



CIRCULATE
FINANCE

An Inclusive DeFi Protocol on the TRON Network

Whitepaper V1.2

November 2020

Introduction

Circulate is an inclusive DeFi protocol built on top of the TRON blockchain, where individuals and businesses can access appropriate, affordable, and timely financial products and services. The Circulate protocol makes lending and borrowing funds easier with blockchain technology. Lending is a basic business unit in DeFi and it has the potential to link with other businesses involved with crypto assets such as ABS, bonds, funds, and trading. The mission statement of Circulate is to build a larger and more inclusive DeFi eco-system than AAVE and Compound, which is governed by the mean of DAO.

The protocol will initially launch on the TRON blockchain due to its faster transaction speed and lower fees. TRON allows wider accessibility for user participation with its lower cost structure resulting in a superior user experience. A good co-operative working relationship with the TRON official team has already been established. Looking further out plans are in place to also launch on Ethereum.

To ensure robust security of the platform, a bug bounty program will be launched within the community. A total of 10,000 CIR tokens have been allocated and will be rewarded to any contributors that successfully identify problematic issues.

The Circulate dev team consists of experienced blockchain developers. However, any project has unforeseen potential risks. For the overall health and stability of the platform, you must sign a risk warning disclaimer agreement marked with your wallet address before initial use of the product. Such action serves as proof that Circulate has the right to exempt you from liability due to any loss of funds on Circulate.

Why Use Circulate ?

- A. Low transaction fees on TRON.
- B. Mature and thriving eco-system already established on TRON.
- C. TRON offers a variety of readily available basic assets.
- D. Lending is a basic business backbone of the DeFi ecosystem.
- E. Lending has been proven to be one of the best applications of crypto assets.
- F. Higher savings interest and lower cost structure compared to centralized exchanges.
- G. More secure asset protection mechanism.

Ecosystem Comparison

Ecosystem	Pros	Cons	Opportunity
ETH	More users; More assets; More popular among investors.	High transaction fees; High entry barrier for small investors.	Layer2
TRON	Less competition; First mover advantage.	Limited user-base; Users are often speculative.	More assets based on TRON will be generated

Presale Specifics

Presale Total Market Capitalization: 5,000,000 USDT

Hard Cap Market Capitalization: 746,268.655 USDT

Proportion: 5% (i.e. $10,000,000 * 5\% = 500,000$ CIR)

Price: 1.49253731 USDT

Token Distribution Schedule:

10% upon launch

20% in week 2

30% in week 3

20% in week 4

20% in week 5

Risk Disclaimer:

Circulate is an online lending information matching platform utilizing blockchain technology. The platform itself has no direct access to user assets. User assets are stored in smart contracts on the TRON blockchain. The platform is only authorized to deploy new contracts and older, existing contracts are immutable. Hence, the following risk warnings are disclosed:

1. **Unknown Technical Defects:** the security risks of the platform itself might result in loss of principal as a result of unknown technical defects (including the platform and the TRON network).
2. **Token Market Price Volatility:** this is beyond the control of the Circulate platform and can be attributed to various factors such as market sentiment, global crypto market conditions, number of token holders, and the behavior of large whale investors. There is no guarantee of token profitability as a result of mining activities and direct purchase.
3. **High Demand Liquidity risk:** any token assets deposited to Circulate protocol could be entirely borrowed by other users and can be temporarily unable to be withdrawn until liquidity improves

from either further deposit of tokens or repayment of outstanding loans.

4. Mining Output Issues: technical solutions to problems, potential bugs, hacker attacks, etc. could lead to problems such as delay in token delivery, discrepancies in the calculated mined amount, or tokens not arriving.

5. Other unforeseen security risks.

Platform Advantages

Security Audit

To ensure robust platform security, Circulate Protocol is to be audited by a prestigious auditor such as Open Zeppelin, Consensys Diligence, or SlowMist. An ongoing bug bounty program exists where community members can report any discovered bugs or vulnerabilities.

Simple UED

Products are offered that support desktop computer and mobile phone wallets and integrated with TRON to minimize the barriers to asset depositing and borrowing from users. A humanized collateral rate and a diverse selection of assets with a fair prediction machine protocol will be provided.

Decentralized Governance

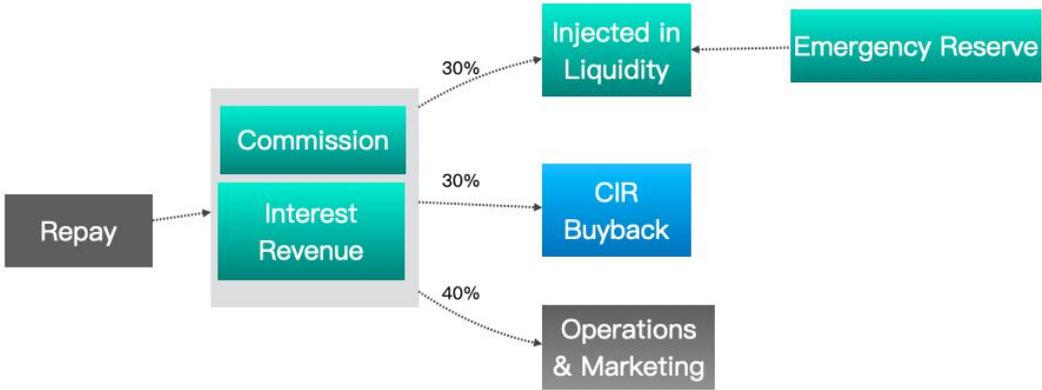
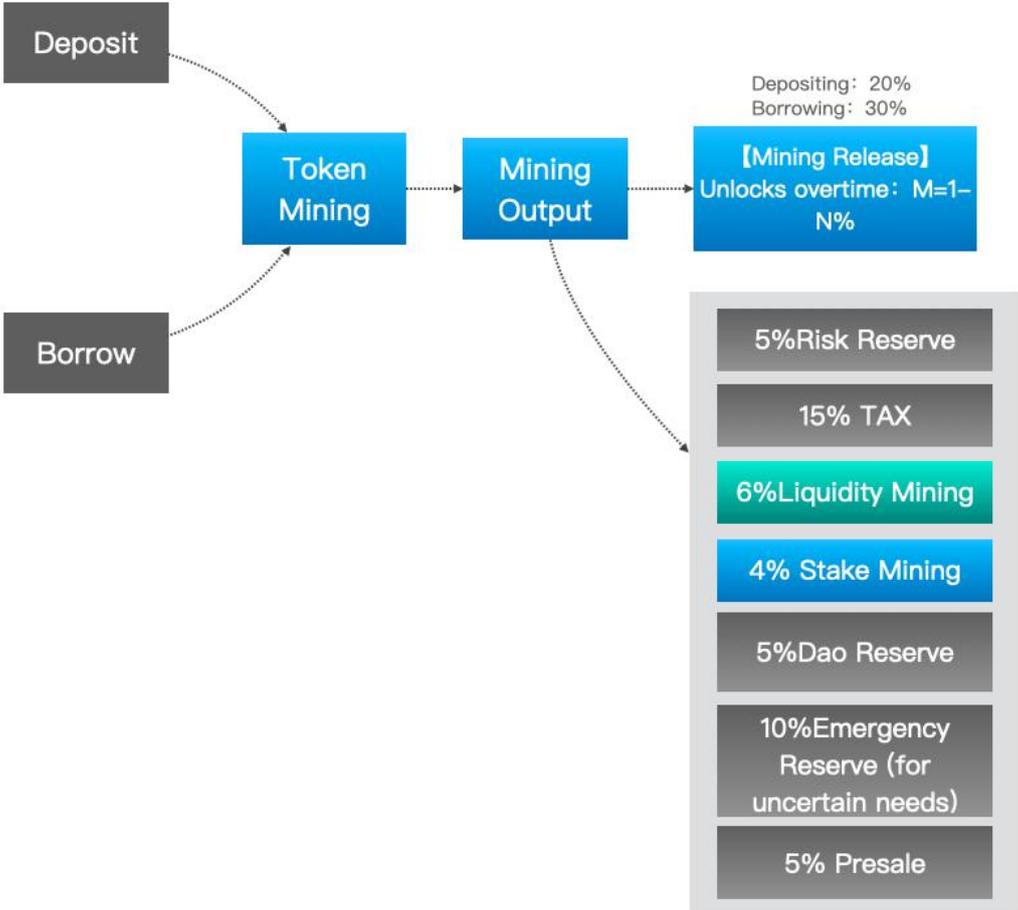
Circulate is managed by a decentralized community of CIR token-holders and their delegates, who propose and vote on upgrades to the protocol.

Growth Hacking

Circulate is one of the few growth-hacker oriented products in the digital currency industry. We actively seek the input and feedback from every user, whether you're depositing, borrowing, or trading CIR tokens. Circulate intends to propel Fintech lending to a higher level and make it easier to borrow funds.

Tokenomics

Basic Output Rules	<ol style="list-style-type: none"> 1. Total supply : 10,000,000 2. Daily total output : 0.35% of the remaining total. 3. Snapshot and distribution every 2 hours, each time 1/12 of the daily total. 4. Users who invite friends to the community will receive a random airdrop.
Token Allocation	<ol style="list-style-type: none"> 1. Fund Pools (lending & borrowing): 50% 2. Liquidity Mining: 6%; Staking Mining: 4% 3. DAO Governance : 5% 4. Mining Tax : 15% 5. Risk Reserve : 5% 6. Emergency Reserve : 10% 7. Presale : 5%
Mining Specifics	<p>Depositing : 20% (decided by your depositing amount) ;</p> <p>Borrowing : 30% (decided by your borrowing amount and history)</p>
Use Cases of Commission & Interest Revenue	See chart below
Basic Concept	<p>Reserve Factor = 20%, i.e.</p> <p>Lending APY = Borrowing APY * (1 - 20%)</p>



Community Governance

Governance Tool : Circulate DAO Incubator

Governance Purpose : Increase utilization and profit rate of the DAO Fund.

Governance Direction : DAO fund invests in other external projects or incubate Circulate extended projects.

Proposal Requirement : for investment projects, full details must be disclosed; for incubating projects, project information (team, members, positioning, and value) and its relationship with the Circulate platform must be clearly stated.

Funding Limit : typical investment projects must not exceed 10% of the usable fund; for outstanding, critically acclaimed projects, the limit can be raised to 10% - 20%; for low-risk staking projects, (e.g. SUN), a higher percentage is allowed; for incubation projects the limit is 5% - 10% based on project quality.

Governance Process : submit proposal → review proposal → set proposal reward → vote → stake token → vote ends & enact resolution → release relative reward → execute resolution

Resolution Requirements:

1. No less than 10 voters.
2. One option exists with more votes than every other.
3. The proposal is submitted by an eligible participant.
4. The voting duration shall be not less than 1 hour.
5. The proposal is submitted in English.

Asset Ratings

Assets	Rating	Loan to Value	Liquidation Threshold	Liquidation penalty	Min. Stable APY	Max. Stable APY	Critical Stable APY	Min. Variable APY	Max. Variable APY	Critical Variable APY
USDT	AA	75%	85%	5%	3.50%	60%	12%	1%	50%	10%
BTC	AA	50%	65%	5%	3.50%	100%	20%	1%	80%	16%
TRX	A	50%	60%	5%	3.50%	100%	20%	1%	80%	16%
HT	A	50%	60%	10%	3.50%	500%	25%	1%	450%	20%
SUN	B	35%	50%	10%	3.50%	500%	25%	1%	450%	20%
JST	B	35%	50%	10%	3.50%	500%	25%	1%	450%	20%

Contract List

Contract List	
AddressesProvider	TE71fiKfq4c9Pr8FSeci5K6vXjsniZPMm
LendingPool	TJmxHAjgtSXqq1jvFNj3w114B1f9YeV6GR
LendingPoolCore	TBukSY13wYnG576uLwav6HKnkvxWL4bnHH
LendingPoolConfiguratorAddress	TMiPFZzBibN1XVXJXJSniZunQ2f7FVcezv
LendingPoolDataProviderAddress	TPdtHKtyKY5z2VaEg7LNGEpCACDHubeZqUa
LendingPoolParametersProviderAddress	TDgBSZgqQmlraBJVaCnnfhXchimycfQuEv
FeeProviderAddress	TR7GWuZQ5oXk2QDipyQWikheXHkYHhB3Ks
LendingPoolLiquidationManagerAddress	TGNEQKZpbaG7Wc6tghnks9q9o1Bzr5F1e7
PriceOracleAddress	TWdHaHwzjd5NUpQNxJ72x3MTAPMrSQwq4b
LendingRateOracleAddress	TCBB9fSD1qQK688Gi5yMaaBMFLvNzgeRKq
TokenDistributorAddress	TUCQR82T9CjAE7wG3RA8FtMJvQNrpEWpjL
CIRToeknAddress	TM3DXhUU NEHrGh59jPpY4V1kjGyRdbnvqq
PresaleAddress	TJhvTSmR35QUtS3Qb336v5KfDxxgFnuqKH

Token Distribution

Item	Proportion	Release Cycle	Details
Presale	5%	10% upon launch 20% in week 2 30% in week 3 20% in week 4 20% in week 5	<ol style="list-style-type: none"> 1. Market Cap : \$500,000 2. Use Cases : market management, project development, risk reserve. 3. Suitability : investors seeking voting power in community governance. 4. Unsold Tokens : 100% to DAO.
Mining	95%	follows mining progress	
Pool Mining	50%	follows mining progress	50% instantly release
Liquidity Mining	10%	follows mining progress	
Risk Reserve	5%	follows mining progress	
Mining Tax	15%	follows mining progress	
Emergency Reserve	10%	follows mining progress	Reserved for emergency cases
DAO Governance	5%	follows mining progress	Used to reward high quality proposals and new projects.

Value comparison

CIR Token:

CIR is the native token of the Circulate platform and it is used for community governance and platform dividends.

CIR is used in the following activities:

- 1) Proof for participation in community governance.
- 2) Capital appreciation potential with token buyback and burn.
- 3) Commission fees discount.
- 4) Interest rate borrowing discount.
- 5) Priority access to withdrawals.
- 6) Lossless income when providing liquidity (i.e. provide CIR only and platform pays for the applicable TRX).
- 7) Dividend stream from future project investment and/or incubation by Circulate DAO.

Note: Interest income will first transfer to an appointed address. The community will then regularly vote to decide the timing of the buyback. For semi-auto buybacks the platform has control.

Commission

Fees are paid to the platform when users borrow or withdraw assets.

It has the following usages:

- 1) 60% used for token buyback (30%) and liquidity injection (30%).
- 2) 40% allocated for operations and development expenses.

Note: These usages are subject to change in the future.

Interest Revenue

Revenue is generated from the difference between lending and borrowing interest.

- 1) 60% used for token buyback (30%) and liquidity injection (30%).
- 2) 40% allocated for operations and development expenses.

Note: These usages are subject to change in the future.

Token Value

For every 2 hours, 100% revenue will proportionally distribute to:

30% : buyback contract

30% : liquidity contract

40% : team address

Supplement to Mining Output:

1. Added a Boost Pool

Output Time	Claim Time	Claimable Amount	Unclaimed Amount	Distribution of the Unclaimed Amount
T1	T1 + within a week (instantly)	50%	Goes to Boost Pool	/
T2	T2 + after a week	100% + Share in Boost Pool	0	Daily based on your token share.

2. Revised Liquidity Injection Rules

The CIR Amount for liquidity injection = $\text{commission} * 30\% / \text{price}$. (This part of CIR is transferred from the Emergency contract)

RoadMap

2020.8	Market Research
2020.10	Product Test
2020.11	Defi Product Launch and Presale starts
2020.12	Implement Circulate DAO Buyback
2021.1	Implement more Languages
2021.01	Start market research on asset-backed security (ABS) and connect it with Fixed-income institutional investors
2021.4	Finish the Implementation of ABS and start test on it
2021.5	Asset-backed security (ABS) Launch
2021.10	Migrate to Circulate 2.0