

LONGER SHELF LIFE BIGGER PROFITS



SAME
FRESHNESS,
FROM FARM
TO MARKET.



ecofrost LINK

Modular Energy Efficient
Solar Cold Room



BUILDING A SMART & SUSTAINABLE FUTURE.

Ecozen is a technology company. Over the last 12 years, our cleantech (solar energy-based), IoT enabled and motor control solutions are helping build a smart and sustainable future. We believe technology and innovation has the power to bring change. We look to harness this power to build solutions that deliver impact to our customers, our people and our planet.



OTHER PRODUCTS

ecotron
by **ecoZEN** | SOLAR PUMP
CONTROLLER SET

‘India’s leading solar water pump manufacturer’

Ecotron the smart AI & IoT enabled solar pumping solution (controllers, motors & pumps) provides farmers with stable and efficient irrigation, especially in areas with inconsistent or no electricity supply.

It helps increase farm yield, reduces operating costs and increases farmer earnings.



OUR TECHNOLOGIES



Motor controls



Full stack IoT



Thermal energy storage



FLOWERS



VEGETABLES



FRUITS

SMART SOLUTION FOR A SUSTAINABLE FUTURE.

ecofrost 





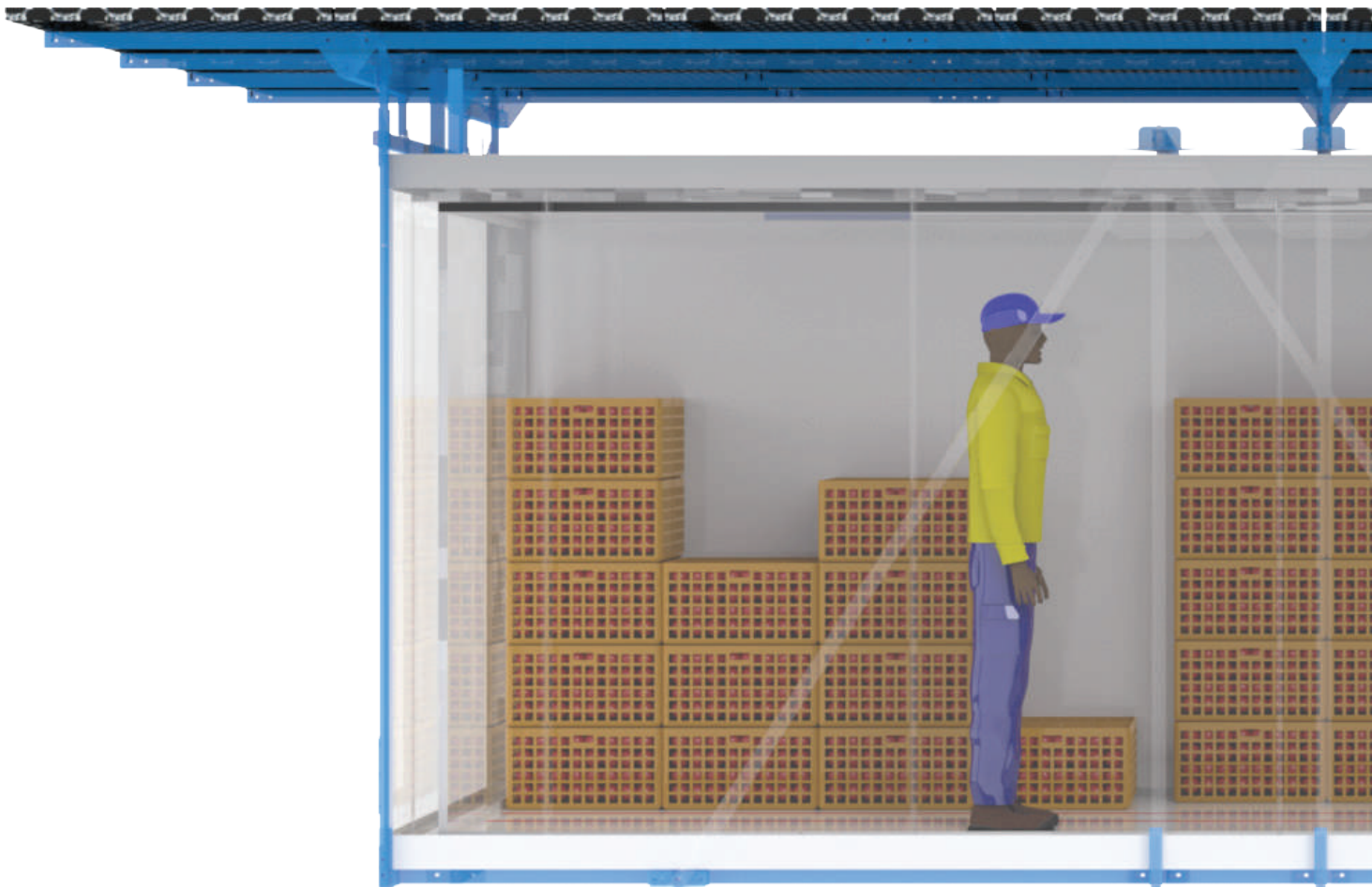
REDUCE WASTE, INCREASE SHELF LIFE, REACH FARTHER MARKETS & EARN MORE

Empower farmers to earn more by pre cooling and storing their produce.

1800 121 7515
ECOZENSOLUTIONS.COM



MODULAR BY NATURE.



A standalone cooling system designed to operate reliably in regions with challenge of quality power supply. It enables you to retain the quality of your perishable produce & can be used in a packhouse, mandi or at a farm gate.

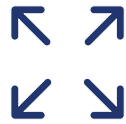
The PVC curtain obstructs the flow of cold air from going out side and hot air entering inside. It also stops dust and files from entering the cold room.



**PRE-COOLING
WITHIN 6 HOURS**



**SMARTPHONE
CONTROLLED**



**CUSTOMISABLE
ROOM SIZE**



**REALTIME
DATA LOGGING**



Available Room Storage Capacity : 2 MT - 30 MT

60mm - 100mm PUF Insulation



Our 16x8x8 (Ft) variant comes with a benefit of probability.
With different farm, change it's location.

(A) ICE CORE

Unique thermal energy based technology. Provides you low cost, battery-less upto 30 hour backup.



Separate Refrigeration Unit Design



4 - 10° C Temp. Range



Humidity Control Range 65% - 95%



R407 F Refrigerant
1.5 - 2.7 TR Capacity

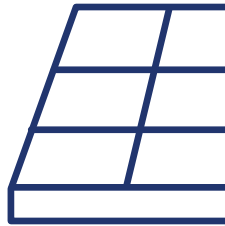
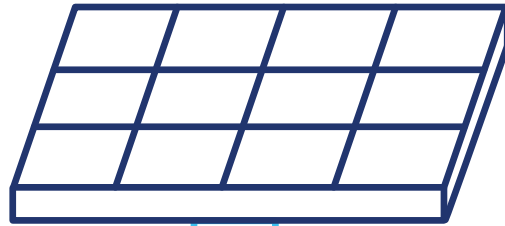
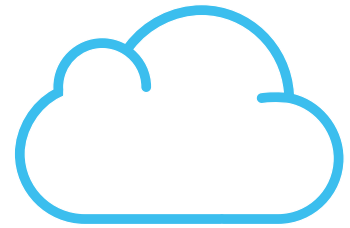


Standalone Solar Capability of 5 KW.

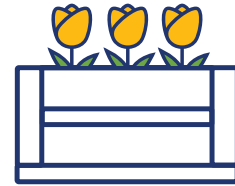
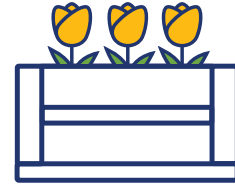


(B) INVERTER TECHNOLOGY

Inverter technology based refrigeration system that works efficiently, even during hours of low sunlight.

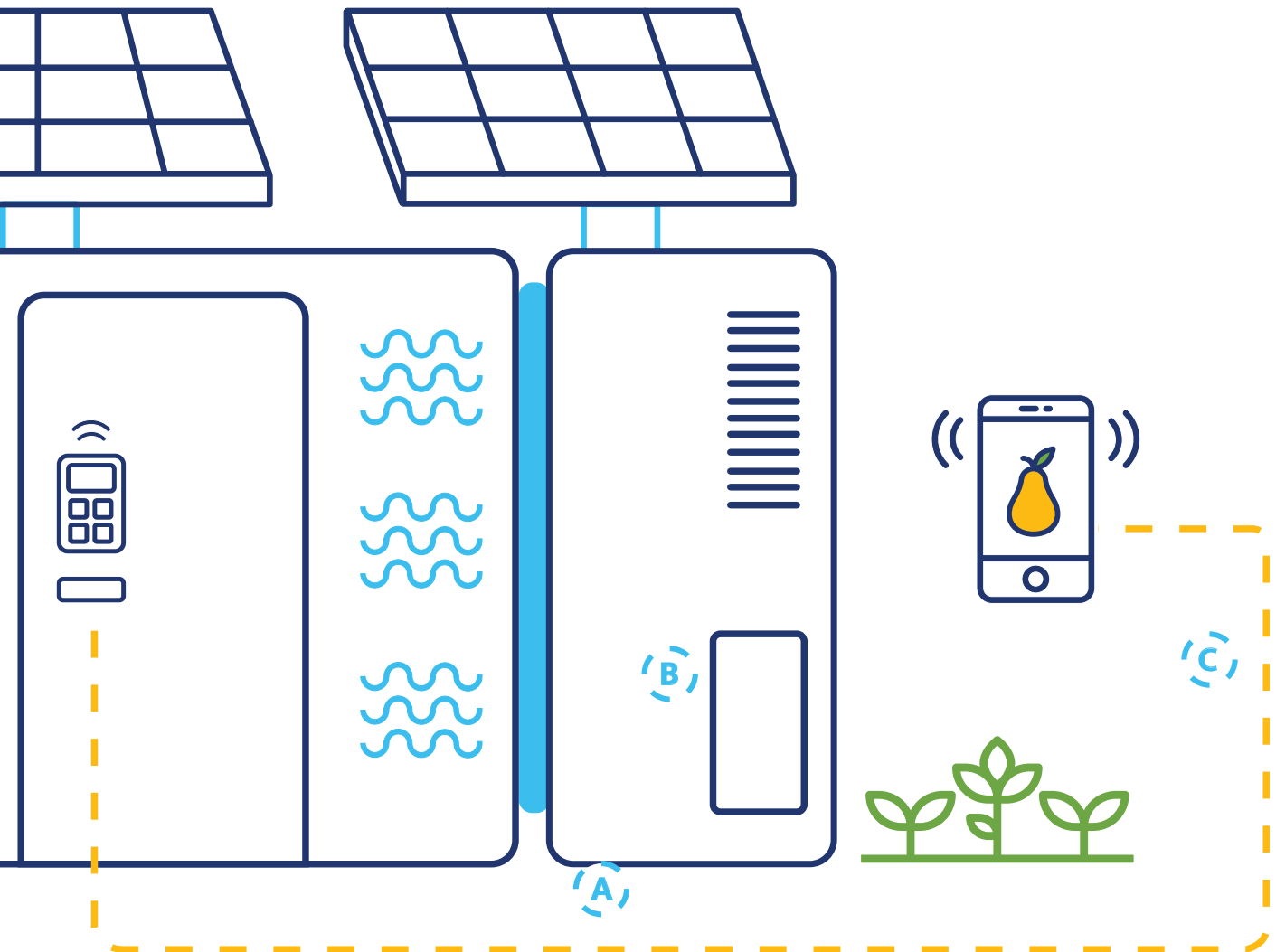
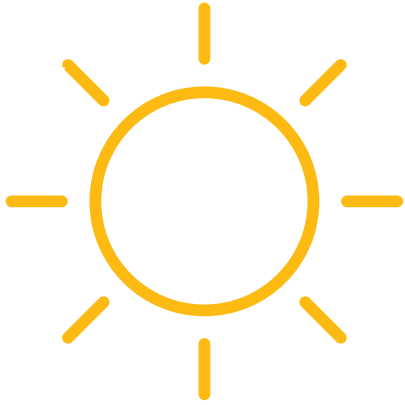


ecofrost



ARTIFICIAL INTELLIGENCE

A digitally advanced system that provides real time data about the cold room on a smartphone.



YOUR PRODUCE, YOUR FIT.

Ecofrost is available in different sizes



2

METRIC TONNES

Your mini powerhouse



5

METRIC TONNES

One that fits many



10-30

METRIC TONNES

For bigger requirements



**ECOFROST
LINK**

Convert any insulated room into a cold room.

This clean machine comes with a great deal of features



Realtime Data Logging



Smartphone Controlled



Separate Refrigeration Unit Design



Pre-cooling within 6 Hours



R407F R407 F Refrigerant
1.5 - 2.7 TR Capacity



4 - 10° C Temp. Range



Humidity Control Range 65% - 95%



Thermal Backup of 24-30 Hours



IoT Enabled Predictive Maintenance



Portable Unit

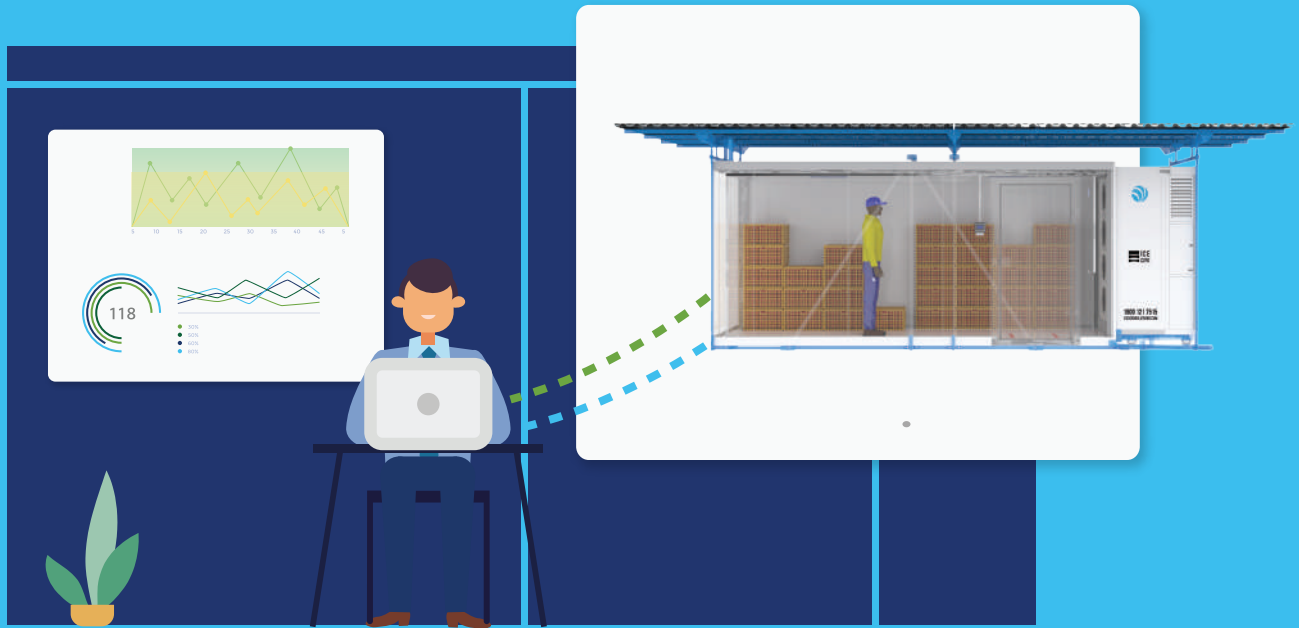


Powered by Ecozen AI



Pre-cooling & Staging

We monitor your ecofrost 24x7



The data coming from our on field installations of ecofrost helps us keep your device up-to-date. IoT sensors & Artificial Intelligence helps us resolve issues, even before the user can identify them. This predictive analytics makes our service process efficient.

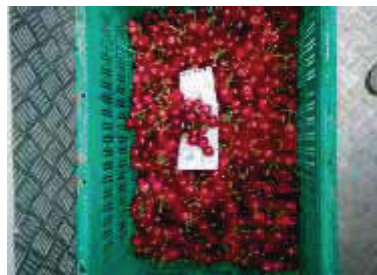
120+ MONITORING PARAMETERS



- ✓ Humidifier
- ✓ Door Open Status
- ✓ Discharge Pressure
- ✓ Comp. Solar Energy
- ✓ Comp. Grid Energy
- ✓ Temperature
- ✓ Battery Charging
- ✓ Signal
- ✓ Humidity
- ✓ Battery Current
- ✓ Ambient Temperature
- ✓ Fan Status
- ✓ Grid Power
- ✓ Compressor
- ✓ Battery Voltage

HOW BIG BASKET PROCOOLED & PRESERVED CHERRY FRUITS AND SENT IT TO FAR AWAY MARKETS?

With Ecofrost Solar Cold Room,
Big Basket kept their Cherry produce fresh during transportation which helped to reduce dump at customer level.



TIME OF HARVEST

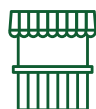
₹ 200-230/KG

Average market rate

STORAGE



Stored in
Ecofrost



Connected to
farther markets

TIME OF SALE

₹ 300-400/KG

Selling Price



Quality
Preserved

WITH ECOFROST, PRAGATI FPO HELPED INCREASE FARMERS EARNINGS BY 2X.

The FPO has over 1000 member farmers, of which 200 grow flowers. They provide Ecofrost on CaaS basis to their member farmers.



PROBLEMS FACED



Market Price
Fluctuations



Lower Farmer
Income



No funds to
invest in growth

SOLUTION

Purchased Ecofrost in 2017, to mitigate price fluctuations, reduce waste and increasing earnings for both the FPO and its farmers.



2.5X

Maintained lowest price at INR 5K as compared INR 2K without Ecofrost.

2.0X

Increased earnings to INR 60 per kg against INR 30 without Ecofrost.



Service fees for FPO at 5% of gross revenue of farmers used in creation of corpus.



HOW MR. SHITOLE PRESERVED HIS PRODUCE FOR BETTER PROFITS

With **Ecofrost Solar Cold Room**, Mr. Shitole's Chrysanthemum produce was kept fresh till the festive season when demand is high.



TIME OF HARVEST

1300 kgs

160 crates

₹30/KG average market rate

STORAGE



Stored in Ecofrost



Connected to farther markets

TIME OF SALE

₹80/KG

Quality Preserved



Selling Price



+POSITIVE IMPACT

With sustainable innovations, our holistic solutions have driven a major positive impact on the value chain, livelihoods and the environment altogether.

21,000 FARMS
ENABLED TO BE
SUSTAINABLE

30,000 TONS
COMMODITY
WASTAGE SAVED

100 MN KWH
CLEAN ENERGY
GENERATED/YEAR

KEY MILESTONES



600+
Ecofrost (Solar Cold Rooms)



1,00,000+
Ecotron (Solar Pump Controller)



10+
Patents Applied





15.1 L TONNES
CO2 emissions saved

1.3 MN TONS
of GHG emissions saved

5,09,415 ACRES
of land area irrigated

30,650 MT
storage infrastructure

DIFFERENT PEOPLE, DIFFERENT NEEDS.

Customer - centric ownership models



Upfront Purchase

For customers with an annual cold storage requirement.



Lease & Rental

Leasing helps customers with seasonal requirements to protect their produce at a minimum cost.



Community Model

3-5 customers can collaborate to own an Ecofrost and use it during different seasons as per their requirement.

EMPOWERING LIVES,



THAT NOURISH LIFE.

The ecofrost unit.

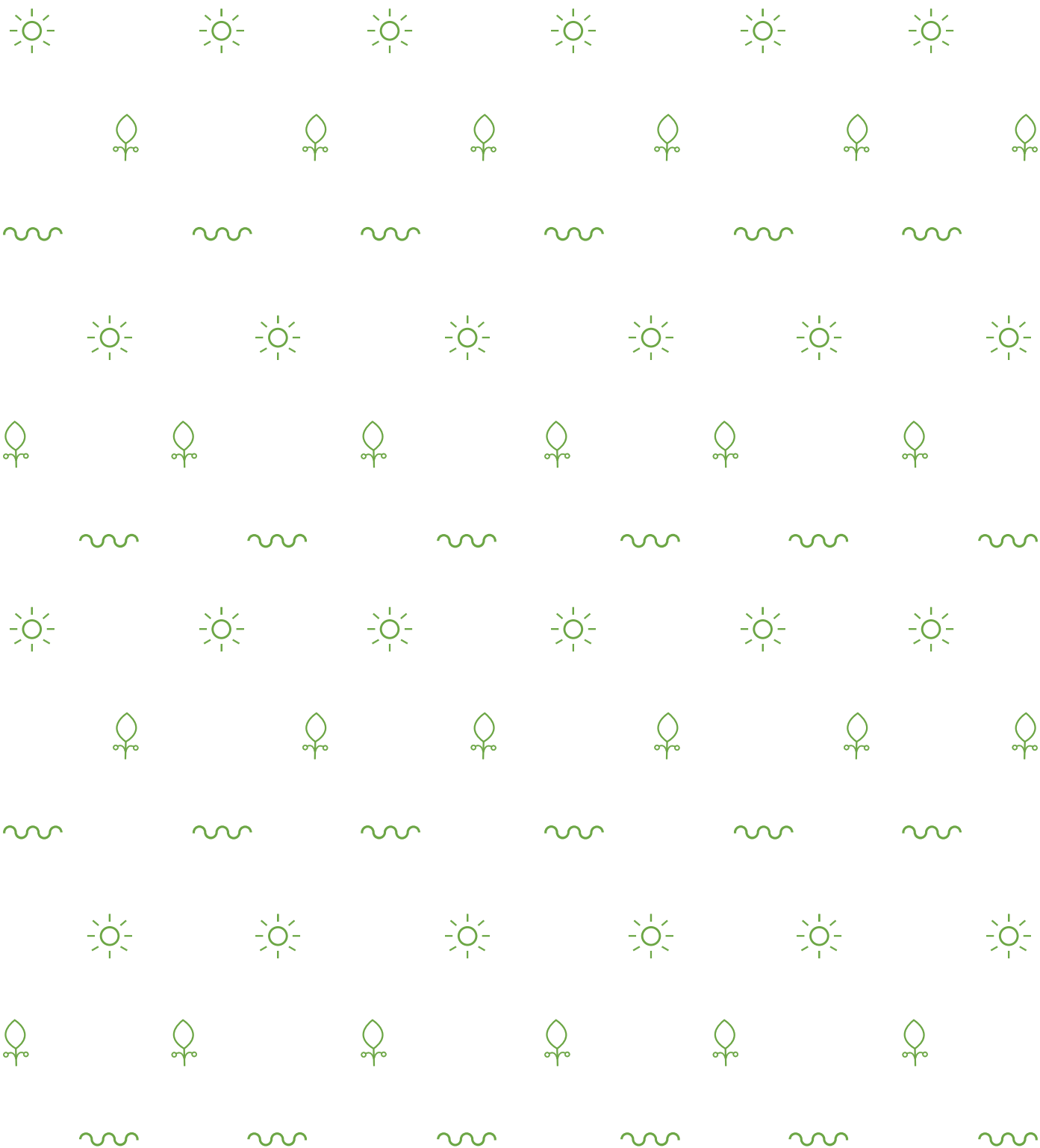
GREEN FUTURE VALUE CHAIN SOLAR COOLING FLOWER FARMING PRE COOLING

Kapil More, a flower farmer in Maharashtra, employs our 5-tonne AI enabled Ecofrost solar cooling system. By storing his produce in an Ecofrost, He is able to increase the shelf life of flowers by up to 15 days. He gains the time and possibility to sell at better prices as a result. Farther markets open up, and losses are reduced drastically.

Kapil intends to expand this pre cooling capacity by as much as 50 metric tonnes. We are fortunate to have reached over 1.3 L farmers so far, and with more farmers choosing ecozen everyday our smart technology solutions are changing lives and building a smart and sustainable future.

All Image Credits: Opmeer Reports for Oiko Credit





ecozen

HEAD OFFICE:

Survey No. 134/1, 134/2, 130/3, Dehu Road,
Katraj Bypass, Tathawade, Pune - 411 033,
Maharashtra, India

Toll Free: 1800 121 7515

Whatsapp: +91 91122 58800

Email ID: care@ecozensolutions.com

