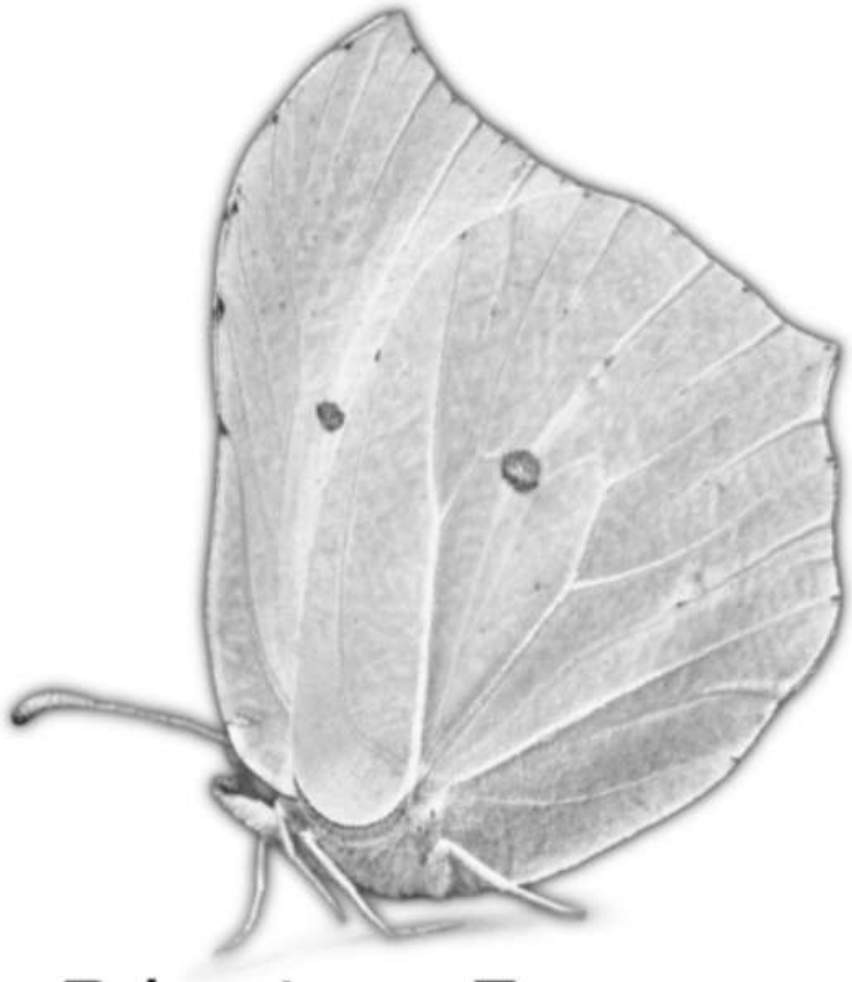
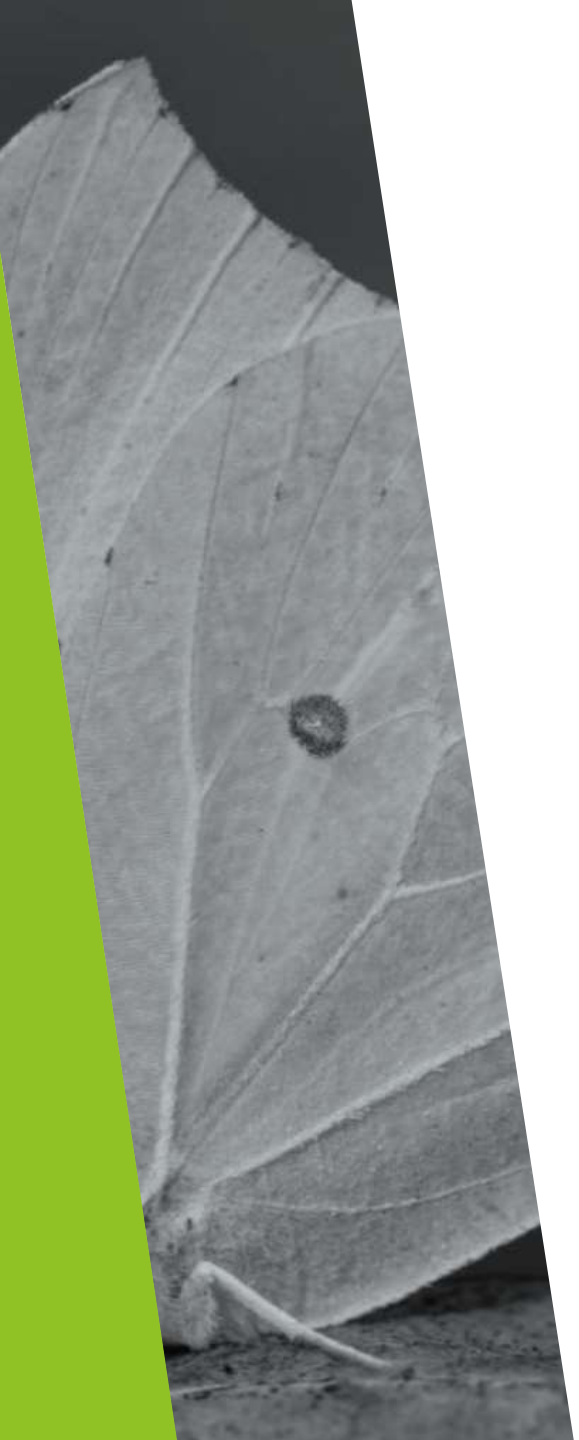


Brimstone Energy

Trust, integrity, quality

Brimstone Energy

- Brimstone Energy is a renewable energy company focused on
  - gaining your **trust**,
  - demonstrating our **integrity** and
  - delivering a high **quality** service.
- We help customers implement the Green Energy Transition in their home.
- We are a local, independent company for all your home energy needs.
- In phase one our evolution we offer:
  - Solar power
  - Battery storage
  - Energy efficiency advice following a heat loss survey of your home



Your partner for the Green Energy Transition

- Long term customer relationship. Why?
  - Because customers are unlikely to retrofit a home in one go that addresses every aspect of the Green Energy Transition:
    - Energy efficiency
    - Insulation
    - Electric vehicle
    - Battery storage
    - Solar panels
    - Low carbon heating
  - We will identify the most cost effective approach, and deliver the highest return on investment
  - Together, we can make a plan that best suit you, your home, your circumstances and your aspriations.

Scope

- Why should you act now?
- What is the future of domestic energy, and why does that affect you?
- What steps can you take to get ready for these changes?
- And how do I maximise my return on investment?

Scope

- **Why should you act now?**
- What is the future of domestic energy, and why does that affect you?
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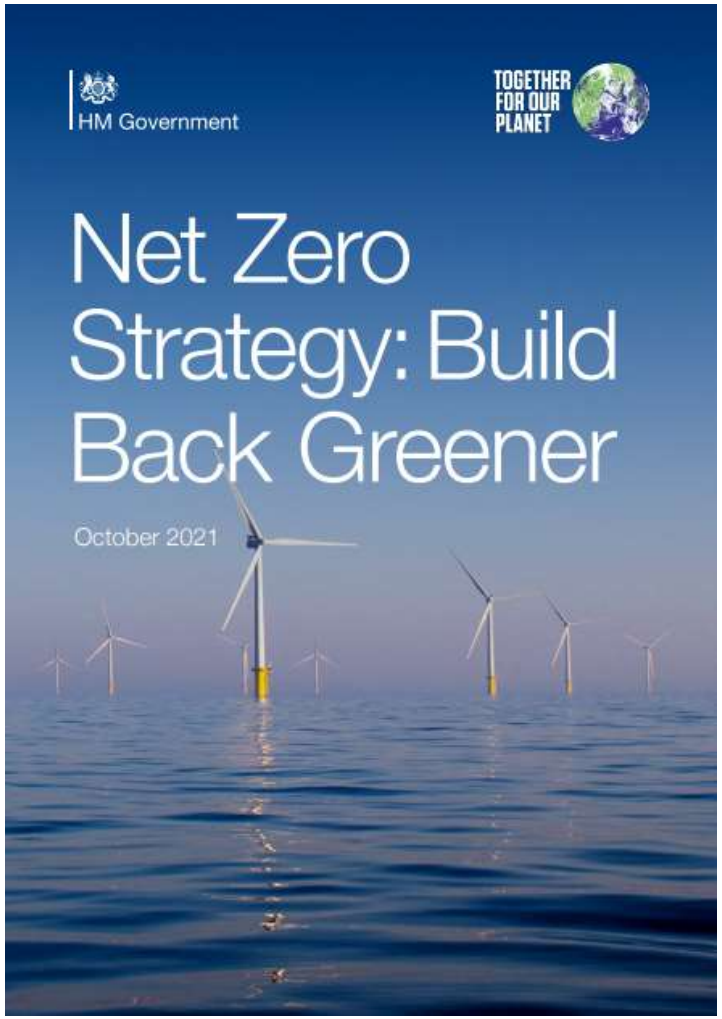
UK Government Policies



- **"This strategy sets out how we will make historic transitions to remove carbon from our power, retire the internal combustion engine from our vehicles and start to phase out gas boilers from our homes"**
  Prime Minister Johnson, October 2021.

- **Key policies for UK consumers:**
- Electricity:
  - By 2035 the UK will be powered entirely by clean electricity
  - 40 GW of offshore wind by 2030
  - Electricity demand to increase by 40-60% by 2035 relative to 2021
- Natural Gas:
  - Ambition that by 2035 no new gas boilers will be sold
  - Natural gas demand to halve by 2037 relative to 2021
- Vehicles:
  - 2030 commitment to end the sale of new petrol and diesel cars

National Grid ESO
Future Energy Scenarios

The Electricity System Operator is responsible for running a **fully decarbonised electricity system** by 2035

They devised 4 credible pathways for the future of energy in the UK

How much energy will we require? & Where will it come from?

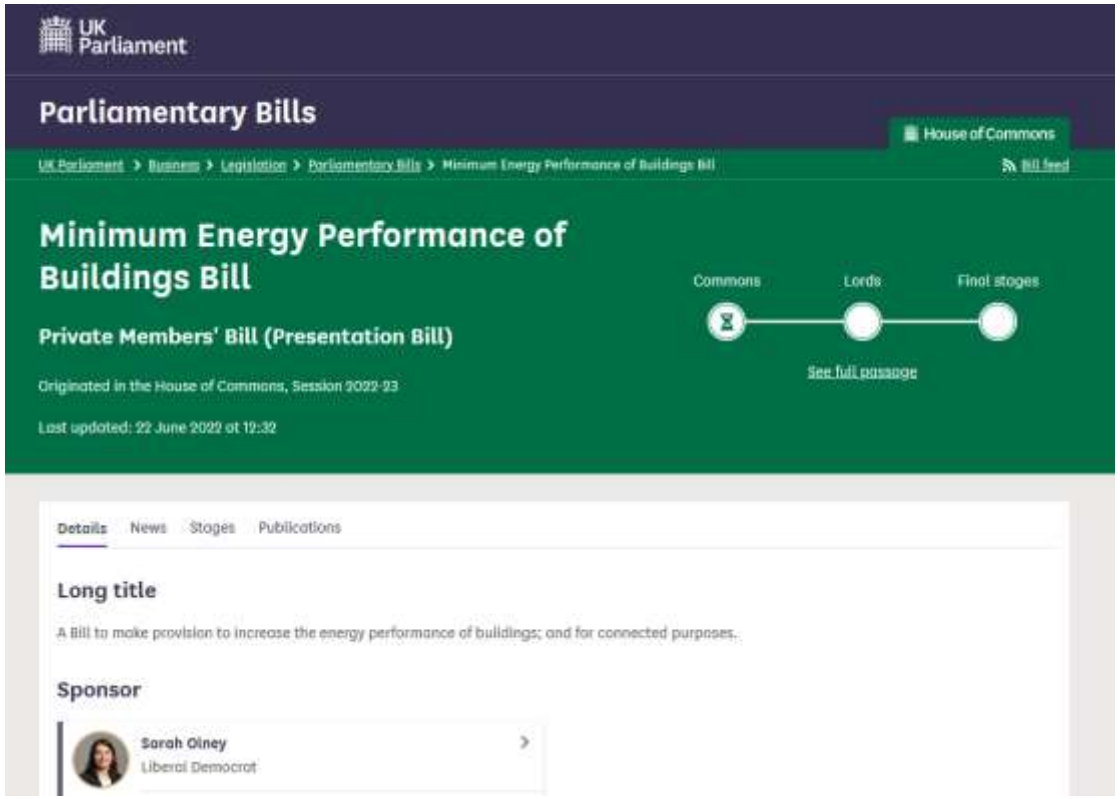
All 4 scenarios are incredibly ambitious

The **complexity** of the energy system will increase

The capital investment required is **very** significant

So what? Electricity prices are unlikely to return to pre-2020 levels

Minimum Energy Performance of Buildings Bill



- UK Government's ambition is to **improve the energy performance standards** of privately rented homes in England & Wales.
- **Minimum standard to be set at EPC Band C by 2030**

So what? Most detached houses in England have an EPC of D or below. If you wished to rent out your home in the future, it's EPC rating might need to be improved.

Building Control


HM Government

The Building Regulations 2010

Conservation of fuel and power

L

APPROVED DOCUMENT

Volume 1: Dwellings

Requirement L1: Conservation of fuel and power

Requirement L2: On-site generation of electricity

Regulations: 6, 22, 23, 24, 25, 25A, 25B, 26, 26A, 26C, 27, 27A, 27C, 28, 40, 40A, 43, 44 and 44ZA

2021 edition incorporating 2023 amendments – for use in England

- From June 2022 Building Control Part L states:
- All new build domestic properties to have a heating flow temperature of **no more than 55°C**
- **This ensures:**
  - Boiler works in **condensing mode** (greater efficiency)
  - Radiators need to be correctly sized

So what? Condensing boilers became compulsory in the UK from 2005, however the vast majority of boilers in the UK don't operate in condensing mode.

Scope

- Why should you act now?
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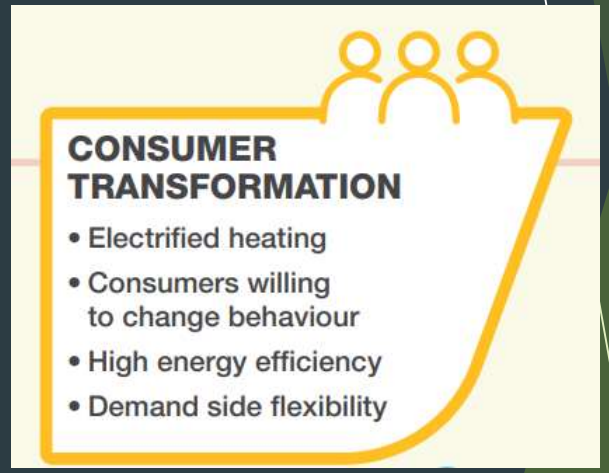
Control, Creation & Consumption

- Control
  - The customer is in control of their energy use.

- Consumption
  - Your consumption of electricity will increase.
  - Better insulation will minimise energy use.
  - Consumption habits will change in response to price incentives.

- Creation
  - The customer can easily generate their own electricity. This electricity can be stored for use when needed.



How does dynamic pricing work?

Most customers are currently paying a single standard rate for electricity

- In March 23, this is 34 pence per kWh (price set by UK Govt Energy Price Guarantee)
- The price per kWh is the same for the life of the contract (currently underwritten by the UK Govt)

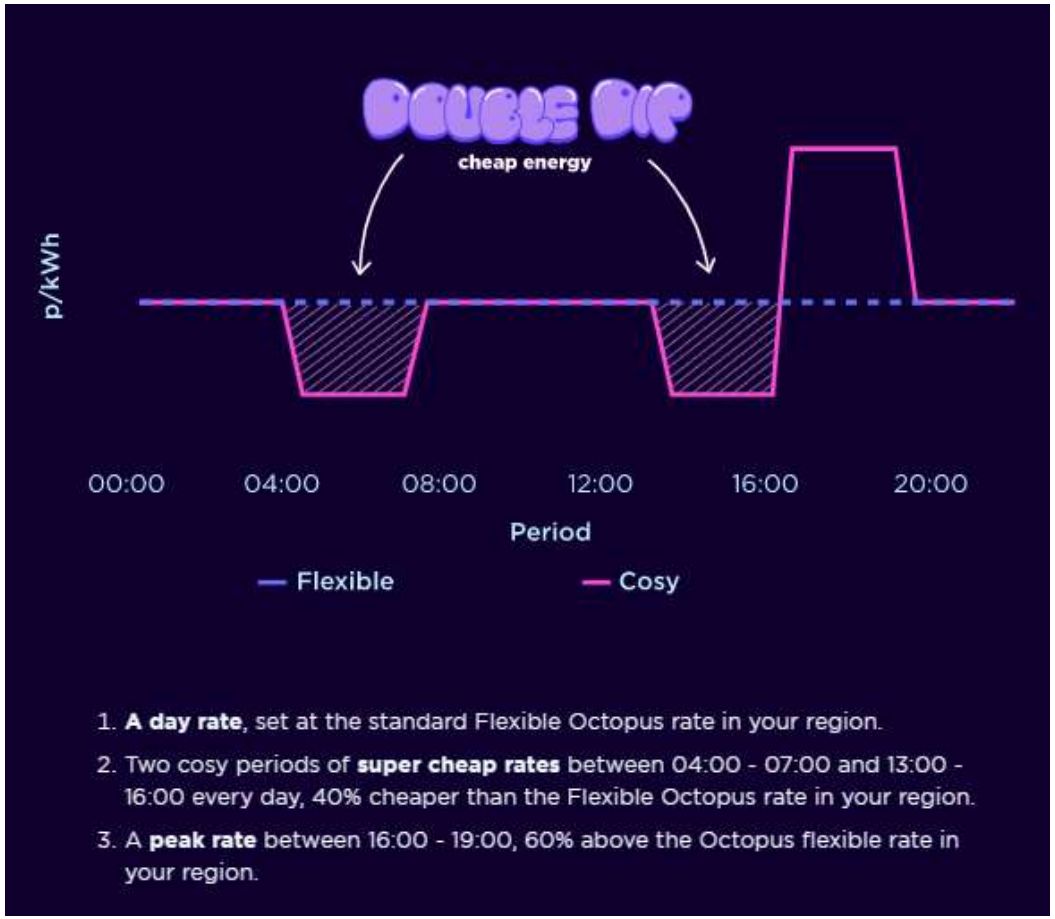
Dynamic pricing varies throughout the day

- Also known as **Time of Use** tariff
  - Encourage use when generation is plentiful (e.g. windy night)
  - Discourage use when supply is constrained

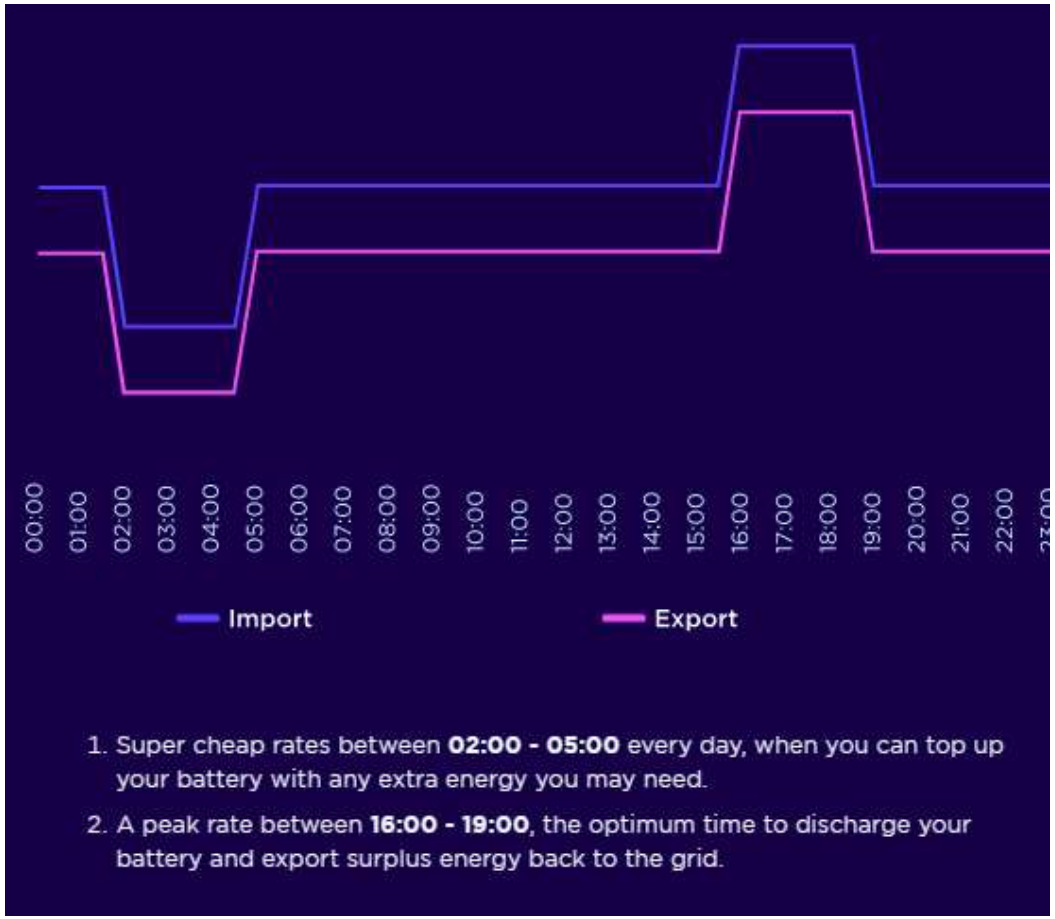
Examples of Time of Use tariffs

Octopus Energy currently have 6 available

The ‘cosy’ tariff for Heat Pump owners



The ‘flux’ rate for home-owners with solar panels and home battery storage



What does this mean in practice?

Your Charges In Detail

Electricity	Supply number	S	2	900	1
			1012431710687		

Supply Address: 15 Langley Way, Hemingford Grey, Huntingdon, Cambridgeshire, PE28 9DB
Postcode area alpha identifier: E

Octopus Go (6th November 2022 - 4th December 2022)

Energy Charges for Meter 18K0288868

Breakdown by rate

Rate	*Consumption*	*Cost*
7.14p/kWh	663.7 kWh	£47.40
38.22p/kWh	191.6 kWh	£73.231
Total consumption	855.3kWh @ 14.10p/kWh †	£120.63
Standing Charge	29 days @ 35.86p/day	£10.40
Subtotal of charges before VAT		£131.03
VAT @ 5.00%		£6.55
Total Electricity Charges		**£137.58**

† Average unit rate charged per kilowatt-hour.

Total charges for bill	£137.58

About Your Tariff

Prices do not include VAT unless otherwise noted.

Electricity

Tariff Name	Octopus Go July 2022 v1
Unit Rate (00:30 - 04:30)	7.14p/kWh
Unit Rate (04:30 - 00:30)	38.22p/kWh
Standing Charge	35.86p/day (£130.89/year)
Price Guaranteed Until	6 Nov. 2023
Early Exit Fee	None

†An average taking into account Octopus Go's unit rate period and the day and night readings

- **77.6%** of my electricity usage was at off peak rates
- Therefore my average cost of electricity was only **14.1** pence per kWh
- The UK Government price guarantee price was **33.2** pence per kWh at this time
- My total bill was **57.5% lower** than it would have been on a Standard Tariff

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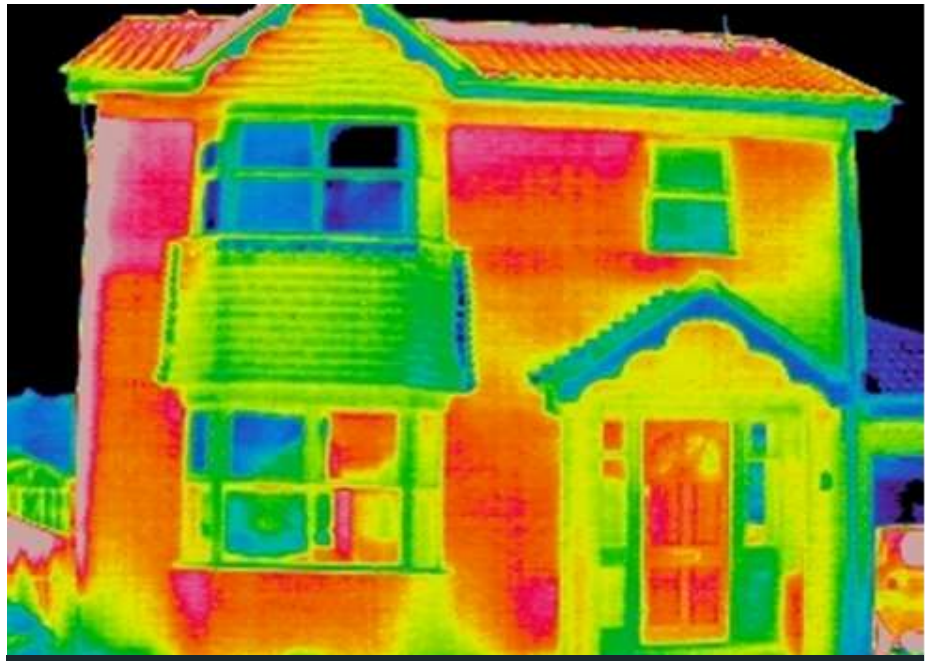
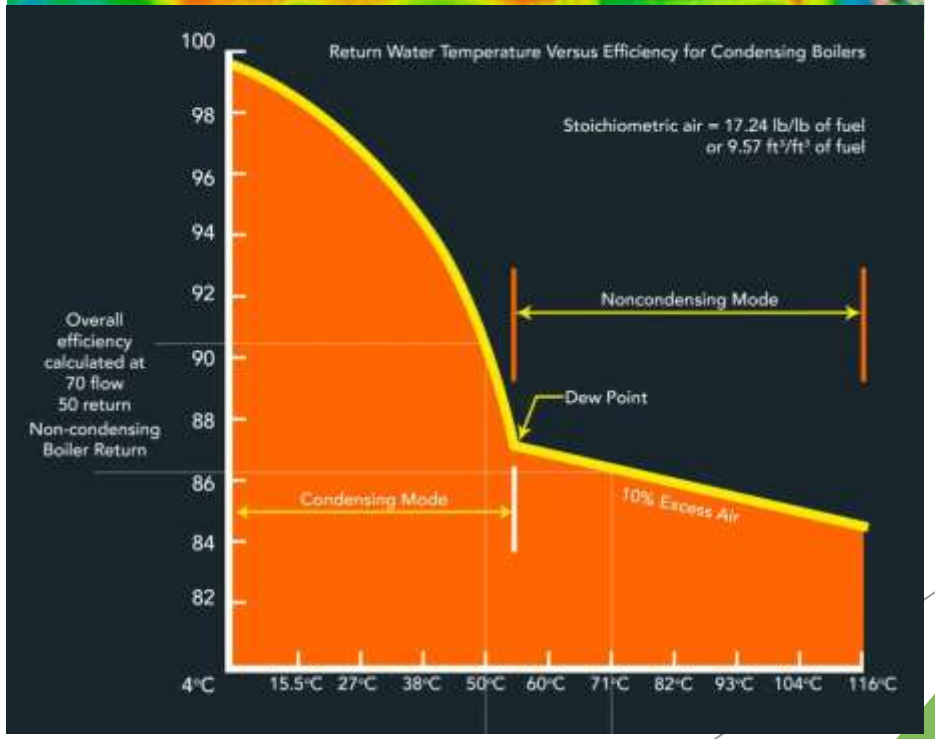
Where do you start?

Solar panels	Solar hot water divert	Electric vehicle	Home storage battery	Vehicle 2 Grid	Vehicle 2 Home
SMETS2 smart meter	Monitoring apps	Control Integration	Smart thermostat	Smart Thermostatic Radiator Valves	Smart energy monitoring plugs
Loft insulation	Cavity wall insulation	Triple glazing	Floor insulation	External wall insulation	Internal wall insulation
Air source heat pump	Ground source heat pump	Reduced flow temperature	Increased radiator size	Underfloor heating	Ventilation rates





Energy efficiency

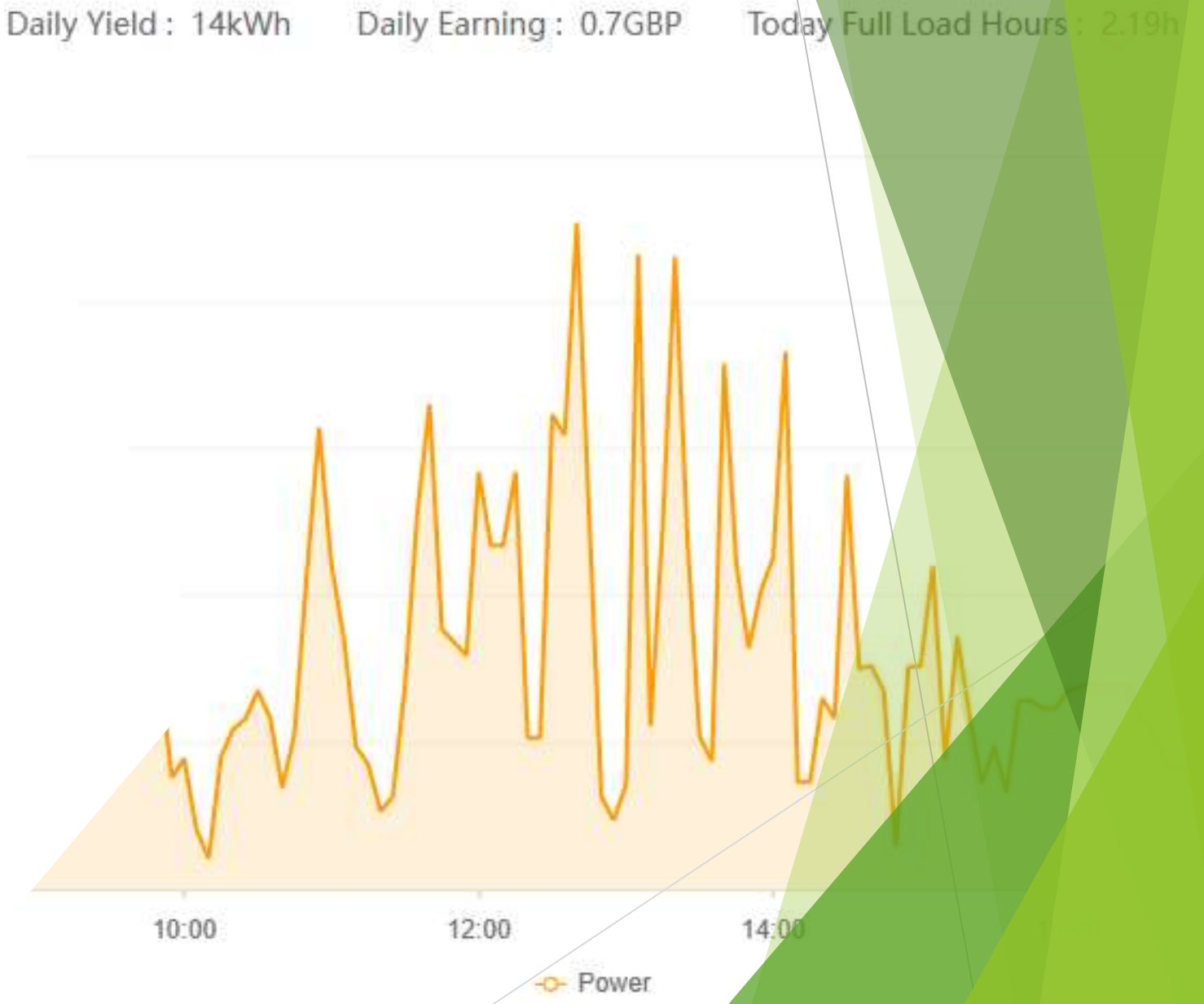
- 79% of residential energy demand is for space heating and hot water [Source: *Office for National Statistics*].
- Central heating systems (whether condensing boilers or heat pumps) work at their greatest efficiency at **lower** temperatures.
- The greatest efficiency (and the lowest costs) will be achieved when the flow temperature is about 38 degrees Celsius.
- Home insulation is a “no regrets” investment.

Solar Panels

- Mass produced & mature technology
- In 2021 75% of global solar PV modules were made in China & 6.8% in Vietnam. [Source: *International Energy Agency*]
- Reliable products, with long warranties and long expected lifespans. No moving parts, no maintenance requirements.
- Commercial solar farms in the UK are now installed without subsidy.
    - Tier 1 Solar Manufacturers. This is a categorisation devised for investors by Bloomberg. It is not a recommendation of quality.[Source: Bloomberg].

Home Storage Batteries

- Batteries are vital for UK homeowners to increase their solar self-consumption rate.
- Costs of batteries have fallen significantly
- Smart meters enable import and export
- Integration & monitoring via apps / websites



Scope

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Optimising your return on investment. Brimstone Energy – your partner.

- You, your home and your lifestyle are unique.
- The amount you can afford to invest will depend on a range of factors personal to you.
- If you are on a fixed income, a capital investment now will protect you against inflation and will reduce your tax bill in the years ahead.
- There is a menu of options available to you. Brimstone Energy will help you understand which of the options best suits you.
- The best approach will likely be an incremental one. For instance, you can benefit from the efficiencies provided by low temperature heating before you invest in a heat pump system.

What is next?

- Solar & battery storage as a stand alone project.

Or

- Heat loss survey
  - Full audit of the energy use of the property
  - Action plan for how to proceed

Choose Brimstone Energy

- Brimstone Energy provides a personal relationship for its customers
- We understand the challenge for customers in identifying good quality firms and trades to carry out work in your home
- We want to take you on this journey with us
- We want a 100% referral rate
- No call centres, no hard selling. Just simple honest advice & old fashioned service and quality.

Brimstone Energy

- Matt Hilton, Director
- Hemingford Grey, Cambridgeshire

- www.brimstoneenergy.co.uk
- 07971414349

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