMICS</b>	<b>9</b>
<b>8 ROADMAP</b>	<b>13</b>
<b>9 CONCLUSION</b>	<b>15</b>

# 1 EXECUTIVE SUMMARY

Solplex is an innovative solution that aims to tap into the growing market of renewable energy by utilizing energy generated from solar power plants to reward its network of generators, both people and businesses. The system, called **Proof of Generated Energy** is an environmentally friendly and sustainable approach that reduces the carbon footprint and contributes to the global effort of decreasing greenhouse gas emissions.

# 2 PROBLEM AND SOLUTION

The problem that Solplex aims to solve is the inefficiency and environmental impact of traditional reward protocols in the crypto industry. The use of energy from renewable sources, particularly solar power plants, in the **Proof of Generated Energy** reward protocol, allows for a sustainable and environmentally friendly approach to reward the network participants. It also opens up the possibility for a new class of participants - electricity generators.

# **PROOF OF GENERATED ENERGY PROTOCOL**

Solplex project utilizes the Proof of Generated Energy (POGE) protocol, which rewards the electricity generators network (people and businesses) for producing energy from renewable sources. The POGE protocol allows for fast transaction processing, low energy consumption, and is not harmful to the environment or susceptible to state interference. It can also be done on smaller and weaker devices.

In the Solplex ecosystem, owners of renewable energy power plants use the amount of converted energy as a stake instead of coins.

As of August 2022, published estimates of the total global electricity usage for crypto-assets were between 120 and 240 billion kWh per year, a range that exceeds the total annual electricity usage of countries such as Australia or Argentina. Renewable energy sources such as solar, wind, tidal, hydro, and geothermal power, are sources of energy that are replenished naturally and can be used without depletion. By using renewable energy, the environment is protected as these are clean energy sources that do not pollute.

Solplex project aims to further promote the use of solar power for rewarding its participants by making it more energy efficient and environmentally friendly. With the increasing need for energy and shifting to renewable energy sources, support for additional investment in renewable energy is crucial.

# 4 USE CASES

Solplex can be used by individuals and organizations - the owners of renewable energy power plants - to monetize their investment, create passive income and earn rewards. Additionally, it can be used by the wider community as an alternative way of participating in the reward program. The use of renewable energy as a stake allows for the efficient tracking of energy usage and reward distribution. It is also beneficial for the environment and economy as it reduces the need for costly and polluting energy sources.

# 5-BUSINESS MODEL

Solplex dApp is designed to reward the owners of solar power plants (up to 60 kW) with tokens in return for the energy they generate. The token, called an SPX token, will be launched on the Binance Smart Chain blockchain. Solplex dApp will be linked to a smart contract (SC) that is responsible for distributing the tokens. This means that the distribution of tokens will be completely handled by the smart contract, without any intervention by people, governments or companies. Once the smart contract is set up (programmed), it is immutable (meaning no one can change it).

The rewards from SPX tokens will be divided into three categories:

- **Generators**, who produce energy,
- **Holders**, who hold the tokens and
- **Stakeholders**, who will stake the tokens.

The total number of SPX tokens is fixed at 1,000,000,000. The number of tokens that will be distributed to holders and stakeholders is also defined. All the participants listed above will receive their share of rewards through the Tokenomics system of SPX smart contract.

Solplex will provide a way for solar power plant owners to connect to the dApp through an API via the portal of the manufacturer of their inverter (e.g. Huawei, Fronius, Solaredge, ABB, SMA, Tesla, etc.). In a later stage of the project, Solplex will also allow for connection to the manufacturers that do not have a portal by connecting directly to the dApp through the inverter serial number (this can only be done if the manufacturer provides Solplex the information that the inverter is producing a certain amount of energy).

With this solution, Solplex will not only reward the existing solar power plant owners but will also encourage new investments in building solar power plants. In this way, Solplex will directly impact an increase in the global production of electricity from renewable sources –and thus reduce pollution on the planet.

# **TECHNICAL DESCRIPTION**

The owner of a solar power plant needs to allow Solplex dApp to access the web portal of the manufacturer of his power plant's inverter via an API and then enter the solar power device's information on Solplex dApp. Once connected, the dApp will perform daily checks to see how much electricity was produced. The number of SPX tokens earned depends on how much electricity the solar power plant generates. The earned tokens will automatically be sent to the owner's digital wallet which was used to connect to Solplex dApp.

## **DETAILED EXPLANATION:**

The following is the process of connecting a solar power plant to the Solplex decentralized application (dApp) in order to earn rewards in the form of tokens:

- The owner of the solar power plant must first have an inverter installed and have the manufacturer's approval to connect to its web portal via an API (different manufacturers might have different or similar approach).
- The owner then must allow Solplex dApp to read the information on the manufacturer's portal regarding how much electricity the power plant is producing.
- After that, the owner has to log in to Solplex dApp using his wallet (e.g. Metamask) and enter the serial number of the inverter for the dApp to track.
- Once connected, the dApp will automatically display the owner's portfolio information, such as how many tokens have been earned and how long it has been active on the power grid.
- Solplex dApp will do daily checks to see if the power plant is producing electricity and, if so, the owner will earn tokens.
- Solplex dApp will send this information to a smart contract (SC), which will calculate and distribute the tokens to the appropriate participants.
- The smart contract will automatically transfer the tokens to the wallet used to log into the dApp.

## GENERATORS REWARD DISTRIBUTION

The system for rewarding generators in this section describes the process where a transaction fee is collected on a Generator Fee Wallet (this wallet is not accessible outside the smart contract and it is used for collecting and storing fees) throughout the day and then transferred to the generators' private wallets at the end of the day. When a solar power plant owner registers on the dApp as a generator, the dApp sends the information about PV capacity to the Smart Contract (SC). The SC then assigns the generator to a tier based on its power production. At the end of the day, the dApp checks all generators that have registered to see whether they were active and producing power. The dApp then sends this information to the SC (wallet XYZ produces power) and the SC calculates how much of the transaction fee each generator should receive and then transfers appropriate amount from generator fee wallet to users wallet. The daily transaction fee is divided into percentages for different tiers of generators. All generators in a particular tier share that percentage of the fee.

The amount of tokens earned from fees is based on the size of the power plant.

An example of distribution to generators for 4% of the transaction fees collected as a reward:

Power plant size	3-5 kW	5.1-8 kW	8.1-15 kW	15.1-30 kW	31.1-45 kW	≥45.1 kW	Total
Percentage of the transaction fee set aside for the generators	27 %	23 %	19 %	15 %	10 %	6 %	100 %

Please check the Tokenomics part for detailed distribution of SPX tokens.



# 7 TOKENOMICS

- Name: **Solplex**
- Ticker: **SPX**
- Decimals: **18**
- Total supply: **1,000,000,000 SPX tokens**

## ALLOCATION:

### PRESALE:

15,000,000 SPX tokens  
(1.5% of total supply)

### PUBLIC SALE:

385,000,000 SPX tokens  
(38.5% of total supply)

### STAKE POOL:

300,000,000 SPX tokens  
(30% of total supply)

### TEAM:

100,000,000 SPX tokens  
(10% of total supply)

### MARKETING, DEVELOPMENT, AIRDROPS:

100,000,000 SPX tokens  
(10% of total supply)

### ADVISORS:

50,000,000 SPX tokens  
(5% of total supply)

### CENTRALIZED EXCHANGES (CEX):

50,000,000 SPX tokens  
(5% of total supply)



## USE OF FUNDS:

- Stake pool: Solplex will distribute tokens according to the staking plan in the roadmap.
- Team: Fund allocated for the development team vested.
- DEX Liquidity pool: 80% of total funds generated from the presale will be put in the liquidity pool on DEX and liquidity will be locked for 5 years. 20% of the funds released over time for marketing purposes only.
- Marketing, development, airdrops will be distributed and released according to vesting rules.
- Advisors: the project includes a wider team.
- Centralized exchanges require certain tokens for listing purposes which will increase trading volume that benefits the project.
- Transaction Fee: 8% of total transactions value (swap, buy, sell). The fee is calculated instantly on each transaction or transfer in the smart contract. The 8% transaction fee will be distributed instantly upon transaction as following:
  - 4% to the electricity generators' wallet
  - 1% to the liquidity pool on DEX
  - 1% to the team for development of projects roadmap goals
  - 2% to the token holders

## TOKENS VESTING SCHEDULE:

No. of SPX tokens	%	Price \$	Unlock TGE	Lock, months	Vesting, months	Vesting
PRESALE						
15,000,000	1.5	0.0035	—	—	—	—
PUBLIC SALE						
385,000,000	38.5	0.005	No	No	—	—
STAKE POOL						
300,000,000	30		No	No	—	—
TEAM						
100,000,000	10		0	12	24	monthly
MARKETING, DEVELOPMENT, AIR DROPS						
100,000,000	10		0	2	24	monthly
ADVISORS						
50,000,000	5		0	4	24	monthly
CENTRALIZED EXCHANGES (CEX)						
50,000,000	5	Market	0	No	3	monthly

## **TOKEN PRESALE:**

In the presale phase users will receive provisional SPXX tokens. These tokens will be exchanged for SPX tokens once the Public sale starts. These presale tokens will be burned and users will receive new tokens with exchange rate 1:1 together with 5% extra tokens as our way to say thank you for your support.

- Minimum amount of tokens for individuals is \$100.
- Any users that buy tokens after 15.000.000 tokens are sold, will be transferred to the Public sale.

## **TOKEN PUBLIC SALE:**

- Soft cap of 100 BNB at price 0.005 \$
- Hard cap 1000 BNB, no cap
- Dex listing price at 0.007 \$
- Any unsold tokens after presale will be sent to the staking pool address and prepared for staking dapp and lock.

This tokenomics provides a good balance between token distribution and use of funds, it provides liquidity for the ecosystem, incentives for holders and traders, funds for marketing and development and a clear understanding of the token usage.

# 8 ROADMAP

## Q4 2021

### Initial Assessment

- Birth of an idea and start of questions
- Deciding on a name for the project

## Q1 2022

### Team and Analysis

- Through analysis of project value, quality, functionality, and market importance
- Elaboration on idea and creation of initial team

## Q2 2022

### Proof of Concept (POC)

- Creation of POC Smart Contract
- Assessment of technical limitations and capabilities of the network

## Q3 2022

### Early Development

- Social accounts creation
- Public website development

## Q4 2022

### White Paper

- Production of documentation to explain vision to public
- Smart contract development

## Q1 2023

### Marketing Activities and Inverter Manufacturer Onboarding

## Q2 2023

### Presale and Early Adapter Sale

### Q3 2023

#### Development

- dApp development
- Arrangement of inverter manufacturers service

### Q4 2023

#### Sales Phase

- Initial Dex Offering
- Public Sale
- DEX listing

### Q1 2024

#### Connection of PV Generators to Smartchain

- Private and Presale generators start of operations

### Q2 2024

#### dApp Start of Operations

### Q3 2024

#### Future Development of the dApp

### Future

#### Development of Solplex Blockchain



# CONCLUSION

Solplex is a novel and ambitious project that aims to revolutionize the crypto industry by utilizing energy from renewable sources. By using solar power to power its reward program, the project reduces its carbon footprint, contributes to the global effort of reducing greenhouse gas emissions, and provides a sustainable and environmentally friendly solution for the crypto industry. Additionally, by allowing the use of renewable energy as a stake, the project opens up the possibility for a new class of participants in the rewarding process and encourages the growth and development of renewable energy. With the increasing need for energy and the global move towards renewable energy, the Solplex project has the potential to be a game changer in the crypto industry.

