February, 2025

Leading Innovation in Agrivoltaics

1. Introduction of Farmdo Group
2. Overview of Agrivoltaics (Solar farm®)
3. Cultivation Methods of Agrivoltaics in Japan
4. Overseas Business
5. Business Proposal in Uzbekistan

Farmdo Group President
Masayuki Iwai

1. Introduction of Farmdo Group

Confidential

MESSAGE FROM OUR PRESIDENT

A Top-Tier Solar Farm® System in Japan

It has been 31 years since our founding, and we owe our success to the support of the people of Gunma. Together with approximately 4,000 contracted producers and around 500 landowners involved in our solar power projects, we are working to improve farmers' incomes.

Japan's food self-sufficiency rate remains low at 38%, and the number of farming households is expected to drop below 20% by 2050. Meanwhile, global warming continues to cause more frequent heavy rainfall disasters, and Japan's energy self-sufficiency is at a critically low 13%, with 75% of its electricity dependent on fossil fuels.

Agrivoltaics, which addresses both the growing issue of abandoned farmland and the creation of a sustainable, circular society, is a powerful solution to these challenges. Leveraging the unique expertise we have accumulated, our company aims to expand these initiatives across Japan and globally.

Farmdo Group President
Masayuki Iwai

Solar Power Plants — 230 Plants

Wind Power Plants — 24 Plants

MoEJ-CO2↓ project — 2 Plants

JCM-UNIDO — 6 Plants

Agrivoltaics — 106 Locations

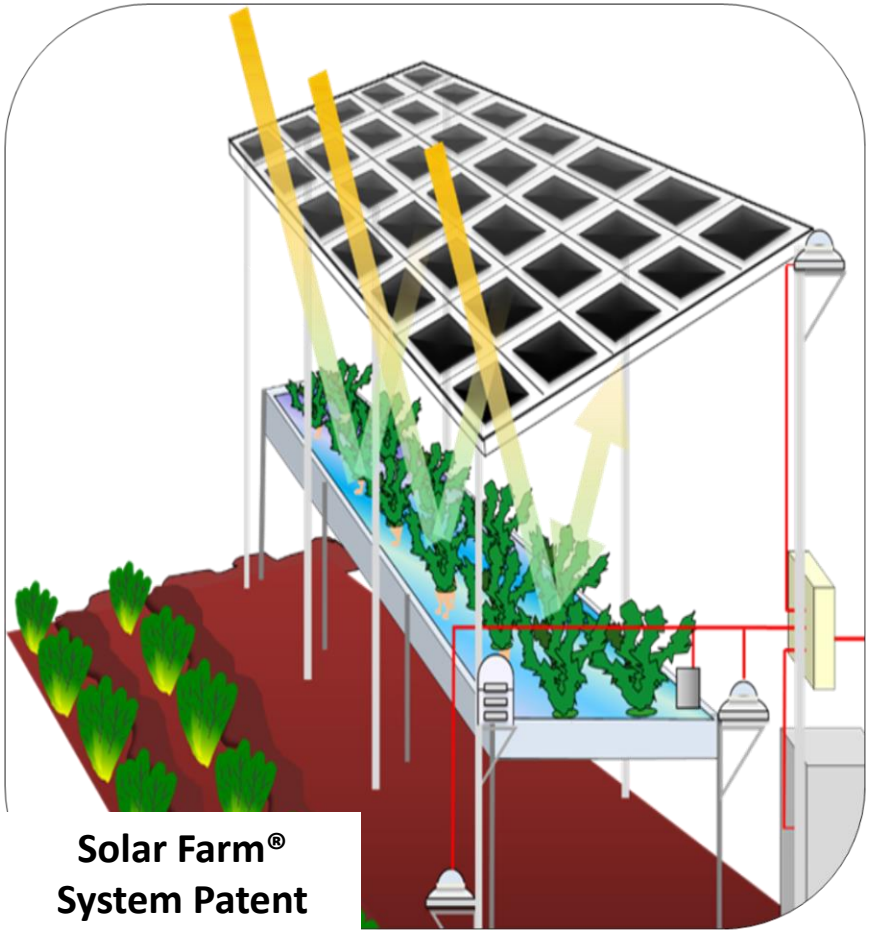
Local Employment — 130 Workers

Large Local Produce Store — 17 Stores

Fresh Produce for Tokyo — 18 Stores

2. Overview of Agrivoltaics (Solar farm®)

Highly efficient sunlight transmissive panels as well as the transparent sections in the roofing of greenhouses ensure sufficient and balanced amount of sunlight for the crops beneath them.



Solar Farm®
System Patent

Open Field

Greenhouse

Use of white weed control sheets on the ground to boost Albedo effect and prevent weed spreading.

Use of bifacial panels to leverage Albedo effect and increase energy yield.

Two Cultivation Methods for Solar farm®:

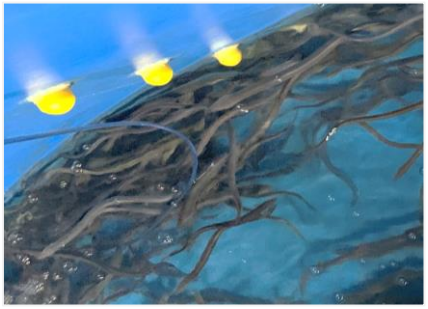
1. Open Field farming
2. Greenhouse farming

3. Cultivation Methods of Agrivoltaics in Japan

Greenhouse (bifacial, monofacial, and transparent solar panels)

Coffee beans

Passion Fruits



Eels

Shrimps

Agricultural crops

Strawberries

Tomatoes

Lettuce

Patents acquired

7 Countries

Japan・US・China・Taiwan・Vietnam・Thailand・Mongolia

Patent: 5791215 (Double-sided), Patent: 5791211 (Single-sided)

ハイブリッドソーラーグリーンハウス
やさいのおうち

Just as people have homes, vegetables also need a proper and comfortable environment to grow.

3. Cultivation Methods of Agrivoltaics in Japan

Open field (bifacial, monofacial, and transparent solar panels)

Red perilla（soil cultivation）

Chinese cabbage（coco peat bag）

Agricultural crops

Onions

Japanese Leeks

Pumpkin

Patents acquired

6 Countries

Japan・US・China・Taiwan・Vietnam・Thailand

Patent: 6314347 (Double-sided), Patent: 5960332 (Single-sided)

4. Overseas Business

【Mid-Term Goal】
Expanding business by utilizing the Ministry of the Environment JCM program（In 2030、Total shall be project in 10 countries、adding ＋50MW more to reach 75MW）
（Now、we have project in 4 countries with total 25MW）
【2024】
13th March、subsidiary in Singapore established as the 4th country
Middle of May Sri Lanka JCM project application was made (13.2MWp)
September Start the 4th project in Chilie with capacity 12MW
November Start selling electricity in Kenya
【2025】
Established overseas business in the 5th country (Sri Lanka)
Make a stepping stone for business in the 6th country (Indonesia as a candidate)
Research on environmental value business (Singapore, biochar)

29 JCM Partner Countries

Farmdo ENERGY CHILE

- 15MW DC
- 30ha farm
- 11,700ton CO2 12,500t/year reduction
- Bifacial Solar Panel
- Tracker (Single axis tracking)

- 3x4 MW Completed and selling electricity
- 1X3 MW under construction (estimated complete in February 2025)
- National policy from Chilie requires batteries to be included
- 2 projects, 4 locations in total
- Total: 40MWp＋100MWh

- UK. Environmental Credit Service, December 2022 $100,000Investment
- Afrika, Europe and Asia Service

Farmdo ENERGY KENYA

Rose Farm Irrigation November 2024 start selling the electricity 230kwp＋270MWh

JCM Application made in May 2024 (13.2MWp)
Waiting for Sri Lanka government`s approval

- 12.7 MW DC (10.4MW)
- 28ha (around half is used for farm
- Solar-Farm
- 12,500t CO2 12,500t/ year reduction

Start selling electricity since November 2017

Farmdo SINGAPORE PTE LTD

- Two rooftop installation projects completed (430kwp)
- I-REC environmental credit business contract is concluded

Established at 13th March 2024

4. Overseas Business

Agrivoltaics in Mongolia (Mongolian Monnaran Power Plant)

Mongolian Monnaran power plant in summer

Mongolian Monnaran power plant in winter

4. Overseas Business

Agrivoltaics Research in Chile (Collaboration with INIA)

Evaluation of the viability of solar farms®

- Cultivation of blueberries under bifacial semi-transparent solar panels
- Examination of the effect of installing solar panels on sunlight sufficiency, temperature, humidity, etc.
- In collaboration with Chile's Ministry of Agriculture (MOA) and Agricultural Research Institute (INIA)
- Beneficial for prospective projects to utilize solar panels on top of blueberry farms and other crops

INIA
Instituto de Investigaciones Agropecuarias

4. Business Proposal in Uzbekistan

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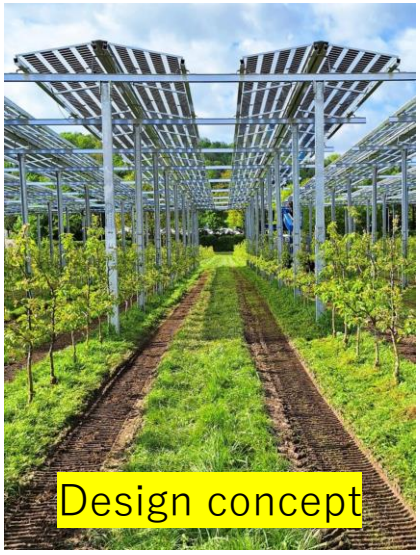
Farmdo

50 kW Pilot Agrivoltaics under Development by Provitaz MMC



Design concept

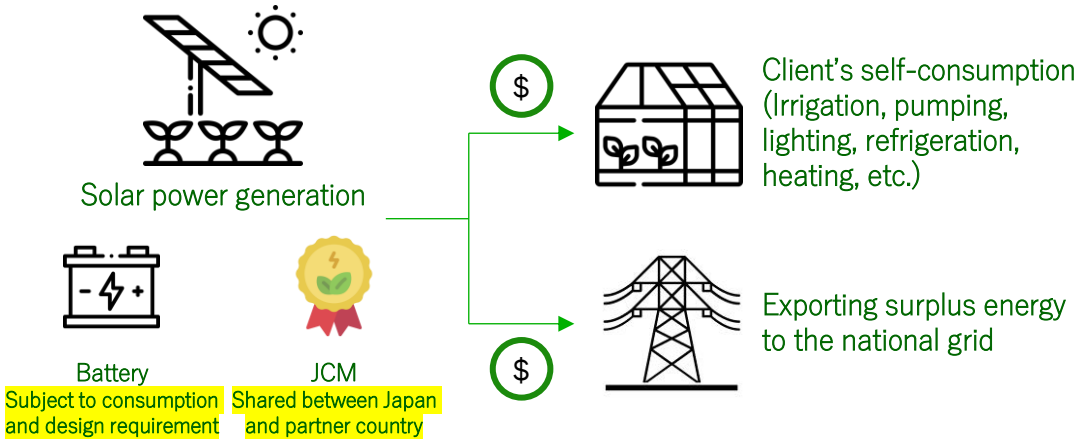
Provitaz alternative energy

- Installation of solar panels above a raspberry farm.
- Using existing concrete pillars as part of the mounting components for solar panels.
- To demonstrate the economic, agricultural, environmental benefit of agrivoltaics.
- Farmdo looking forward to collaborate with Provitaz MMC after this pilot project is established.

https://cy.grengysolar.com/solar-farm-mounting-system/agrivoltaics-mounting-systems.html

5. Business Concept in Uzbekistan

Why Uzbekistan Needs Agrivoltaics (Solarfarm®)



By utilizing the same farmland for both food production and electricity generation, agrivoltaics offers a unique opportunity to maximize land efficiency and unlock dual revenue streams from a single space.

Solutions

- Solar panels provide crops a necessary protection against excessive sun, wind, rain, hail, etc.
- Crops underneath solar panels require less irrigation due to increased humidity in the shade.

Opportunities

- Abundant sunlight in Uzbekistan is a good opportunity for solar power generation.

Yearly solar Irradiation, GHI	Tashkent, Uzbekistan	1,650 kWh/m^2
	Maebashi, Japan	1,483 kWh/m^2

- Surplus electricity can be exported and sold to the grid for additional income.
- Agrivoltaics will address both agricultural productivity and the nation's growing energy demand.
- This will pave the way for food self-sufficiency and a secure, stable electricity supply to support Uzbekistan's sustainable future.