

CLAIMS

1. A method for processing carbon emission reduction data, comprising:
 - determining a target smart contract matching an attribute of an object carrying out a carbon
 - 5 emission reduction activity;
 - determining a carbon emission reduction equivalent corresponding to the object based on the target smart contract and carbon activity data corresponding to the carbon emission reduction activity; and
 - sending the carbon emission reduction equivalent to a node of a blockchain platform to store
 - 10 the carbon emission reduction equivalent in a first account associated with a corporate user on the blockchain platform.
2. The method according to claim 1, wherein determining the carbon emission reduction equivalent comprises:
 - determining a reference emission based on a reference emission relationship associated with
 - 15 the target smart contract; and
 - determining the carbon emission reduction equivalent at least based on the reference emission.
3. The method according to claim 2, wherein the reference emission relationship is generated according to a predefined emission standard.
4. The method according to claim 2, wherein determining the carbon emission reduction
- 20 equivalent at least based on the reference emission comprises:
 - determining an actual emission based on a predetermined emission relationship related to the attribute of the object; and
 - determining the carbon emission reduction equivalent based on the reference emission and the actual emission.
- 25 5. The method according to claim 1, wherein the object carrying out the carbon emission reduction activity comprises at least one of the following items:
 - a transportation apparatus,

an energy-saving home appliance,

a recovered item, and

a recycled item.

6. The method according to claim 1, wherein the attribute of the object comprises at least one
5 of the following items:

a type of a transportation apparatus,

a model of a transportation apparatus,

a model of a smart home appliance,

an operating mode of a smart home appliance,

10 a type of a recovered item, and

a type of a recycled item.

7. The method according to claim 1, wherein determining the target smart contract comprises:
determining a candidate smart contract matching the object as the target smart contract based
on a correspondence between the candidate smart contract and a keyword, wherein the keyword
15 corresponds to an attribute or a combination of a plurality of attributes of the object.

8. The method according to claim 1, further comprising:

in response to receiving a carbon currency issuing request from the corporate user,
determining a to-be-locked quantity of the carbon emission reduction equivalent stored in the first
account of the corporate user on the blockchain platform, wherein the carbon emission reduction
20 equivalent is from a carbon emission reduction activity of at least one object of the corporate user;

determining a carbon currency issuing quantity based on the to-be-locked quantity and a first
predetermined proportion relationship;

generating carbon currency of the issuing quantity based on the carbon emission reduction
equivalent in the first account; and

25 transferring the carbon emission reduction equivalent of the to-be-locked quantity from the
first account to a second account of the blockchain platform.

9. The method according to claim 1, further comprising:

in response to receiving a carbon currency cancellation request from the corporate user,
determining a to-be-canceled quantity of carbon currency in the first account of the corporate user;

determining an unlocking quantity of the carbon emission reduction equivalent based on the
to-be-canceled quantity of the carbon currency and a second predetermined proportion

5 relationship;

destroying the carbon currency of the to-be-canceled quantity from the first account; and

transferring the carbon emission reduction equivalent of the unlocked quantity from a second
account to the first account.

10. The method according to any of claims 8 and 9, further comprising:

10 determining the first predetermined proportion relationship and the second predetermined
proportion relationship based on a total quantity of the carbon currency and the carbon emission
reduction equivalent in the second account.

11. The method according to any of claims 8 and 9, further comprising:

in response to a carbon currency issuing request of an individual user related to the object
15 carrying out the carbon emission reduction activity, determining an exchange quantity of the
carbon currency based on carbon activity data corresponding to the carbon activity of the individual
user; and

transferring the carbon currency of the exchange quantity from the first account to an account
of the individual user, wherein the first account is associated with accounts of a plurality of
20 individual users comprising the individual user.

12. The method according to any preceding claim, further comprising obtaining
identification information of the object and the carbon activity data,

storing the identification information and the carbon activity data on a distributed storage
apparatus,

25 calculating hash values of the obtained original identification data and carbon activity data,

and

packaging the hash values to send to the blockchain platform for storage.

13. The method according to any preceding claim, wherein the transmitting the carbon emission reduction equivalent to the blockchain platform includes packaging the determined carbon emission reduction equivalent for transmission to the block chain in response to at least one of i) reaching a preset time interval and ii) the data volume of the obtained identification data and carbon activity data exceeding a predetermined value.

~~12~~14. An electronic apparatus for processing carbon emission reduction data, comprising:

one or more processors; and

a storage device configured to store one or more programs, wherein the one or more programs,

when executed by the one or more processors, cause the one or more processors to implement the method according to any of claims 1-~~11~~13.

~~13~~15. A computer readable storage medium storing a computer program thereon, wherein the program, when executed by a processor, implements the method according to any of claims 1-~~11~~13.