

**Big Solar Gathering**  
**4 October 2024**



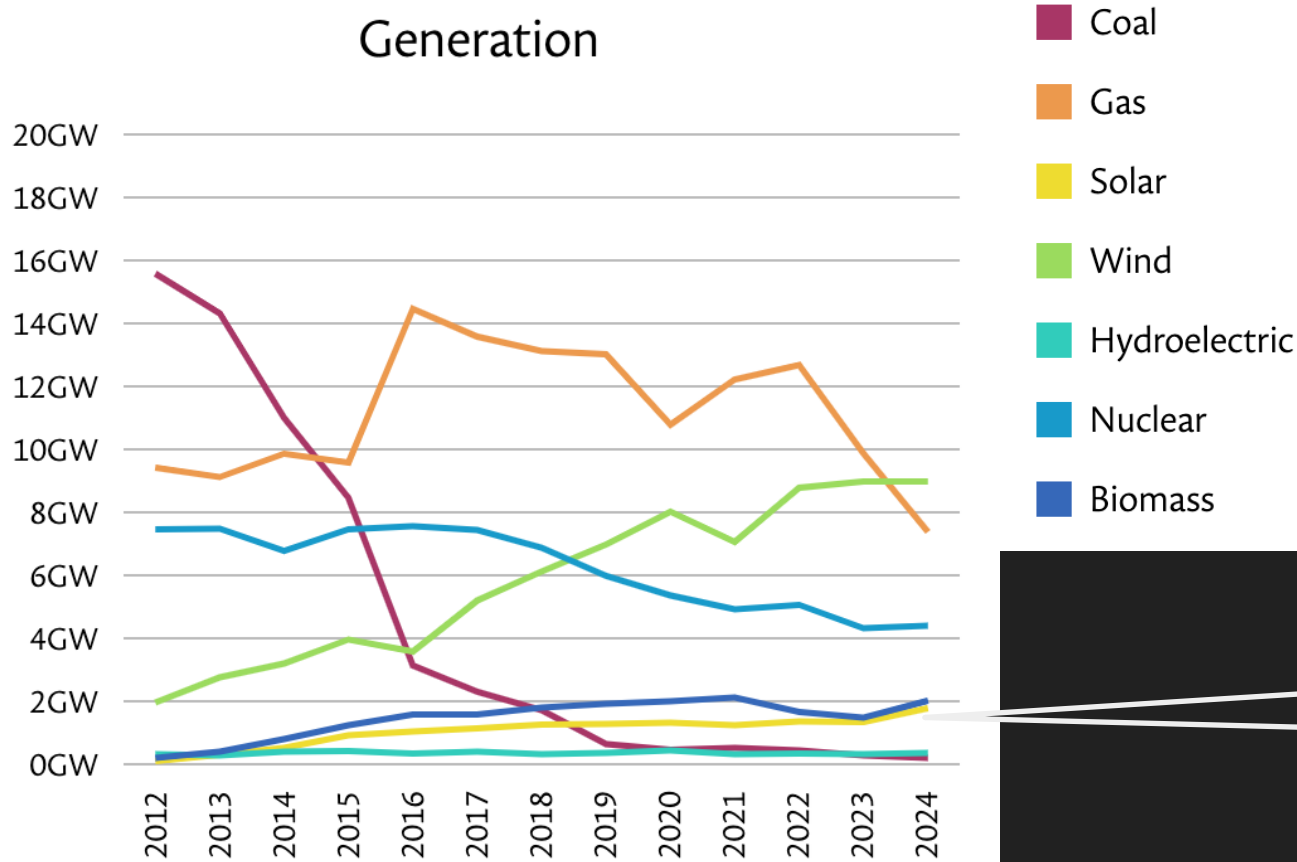
# Who we are

## A not-for-profit solar co-op working across the UK

- We build and own (mostly) rooftop solar on commercial and community buildings
- Hosts benefit from low-cost electricity at a fixed rate
- Carbon-first, ethical and professional
- Owned by our Volunteer and Investor Members
- Founded by experienced community energy pioneers



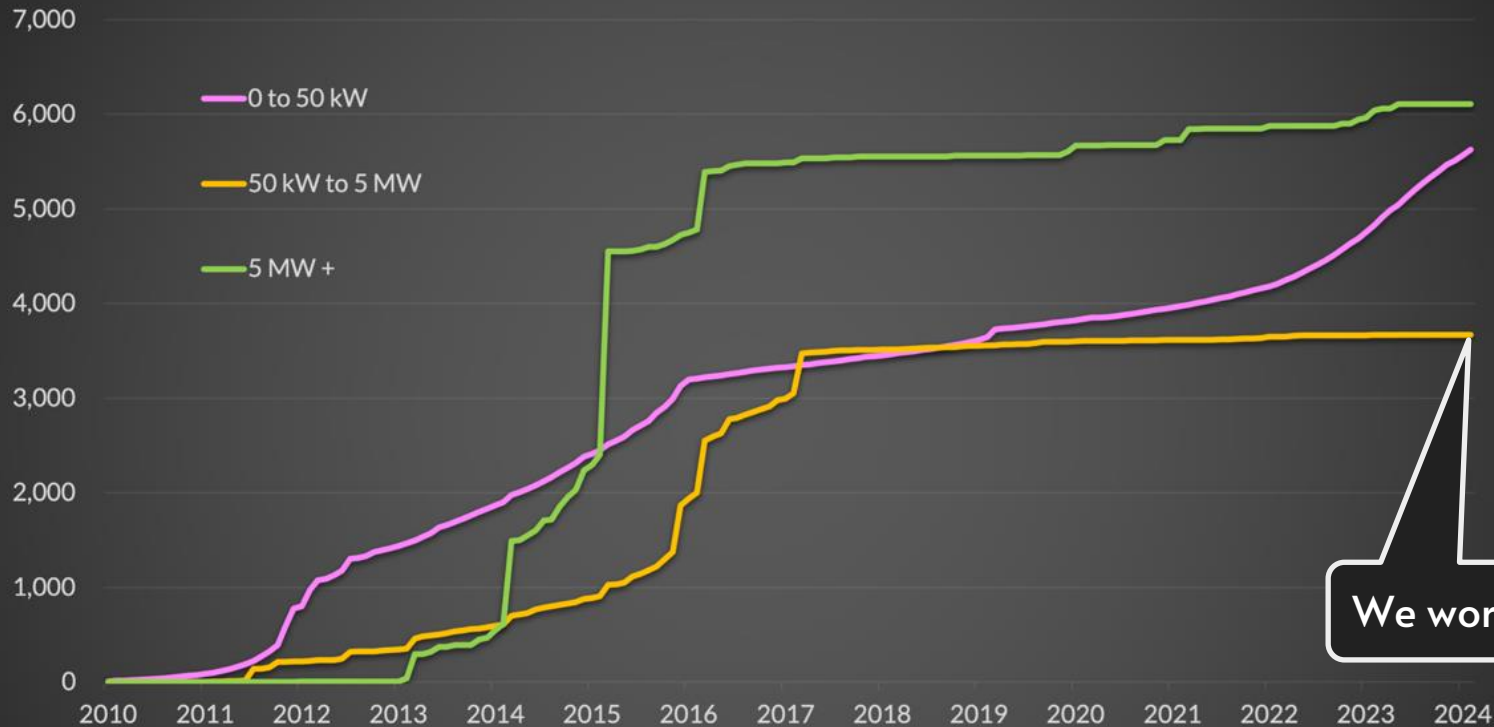
## Generation



We are part of  
this



## MWp of solar deployed in UK



UK solar  
rooftop  
potential  
40 GW?

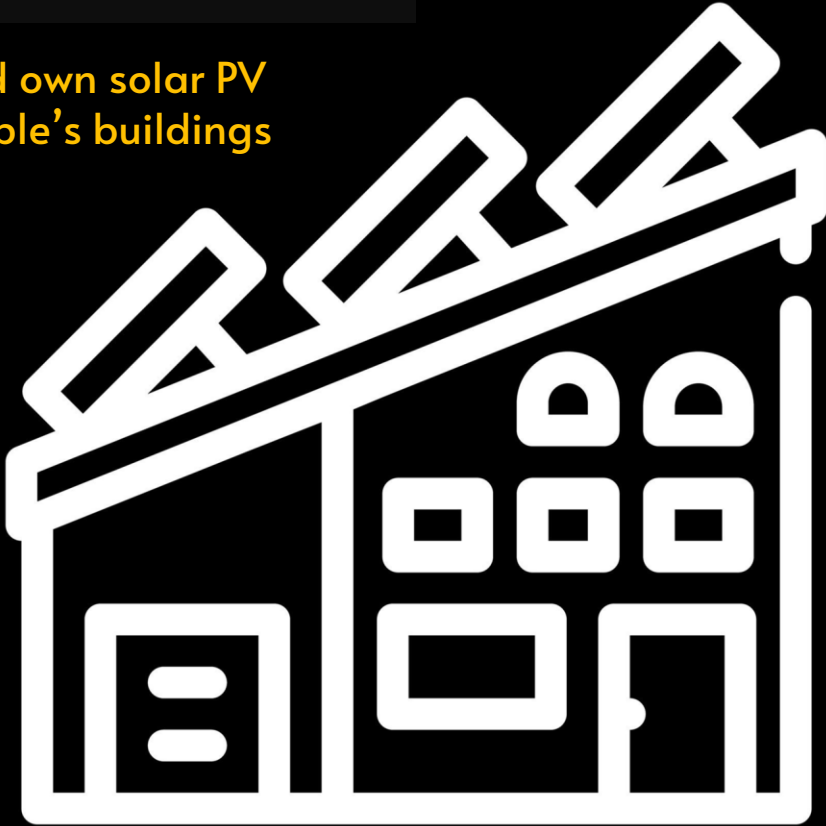
We work here

Data source: DESNZ



# How we work

We build and own solar PV  
on other people's buildings



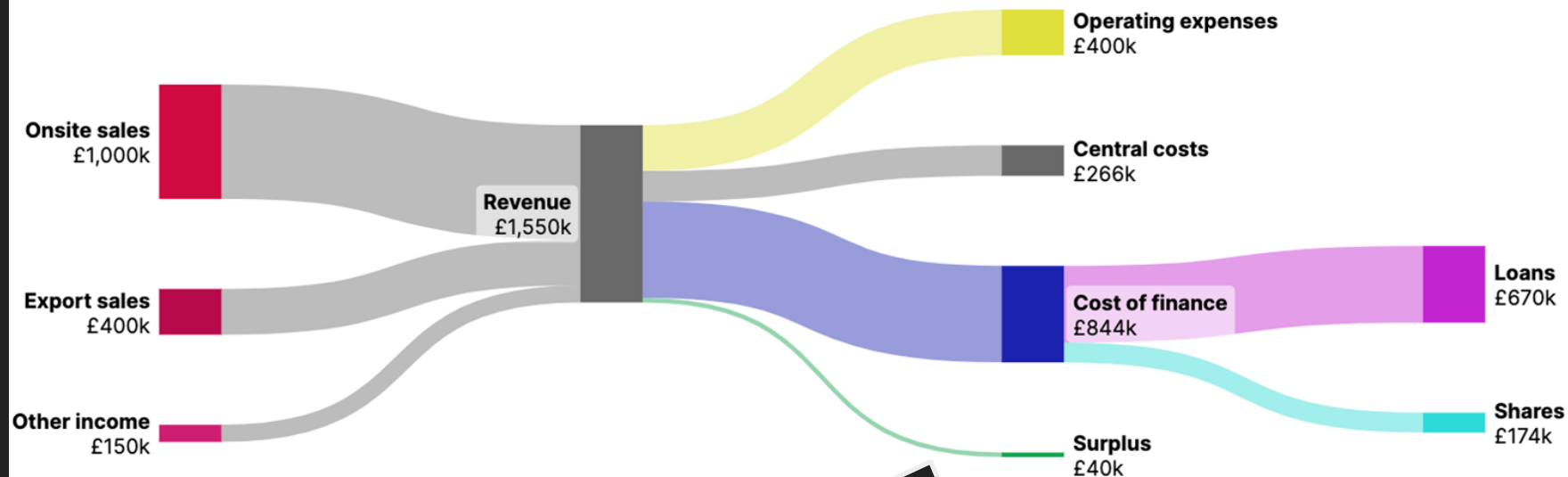
We sell them electricity from  
the solar

We sell any surplus to grid

They get a low and fixed  
price for 30yrs under a fair  
legal agreement



# Flow of funds (2028 projection)



Any surplus is  
reinvested in new  
solar





# Board



**BIG SOLAR CO-OP**



# Staff



**Noël Lambert**  
Content and  
Community Lead



**Chris Rigby**  
Technical Lead



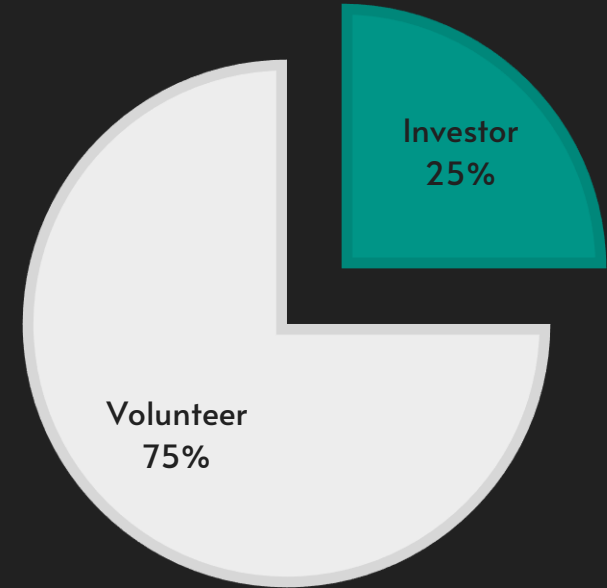
**Jon Hallé**  
CEO



**Dean Hill**  
Client Lead



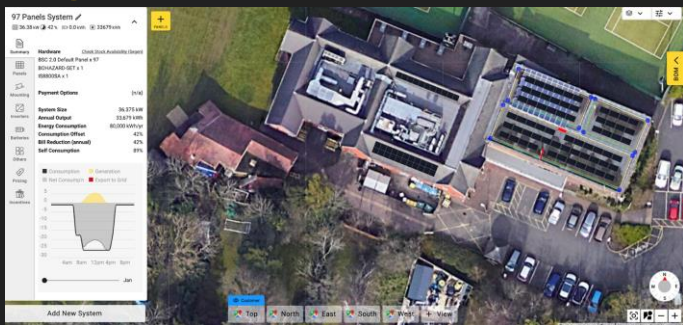
# Volunteer members



Over 100 fully signed-up Volunteer Members



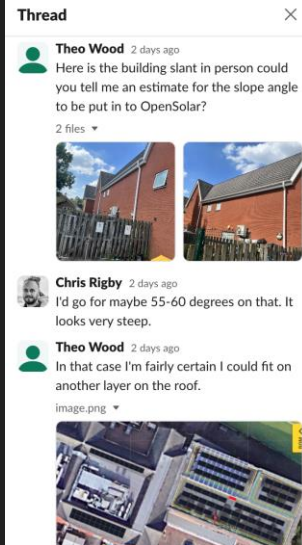
# MONDAY



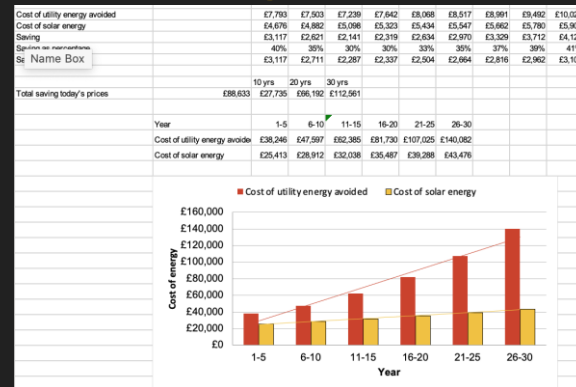
# THURSDAY



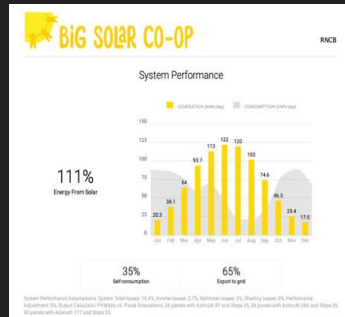
# TUESDAY



# WEDNESDAY



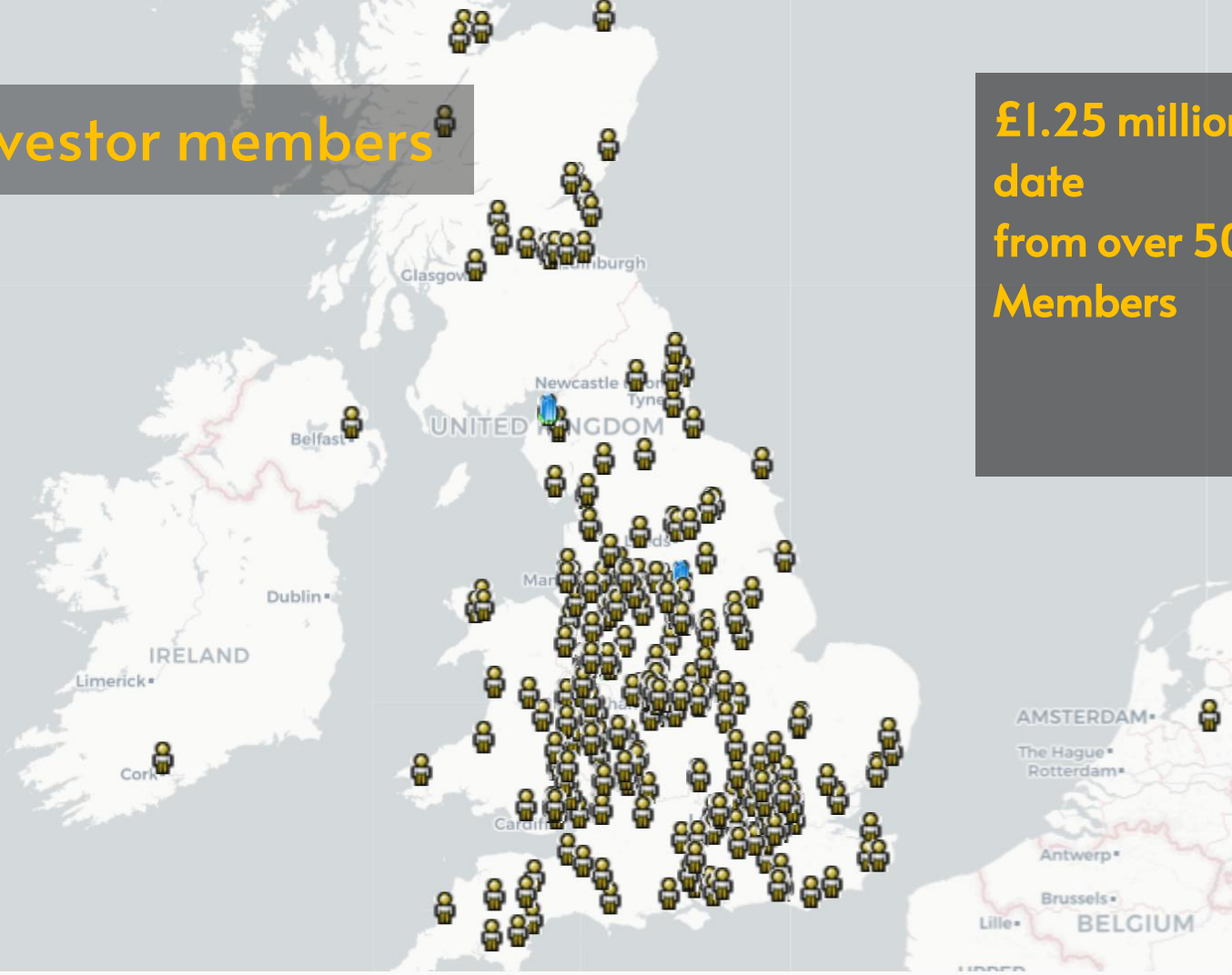
# FRIDA





Investor members

£1.25 million raised to  
date  
from over 500 Investor  
Members



**BIG SOLAR CO-OP**



# Operational sites



**BIG SOLAR CO-OP**

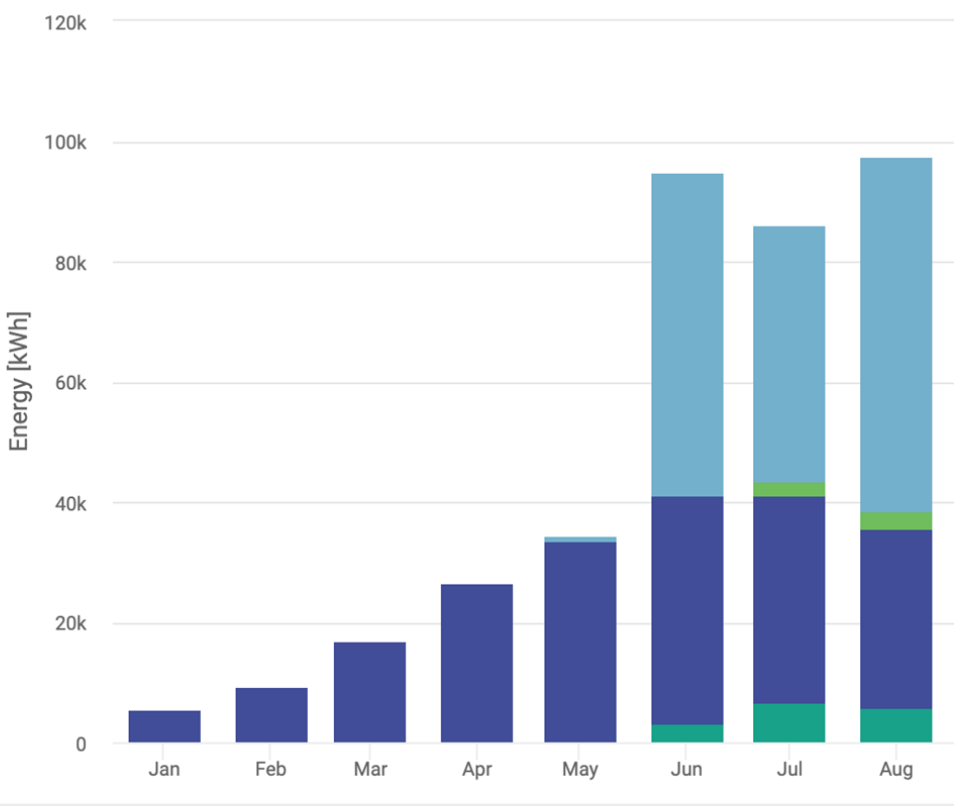


Deselect all

Time range

2024

PV system	kWh/kWp	kWh
Eco-Pak Limited	359.05	179526.46
Eden Court Medical Centre	308.40	6168.03
Kerry foods - Big Solar Co-op	731.40	204379.07
Twiggs Stores - Matlock	356.15	17807.48

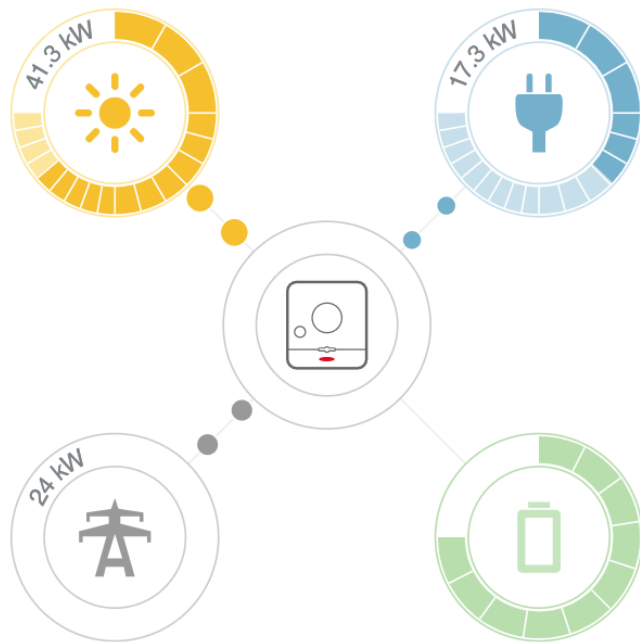


<

2024



## CURRENT POWER

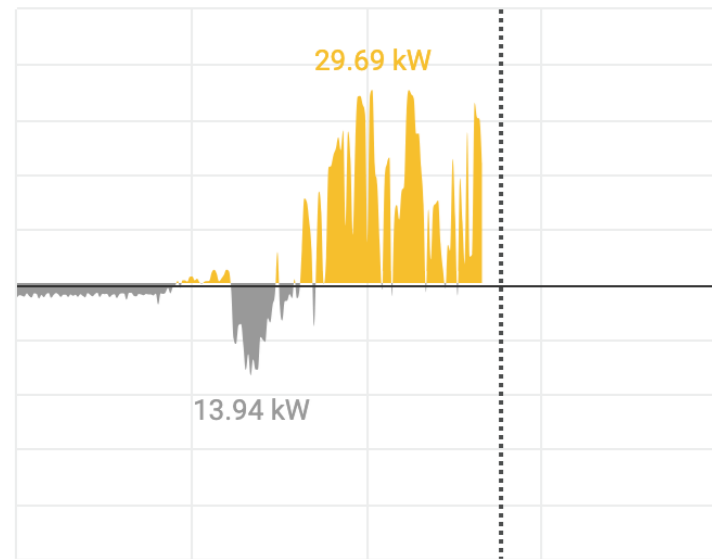


## ENERGY BALANCE TODAY



▲ 97.53 kWh

30.13 kWh ▼



00h

06h

12h

18h

00h



# Sites for 2024/25/26

- Community and commercial sites.
  - Aim to build approx. 1/month
  - Rooftop sites from 30 kW to 2.9 MW!
- 
- Steel manufacturer, Leisure centre, School, Shopping centre, Golf club, Food packer, Visitor centre, Hotel ...



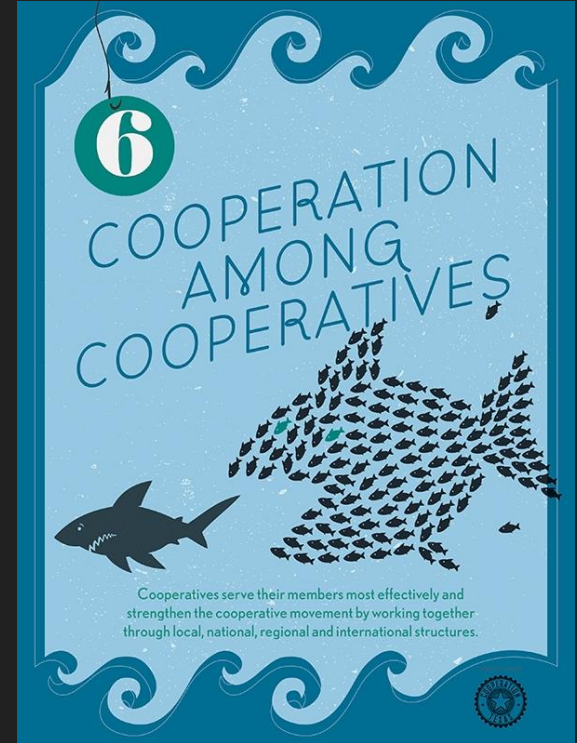


# Midcounties Co-operative

- 29 sites across the Midlands to be completed over next 18 months



Source: The Energyst





# Mergers

## Leominster Sunrise Co-op

- 94 kW array
- Transfer of engagements to Big Solar Coop
- Members become Big Solar Coop members or can withdraw
- We take over running the array
- Members freed up to look for more sites locally

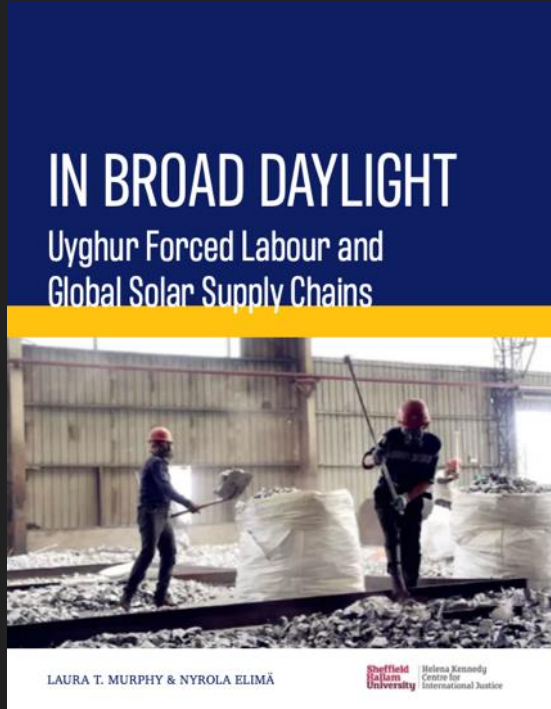
Other small solar co-ops considering mergers





# Ethical solar

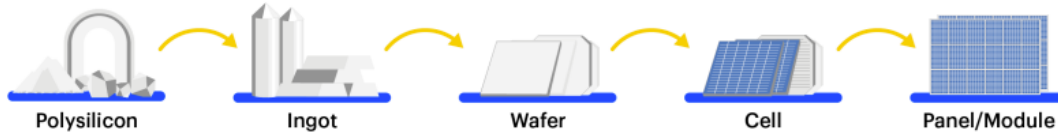
“many of the major Chinese producers of raw materials, solar-grade polysilicon, ingots and wafers ... are operating facilities in the Uyghur Region that have employed forced labour transfers of the indigenous people of the region”





# Low-carbon solar

Key stages in the main manufacturing process for solar PV

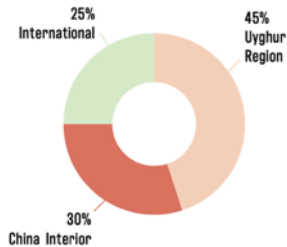


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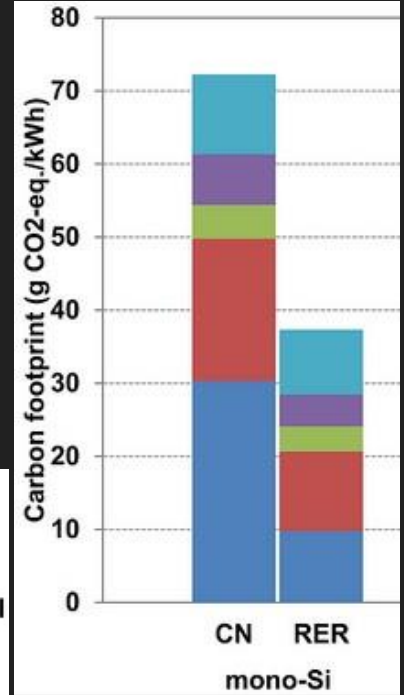
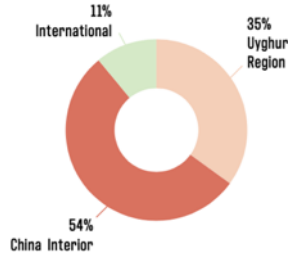
## Polysilicon Market Share

Source: Bernreuter Research

2020



2022



module  
 cell  
 wafer  
 ingots/crystal  
 Si feedstock

Domestic and overseas manufacturing scenarios of silicon-based photovoltaics  
Yue, You, & Darling 2014



# Ethical + low carbon solar

 MEYER BURGER

## Meyer Burger White

380 – 400 Wp

For higher energy yield over the same area:  
Heterojunction high-performance solar module  
with SmartWire Connection Technology (SWCT™).

-  **Made in Germany. Designed in Switzerland.**  
Production and development according to the highest quality standards.
-  **Highly profitable**  
More energy yield over the same area even on cloudy or hot days.
-  **Extremely durable**  
Outstanding cell stability and high breakage resistance



HETEROJUNCTION (HJT) TECHNOLOGY

## REC Alpha Pure-R

The REC Alpha Pure-R hits the sweet spot between high power and practical handling, in an elegant full-black design. Reaching 430 W in a compact form factor, it boasts an impressive power density of 223 W/m<sup>2</sup>, with 22.3% panel efficiency. Plus, its lead free (RoHS compliant), enabling homeowners to do even more environmental good.

Key documents:

[Datasheet \(400-430 Wp\)](#)

[Information sheet](#)

[More downloads](#)

Ask for REC Alpha Pure-R



## Exposure | Company

HIGH	Canadian Solar
VERY HIGH	JA Solar—Southeast Asia/US
VERY HIGH	JA Solar—China
HIGH	Jinko Solar—Southeast Asia/US
HIGH	Jinko Solar—China
VERY HIGH	LONGi Solar—Southeast Asia
VERY HIGH	LONGi Solar—China
VERY HIGH	Maxeon 3/5/6 Module / Sunpower X-/A-/M-Series
VERY HIGH	Maxeon / Sunpower Performance Series
NONE (UNVERIFIED)	Meyer Burger Technology
VERY HIGH	QCells
NONE (UNVERIFIED)	REC Group N-Peak and Alpha
VERY HIGH	REC Group TwinPeak 4
HIGH	Tongwei Solar
NONE (UNVERIFIED)	Trina Solar—Southeast Asia
VERY HIGH	Trina Solar—China



An aerial map of the Whiteborough solar project site. The map shows a large area with various colored rectangular blocks representing solar panels. The colors include shades of purple, blue, green, yellow, and pink. A red line runs vertically through the center of the site. A black line runs diagonally from the top left to the bottom right. A green line runs along the right edge of the site. A small orange square is located in the top left corner. A small orange arrow points to a small square on the map.

# Whiteborough solar

- 3.5 MW solar project
- Former opencast mine
- Second-life solar
- Aiming to be UK's lowest carbon solar install
- Planning, grid and lease in place
- Coming 2025



# Funding our growth

We need to raise £5m+ over next 2 years

- Investor Members
- Loans
- More shares and bonds





# Loans

## Short term

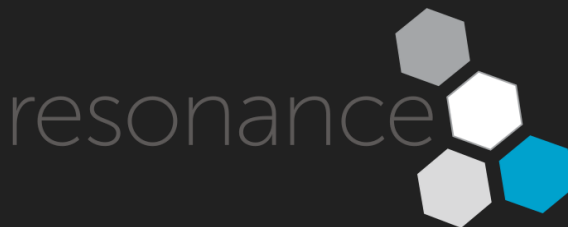
- 3-6 months
- Co-ordinating multiple loan makers
- Sub £500k
- Early 2024-Currently paying back

## Medium term

- 36 months
- £800k starting Autumn 2024
- £1.5m agreed in principle

## Long term

- 10 yrs+
- £5-10m
- Looking for suitable lenders





# Share offer

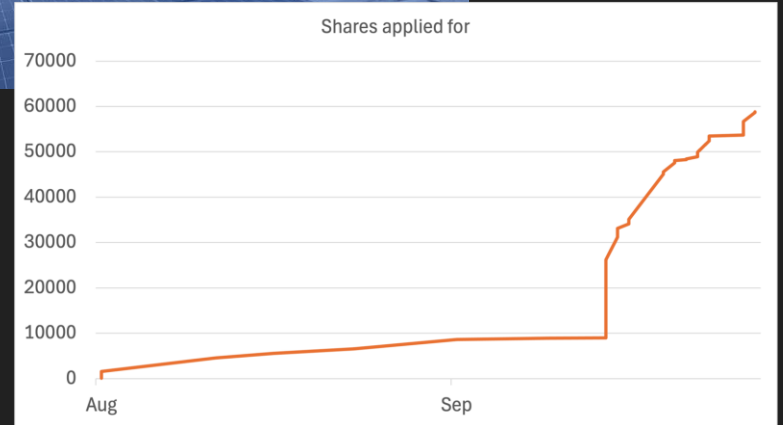
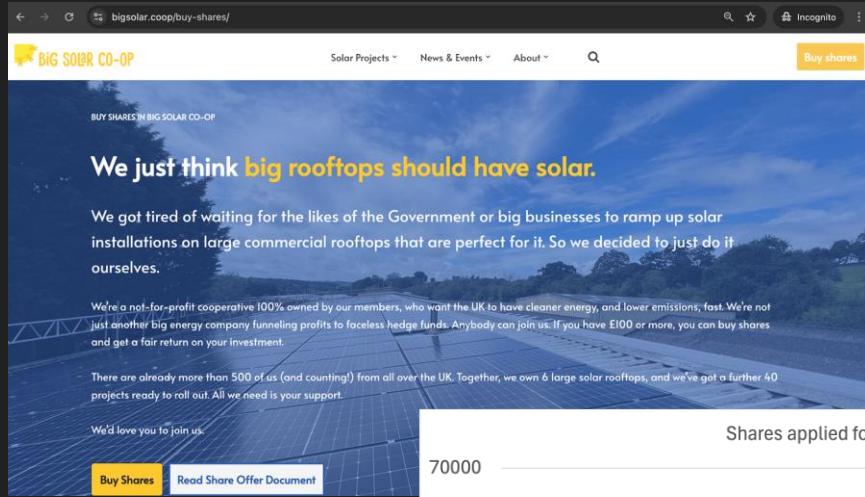
- Share target: +£1m by April 2025
  - Share offer is always rolling
  - Aim to pay interest to first investors this year at 3%
  - Interest target: 2% above base rate, min 5%
  - Interest can be re-invested
- 
- Planning IFISA-wrapped bond offer in 2025





# Re-launch

- Social media content and adverts
- New website pages
- Mailing list push





# Impact

Number of £1  
shares bought



Annual impact:



Power an average house's electricity needs for **4 months**



Drive **3,600 miles** in an electric car



Push enough gas-generated electricity off the grid to save **473 kg of CO<sub>2</sub>** - that's about **5%** of your personal carbon footprint



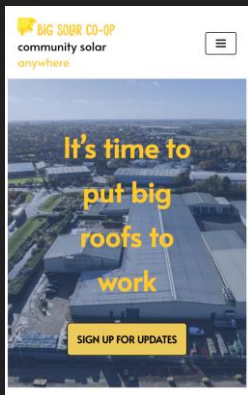
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## Investment webinar

Tuesday, 8 October 2024 1300 by Zoom



[www.bigsolar.coop](http://www.bigsolar.coop)

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