

What is the carbon footprint of products (CFP)?...

The carbon footprint of products (CFP) visualizes where and how much CO₂ emissions are released.

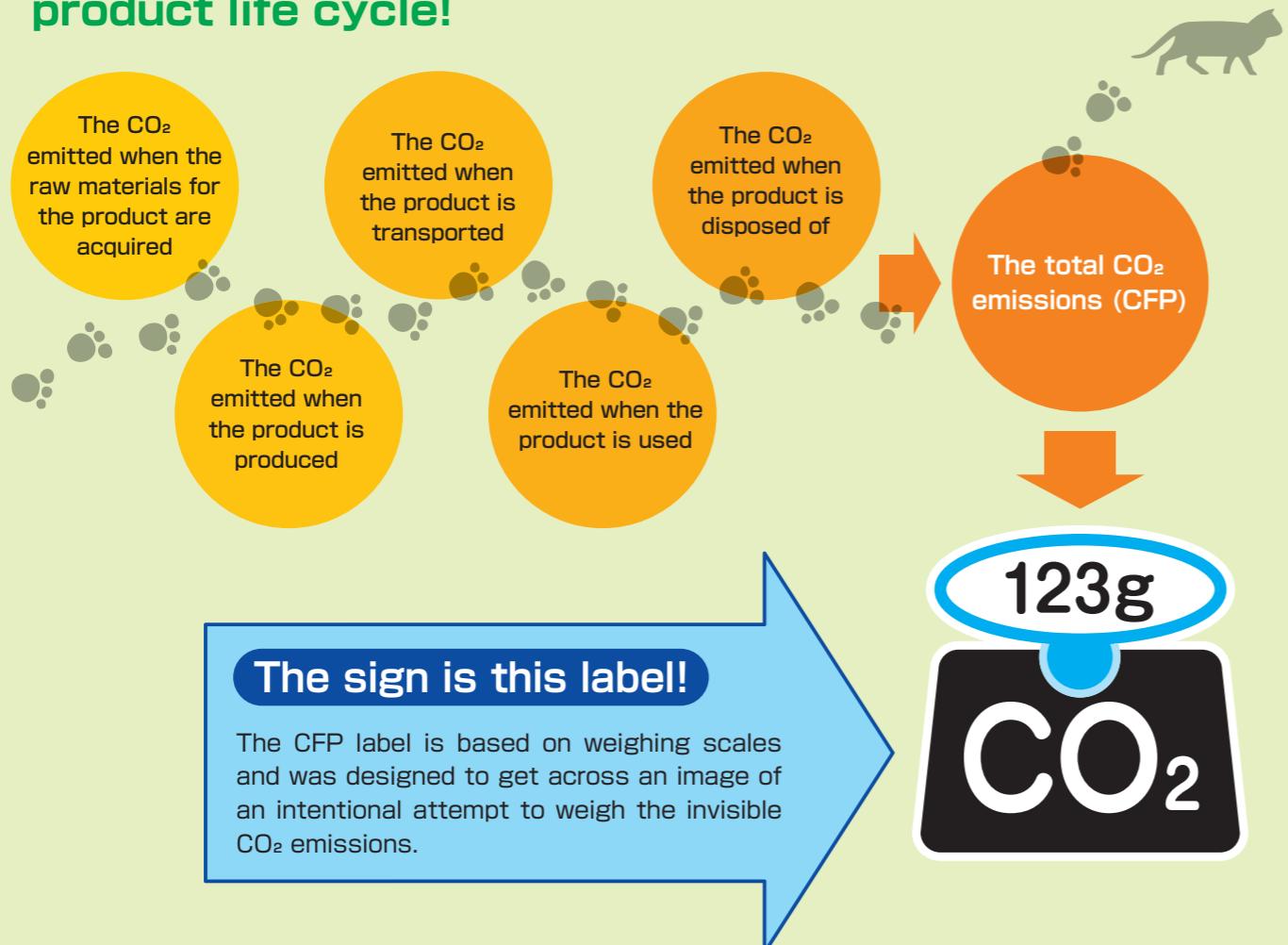
You know about it, don't you?

Carbon footprint of products (CFP) - its meaning, its significance.

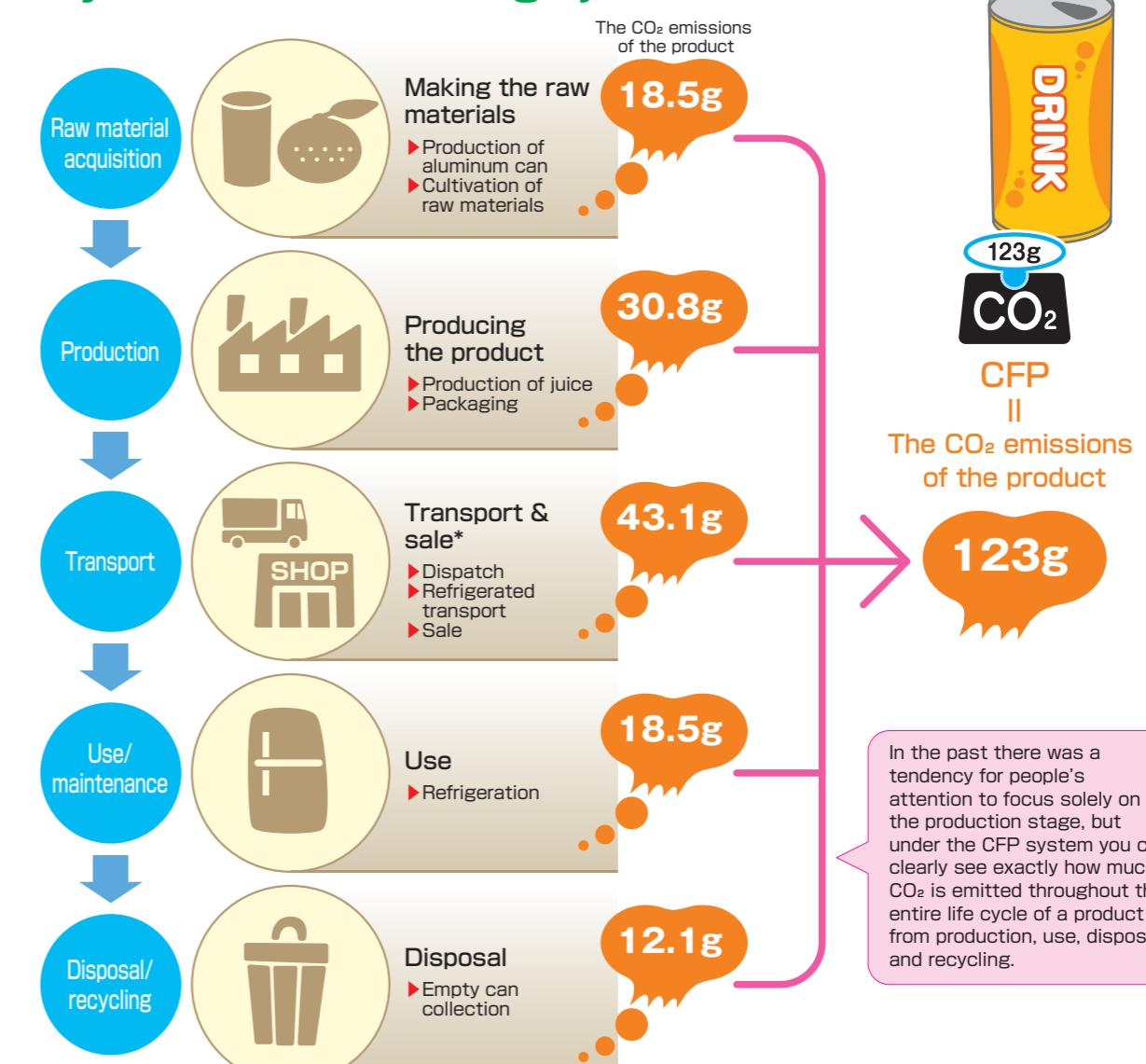
All the products (goods and services) that we purchase and consume require large amounts of energy throughout their product life cycles – from the time they are made through to the time they are disposed of. That energy is obtained mainly from fossil fuels such as oil, coal and natural gases, and all of these release carbon dioxide (CO₂) into the atmosphere, which is a cause of global warming.

The carbon footprint of a product is calculated by combining the total greenhouse gas (GHG) emissions emitted at each stage of the product's life cycle to find out its overall emissions, and then converting this figure into the equivalent amount of CO₂ emitted.

The point is to calculate emissions for the whole product life cycle!



Let's look at the example of the life cycle of a can of orange juice!



*The sales stage was not covered in calculations during the pilot period.
N.B. All numerical values are hypothetical.

Carbon Footprint

Background to the creation of CFP

Point

CFP was created as a tool to involve everybody in CO₂ reductions.

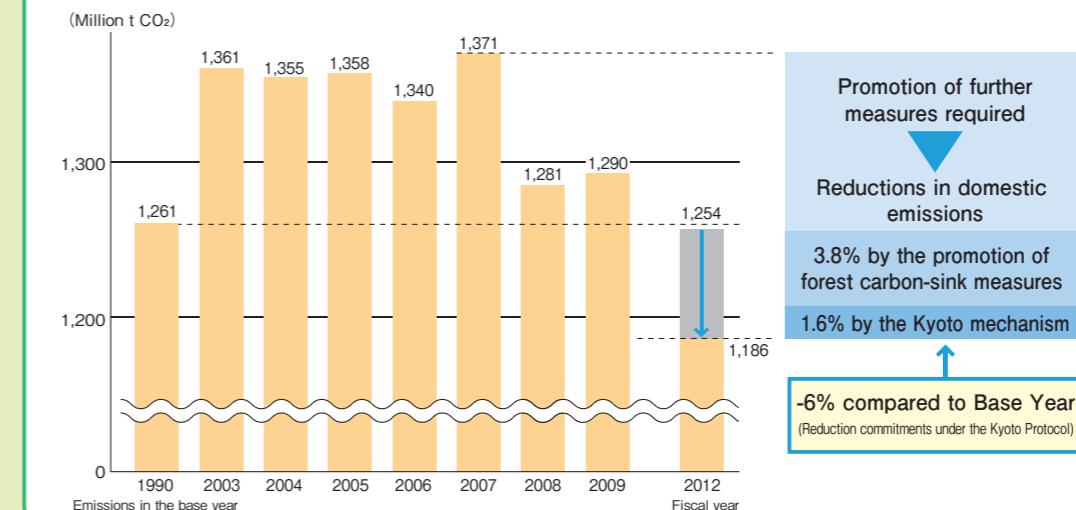


To gain the cooperation of as many people as possible in CO₂ reductions, the carbon footprint of products (CFP) was created.

In the Kyoto Protocol, Japan committed to reducing its domestic greenhouse gas (GHG) emissions by 6% of the 1990 level by the year 2012. As a concrete measure for achieving this target, discussions started towards the development of a carbon footprint mechanism that would "visualize" the CO₂ emissions of products.

The life cycle of products depends not just on the manufacturers but also on the many other operators involved at the stages of raw material acquisition, production, transport, use and maintenance, disposal and recycling. Furthermore, consumers are also involved in the stages of the use as well as disposal and recycle of products. CFP is a tool with the theme of products for getting both operators and consumers to think about reducing GHG emissions, and involving them in these efforts.

Transition and Outlook of Japan's Greenhouse Gas Emissions



CFP is a “common scale” for enabling the visualization of CO₂ that is unseeable.

1

If we think about the CO₂ emissions in the life cycle of a product... many operators and consumers are involved.

2

In order to obtain the cooperation of more people in reducing CO₂ emissions... it is vital to visualize those CO₂ emissions.

3

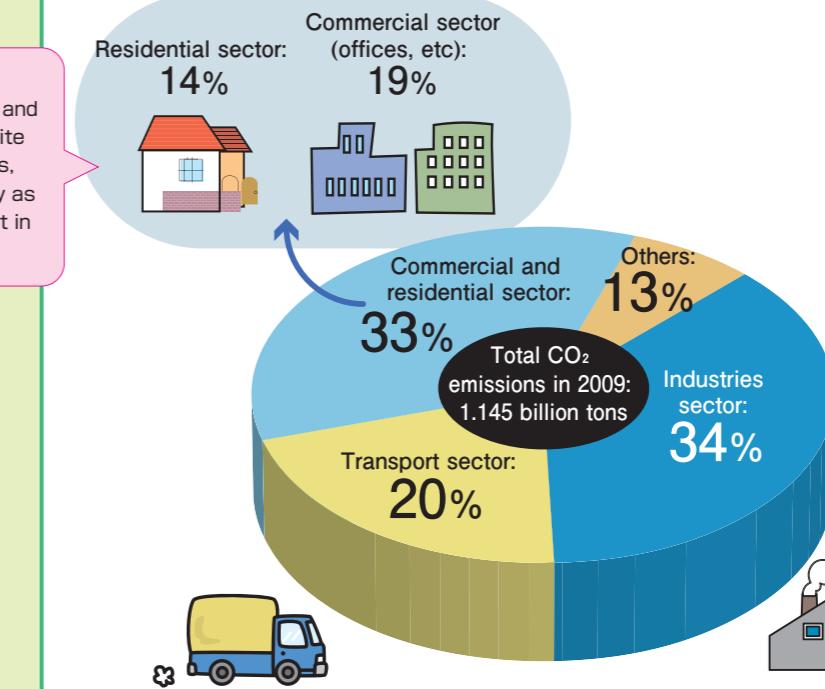
And that's how CFP was created.

123g

CO₂

As you can see, the CO₂ emissions from residential and commercial sectors are quite large. So not only operators, but consumers and society as a whole, need to play a part in reducing CO₂ emissions.

Japan's CO₂ emissions by sectors



Source: Japan's National Greenhouse Gas Emissions for Fiscal Year 2009 (Final Figures) from the Ministry of the Environment

Background

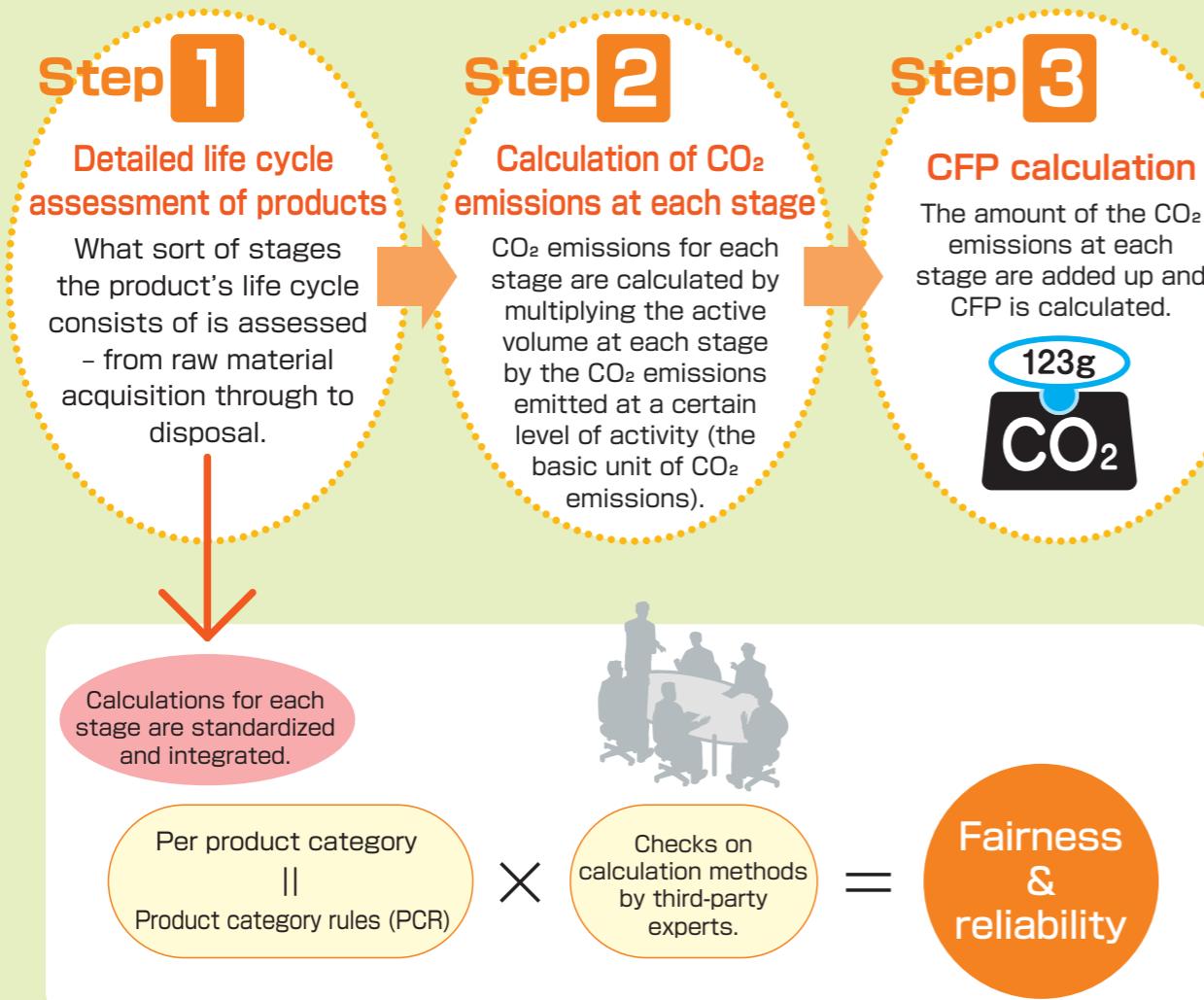
How CFP is calculated

To visualize CO₂ emissions, we integrate CFP calculation methods.

PART 1

CFP is calculated according to product category rules (PCR) that set the rules for these calculations in each product category.

Moreover, by running checks on the calculation method with a committee of third-party experts, a system that secures fairness and reliability has been constructed.



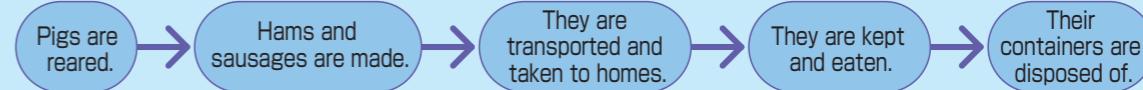
By creating common rules for calculations the carbon footprint of **each product** can be calculated under the same specific rules.



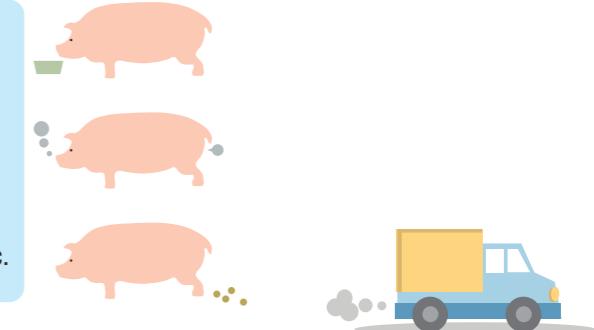
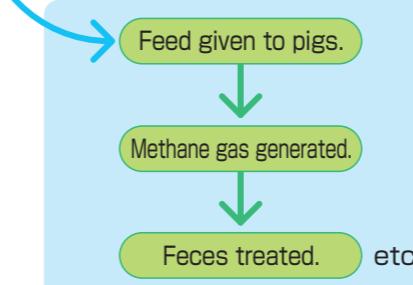
Let's look at the example of hams and sausages!

N.B. The following presents an example of the way of thinking behind the calculations. It has been abbreviated and does not exactly coincide with the actual meticulous calculations.

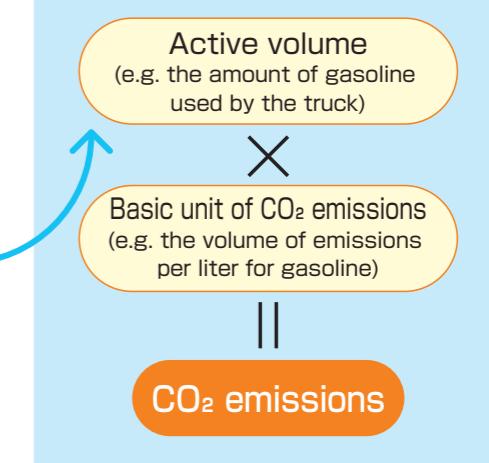
Step 1 ① The whole life cycle looks like this.



② Now we take a close look at each stage.

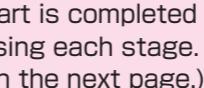


Step 2 CO₂ emissions are calculated by multiplying the active volume by the CO₂ emissions emitted at a certain level of activity (the basic unit of CO₂ emissions). If trucks are used for transport...



Step 3 The amount of the CO₂ emissions at each stage are added up and CFP is calculated.

A life cycle flow chart is completed by precisely assessing each stage. (This is explained on the next page.)



PCR
Product category rule

How CFP is calculated

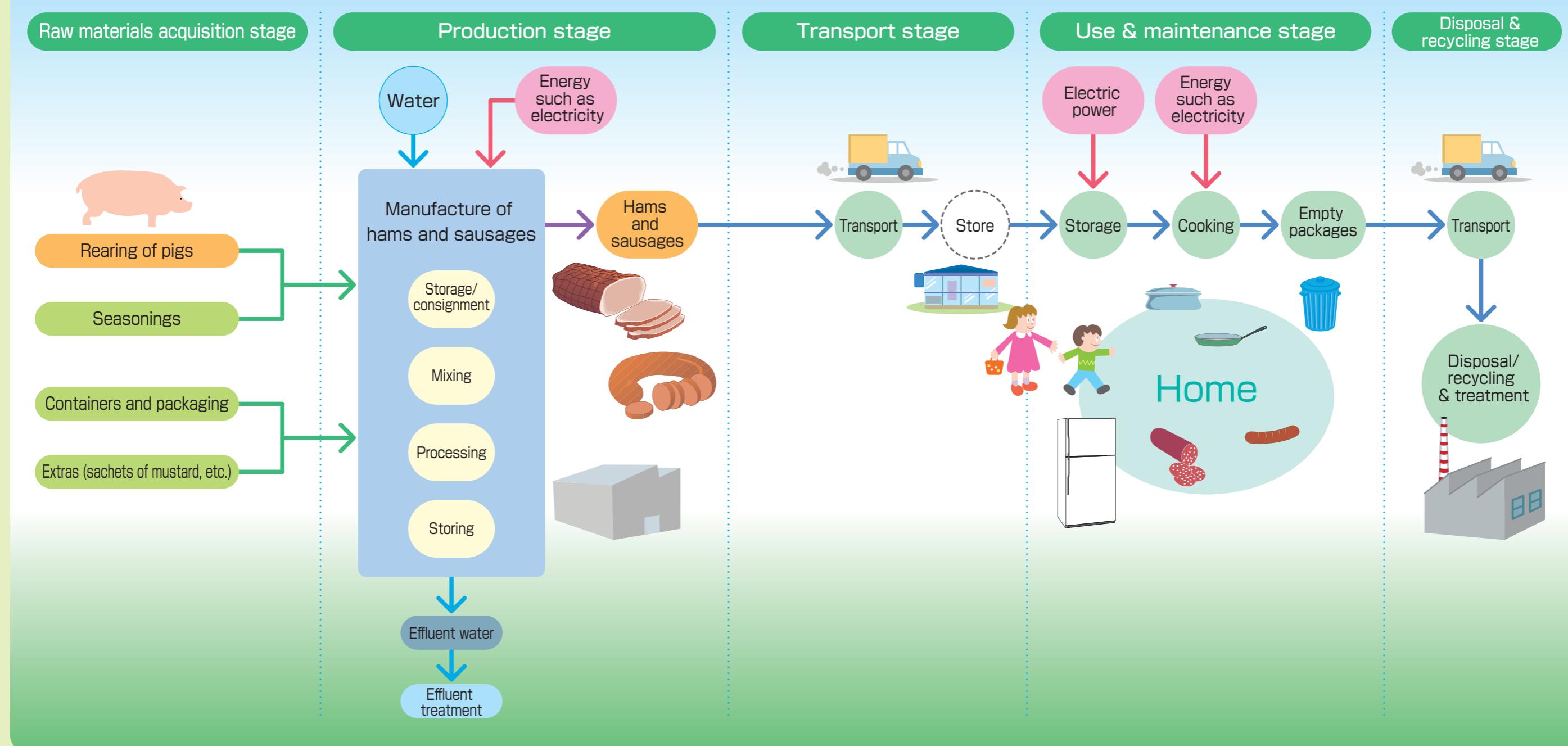
Product category rules (PCR), including life cycle flow charts, are displayed on the CFP website, making it possible to assure transparency and enabling those involved in future CFP calculations to look at them.



Point

PART 2

Making hams and sausages (image)



N.B. The shop sales process (the part in the dotted circle in the diagram) has been provisionally discounted from the calculations. Certain parts of the PCR life cycle flow chart have been shown in an abbreviated form.

Let's expand CFP to the future

Carbon footprint of products Towards an eco-society with everybody's awareness

Why don't you join us in spreading the message, in using CFP to make an eco-society?

Carbon footprint labeling enables us to select products based on a new indicator, the "environment". Moreover, business operators too can use the label as an indicator of their environmental management and corporate social responsibility (CSR) efforts.

By spreading and expanding the CFP concept even wider and deeper we can create a future in which everybody participates together in the creation of an eco-society. We sincerely hope that everyone will continue to support the CFP label.

CFP spreading across the world

Measures to promote CFP activities are underway all over the world – in European countries such as Britain, France, and Germany, in the U.S. and Canada, and in Asia and Oceania.

In tandem with this movement, the international standardization of CFP is also being pursued as a part of the ISO 14000 series.

