

Sustainable Materials Sourcing

Approach

GRI301-DMA

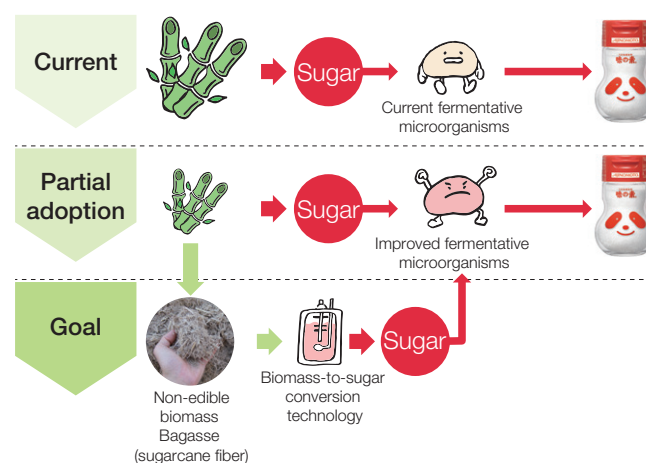
Resource-saving Fermentation Technologies

Demand for the crops used in amino acid production is rising as they are important food resources and also used as biofuels and industrial materials. As a leading amino acid manufacturer, the Ajinomoto Group has a social responsibility to continuously developing lower-impact production methods.

Leveraging its proprietary leading-edge bioscience and fine chemical technologies, the Group has been actively working over the years to develop efficient “resource-saving fermentation technologies.”

Two examples of resource-saving fermentation technologies are those that reduce raw materials and energy use to enhance fermentation productivity, and those that employ rice husks, wood chips, and other unused local biomass as energy sources. These technologies help secure food resources while reducing the use of raw materials, water use and carbon emissions. The Group also pursues development of technologies that make use of non-edible biomass such as bagasse (sugarcane fiber) and corn stalks without competing with food resources.

To accelerate R&D and further improve these technologies, the Group is partnering with various entities with cutting-edge technologies in Japan and abroad, including venture companies, universities, and research institutes.



Technology Roadmap

Around 80% of amino acid production factories slated for introduction of resource-saving fermentation technologies have introduced raw materials and energy-reducing technologies as of the end of fiscal 2018. The Group will complete technology introduction of all target factories by fiscal 2025, beyond which it will pursue further technology development and deployment.

In addition, the Group will raise the ratio of renewable energy to 28% by fiscal 2020, by reducing CO₂ mainly through shifting to cogeneration systems^[1] and biomass boilers and introducing greenhouse gas emissions trading.

[1] Systems that generate and supply electricity and steam simultaneously

Performance