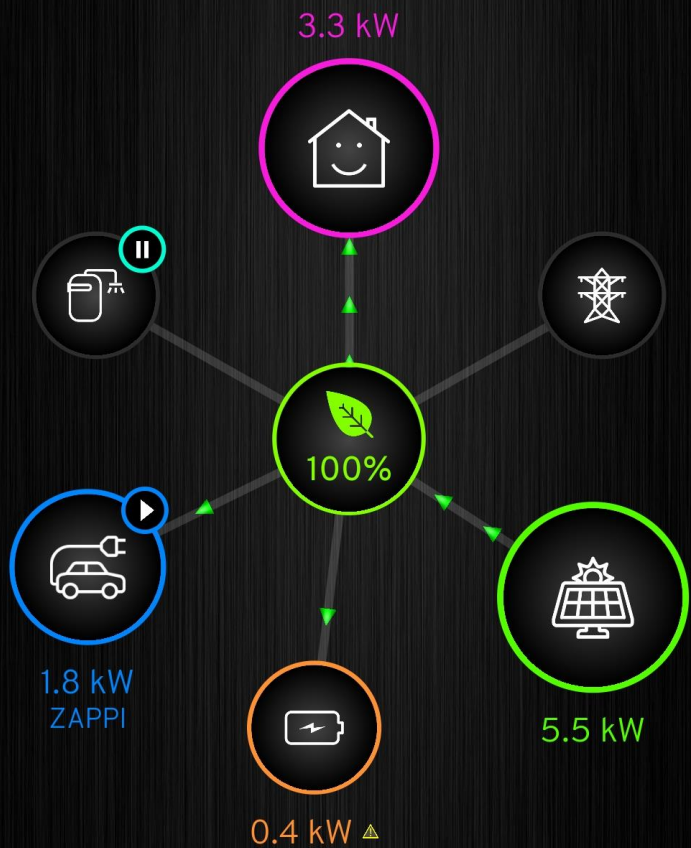




# **NIXON TOWERS GOES GREEN(ISH)**

**PAUL NIXON**



# Agenda

Why we decided to go Green

The Plan

The consequence (so far)

Conclusions

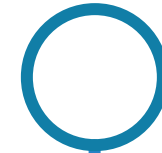
Questions

2019

# Why Green?

Eek!: Retirement?

What does Nixon Towers cost to run?



Looking at pension pot

What are essential costs?

What can we reduce?

Led to detailed analysis of all costs

Annual utility + fuel costs

- LPG (heating and hot water) £2k
- Oil (aga) £0.8k
- Electricity £1k
- Water £1k
- Petrol and diesel £2.7k
- Total £7.5k



2020

# Why Green?

Climate change research

Research and awareness

Desire to reduce personal impact

Desire to help others reduce impact



# 2021/2

## Why Green?

### Net zero plan

Plan to reduce:

- Electricity usage
- LPG usage
- Oil usage
- Diesel / petrol usage

Supplier selection

Planning permission (listed house)

### Cost of living crisis

Focus on ALL costs

Reduced usage

### Ukraine invasion

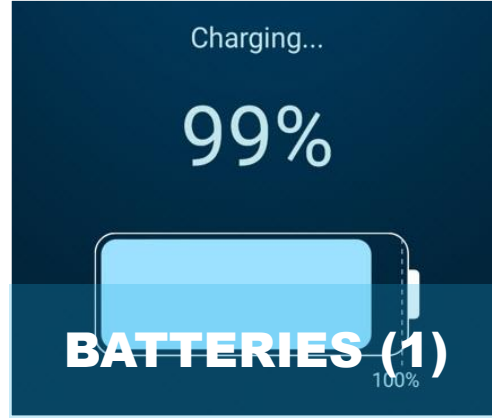
2 extra people in house

Stopped work to set up CAUSN

Cut costs!!!!!!



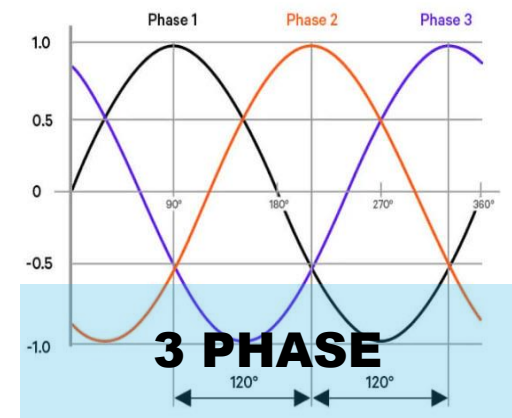
Feb 2022



Feb 2022



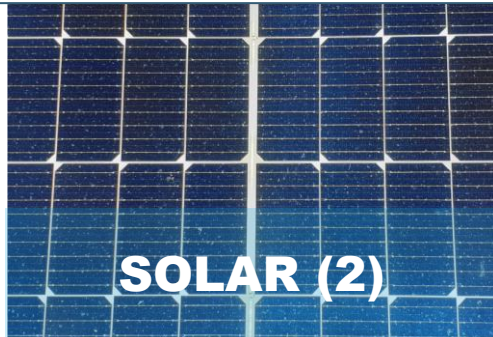
Feb 2022



Apr 2023

# Net Zero plan

Stop using fossil fuels  
Reduce running costs



Nov 2022

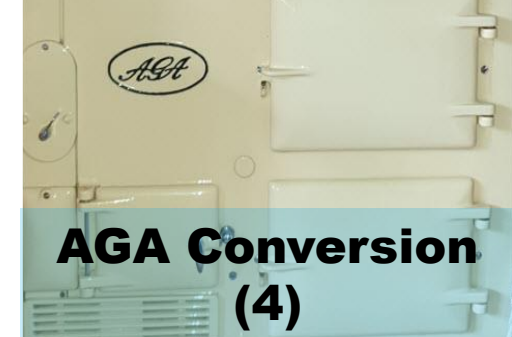


Nov 2022



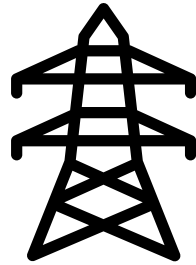
TBC

Generate majority of load  
Use off-peak for the rest

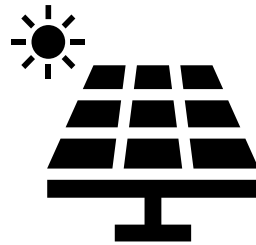


TBC

# Electric Vehicle



Charge off peak (0:30 - 4:30) @ 7.14p / kWh  
Typically circa £2.40 for 130 miles



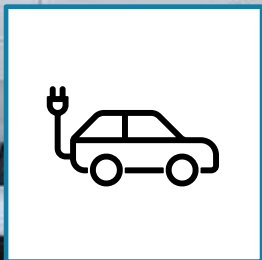
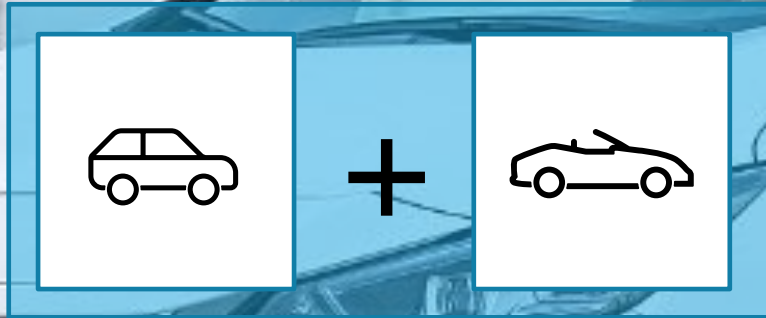
Use excess solar to charge car battery

Avoids:

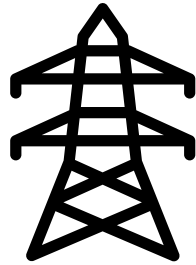
- Petrol @ lots per litre
- Car tax

Reduces:

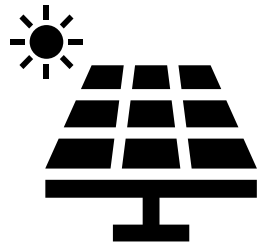
- Services costs (less to go wrong)



# Home batteries



Charge off-peak (0:30 - 4:30)  
@ 7.14p / kWh



Use excess solar to charge  
batteries



Run house on  
batteries avoiding  
peak tariff  
@ 32.71p / kWh

Plus:

- Manual power back up during power cuts





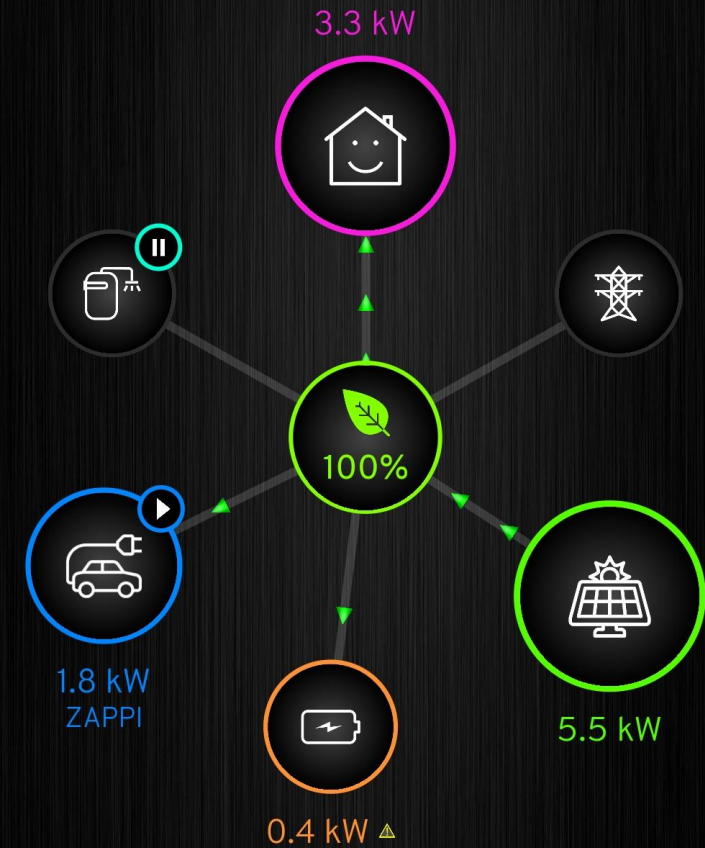


# Zappi Car Charger

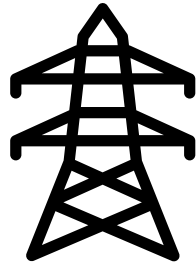
## Plus:

- Integrates all components
- Allows setting of priority of what to do with excess power
- For instance:
  1. House demand
  2. Batteries
  3. EV
  4. Hot water (Eddi)
- Provides data

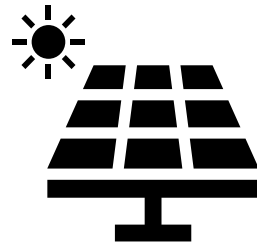
☰ Nixon Towers



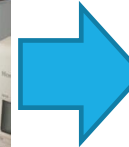
# Eddi (for hot water)



Charge off-peak (0:30 - 4:30)  
Cheaper than LPG IF below 8p / kWh

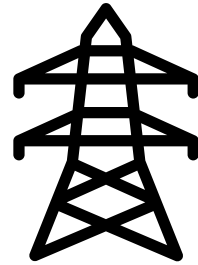


Use excess solar to heat hot water

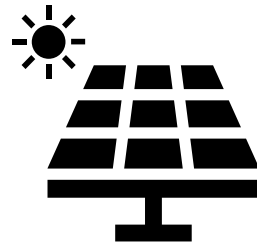




# Heat Battery



Charge off-peak (0:30 - 4:30)  
e.g. 7.14p / kWh

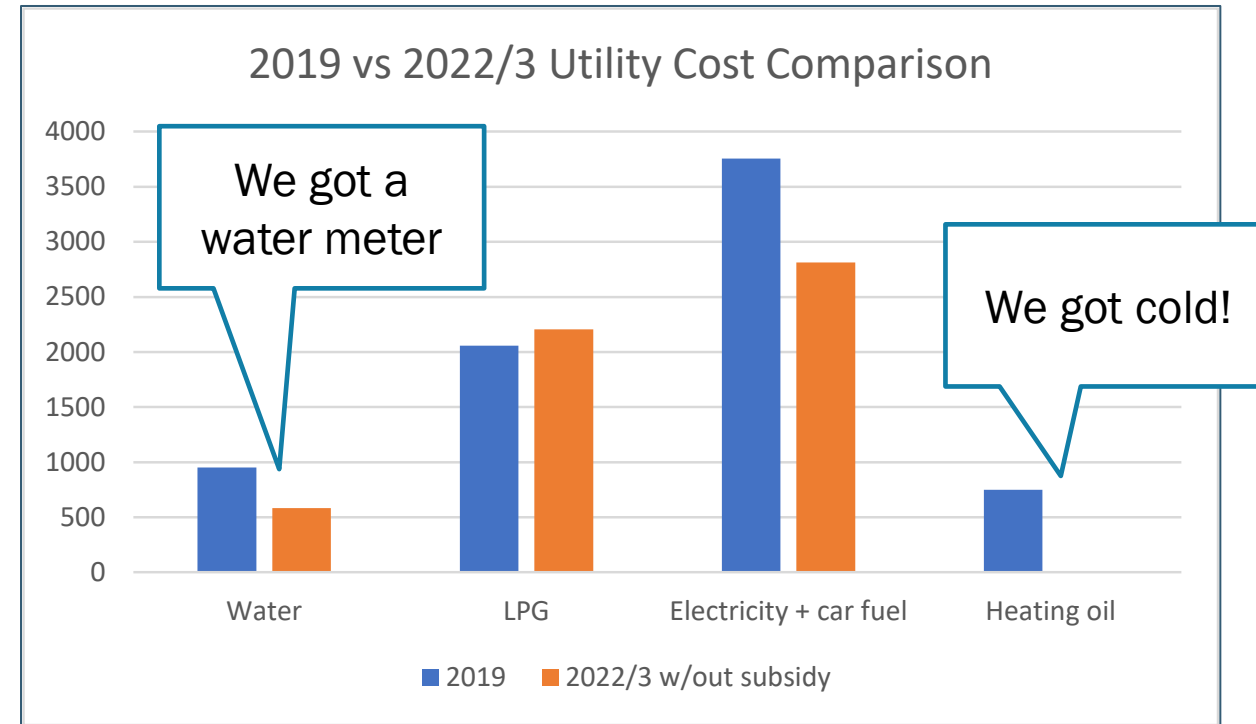
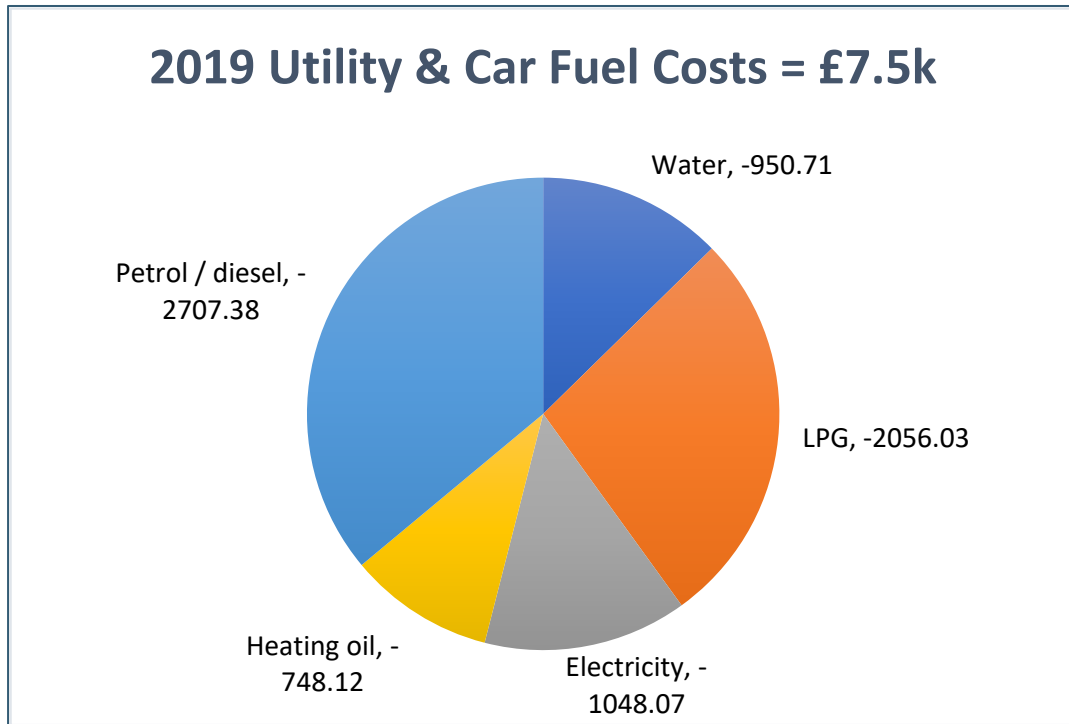


Use excess solar to heat up Heat Battery (sandstone block)

Sandstone heats hot water through heat exchanger

Objective: to get rid of LPG

# And the Consequence was...



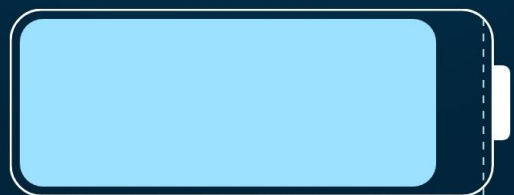
**2022/3 Electricity + car fuel costs (with Government fuel subsidies removed) = £2,813 (-25%)**

**Batteries:**

- Quickest payback: 2 – 3 year
- Cost circa £5k
- Considering adding more

Charging...

99%



100%

Power

0.00 kW

Voltage

320.70 V

Current

0.00 A

# Conclusions

**Solar and Eddi:**

- Only run through Winter
- Proof will be over next 6 months
- Cost circa £15k
- Better payback once Heat Battery installed

**The Installer is key:**

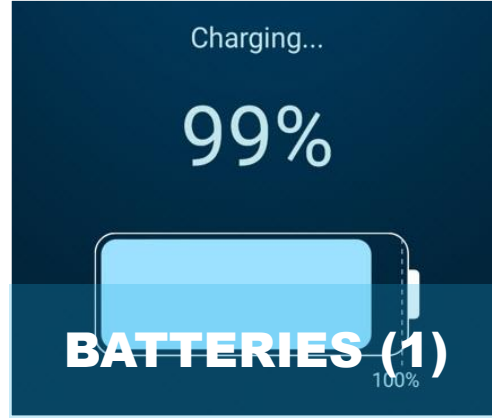
- Many poor ones
- Single component focused
- Don't care about after service

**I found a good one!****Check basics:**

- Roof insulation
- Drafts
- Consider thermal survey



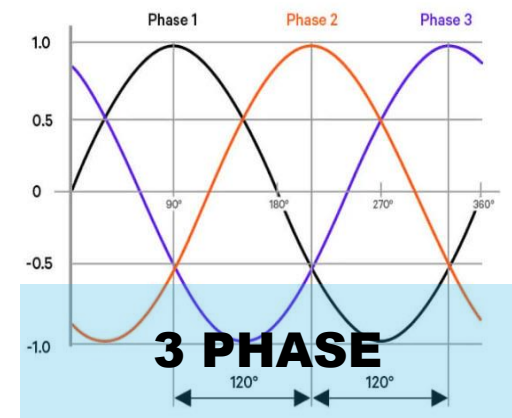
Feb 2022



Feb 2022

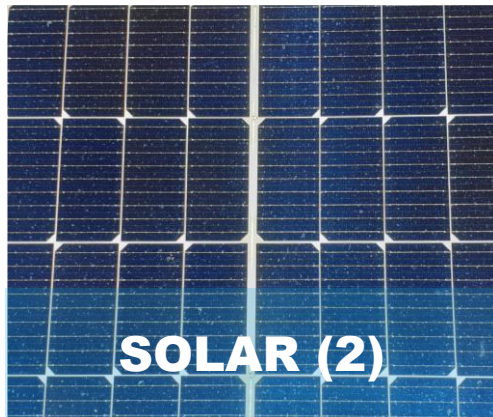


Feb 2022



Apr 2023

# Questions



Nov 2022



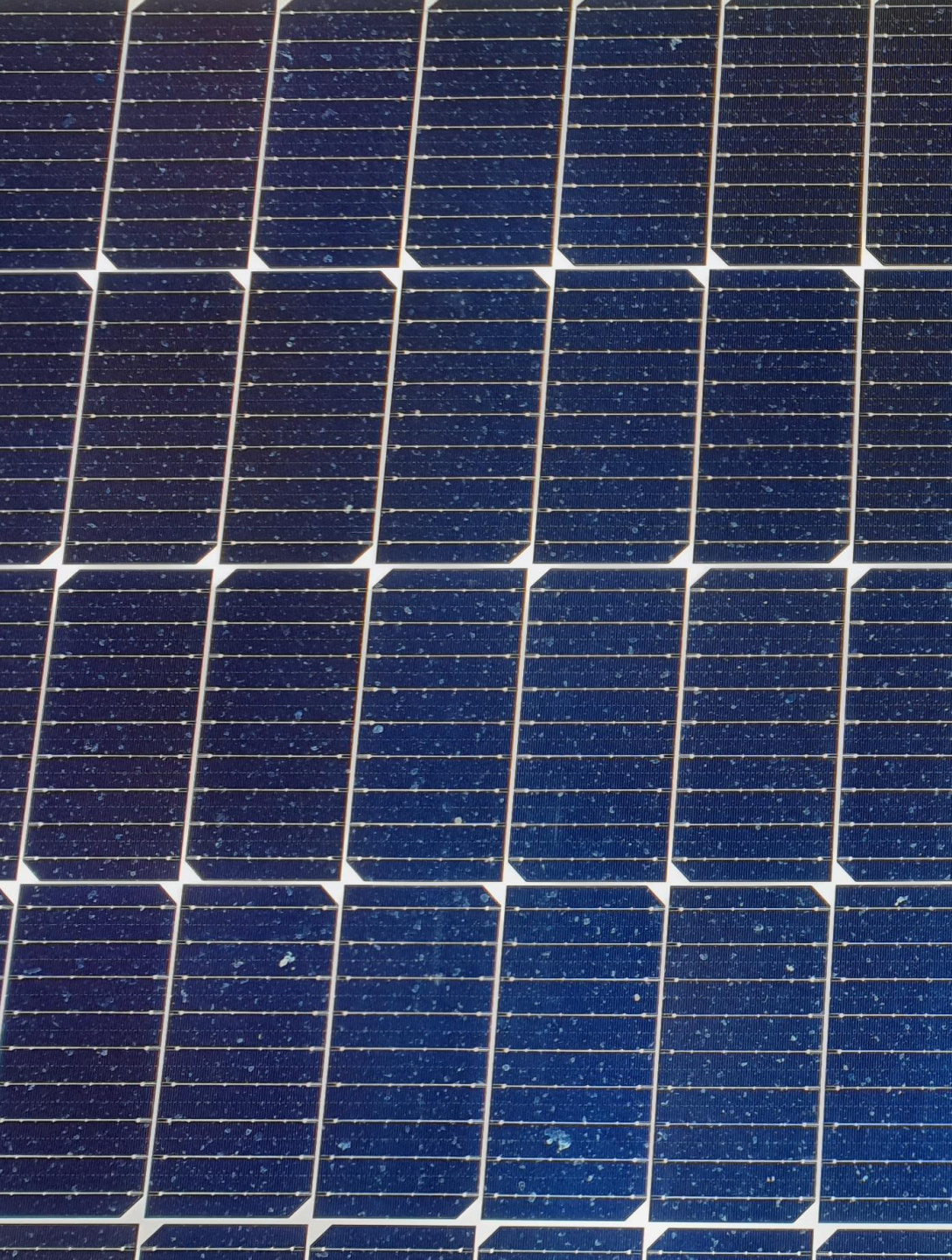
Nov 2022



TBC



TBC



[paul.nixon@corporate-eye.com](mailto:paul.nixon@corporate-eye.com)  
07885 494313

