Company Overview

Protecting Greenery
Nurturing Greenery
Creating The Future

Tromso Co., Ltd.

Speaker introduction

Tromso Co., Ltd.

General Manager

Yuichi Yanaka

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About Tromso

Company overview

株式会社トロムソ
TROMSO CO., LTD.

Name	Tromso Co., Ltd.
Location	1182-6 Shigeicho, Innoshima, Onomichi City, Hiroshima Prefecture, 722-2102
TEL	0845-24-3344
FAX	0845-24-3181
Establishment	October 19, 1994
Capital	29.99 million yen
CEO	Masaaki Uesugi
Business Contents	・Manufacture and sale of biochar production machine ・Providing agricultural consulting services to farmers on how to use biochar ・Sale of carbon credits associated with the use of biochar ・Manufacture and sale of rice husk solid fuel production equipment Tromso Co., Ltd. HP : https://tromso.co.jp/

From Innoshima, Hiroshima Prefecture, we are taking on the challenge of solving global issues with new technology!

Technologies born in Innoshima, once called "Shipbuilding Island" are to be handed to the next generation for creating a new future

2022

Tromso embarked on agricultural demonstration projects for biochar utilization in Japan and overseas

2024

First-ever-in-Japan Biochar R&D Center construction was started in oshima, Onomichi City, iroshima Prefecture

2017

Masaaki Uesugi was inaugurated to serve as CEO. Tromso ailed into another phase as a ondary “start-up” by engaging in inesses

2025

Selected for the Ministry of Economy, Trade and Industry’s Global South Future Co-Creation Project (Large-Scale Demonstration).

2013

「Selected for JICA’s Private Sector Partnership Program for Expansion into Africa

1994

From producing for the sea to producing land-Tromso was established

2007

A rice husk briquetting machine “Grind Mill” was released

Tromso's Business

Introduction

Green protection project

・Manufacture and sales of the “Grind Mill”, a machine that effectively utilizes discarded rice husks to produce solid fuel from rice husk

Green Nurturing project

・Manufacture and sales of biochar production equipment that effectively utilizes unused agricultural residues.
・Consulting services for agricultural guidance using biochar
・Support for carbon credit generation

New Business: Nurturing Greenery Business

Taking on new business challenges

"From a business that protects greenery to a business that nurtures greenery"

The following three issues were set as goals:

① Effective utilization of unused agricultural residues by converting them into biochar (agricultural material)

② Reduction of chemical fertilizer use and increase in crop yields through the application of biochar

③ Achieving “carbon-negative” outcomes by applying biochar to agricultural land

- Realization of Sustainable Agriculture
- Improvement of farmers income

What is biochar?

Coffee husk BC

Biochar

… a solid material made by heating biomass at a temperature of over 350℃ under an oxygen concentration that is controlled to a level that will not cause combustion (in anoxic or hypoxic conditions).

… Various organic residues (biomass) including thinned wood, bamboo, rice husks, other agricultural residues (mainly husks), and livestock excrement are used as raw materials for biochar.

Rice husk BC

Peanut husk BC

Pruning branches BC

Biochar Business 1

1. Manufacturing and sales of biochar production equipment

The quality of biochar varies depending on the carbonization temperature and duration during its production, and as a result, its characteristics when applied to farmland also differ. Through three years of field demonstration of biochar application to agricultural land, we have accumulated valuable know-how regarding these differences.

→ Based on field trials conducted both in Japan and abroad, we manufacture and sell biochar production equipment designed to produce biochar of a consistent quality suitable for agricultural application

Biochar Business 2

②Agricultural training project using biochar

- Since biochar has a high potassium content, it can serve as a substitute for chemical potassium fertilizers when applied to farmland.
- Due to biochar's high nitrogen adsorption capacity, it improves nitrogen use efficiency and contributes to reducing nitrogen fertilizer application rates.
- We provide fertilizer design support and agricultural guidance to domestic and international farmers, aiming to reduce chemical fertilizer usage through biochar application.

  → This aims to increase farmers' income and build environmentally friendly, sustainable agriculture.

Biochar Business 3

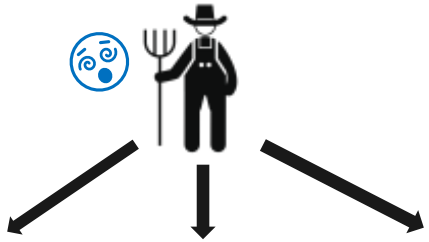
③ Carbon credit creation business and various analysis business

Based on biochar demonstration experiment,
the amount of GHG emissions reduced, including CO_2, is calculated to generate carbon credits.

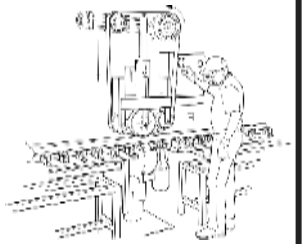
Biochar business model

Tromso offers integrated support for services that were traditionally handled separately

Conventional



Separate and independent services



Company A

Equipment manufacturing

Company B

Agricultural guidance

Company C

Support for carbon credit generation

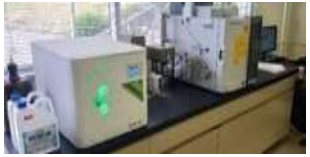
Various analyses

Tromso

Offering comprehensive services related to biochar

1. Manufacture and sales of biochar production equipment

2. Agricultural guidance



3. Support for carbon credit generation/Various analyses

Results of cultivation trials using biochar ②

Control Area
Conventional practice area (100% chemical fertilizer use)
Many plants were lost due to heat (high temperature damage)

Biochar application area
Of the three nutrients, nitrogen, phosphorus and potassium, potassium was replaced by rice husk biochar.

"Protecting Greenery" and " Nurturing Greenery“ businesses

Protecting Greenery

Rice husk briquetting machine production and introduction

Contribution to mitigate environmental impacts by preventing deforestation through utilization of agricultural biomass for solid fuel

Circular model enabling both economy and environment to go hand-in-hand

Nurturing Greenery

Biochar production machine development, production and introduction

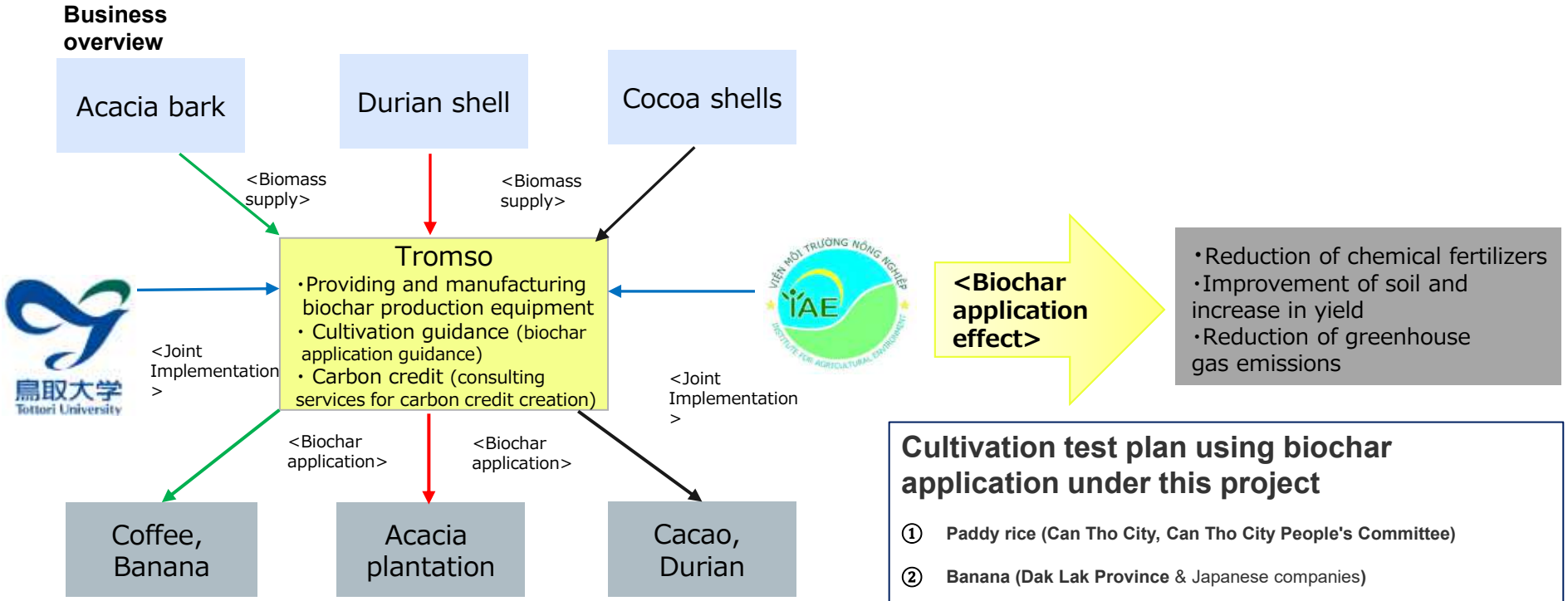
Farming advisory services for biochar utilization

Consultation services for carbon credit creation from management, application to trading

Protect and nurture greenery. Resolving issues through recycling.

Global South Future-Oriented Co-Creation Project (Large-scale

Business overview



Cultivation test plan using biochar application under this project

① **Paddy rice (Can Tho City, Can Tho City People's Committee)**

② **Banana (Dak Lak Province** & Japanese companies)

③ **Coffee (Lam Dong Province,** Lamgbiang Coffee)

④ **Cacao (Dong Nai Province, Gia Lai Province, Choong Dak Company)**

HD Research and Development Project , Binh Dinh Province)

Acacia （ Proposed R&D by Vinh Dinh Province & Oji Holdings)

Team (The Green Innovation Division is working on a biochar project!)

Ugwu Chigozie (Nigeria)

PhD graduate, school of Environmental and Life Science, Okayama University

Responsibilities: Analyzing and quantifying CH_4, CO_2, and N_2O collected during demonstration experiments using a gas chromatograph

Shema Jean de Dieu (Rwanda)

Master's degree from Hiroshima University Graduate School, Chemical Engineering department.

Responsible for: Analyzing and quantifying CH_4, CO_2, and N_2O collected during demonstration experiments using a gas chromatograph

Yikii Walter (Uganda)
Graduated from the Department of Mechanical Engineering, Faculty of Engineering, Tokai University
Responsibilities: Design and Engineering

Yuichi Yanaka
Graduated from the Faculty of International Studies, Bunkyo University
Responsibilities: Overseeing entire business from biochar project demonstration experiments to credit creation

Akari Kuroda
Graduated from the Faculty of Agriculture, Tottori University
Responsibilities: Conducting demonstration experiments using biochar in Japan and Vietnam

Finally, why do we want to do this business?

Tanzania, Uganda , Madagascar ...

I have seen with my own eyes more than

What I felt strongly was the reality that "lack of education" creates a cycle of poverty.

People working in agriculture do not have a stable income.

This means that they cannot send their children to school, and the next generation cannot escape poverty.

At the root of this vicious cycle lie structural issues in agriculture, and Japan is no exception.

However, Japan has the world's best agricultural technology, including precise yield forecasting.

We will spread these technologies and systems to the world along with the spread of biochar and carbon credits,

We would like to increase the value of agriculture and expand systems that stabilize income.

This results in educational opportunities, reduced environmental impact,

We believe this will lead to a cycle that improves the lives of people all over the world.

"If agriculture changes, education, the environment, and the future will change too."

This is our "greening" project.

We in Tromso "protect greenery," "nurture greenery," and create the future .


— Thank you for your attention —