[0005] A first aspect of the present disclosure relates to a management system having a first management device provided in a first company provided upstream and a second management device provided in a second company provided downstream of the first company to which a product is delivered from the first company. The first management device is configured to calculate a first amount of carbon dioxide emitted by manufacturing the product using a first calculation method. The second management device includes an identification unit configured to read identification information attached to a packing box packed with the product, and is configured to transmit the identification information read by the identification unit to the first management device. The first management device is configured to transmit information on the first amount of carbon dioxide, information on the number of the products packed in the packing box and information on the first calculation method to the second management device based on the identification information received from the second management device. The second management device is configured to calculate an emission amount of carbon dioxide per product based on the information on the first amount of carbon dioxide and the information on the number of the products transmitted by the first management device, and to perform management by linking the calculated emission amount, the product and the first calculation method with each other.

[0006] In the management device according to the first aspect of the present disclosure, as described above, the communication unit is configured to notify the second company of the information including the first amount of carbon dioxide, and the first calculation method. With this, a downstream company (second company) can recognize a calculation method for an emission amount of carbon dioxide of a product supplied by an upstream company (first company).

[0007] In the management device according to the first aspect, the communication unit may be configured to notify the second company of the first calculation method together with the information including the first amount of carbon dioxide. With this configuration, the second company is notified of the first amount of carbon dioxide corresponding to the product, and the first calculation method, as a set. With this, the second company can easily perform management by linking the first amount of carbon dioxide and the first calculation method with each other.

[0008] In the management device according to the first aspect, a basic product constituting the product may be supplied to the first company from a third company provided upstream of the first company. The third company may calculate a second amount of carbon dioxide emitted by manufacturing the basic product using a second calculation method. The communication unit may be configured to notify the second company of the information including the first amount of carbon dioxide, and the first calculation method, and information including the second amount of carbon dioxide, and the second calculation method. With this configuration, the second company can recognize the second calculation method for calculating the second amount of carbon dioxide corresponding to the manufacturing of the basic product, in addition to the first

calculation method.

[0009] In the management device according to the first aspect, the communication unit may be configured to notify the second company of the first calculation method together with the first amount of carbon dioxide and notify the second company of the second calculation method together with the second amount of carbon dioxide. With this configuration, the second company is also notified of the second amount of carbon dioxide corresponding to the basic product, and the second calculation method, as a set. With this, the second company can easily perform management by linking the first amount of carbon dioxide and the first calculation method with each other, and can easily perform management by linking the second amount of carbon dioxide and the second calculation method with each other.

[0010] In the management device according to the first aspect, the first calculation method may include information indicating that the first amount of carbon dioxide is calculated based on at least one of an amount of electricity and an amount of energy used in manufacturing the product at the first company. With this configuration, the second company can easily grasp the method by which the first amount of carbon dioxide is calculated.

[0011] A second aspect of the present disclosure relates to a management method performed by a management device that manages a product to be delivered from a first company provided upstream to a second company provided downstream of the first company. The management method includes a calculation of calculating a first amount of carbon dioxide emitted by manufacturing the product at the first company using a predetermined calculation method at the first company; a step of reading, at the second company, identification information attached to a packing box packed with the product; a step of transmitting the identification information read at the second company from the second company to the first company; and a step of transmitting information on the first amount of carbon dioxide, information on the number of the products packed in the packing box and information the predetermined calculation method from the first company to the second company based on the identification information transmitted from the second company being received by the first company. The method further includes a step of calculating, at the second company, an emission amount of carbon dioxide per product based on the information on the first amount of carbon dioxide and the information on the number of the products transmitted by the first company; and a step of performing, at the second company, management by linking the calculated emission amount, the product and the predetermined calculation method with each other.

[0012] In the management method according to the second aspect of the present disclosure, as described above, the second company is notified of the first amount of carbon dioxide emitted by manufacturing the product at the first company and the predetermined calculation method for calculating the first amount of carbon dioxide. With this, it is possible to provide a management method of enabling a downstream company (second company) to recognize a calculation method for an emission amount of carbon dioxide of a product supplied by an upstream company (first company).

[0013] In the management method according to the second aspect, a third step of adding up a second amount of carbon dioxide emitted in manufacturing a basic product constituting the product and the first amount of carbon dioxide to obtain an adding amount and dividing the adding amount by the number of the product to calculate an emission amount of carbon dioxide per product may further be provided.

[0014] In the management method according to the second aspect, a fourth step of managing the emission amount of carbon dioxide per product and the predetermined calculation method in association with each other may further be provided.

[0015] The present disclosure also relates to a management system. The management system includes a first management device and a second management device. The first management device is provided in a first company. The second management device is provided in a second company to which a product is delivered from the first company. The second company is provided downstream of the first company. The first management device is configured to calculate an amount of carbon dioxide emitted by manufacturing the product using a predetermined calculation method and notify the second management device of information including the amount of carbon dioxide, and the predetermined calculation method.

[0016] In the management system according to the present disclosure, as described above, the second management device of the second company is notified of the amount of carbon dioxide emitted by manufacturing the product at the first company and the predetermined calculation method for calculating the amount of carbon dioxide. With this, it is possible to provide a management system that enables a downstream company (second company) to recognize a calculation method for an emission amount of carbon dioxide of a product supplied by an upstream company (first company).

[0017] According to the present disclosure, the downstream company can recognize the calculation method for the emission amount of carbon dioxide of the product supplied by the upstream company.

BRIEF DESCRIPTION OF THE DRAWINGS

[0018] Features, advantages, and technical and industrial significance of

CLAIMS

1. A management system comprising:

a first management device provided in a first company provided upstream; and

a second management device provided in a second company provided downstream of the first company to which a product is delivered from the first company, wherein:

the first management device is configured to calculate a first amount of carbon dioxide emitted by manufacturing the product using a first calculation method,

the second management device

includes an identification unit configured to read identification information attached to a packing box packed with the product, and

is configured to transmit the identification information read by the identification unit to the first management device;

the first management device is configured to transmit information on the first amount of carbon dioxide, information on the number of the products packed in the packing box and information on the first calculation method to the second management device based on the identification information received from the second management device; and

the second management device is configured to calculate an emission amount of carbon dioxide per product based on the information on the first amount of carbon dioxide and the information on the number of the products transmitted by the first management device, and to perform management by linking the calculated emission amount, the product and the first calculation method with each other.

2. The management system according to claim 1, wherein:

a basic product constituting the product is supplied to the first company from a third company provided upstream of the first company;

the third company is configured to calculate a second amount of carbon dioxide emitted by manufacturing the basic product using a second calculation method; and

the first management device is configured to transmit the information on the first amount of carbon dioxide and the first calculation method, and information on the second amount of carbon dioxide and the second calculation method, to the second management device.

3. The management system according to claim 1 or 2, wherein the first calculation method includes information indicating that the first amount of carbon dioxide is

calculated based on at least one of an amount of electricity and an amount of energy used in manufacturing the product at the first company.

4. A management method performed by a management device that manages a product to be delivered from a first company provided upstream to a second company provided downstream of the first company, the management method comprising:

a calculation step of calculating a first amount of carbon dioxide emitted by manufacturing the product at the first company using a predetermined calculation method at the first company;

a step of reading, at the second company, identification information attached to a packing box packed with the product;

a step of transmitting the identification information read at the second company from the second company to the first company; and

a step of transmitting information on the first amount of carbon dioxide, information on the number of the products packed in the packing box and information on the predetermined calculation method from the first company to the second company based on the identification information transmitted from the second company being received by the first company;

a step of calculating, at the second company, an emission amount of carbon dioxide per product based on the information on the first amount of carbon dioxide and the information on the number of the products transmitted by the first company; and

a step of performing, at the second company, management by linking the calculated emission amount, the product and the predetermined calculation method with each other.

5. The management method according to claim 4, further comprising a third step of adding up a second amount of carbon dioxide emitted in manufacturing a basic product constituting the product and the first amount of carbon dioxide to obtain an adding amount and dividing the adding amount by the number of the products to calculate a total emission amount of carbon dioxide per product.