



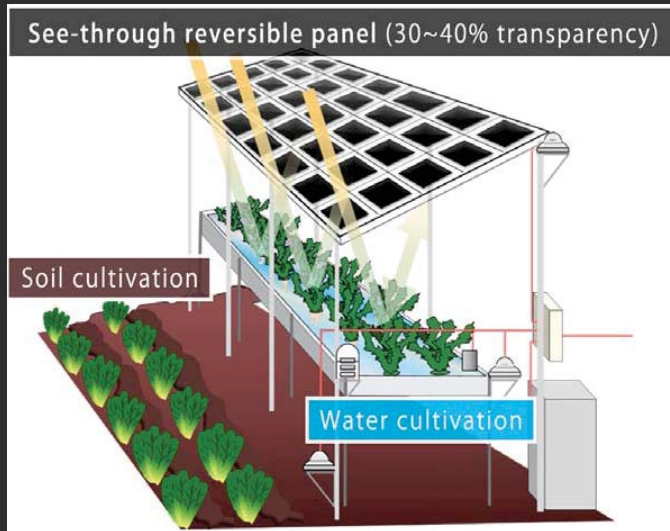
Support agriculture & help farmers increase their income



Innovative Technology

Solar Farm®

Innovative Technology



Solar Farm®



Solar Farm® is a system that improves food and energy security by providing year-round clean solar energy and high quality produce.



Solar Farm® increases land utilization to 120% by combining solar power generation and horticulture operations on the same piece of the land



Solar Farm® system can mitigate damage for income of farmers (risk of agriculture) through sales of electricity even at the time when abnormal weather events might happen then cultivation facilities and crops are damaged.



Solar Farm® can reduce water demands of plants due to the increase of shade (made by solar panels) and the use of hydroponic systems

Innovative Technology

Precision agriculture efforts in Solar Farm®

- **Spray-hydroponics system:** System that spray appropriate amount of fertilizer directly to the root of crop.
Benefits : Reduce water usage & increase fertilizer efficiency
- **Automatic air-conditioning system:** Automatic system that stabilizes the temperature & moisture inside of the house.
Benefits: Reduce man-power
- **Plant monitoring system:** System that collects the plantation data (air condition, fertilizer, water condition)
Benefits: Enable analysis of the plantation data, which allows us to make an effective future cultivation plan
- **Automatic culture fluid supply system:** System that supplies the necessary culture fluids into the soil by using soil condition detecting sensors
Benefits: Reduce a loss & increase a quality of the crop

4 types of Solar Farm®

Hydroponics with high benches



Soil culture with hydroponics



Soil culture with watering system



Soil culture



Possible crops that can be cultivated under Solar Farm®
 Our Solar Farm technology is unique and its special see-through panel has been patented




Greenhouse	A Hydroponics with high benches						
	B Soil culture with hydroponics						
	C Soil culture with watering system						
Ground	D Soil culture						

Our owned Solar Farm® up to today

SolarFarm® In Mongolia



Solar Power Plants in Monnaran



Power Output

Monnaran

10.3 Mw
28 ha



CO2 Reduction

15,000 t / year
(JCM)

7 billion yen
For Facility



Renewable Energy Supply

6,500 houses

※The average of power usage in Mongolia is 184wh.

SolarFarm® In Japan



Effective use of Abandoned Farmlands



Power Output

117Mw
(187 places)

Total Revenue

47 billion yen
/ year



CO2 Reduction

150,000 t / year
(Carbon Pricing)

9.3 billion yen
(50€)

3.75 billion yen
(20€)



Renewable Energy Supply

20,000 houses

※The average of power Usage in Japan is 300kwh.