

We take waste and give it new value as a resource. With our customers, we aim to provide recycled resources in order to protect our environment.

# Next Solution with You

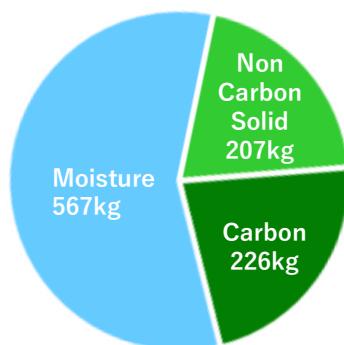


SUSTAINABLE DEVELOPMENT GOALS

## 【2024 Edition】

The clients who recycle their food waste through our carbonization process, calculates that per 1 tonne of food waste, the client cuts carbon emissions reduction of 95kg (CO<sub>2</sub> equivalent: 348kg) .

Food waste  
1 tonne



Carbon  
23kg



Total of Carbon 118kg

Carbon used  
for circulating  
heat utilization  
75kg

Carbon of  
charcoal  
products  
43kg

Carbon  
- 23kg

Total of Carbon 118kg  
- 23kg (added carbon) =

**95**  
kg

(CO<sub>2</sub> equivalent: 348kg)

One tonne of food recycling resources contains 567 kg of moisture, 226 kg of carbon, and 207 kg of solids other than carbon. Generally, the moisture content of food circulating resources is around 70%, but we investigate and analyze the properties of our customers' food circulating resources in advance, and prepare the moisture content by mixing food circulating resources with low moisture content to increase energy efficiency.

Approximately 10% (23 kg) of carbon is added to 226 kg of carbon contained in food recycling resources. Adding carbon means using some external energy such as fossil fuel, and it evaporates water and solids other than carbon, induces a phenomenon called thermal decomposition to fix carbon to charcoal.

The use of circulating heat means that the heat required for carbonization is provided by the calories (heat) that food circulating resources originally possess, and in terms of reducing the use of fossil fuels, 75 kg of carbon emissions are reduced when converted to carbon content. The use of charcoal products in place of coal and other fossil fuels in the cement and steel industries reduces carbon emissions by 43 kg, for a total reduction of 118 kg. On the other hand, 23kg of carbon derived from fossil fuels is used in the carbonization process, so if this is subtracted, 95kg of carbon is reduced per ton of customer's food recycling resources.

\* 1: Indicates the wet weight.

\* 2: The above data have been calculated from their data of April 2024 to March 2025.