# Achieving SDGs Through Use Of JCM
# Case Studies and Methods


Farmdo group

Agriculture and Renewables contributing to society
Working towards a Green Recovery

# Farmdo Group Corporate Profile

**Increase Farmers Incomes**
4,000 farmers sell directly to customers through our stores improving their revenues

**Agriculture and Local Development**
Jobs for 35 disabled individuals
Agriculture internships for 46 university students

**Safe Electricity**
Producing enough renewable energy to reduce $CO_2$ emissions by an equivalent of 30,000 households

**Energizing the Earth**
Establishing renewable energy on 500 abandoned farmland locations to help diversify farmers revenues

## Farmdo

### 食の駅®・農援'S®
Local Production for Local Consumption

18 Locations

### Chisan Marche 地産マルシェ®
Fresh Produce for Metro Area

16 Stores

## Farm Club

### Green Houses
Strawberry・Tomato・Lettuce

72 Locations

### Agriculture Support
Nurturing Future Farmers

81 Workers

## Farm Land

### Solar Power Plant
Use of Farrow Land

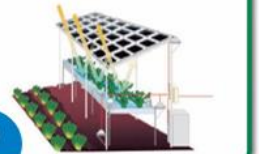
170 Plants

### Wind Power Plant
Helping Global Environment

9 Plants

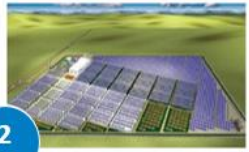
## Solar Farm®

### Climate Change Adaptation
MOA White Paper Inclusion



50 Locations

### Over Seas Business
Mongolia・Chile



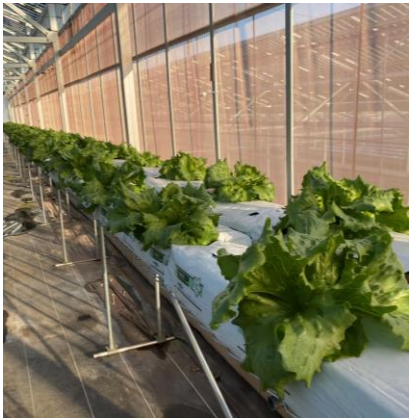
2 Countries

# Solar Farm® Cultivation Methods

DFT Hydroponics

Soil Cultivation with Mulch

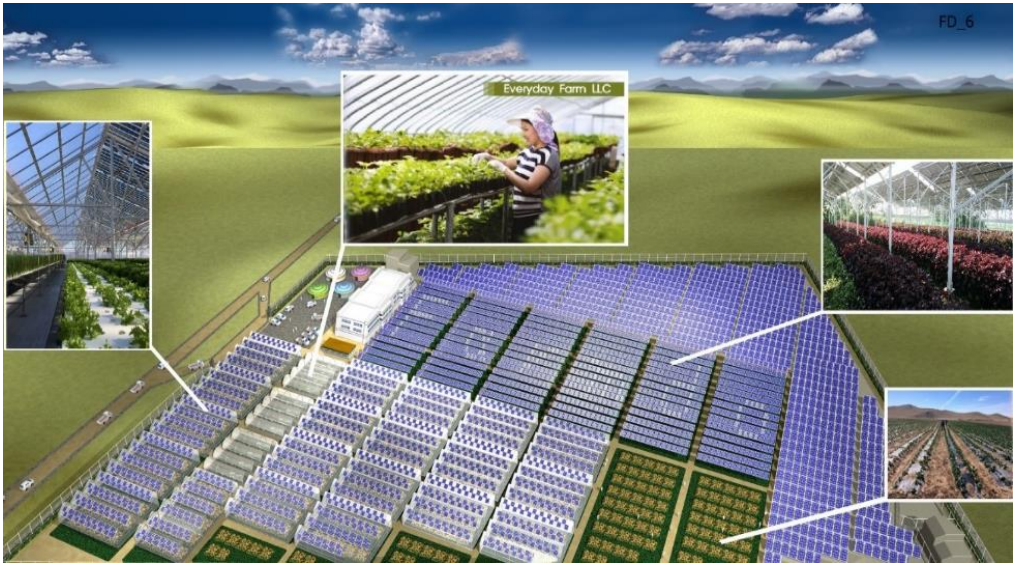
New Initiative – Utilizing Cocopeat Growing Medium



# Contributions to Mongolia's energy policy

## Mongolia

JCM THE JOINT CREDITING MECHANISM




**28 ha farm near Ulaanbaatar**

**Solar Capacity**
**: 12.7MWdc**

**Expected $CO_2$ emission reduction over project lifetime**
**: 200,000t**

**COD**
**: Nov. 2017**

**2013 Established joint venture Everyday Farm LLC**
**Conducted JICAs 5th Cooperation study**
**(Promotion of BOP Business Cooperation)**

**2015, 2016 Received JCM subsidy each year**

# SDGs under our JCM projects

## Initiatives at Everyday Farm LLC

Creating employment opportunities for women to reduce the gender-pay-gap through implementation of gender-balanced hiring policies.

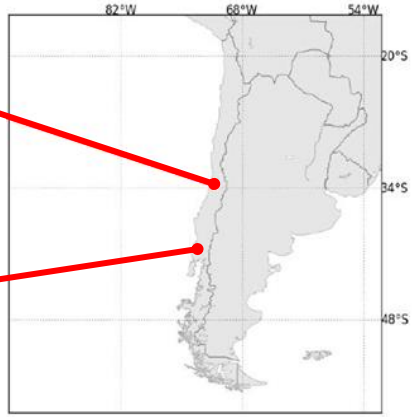
Last year we produce and delivered 27 tons of high quality, fresh produce to Ulaanbaatar. Using the revenue from sales of solar energy investment in new agriculture technology is made, improving the annual output of the farm.

Solar power reduces carbon intensity of the local grid which relies heavily on coal burning fire plants. This in turn improves the air quality of Ulaanbaatar.

# Contributions to Chile's energy policy

## Chile

JCM THE JOINT CREDITING MECHANISM


①Chilan／②Malvilla

**Solar Capacity**
**: 2, 3MW plants**

**Expected $CO_2$ Emission Reduction Over Project Lifetime**
**: 7万t**

**Expected COD**
**: ①March 2020**
**②August 2020**

**2019** Secured JCM subsidy and established Joint venture Farmdo Energy Chile SpA.

**2020** Secured second JCM subsidy
Collaboration with Ministry of Agriculture to construct pilot solar farm (to be built 2021)

# Solar Farm® Pilot Project

JCM THE JOINT CREDITING MECHANISM

**Chilean Ministry of Agriculture**

INDAP Ministerio de Agricultura Gobierno de Chile

&

INIA Instituto de Investigaciones Agropecuarias Ministerio de Agricultura, Chile


## Goals

- To spread our model of agriculture to small and medium sized farmers in Chile through collaboration with the Ministry of Agriculture by building a pilot project at the research site of the Ministry

  (Construction July 2021)

- In 2022, spread the model to 50 farmers
- Within 5 years, have spread to 200 farmers

Solar Farm® in Gunma prefecture Japan growing cabbage

# Using PDCA to implement JCM projects

Realizing dreams through **Positive Thinking**

| | |
|---|---|
| With a Dream | develop a Goal |
| With a Goal | create a Plan |
| With a Plan | take Action |
| With Action | get Results |
| With Results | make Analysis |
| With Analysis | have Growth |
| With Growth | find a Dream |

# Using PDCA to implement JCM projects

## Realizing dreams through **Positive Thinking**
## A real world example

Dream : 「Renewables」×「Agriculture」contribute to SDGs

Goal : Spread Solar farm® to 10 countries in 20 years

Plan : Apply for a ne JCM project every year

Action : First entry into countries with JCM subsidy

Result : Established business in Mongolia

Analysis : Develop knowhow for entry into new countries

Growth : Expanded into Chile and plans for Asia and Africa


Thank you