

Support activities in FY2024 under the comprehensive partnership agreement with Faculty of Engineering in Shinshu University

JX Metals Trading Co., Ltd. (President & CEO : MUTSUNOBU Atsuushi ; the below "The company") concluded the comprehensive partnership agreement with Faculty of Engineering in Shinshu University in March, 2023.*

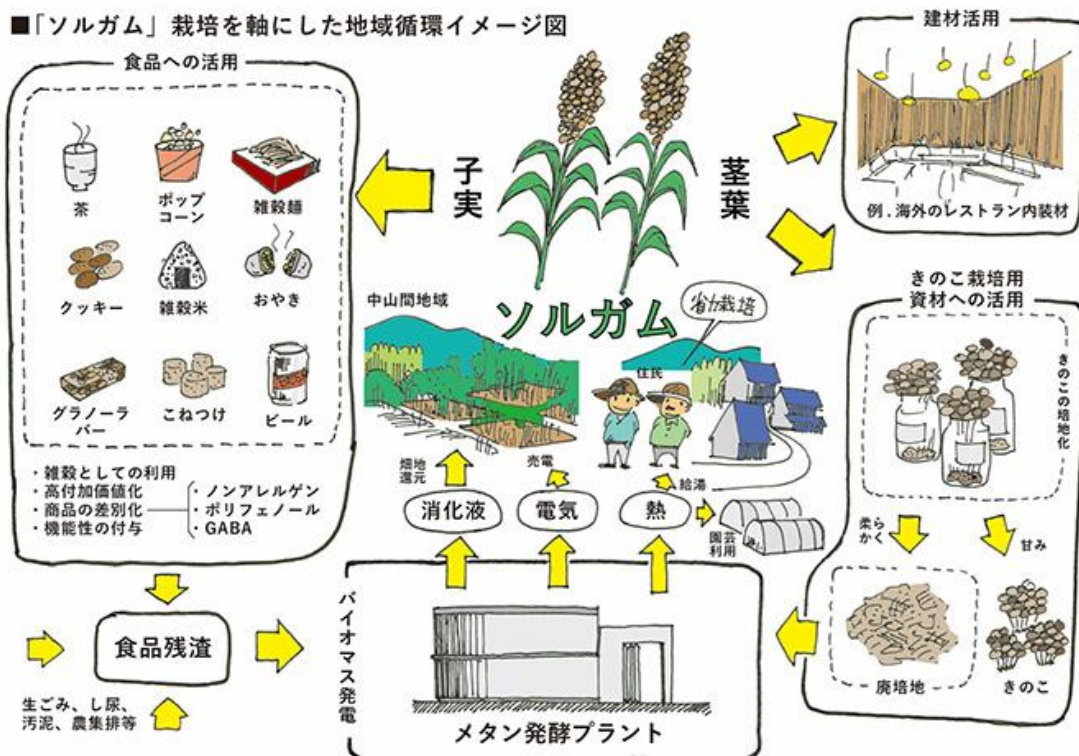
*The themes of collaborative activities would be proposed as follows;

- ① Regeneration of abandoned farmland and revitalizing the local economy by cultivation of sorghum
- ② Conversion to biofuel of stem, leaves and unused agricultural products, except edible parts, of sorghum
- ③ Reduction and immobilization of CO₂ by cultivation of sorghum

As part of this comprehensive collaboration agreement, The company are promoting activities aimed at "realizing a cascade-type decarbonized society centered on sorghum," and in fiscal 2024 The company carried out the activities outlined in the attached document.

In fiscal 2025, we will support the following initiatives: "Expanding ways to utilize sorghum for large-scale cultivation and supporting the mechanization of cultivation," "Exploring uses as a composite material," "Promoting the diversification of use of sorghum stems and leaves," "Using sorghum as fuel for biomass power plants," and "Establishing a supply chain from cultivation to fuel use."

Image of Circulation by cultivation of sorghum



Ou support and participation activities in FY 2024

Assignment in Reserch	The company's activities
Revitalizing the local economy	Promotion of sorghum cultivation, Consideration of collaboration with NPOs
Expanded use of foliage	Gathering information on partners for direct biofuel production, Considering use of ethanol and fiber
Expansion of cultivated land	Consideration of use within the JX Group

In addition to the above, Shinshu University, the Shinshu Sorghum Community Revitalization Association and others organized activities to raise awareness of sorghum, and The company supported and participated in these activities.

Seeding (Regional exchange meeting) on May 19, 2024 in Daian Temple, Nagano City



Professor Amano



Information session for seeding



Seeding

Cultivation seminar (harvesting) on September 27, 2024



Large specie with 5 meter height



Small specie with 1.5 ~ 2 meter height

20 ares has been planted and harvested it.

Industrial fair in Shinshu on 25, 26 October 2024 in Big-hat Nagano city

Efforts toward decarbonization was introduced and the related products was sold based on sorghum hosted by Shinshu Sorghum Association to Revitalize the Community.

Results report meeting and Sorghum Marche in FY2024 on January 29, 2025 in Chateraise Hotel Nagano

- Opening Remarks from Professor Amano
- Video message from Mayor of Nagano City
- Keynote Speech : Further improving the functionality of food that contributes to a long and healthy life ~ charm of sorghum grain and its varietal characteristics ~ by Professor Amano
- Panel discussion : “What each of us can do now to revitalize our communities”
Participants: TAKEDA Toru, YOKOYAMA Takako, AMONO Yoshihiko, TANAKA Mitsuko, SEKISHITA Tsuyoshi, HAYAKAWA Koki
- Closing Remarks from Associate Professor Mizuno



Professor Amano



Panel Discussion