

# CoinFarm Description

## Glossary:

**Farm** - a general term for all kind of pools on CoinFarm

**Garden** - a competitive type of pool where User's reward is affected by other users using CML multipliers during unstaking. (Geyser on Gysr)

**Greenhouse** - a noncompetitive pool where User reward is affected only by the amount CML used during staking (Fountain on Gysr)

**Staking** - the process where Users temporarily lock their tokens to receive reward by interacting with a smart contract

**Staking token** - the token that has to be locked into the farm to receive Reward

**Unstaking** - the process where User is getting back their previously Staked tokens by interacting with a smart contract

**Reward** - amount of reward tokens User can receive if they unstake now

**Reward token** - the token that is used for paying rewards to User.

**Platform** - CoinFarm

**Platform wallet** - wallet that receives the part of CML tokens paid by users it's eligible for and all tokens paid by farm creators

## Farm creation process:

1. Creator chooses the type of Farm - Garden or Greenhouse

<https://imgur.com/Q626l5r>

Below the Farm creation title there is a five button menu that let's a Farm Creator navigate freely between the stages of creation.

2. Near the Farm creation title appears the type of the Farm selected at step 1. Creator has to input the addresses of the tokens used for Staking and Reward. The platform pulls up the tickers and logos of the tokens from the smart chain explorer.

Farm Creator also has to input the amount of Reward tokens that are to be funded to this Farm.

Parameters:

Input token addresses:

*Input: CRC20 Token address*

Input amount:

*Input: Number (of tokens)*

It's the same for both Garden and Greenhouse

<https://imgur.com/widQ9JK> - Greenhouse

<https://imgur.com/EUxcdHE> - Garden

3. a) **For a Greenhouse**

- set a time-based fine for withdrawing earlier than intended by the Farm creator. This is done by setting two parameters:

- Greenhouse lifetime - the length of days the User must stake their tokens to get 100% of their rewards; If set to 0, User will get all of their rewards no matter how long their tokens are staked.  
*Input: number (of days)*
- Penalty - the multiplier that would apply to reward if the User unstakes earlier than set in the Period parameter. As a result the penalty scales linearly from 0.x (x%<100%) multiplier on day 1 to 1x multiplier (100%) on the date set in Period parameter resulting in the User getting 100% of their rewards. If set to 100%, there is no penalty applied to Users no matter when they unstake.  
*Input: slider between 0% and 100%*

I.e. If the period is set to 100 days and the minimum penalty is set to 0.2 that means that the user will get 20% of rewards if they unstake on day 1, 60% if they unstake on day 50, etc.

- set other attributes:
  - Activate - moment when the Greenhouse is activated  
*Input: switch between Immediately and Later. If Later is chosen the date field appears near Later. Upon clicking on this field there appears a calendar that lets the Creator choose a future deployment date and time. The default setting is Immediately. "Info" image is on the left of "Activate" with the following text while hovering over: ""Immediately" - the Farm will be activated immediately after it is funded. "Later" - the Farm will be activated after funding on a set date"*
  - Private - when activated makes the farm visible only to a list of designated wallets.  
*Input: checkbox.*

If checked there appears a text input field with text "Please input the addresses of the wallets that can see this Greenhouse (one per line)"

To the left of the word "Private" there's an info image. When hovered upon the following text appears: "Make the Greenhouse private if you want it to be visible only to certain wallets"

The default setting is disabled.

<https://imgur.com/ROGZISD>

3. b) **For a Garden** - set a time-based multiplier that increases linearly the longer User is staking his tokens for. This is done by setting the following parameters:

- Garden lifetime - the length of days the User must stake their tokens to get maximum multiplier (no multiplier if set to 0)  
*Input: number (of days)*
- Minimum multiplier - the multiplier applied immediately after staking. (if set to 1, there will be no starting multiplier)  
*Input: slider on the left side of the line*
- Maximum multiplier - the multiplier the User will receive if they are staking for a number of days set in the Period parameter. Maximum parameter is 5x. (if set to 1, there'll be no multiplier)  
*Input: slider on the right side of the line*

I.e. if the period is set to 100, min. multi. is set to 2x and max. multi. is set to 5x then on day 1 the User will receive 2x multiplier reward on their tokens, on day 50 they will receive 3.5x multiplier etc.

- set other attributes:
  - Activate - moment when the Garden is deployed  
*Input: switch between immediately and later. If Later is chosen the date field appears near Later. Upon clicking on this field there appears a calendar that lets the Creator choose a future deployment date. The default setting is Immediately. "Info" image is on the left of "Activate" with the following text while hovering*

over: ""Immediately" - the Farm will be activated immediately after it is funded. "Later" - the Farm will be activated after funding on a set date"

- Private - when activated makes the farm visible only to a list of designated wallets.

*Input: checkbox.* If checked there appears a text input field with text "Please input the addresses of the wallets that can see this Garden (one per line)"

Beside the checkbox there's an info image. When hovered upon the following text appears: "Make the Garden private if you want it to be visible only to certain wallets"

<https://imgur.com/lhyUguW>

4. Farm Creator can choose between two types of distribution of CML tokens used for multiplication:

- Farm Creator gets 80% (variable parameter that can be changed by Platform in the future) of all CML tokens used for multiplication. CML tokens go to the wallet that the Farm is created from. In this case, the setup fee is 2500 CML (variable parameter). The remaining 20% (variable parameter) of CML tokens go to the Platform wallet.
- Farm Creator gets 20% (variable parameter) of all CML tokens used for multiplication. The rest goes to the Platform wallet. In this case the setup fee is 500 CML (variable)

It's the same for both Greenhouse and Garden.

<https://imgur.com/mPifjQ4> - Greenhouse

<https://imgur.com/eyckRNS> - Garden

5. Review page where Farm creator sees all the parameters that were set in previous steps and where the Farm is deployed.

The parameters are:

- For Greenhouse: Type, Staking token ticker, Reward token ticker, Reward token amount, Reward Vesting, Setup Fee (variable, can be changed by Platform), Activation date, Access settings
- For Garden: Type, Staking token ticker, Reward token ticker, Reward token amount, Reward Multiplier, Setup Fee (variable, can be changed by Platform), Activation date, Access settings

"Approve setup fee" button opens up MetaMask for approving to spend setup fee amount in CML tokens from Farm Creator to the Platform wallet

"Deploy" button opens up MetaMask for Farm Creator to pay a gas fee for deployment and deploys the contract

<https://imgur.com/q4rwefJ> - Greenhouse

<https://imgur.com/dTaBB6S> - Garden

6. After the deployment of a smart contract Farm Creator is directed to a page where they can provide the funding for their Farm or postpone it.

If a Creator chooses to fund the tokens immediately they need to approve two separate MetaMask transactions: for deposit of Reward token and funding function.

There is also a button "Fund later" if the Farm Creator chooses not to fund the Farm immediately. The press of this button leads the Farm Creator to the list of his Farms

The Farm is not active until the funding is complete.

### Difference between CoinFarm and Gysr:

1. **Where** difference occurs: Stage 2 of Farm creation  
**What** is the difference: Farm Creator has to input the amount of Reward tokens that is going to be funded into the contract. These numbers can be changed before the Contract is deployed.  
How it is done **on Gysr**: Pool can be funded multiple times so the amount of Reward tokens is set during each funding after the Contract is deployed.
2. **Where**: Stage 3 of Farm creation  
**What**: Ability to postpone Contract activation during Farm creation. Default setting is the immediate activation after funding, but Farm Creator can set another date in the future and the Contract will take effect later at that date (still after funding only).  
**On Gysr**: The activation date is set up for each funding round after the pool deployment
3. **Where**: 3.b) Garden  
**What**: Multiplier for Garden lies within a range of 1x and 5x  
**On Gysr**: Multiplier for Geyser lies within a range of 1x and 6x
4. **Where**: Stage 3 of Farm creation  
**What**: The Farms can be made private. It means that a Farm Creator can input the whitelist of wallets that can see the Farm. Only Users with wallets present in the whitelist can see the Farm in the Farms list.  
**On Gysr**: there's no such functionality on Gysr
5. **Where**: Stage 4 of Farm creation  
**What**: Farm Creators can choose between two models of CML token distribution which have different amounts of CML tokens given to a Creator depending on the setup fee.  
**On Gysr**: there's no such functionality on Gysr
6. **Where**: Stage 5 of Farm creation  
**What**: Platform is taking a fee for a Farm Creation  
**On Gysr**: no fee for Pool Creation