



Concordium Tokenomics System

The overall structure of the Concordium tokenomics system is illustrated in the diagram to the right.

At the time of launch on June 9, 2021, the Genesis block was established with 10,000,000,000 CCD. The total number of CCD in existence will increase over time because of the minting of new CCD.

The minting of CCD is planned to decrease as the number of transactions increases. The growth rate, currently running at 10%, is planned to decrease to 6% when the number of transactions consistently exceed 1.7 TPS, and further to 5% at 4.2 TPS, to 4% at 10.4 TPS, to 3% at 16.7 TPS, and 2% at 33.3 TPS.

Tokenomics roles

At any given time, all CCD will be held by either Concordium Foundation (A) or other Users (B).

The following entities are part of the tokenomics system at the time of mainnet launch:

Users own accounts (B) and execute transactions on the blockchain for which they pay a transaction fee.

Concordium Foundation has overall control and responsibility for the tokenomics system. On its account (A) the Foundation receives Development Charges amounting to 10% of the new minting (3) and 10% of transaction fees (1).

Bakers create new blocks. The right to create the next block is assigned to an individual baker by means of a lottery in which the number of CCD staked (i.e. locked up for per period of time) by each baker on the baker's Baker Account (G) determines the winning-probability.

Bakers who hold a certain minimum amount of CCD on their account (G) (initially set to 0.1% of all staked CCD) will automatically also become Finalizers, who are responsible for finalization of blocks.

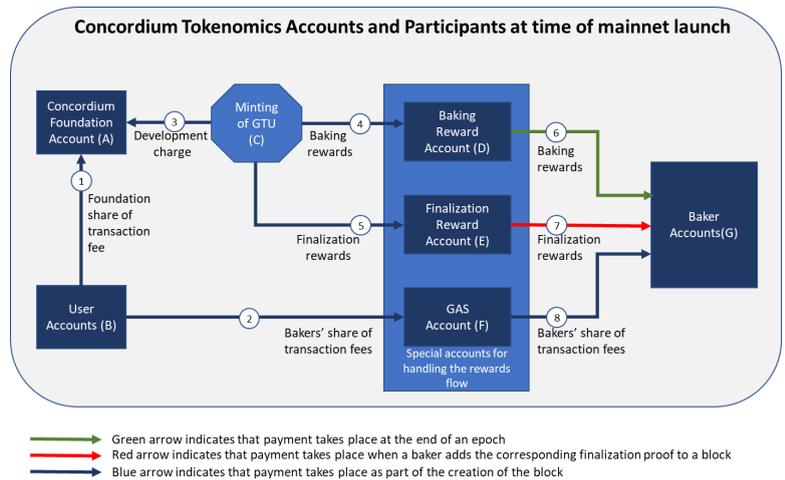
The above roles are not mutually exclusive as all Bakers are also Users, and Concordium Foundation will also be both a User and a Baker.

The Governance Committee monitors the functioning of the tokenomics system and decides on tokenomics parameter changes, such as the CCD growth rate and reward payout percentages. It also prepares recommendations to the Board of Concordium Foundation regarding tokenomics system updates and system enhancements.

Tokenomics flows and processes

The tokenomics system is based on income generated from two sources:

- Payment of Transaction fees (1) and (2) by Users (B)
- Payment of newly minted CCD (3), (4) and (5) from the minting process (C)



Transaction Fees

Blockchain Users pay a transaction fee (also referred to as GAS) for each transaction they make. The complexity of the transaction determined the fee. The fee is paid in CCD and therefore, users will need to acquire CCD before executing transactions.

Transactions costs are designed to be stable in EUR terms, thereby enabling businesses and other users to predict and plan the costs of blockchain transactions.

90% of GAS (2) is paid into the GAS Account (F), which holds all GAS until it is paid out as rewards to bakers (8). The remaining 10% of GAS is paid (1) to the Foundation (A) as part of the Development Charge which enables the foundation to finance its operations and to promote and further develop the blockchain.

Baking & Finalization Rewards

For each new block baked, a number of new CCD are minted. The newly minted CCD are distributed as follows:

- 10% is paid (3) to Concordium Foundation (A)
- 85% is paid (4) to the Baking Reward Account (D)
- 5% is paid (5) to the Finalization Reward Account (E)

The CCD paid into the two reward accounts (D and E) will be accumulated until they are paid out as Baking Rewards (6) or Finalization Rewards (7) to Bakers (G).

Rewards are paid from the reward and GAS accounts (D, E & F) to bakers according to the payout principles illustrated at the diagram above. The Baking Rewards are allocated between bakers based on the number of blocks each baker has created since the last payout of rewards, while the Finalization rewards are allocated to all bakers who are also Finalizers, and with the finalization rewards being allocated based on the number of CCD staked by each. The baker can choose between having its rewards added automatically to the staked amount or not adding the rewards to the staked amount, meaning that rewards can be transferred freely from the account.

As long as the baker is active, the stake limit CCD amount is locked in the account and cannot be moved.