



# **Smart Contract Security Audit**

<u>TechRate</u> September, 2021

# **Audit Details**



Audited project

GreenCoin



Deployer address

0x08c07f522699687640AA1F71B5735b9B3fD39995



Client contacts:

GreenCoin team



Blockchain

**Ethereum Mainnet** 



Project website: https://greenflows.com

## **Disclaimer**

This is a limited report on our findings based on our analysis, in accordance with good industry practice as at the date of this report, in relation to cybersecurity vulnerabilities and issues in the framework and algorithms based on smart contracts, the details of which are set out in this report. In order to get a full view of our analysis, it is crucial for you to read the full report. While we have done our best in conducting our analysis and producing this report, it is important to note that you should not rely on this report and cannot claim against us on the basis of what it says or doesn't say, or how we produced it, and it is important for you to conduct your own independent investigations before making any decisions. We go into more detail on this in the below disclaimer below – please make sure to read it in full.

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The analysis of the security is purely based on the smart contracts alone. No applications or operations were reviewed for security. No product code has been reviewed.

# Background

TechRate was commissioned by GreenCoin to perform an audit of smart contracts:

https://etherscan.io/address/0x46d886887b6908183032c75dee1b731b26d653c6 #code

### The purpose of the audit was to achieve the following:

• Ensure that the smart contract functions as intended.

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• Identify potential security issues with the smart contract.

The information in this report should be used to understand the risk exposure of the smart contract, and as a guide to improve the security posture of the smart contract by remediating the issues that were identified.

101011001000100000101000000

1000101001000110000000

101111110000100

10101101010101000110100110000001110011001

10100101100000011011000110001011000010

# **Contracts Details**

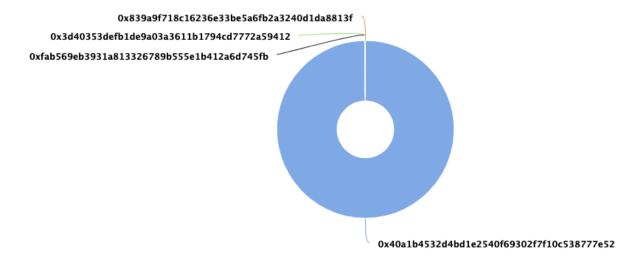
### Token contract details for 09.9.2021

Contract name	GreenCoin
Contract address	0x46D886887B6908183032c75dee1b731B26D653c6
Total supply	168,800,000,000
Token ticker	GRC
Decimals	18
Token holders	3682
Transactions count	5761
Top 100 holders.	99.9998%
Total Fees	0

# **Greencoin Token Distribution**

#### GreenCoin Top 100 Token Holders

Source: Etherscan.io



# **GreenCoin Contract Interaction Details**



# GreenCoin Top 20 Token Holders

Rank	Address	Quantity	Percentage	Analytics
1	0x40a1b4532d4bd1e2540f69302f7f10c538777e52	168,796,165,613.3333	99.9977%	<u>~</u>
2	0xfab569eb3931a813326789b555e1b412a6d745fb	1,563,100	0.0009%	<u>~</u>
3	0x3d40353defb1de9a03a3611b1794cd7772a59412	1,000,000	0.0006%	<u>~</u>
4	0x839a9f718c16236e33be5a6fb2a3240d1da8813f	958,362.8	0.0006%	<u>~</u>
5	0xc25b87f38b89c5f7f1f5770db63f7986fce9fb6b	100,000	0.0001%	<u>~</u>
6	0xe1f8b62c17800d9686401c0f85e112d638574ca9	53,834.570600965349765992	0.0000%	<u>~</u>
7	☐ Uniswap V2: GRC 9	42,074.474695195522338244	0.0000%	<u>~</u>
8	0x99e0b959a1e2c98cff915a74250ef66a59dd5755	30,000	0.0000%	<u>~</u>
9	0xa18e307f3ddff180a50dd442f6088bbfb985b421	28,167.166473270593525875	0.0000%	<u>~</u>
10	0x4fdb083fb94a17dae87acfd09f8d401395743528	21,422.115637914721995223	0.0000%	<u>~</u>
11	0xf14f0836f7d6ef65799d325cc787646f8ad2fa0d	12,629.567270946726332622	0.0000%	<u>~</u>
12	0xbcb045871916e8e9901f61480bbabe857deebb87	10,000	0.0000%	<u>~</u>
13	0xf443b801e7494a26fab20a96ca1922322f367842	6,753.567231828509204606	0.0000%	<u>~</u>
14	0xef50be911d493f31523df3738a899e57169313d6	3,147.652283423255786263	0.0000%	<u>~</u>
15	0xff2227e364bda0ab3dc0bc57e328322df1096cf8	1,242.396732031371068392	0.0000%	<u>~</u>
16	0xa88ba0d43b3495fdcad528afc099654e1d779f23	1,163.918504793946038597	0.0000%	<u>~</u>
17	0xfd61770e1a275a40d1e44e3b01f08af8dc43ec22	1,031.87975038321061351	0.0000%	<u>~*</u>
18	0x1615e5059e602050e8a824dfe5e807f197ab2f6b	1,000	0.0000%	<u>~</u>
19	0xc1801e2f7432addb53fd617860c13ec86417f476	200	0.0000%	<u>~</u>
20	0x628604a8220f3a8a8b040d5dbdbaffc83141d6f9	100	0.0000%	<u>~</u>
21	0xf68dc9bb30ca41bd609c3a9f3c3a61cd06462981	65.149294498384013914	0.0000%	<u>~</u>
22	0xcd1ec3aae5f0f9461fdff0355913eb940ae8cca5	10	0.0000%	<u>~</u>
23	0x210e8cbcf99b370bf1b095e189434833c2793c83	10	0.0000%	<u>₩</u>
24	0xd6962480778c2c73b982b6642c04ed9e10903cb3	8.8	0.0000%	<u>~</u>
25	0x72f34510939987c1fa61bd9c66c10b4f736d1608	7.507024388917852921	0.0000%	<u>~</u>

## **Contract functions details**

- + [Lib] SafeMath
  - [Int] add
  - [Int] sub
  - [Int] mul
  - [Int] div
- + ERC20Basic
  - [Pub] balanceOf
  - [Pub] transfer
- + BasicToken (ERC20Basic)
  - [Pub] transfer
  - [Pub] balanceOf
- + ERC20 (ERC20Basic)
  - [Pub] allowance
  - [Pub] transferFrom
  - [Pub] approve
- + StandardToken (ERC20, BasicToken)
  - [Pub] allowance
  - [Pub] transferFrom
  - [Pub] approve
  - [Pub] allowance
  - [Pub] increaseApproval
  - [Pub] decreaseApproval
- + Altcoin (StandardToken)
  - [Pub] Altcoin

# **Issues Checking Status**

Issue description	Checking status
1. Compiler errors.	Passed
2. Race conditions and Reentrancy. Cross-function race conditions.	Passed
3. Possible delays in datadelivery.	Passed
4. Oracle calls.	Passed
5. Front running.	Passed
6. Timestamp dependence.	Passed
7. Integer Overflow and Underflow.	Passed
8. DoS with Revert.	Passed
9. DoS with block gas limit.	Low issues
10. Methods execution permissions.	Passed
11. Economy model of the contract.	Passed
12. The impact of the exchange rate on the logic.	Passed
13. Private user data leaks.	Passed
14. Malicious Event log.	Passed
15. Scoping and Declarations.	Passed
16. Uninitialized storage pointers.	Passed
17. Arithmetic accuracy.	Passed
18. Design Logic.	Passed
19. Cross-function race conditions.	Passed
20. Safe Open Zeppelin contracts implementation and usage.	Passed
21. Fallback function security.	Passed

## **Security Issues**

**⊘** High Severity Issues

No high severity issues found.

**⊘** Medium Severity Issues

No medium severity issues found.

Low Severity Issues

No low severity issues found.

### **Notes:**

- Altcoin is a common template contract used by other projects written in an outdated solidity version
- Large percentage of supply is held by one address.
  GreenCoin team has provided proof that these tokens will be distributed at a later date

## Conclusion

Smart contracts contain no severity issues! Liquidity pair contract's security is not checked due to out of scope. The further transfers and operations with the funds raise are not related to this particular contract.

Liquidity locking details NOT provided by the team.

#### TechRate note:

Please check the disclaimer above and note, the audit makes no statements or warranties on business model, investment attractiveness or code sustainability. The report is provided for the only contract mentioned in the report and does not include any other potential contracts deployed by Owner.

