





# Home Energy Showcase Talks



# Talk

## Generating Clean, Local Energy in Surrey



# Speaker

Ben McCallan, Director,  
Surrey Community Energy





**SURREY**  
COMMUNITY ENERGY

# Surrey Community Energy

8th March 2026

# What Is Community Energy?



In short, community energy is a way to generate clean electricity locally, on buildings where the landlord / tenant can't afford the upfront capital costs.

Community energy groups take the hassle and cost out of solar installations...

## What SCE does...

- Feasibility study
- Agreement in principle with site owner
- Supplier selection
- Legals and planning consent
- Share offer raised
- Installation

## The site owner...

- Signs a power purchase agreement - typically 15-20 yrs
- Pays SCE a set price for electricity, typically lower than current grid price
- Pays no upfront capital costs
- Receives expert support through the process, incl. Planning and surveys

# How SCE Started



**2022** - Community Energy Pathways (née Community Energy South)



10 projects supported



**2024** - CEP re-contracted for generation projects

Directors found



CBS registered



Potential sites identified



**2025** - Progression of pipeline projects

**2026** - First install in summer 2026

# Our Objectives



**Boost the Surrey Economy**

**Cut emissions**

**Help achieve clean power**

**Help Surrey people get involved & upskill volunteers**

**Reduce costs for frontline support services**



# Why Is This Worth Council Investment?



In 2023 alone, community energy projects in the UK:



**617gW hrs**

OF ENERGY  
PRODUCED



**102**

NEW JOBS  
CREATED



**£12.9M**

PAID INTO LOCAL  
ECONOMIES



**165,980t**

CO<sub>2</sub>  
REDUCTION

# Benefits of CE installs to Client



## 1. Benefits to Site Owner

Using the community energy method to install solar in partnership with SCE can bring your company multiple benefits...



### Cheaper electricity

No upfront capital costs for the installation, and estimated total of £110,000 savings over length of lease.



### Community investment opportunity

Your members can invest in your project, with an annual return of approximately 5%.



### Reduce CO2 emissions

Lower the operational impact of the business and be ready for future energy legislation. Projected CO<sub>2</sub>e savings of 31 tonnes in year 1.



### End of life gift

At the end of the lease, we give you the solar installation - so you'll get free electricity for the remainder of the life of the panels.

This model brings multiple benefits to the site owner...

- PV without upfront costs
- Lowered electricity price
- Prep for future legislation
- Reduced CO<sub>2</sub>e emissions
- Favourability in tenders with large companies who report carbon emissions
- Potential for employees, members etc to make ethical investment
- Panels gifted at end of lease period

# What better place than sunny Surrey?



Map © 2021 Solargis, <https://solargis.com>

## Install 1 - Birtley House, Bramley

**Nursing home in Surrey - brings in nice social element allowing Board to divert funds away from high energy bills towards care for residents.**

**Ecological survey conducted by SWT 16th Feb.**

**Spades in ground early summer - fingers crossed!**

**Best of all - you can invest in the project...**



# Share Offers



**Surrey residents can invest in the Birtley House project, and upcoming pipeline projects as they commence via SCE, a Community Benefit Society...**

- Invest from a few hundred pounds to £10,000 (subject to change on launch of share offer)
- Client pays reduced energy bills under PPA - which come to SCE
- Return likely to be 5-6%
- Maximum share option is roughly 10%
- 1 *person* = 1 vote
- Registered with the Financial Conduct Authority

**Pledge period - likely to begin around May 2026**

**Share offer - launch around June 2026**

## How can you help?



- Get on our mailing list at [www.surreycommunityenergy.org](http://www.surreycommunityenergy.org)
- Spread the word! Follow us and share on socials.
- Help find potential sites
- Volunteer some time
- **Invest** in our share offers - make an ethical investment in local energy independence

# Talk

# Air Source Heat Pumps



# Speaker

Leah Robson,  
Managing Director,  
Your Energy Your Way





# Air Source Heat Pumps

Produced by: Your Energy Your Way CIC

[www.yourenergyyourway.co.uk](http://www.yourenergyyourway.co.uk)

[info@yourenergyyourway.co.uk](mailto:info@yourenergyyourway.co.uk)

6 March, 2026

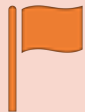
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## How to Get Started



## How to Buy a Heat Pump

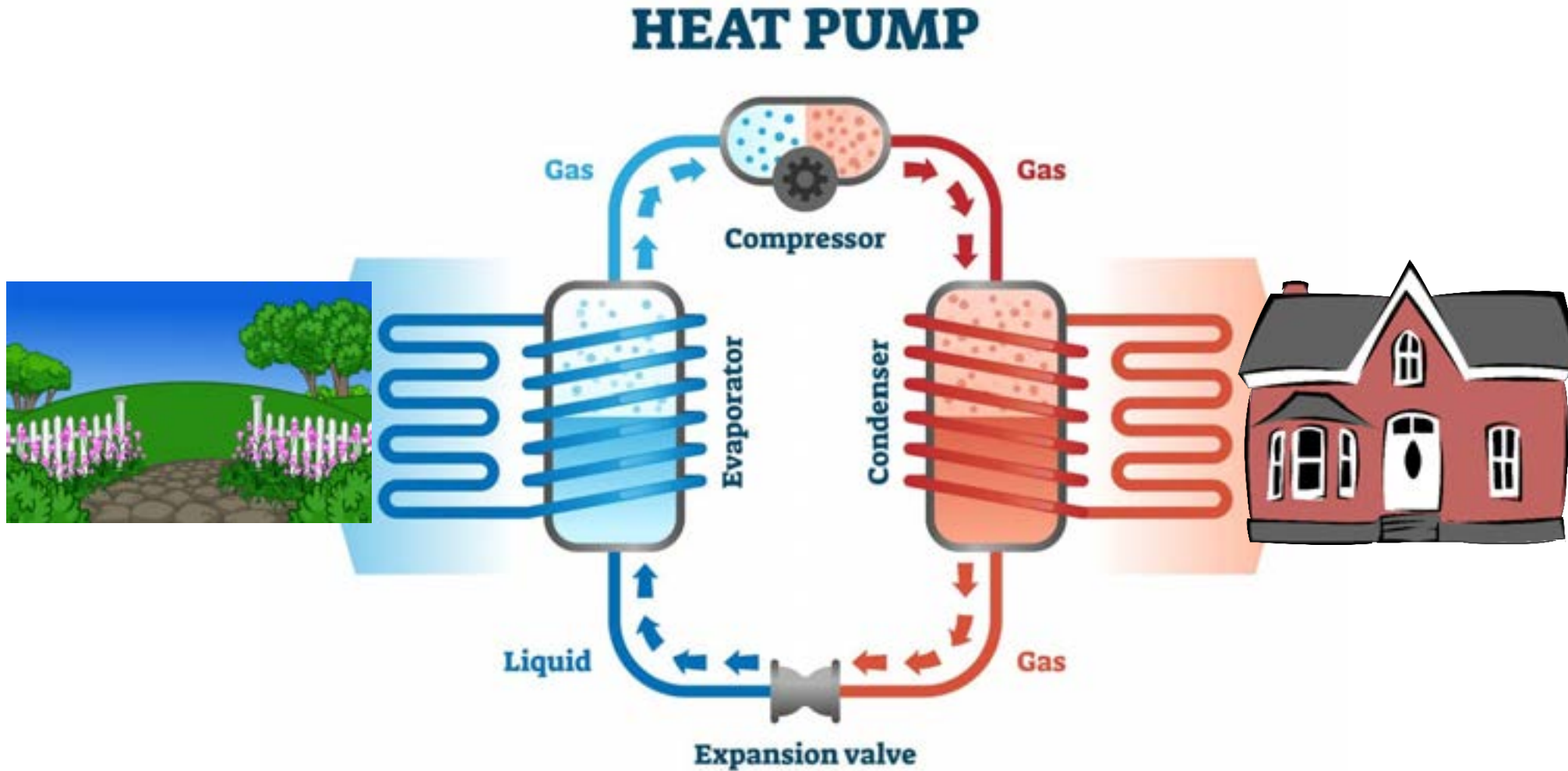


## What does Good Look Like?



## Questions to Ask your Installer

# What is a Heat Pump?



Hot Water Cylinder/Tank – an essential store for hot water in your home

Buffer cylinder – the heat pump installers favourite argument. A small cylinder that can help your heating system work well.

Heat Loss Survey – measures each room, window, door and understands your home to size the heat pump and emitters

Emitters – fancy name for radiators or underfloor heating

Primary pipework – a new pair of pipes that will need to run between your heat pump and hot water cylinder

Zoning/Open loop – the heat pump installer's second favourite argument. A decision about how you control your heat pump



# What does good look like?

22

- Correct clearances
- Continuously insulated pipes
- Neatly clipped cables
- Drainage
- Weed suppression
- Ease of maintenance
- Thought out pipework
- Heat pump specialist controls
- Minimal number of pumps



# How to find the right installer?

We have a guide called 23 Questions to Ask you Heat Pump Installer, which you can download from our website here [Considering a Heat Pump? 23 Questions](#). But here is a selection:

- 1.) Are you MCS registered?
- 2.) What is your health and safety regime?
- 3.) Please can I speak to a customer whom you installed for more than 1 year ago?
- 4.) What will you do if you break or damage anything while here?
- 5.) Who do you use to do the actual work on-site?
- 6.) How long have you worked with them for?
- 7.) What is the manufacturer support like for these products?
- 8.) What kind of ongoing support do you offer including, what are your servicing arrangements? *(Remember: A good aftercare package ensures your system continues to perform optimally and that any problems are addressed promptly. Check for warranties on both the heat pump and the workmanship.)*
- 9.) How do the things you've quoted for all work together?
- 10.) How do you attract new business?
- 11.) Bonus question: What's your favourite type of biscuit?  
Because it's always good to keep your installers happy with a good biscuit!



# Talk

# Cut Costs, Save Energy! Energy Saving for Homeowners



# Speaker

Terry Warman,  
Managing Director,  
Surrey Energy Centre

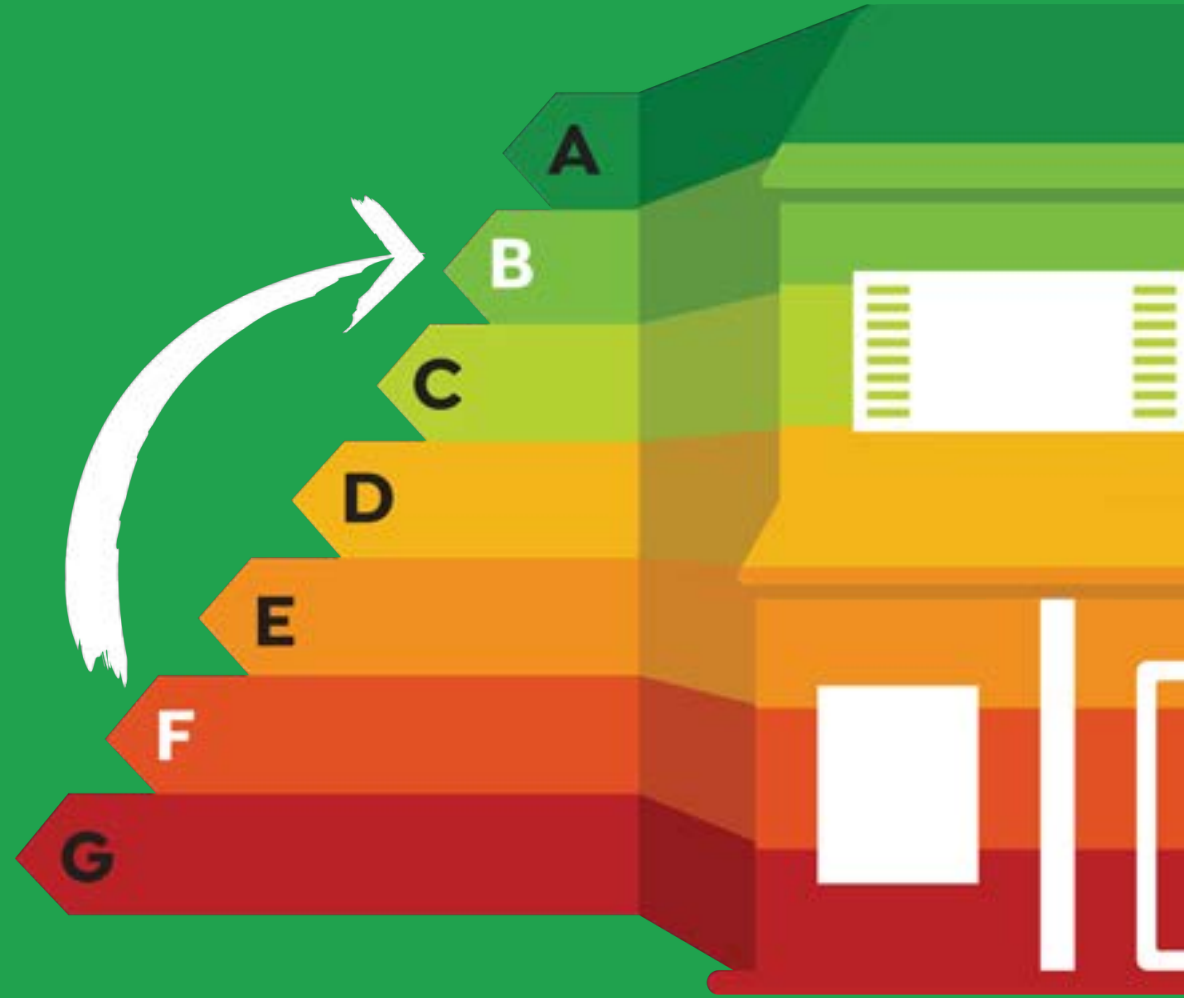




# ENERGY CENTRE

**CUT COSTS,  
SAVE ENERGY!**

ENERGY SAVING FOR HOMEOWNERS



# INTRODUCTION



**MICHAEL**  
Strategy & Business  
Development Director  
Energy Centre



**TERRY**  
Managing Director  
Energy Centre

# IN PARTNERSHIP WITH



ACCREDITED BY



# WHY WE'RE HERE



RISING ENERGY COSTS



GOVERNMENT REGULATIONS



SUSTAINABILITY



# WHO ARE WE?

Surrey Energy Centre Ltd was founded in 2024 with a strong ambition to play a leading role in the **UK's transition to net zero**. We deliver **innovative, affordable, and accessible renewable energy solutions** designed to make clean energy practical for everyone. As the **UK's first high street renewable energy showroom**, we provide a physical space where homeowners and businesses can explore technologies firsthand. We support our clients at every stage, **from initial design and specification through installation and ongoing maintenance**. In response to rising energy costs and national decarbonisation targets, our mission is to help homes and organisations **reduce energy consumption, cut costs**, and move confidently towards a more sustainable future.

*All tailored to meet the unique needs of both residential and commercial clients*



# MEET THE TEAM



**Terry Warman**  
Managing Director



**Michael Sam**  
Strategy & Business  
Development Director



**Kenneth Coetzer**  
Centre Manager



**David Rutledge**  
Project Manager



**Jenna Sam**  
Marketing & Admin  
Assistant

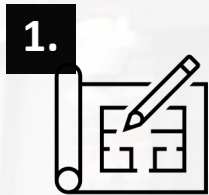


**Aimee White**  
Graphics &  
Brand Marketing



**Installation Team**

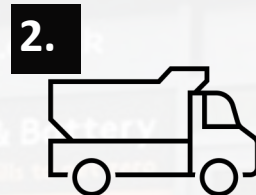
# WHAT WE DO



1.

## DESIGN

Design renewable energy systems for homes & businesses.



2.

## SUPPLY

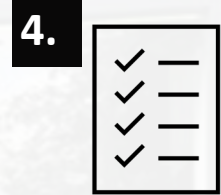
Supply renewable energy systems for homes & businesses.



3.

## INSTALLATION

Installation of renewable energy systems for homes & businesses.



4.

## COMMISSIONING

Commissioning of renewable energy systems for homes & businesses.



5.

## EDUCATE

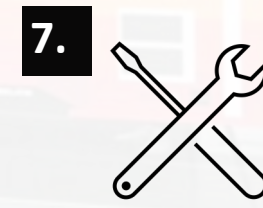
Educate homeowners & businesses on renewable energy systems.



6.

## SUPPORT

Support homeowners & businesses with latest public energy upgrade grants.



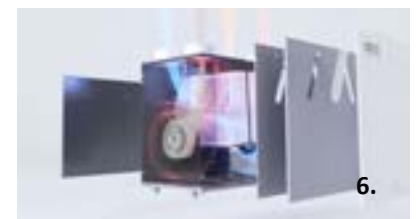
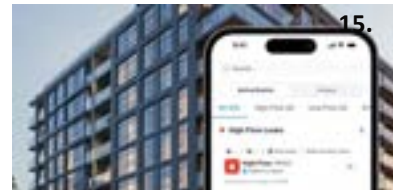
7.

## MAINTENANCE SUPPORT

Maintenance support for customers products and systems we've installed.

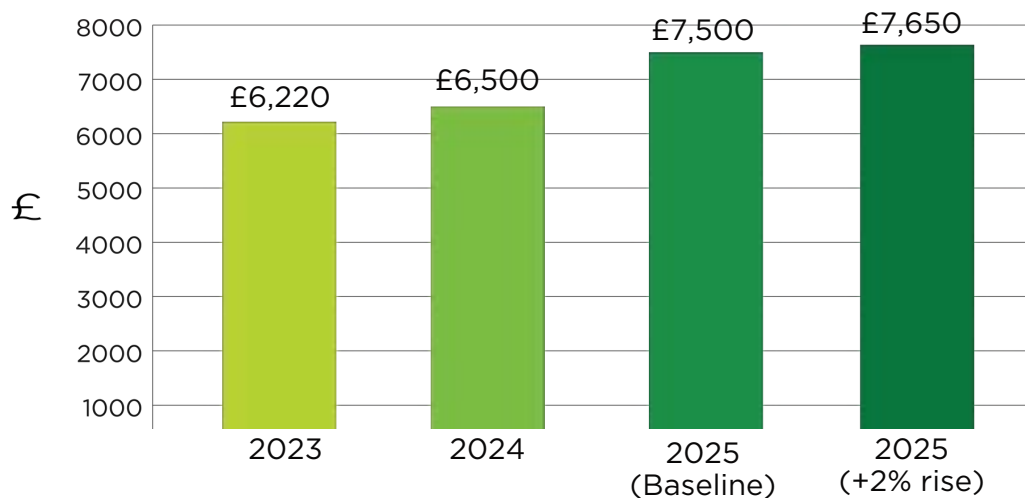
# OUR SOLUTIONS

1. EV charging
2. Solar panels
3. Battery storage
4. Air sourced heat pumps
5. Ground sourced heat pumps
6. Heat recovery
7. Resin flooring
8. Intelligent lighting
9. Rainwater harvesting
10. Air sourced hot water cylinders
11. Infrared heaters
12. Underfloor heating
13. Wall insulation
14. Heat interface unit
15. Water leak detection



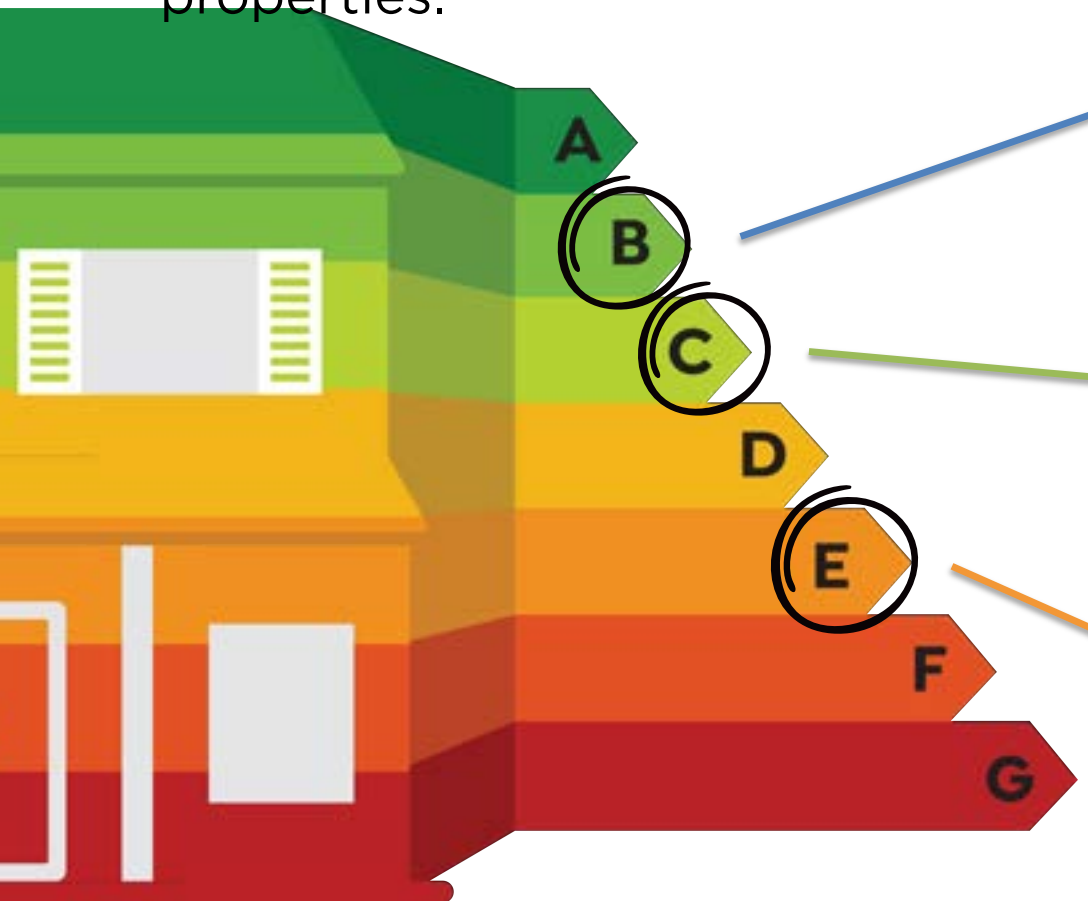
# ENERGY PRICE INCREASE

Ofgem's latest 2% increase to the household energy price cap means that domestic energy bills are expected to rise in the coming months. Although the rise may appear modest, the additional cost can add up over the course of the year. Now is a sensible time to review your energy usage, identify simple efficiency improvements, and consider practical steps to help keep household bills under control.



# GOVERNMENT REGULATION

The Government is tightening rules to cut carbon emissions, and this will affect residential, shops, cafes, offices and other business properties.



**BY 2030**  
Proposed

Minimum EPC rating B. More substantial improvements expected, such as renewable integration, and better building fabric efficiency.

**BY 2027**  
Proposed

Minimum EPC rating C for all commercial rentals. Businesses may need upgrades such as insulation, efficient lighting, and heating improvements.

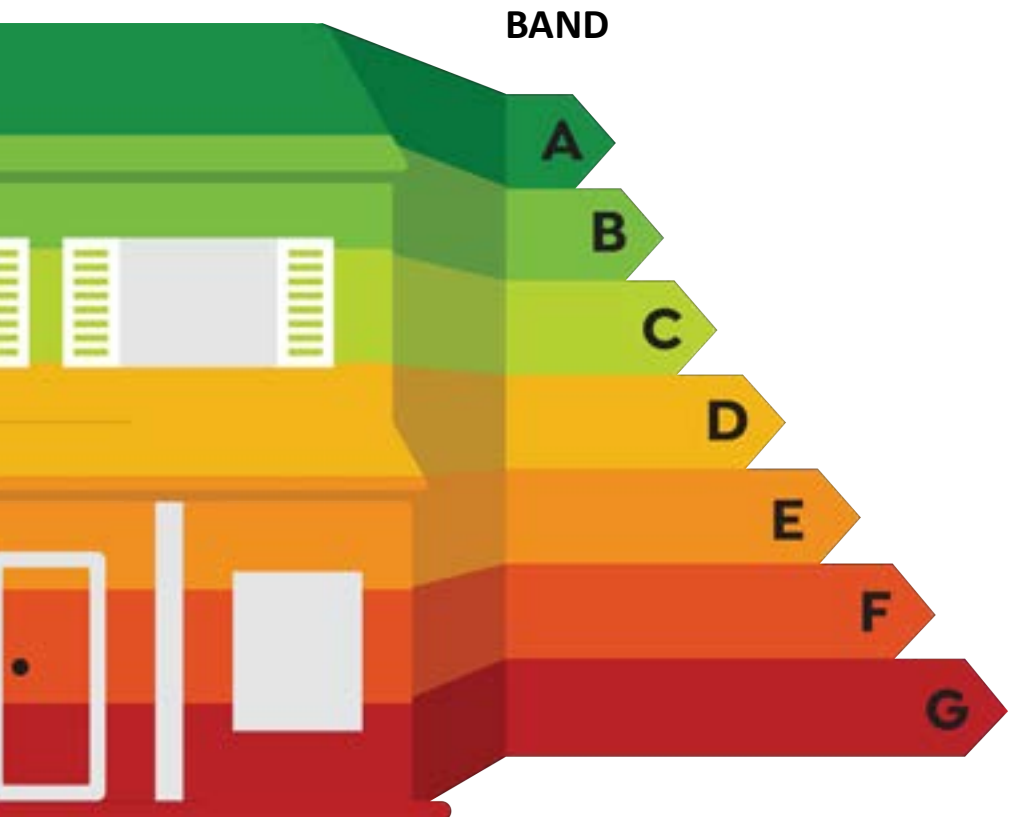
**2025**

Minimum EPC rating of E required to let commercial property. Properties below EPC E cannot be legally let.



# WHAT DOES AN EPC RATING MEAN?

An EPC (Energy Performance Certificate) is a document that gives a property an energy efficiency score. It shows how much it costs to heat, light, and power the building, and gives recommendations for making it more efficient.



BAND	EPC SCORE	MEANING
A	92-100+	Very efficient (lowest running costs)
B	81-91	Efficient
C	69-80	Average / fairly efficient
D	55-68	Below average
E	39-54	Inefficient
F	21-38	Very inefficient
G	1-20	Extremely poor efficiency

# INSTALLATION CASE STUDY



13.3 kWp solar



5.8 kWh battery storage

METRIC	DESIGN-STAGE FORECAST	ACTUAL (12 MONTH ANNUALISED)
Generation	12,091 kWh / yr	Within $\approx$ 5% of forecast – excellent alignment
25-Year total generation	302 MWh	Slight reduction due to lower yield; realistic
Payback period	5 years	Correct given lower tariff (28 p vs 40 p / kWh)
Net present value (NPV)	£164,769	Matches recalculated value with real-world rates
Internal rate of return (IRR)	18%	Sensible and proportionate adjustment
Electricity rate used	£0.40 / kWh	Correctly applied for 2025 pricing

# INSTALLATION CASE STUDY



13.3 kWp solar



5.8 kWh battery storage

## CONCLUSION


The figures in this case study are realistic and financially consistent with the 12-month data and current energy prices.


The structure - showing both design-stage and actual performance side by side — clearly demonstrates performance stability and return resilience.

The 6-year payback and 15% IRR are credible given your verified generation output of ~9.5 MWh in 10 months.


# RENEWABLE FINANCE OPTIONS


## 1. WARM HOMES PLAN

 Check eligibility to see what support you qualify for

 We identify what upgrades are best for your property


 Access up to £30,000 grant or low interest government backed loan

 Our certified installers will complete the work


 Start saving, lower your energy bills and reduce carbon

## 2. BOILER UPGRADE SCHEME


 Government heat pump support grants


 Access up to £7,500 to help cover the cost of the heat pump

 Eligibility for those with a property in England or Wales and a valid Energy Performance Certificate


 Our certified installers will complete the work


## 3. KANDA

 Spread the cost in monthly instalments

 0% up to 12 months of interest free options available on smaller projects

 Longer terms agreements available for larger projects as well

 Finance can often be arranged with £0 deposit, subject to approval

 Credit check applies on a simple application and affordability check



# ENERGY SOLUTIONS FOR THE RESIDENTIAL & LIGHT COMMERCIALS



DREW IN

**ANDREW LARKIN**  
Director

“Our recent projects with Surrey Energy Centre delivered excellent results. Their solar systems performed flawlessly on both flat and sloped roofs, including a £4 million Wandsworth home with inbuilt panels and no waterproofing issues. Their precision and quality made for a durable, energy-efficient installation and a strong sustainable partnership.”

# REVIEWS



“Thanks to Terry and he’s team at the energy centre Banstead. They recently installed a solar array... The team did an excellent job and were extremely user friendly from design to completion of the project.”

William Smith

“It’s been refreshing to work with an Surrey Energy Centre company that truly cares. SEC have been efficient, take pride in their work, and stand out in an industry full of cowboys. I’d definitely recommend them.”

Brian McCloskey



“All in all, the service was excellent from start to finish.”

Katy of Deal

“Great overall experience with SEC... professional, efficient staff, clear information for decision-making, and a quick, tidy installation completed on schedule...”

George Hogan

“We had solar panels and a 6kWh battery installed by the Energy Centre — everything went perfectly. The team were professional, tidy, and four months on, the system is working great. We're very happy with our purchase.”

Trevor Ford



ENERGY CENTRE

59

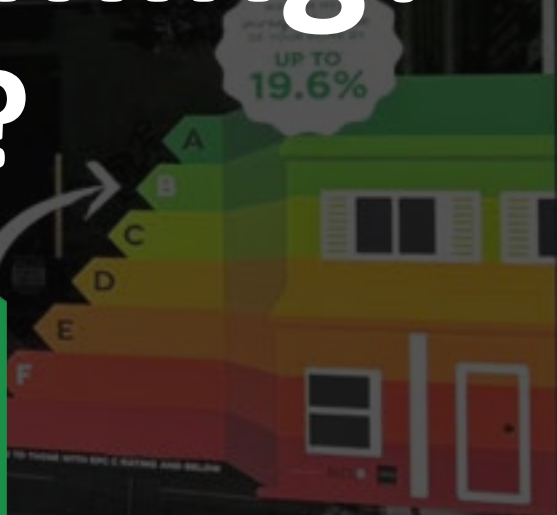
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www.energy-centre.co.uk

Thank You for coming!  
Any questions?



Get a Quote  
SCAN  
ME



# Talk

**5 Things You Need to Know to Achieve a 10x Saving on Your Energy Bill from Solar & Battery Storage**



# Speaker

*Introduction:*  
*Phillip Russell,*  
*Local Building Consultant*  
*Andy Martin,*  
*Sales Manager, Skylar Solar*



# Talk

- Why solar size matters
- Why you need to consider the right technology for the future
- DC car charging
- Home backup
- Why now



# Talk

## From Concept to Delivery: Integrated Clean Energy Solutions for Communities



# Speaker

*Alan MacLeod,  
Founder and CEO of  
Pure Energy (REGen) Ltd*





# pure energy



Connecting Communities to a Low-Cost Sustainable Future

March 2026

## Our Business..

We exist to connect our communities to best value renewable energy products and services

### Our focus

Source and integrate **best value** renewable energy technology solutions to meet customer **on-site needs**

### We save time

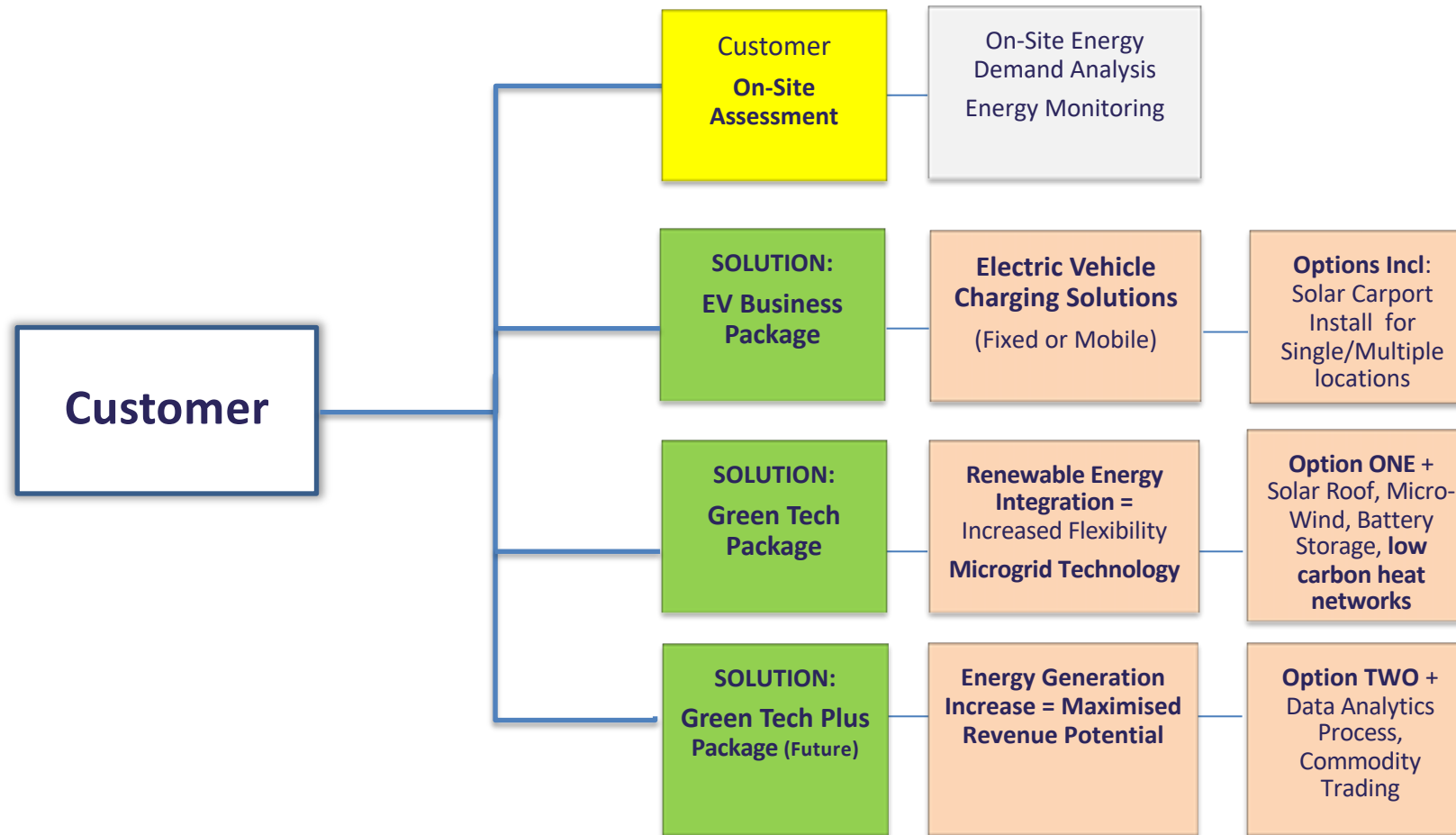
A hassle free on-site renewable energy solution

### Innovation is key

We continuously monitor the renewable energy technology landscape to deliver **cost effective** energy solutions for your business needs



# Your Choice - Bespoke Solution or Bundled Option....



■ On-Site Analysis   ■ Technology Levels   ■ Technology Components

# Core Technology – Rooftop Solar PV + Battery Storage

## We convert Buildings into Power Stations Heat Networks and EV Charging Hubs

- Decentralised energy generation model
- Carbon emissions reduced
- Supports electric mobility transition

## Solution: Integrated Energy Generation

### Provides

- Reduced on-site energy costs
- Revenue generation opportunities
- Stakeholder focused – Environmental, Sustainable, Governance Goals Achieved



# Core Technology – Smart Electric Vehicle Charging

## Features

- Dual, AC Level 2 EV charging
- High Power: 150kw – 3 phase 7.5kw – 1 phase
- Community and Commercial Charging Facilities
- Monitoring service capability
- Warranty: 2 years including SW and HW (excl physical damage) with full support and training

## Advantages

- Integrated open/closed payment solutions
- Billing options
- Turnkey solutions
- Real time control, reporting, monitoring & advertising
- Compatible with all EV standards
- Indoor/outdoor weatherproof enclosures



# Core Technology – Low Carbon Heat Networks

## Our Strategy:

### Housing Sector - Low Carbon Heating Focus

- **Increased demand** for low carbon heat solutions - Ground Source/Air Source Heat Technologies
- **Community Energy**, Housing Associations, Care Sector, Leisure Sector focused on low-cost sustainable heat networks
- **Community Micro Grids** – Identifying network opportunities
- **Industrial Developments** offers heat networks infrastructure potential
- **Our Innovation** – “**Energy Box**” Heat Pump Design, integrated heat pump solution efficiently connected within external enclosure providing low carbon heating

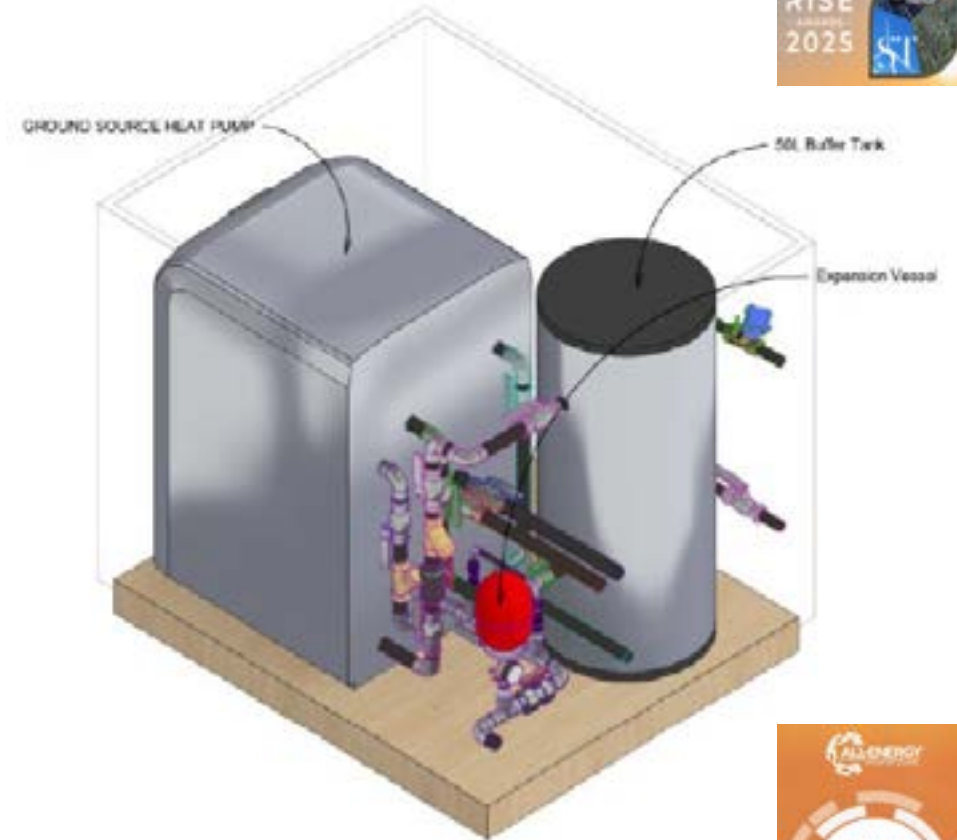


# Core Technology – Low Carbon Heat Networks

## Strategy: Housebuilding Sector

### Product Innovation – “EnergyBox™” Heat Pump Assembly Concept

- “EnergyBox™” self-contained low carbon heat design
- **Connecting buildings to outdoor ground source heat systems** in a simpler, more efficient way. Installed outside property
- **Contained within enclosure** enabling efficient connections between borehole/array and indoor heat system
- **Adoption at scale** for both **retrofit** and **new home heating networks**
- “**Design for Manufacture**” phase, collaborated with National Manufacturing Institute Scotland (NMIS) to finalise product design load cases, funding provided by **Innovate UK EDGE**
- **Trademark Registered**



The “EnergyBox”



# Climate Innovation Platform 2026 – Innovation for Low Carbon Impact



- Condition 1: System is under its own weight. (50L buffer tank is full)

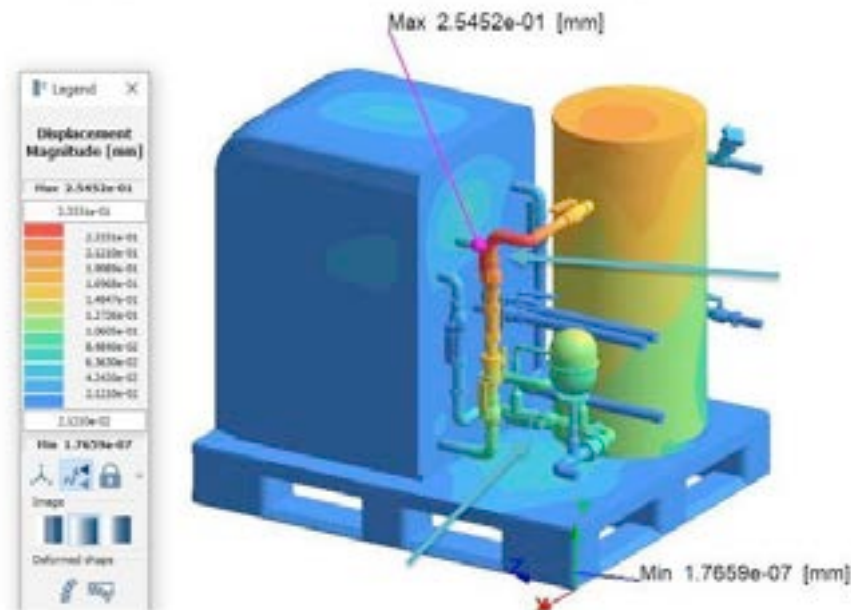


FIGURE 16: DISPLACEMENT IN CONDITION 1

## Transforming heat products to deliver carbon reduction and clean growth

- **Systems Integration:** Integrated physical, digital and energy technologies
- **Energy Launchpad:** Catapult-backed support to de-risk, scale and invest
- **System Modelling:** Validate performance, cost and carbon impact
- **Market Engagement:** Access to customers, public sector and investors
- **Manufacturing Support:** Heat pump R&D, prototyping and demonstration

# Core Technology – Solar Carport

## Product Innovation – Solar PV Technology

- Combines protection of a regular carport with solar production
- Design incorporates wooden frame structure, recycled metal screws foundation and eye-catching design
- Structure according to environmental building standards
- Designed for snow load and wind speed, waterproof via railing system
- Compatible with all charging solutions and battery storage currently on the market to enable both transfer and energy storage.



Technical data

	Modules	Power	Yearly Energy
Carport 1 car (5.6 x 5.4 x 2.5m)	15	5.40 kwp	5 300 - 6 500 kwh
Carport 2 cars (6.6 x 5.4 x 2.5m)	18	6.50 kwp	6 400 - 7 500 kwh
Carport 2 cars (6.6 x 7.2 x 2.3m)	24	8.65 kwp	8 500 - 10 000 kwh
	Material	CO <sub>2</sub> saved	Panels
Structure	Glue Laminated Larch	4 Tons	Bi-Facial transparent



# We Add Value To Community Energy Groups

## A. On-site Energy Optimisation

### Site Optimisation

- Energy generation **maximises ROI**
- Energy cost and carbon savings data generation
- Asset locations + energy generation maximise market value

## B. Home Energy Networks

### Energy Leadership

- Ultra efficient heat network technology
- Designed for low cost heat network deployment
- Additional revenue streams – Behind the meter (BTM)
- Supports low-cost community heat networks

## C. Community Energy Benefits

### Sustainability

- Reduced carbon emissions levels
- Eco-friendly materials
- Environment benefits

### Transparency

- Effective risk management – Supports Investors and customers focus on environmental impact of commercial activities
- Supports a Community sustainability strategy

### Low-cost Heat Technology

- Aligns your community's business with sustainable goals
- Improves sales, marketing and brand reinforcement

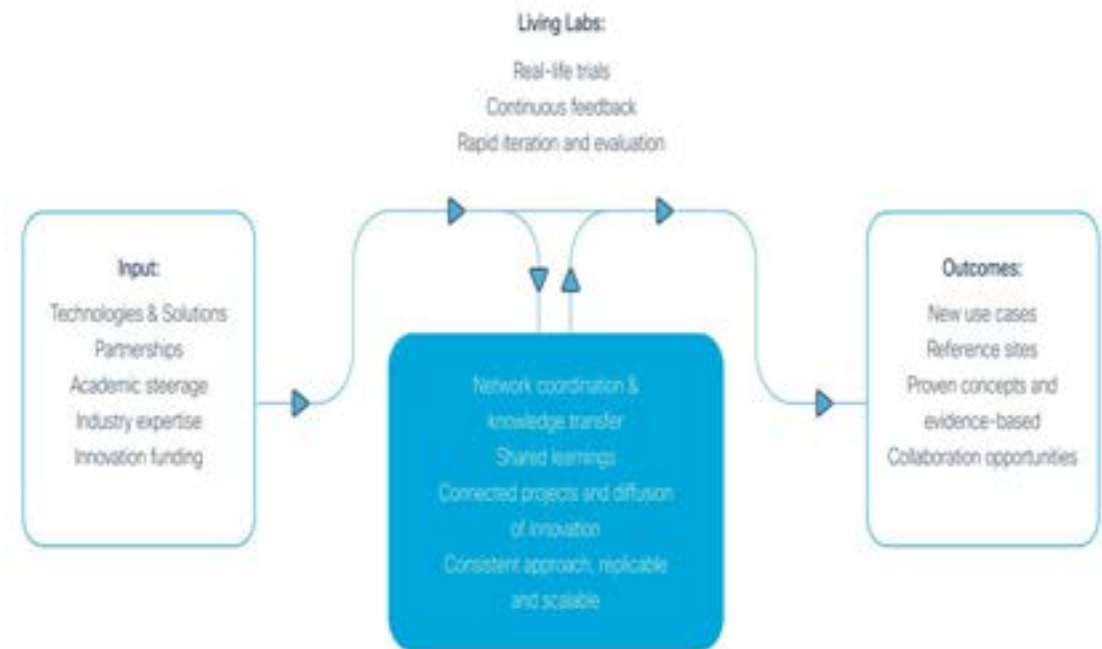


# Future Technology – Collaboration

## Smart Building Innovation – DC Networks

- **Combines data, innovation and digital infrastructure** to creating sustainable healthcare environments.
- **Jointly with urban and rural NHS practices** to explore digital solutions
- **Focus on DC microgrids, energy monitoring, environmental controls** and space energy efficiency management
- **Build scalable primary care models** integrating energy efficiency, building efficiency, digital services
- **Meet net-zero goals**

## How our ecosystem works





# pure energy



On Site Energy Demand Analysis



# Core Technology – Energy Monitoring

## Energy Monitoring - Convenient and Effective Application

- **Installed faster** - Wireless and Ultra Compact
- **Avoids integration** with on-site legacy systems
- **Standard, flexible approach** across commercial sites
- **Real time energy data**
- **UK country wide** Installation



# Energy Demand Analysis..

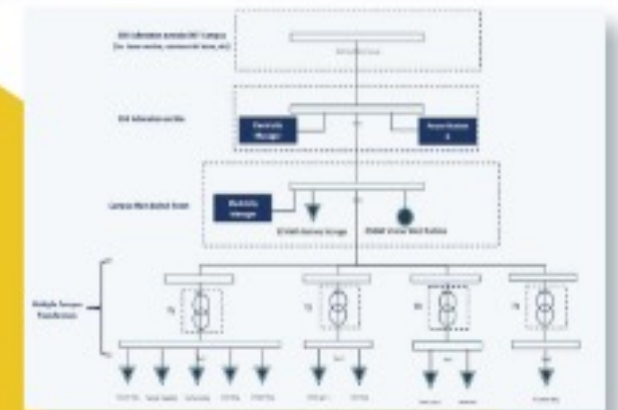
## Providing Communities with;

- **Wide range** of renewable energy generation and storage options via online tool
- **Electricity Usage Data** Analysis for single site or portfolio of sites
- **Optimal renewable system** size and technology combinations per site location
- **Operation and Maintenance Services**
- **Funding availability** and accredited installers

Schematic View



Geographical View

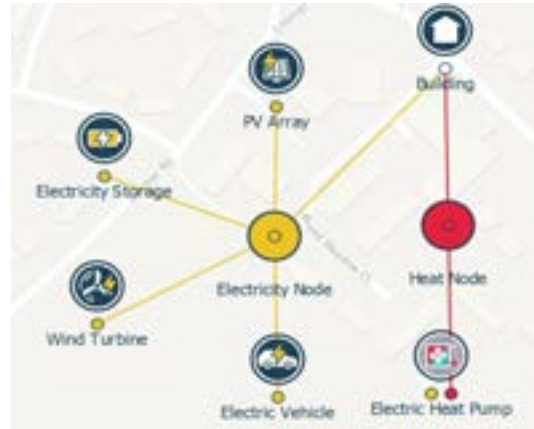


Power Flow View

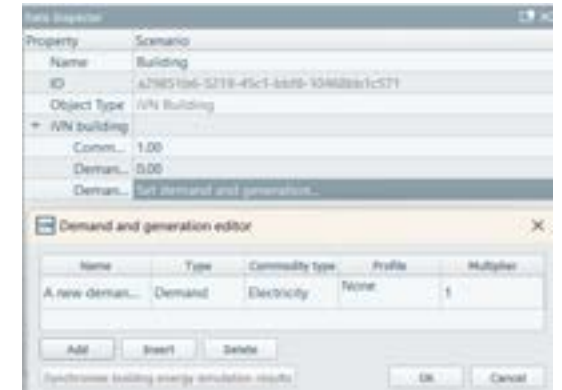
# Data Analysis Workflow...



Identify Site Location(s)



Select Renewable Technologies



Input On-Site Data available

Scenario 2: Solar + Battery Storage

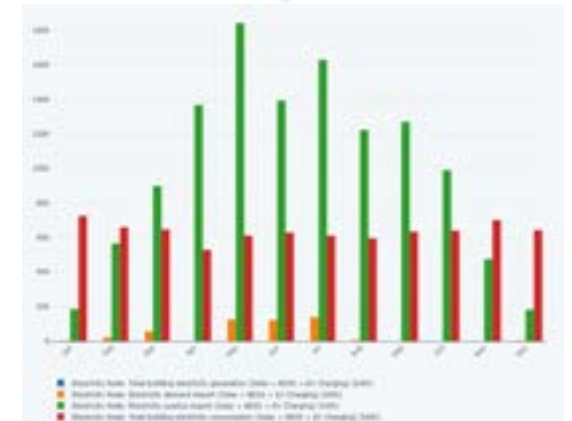


Annual PV Production	Import from Grid	Carbon Emissions	Annual Energy Costs*	Revenue from Export to Grid**	Annual Costs Savings***	Annual Carbon Emission Reduction****
28,238.43 kWh	14,931.35 kWh	1,746.97 kg	£ 3,882.58	£ 795.77	(£ 4,871.32)	1,834.81 kg

Feasibility Reporting



Visualisation



Simulate generation





**pure energy**



Sustainable Energy Advisory



# Advisory - Sustainable Infrastructure Solutions



## Our Capability

- Investor support in sustainable infrastructure developments through to project execution
- Our engineering capability is key to managing and delivering all infrastructure projects on time and within budget
- Due-diligence assessments of sustainable infrastructure
- We possess a deep understanding of operational risks including experience operating hazardous processing facilities
- We understand the regulatory environment within which sustainable projects are delivered



# Project Scope - Integrated Solutions

## A. Low Carbon Heat Networks

Client	Project Reference	Description
eQuality Homes Ltd (KS17)	Kirby Stephen Low Carbon Community Development	22 No. Low Carbon New Homes Development - Low Carbon Design: Energy Box, Geotechnical, Project Management
Prospus Group Ltd	Partington Housing	High level energy load assessment, analysis of phase one target zone
Prospus Group Ltd	Chipping Community Energy	Low Carbon Heating Project - Design, Geotechnical, Project Management
Prospus Group Ltd	Skelmersdale Low Carbon Community	Energy Assessment - Housing Estate

## B. Sustainability Advisory Services

Client	Project Reference	Description
Cambridge Consultants Ltd	King Abdullah City	Renewable Energy & Waste to Energy Solutions
ALEA Global Group	Kuwait City Sustainable Infrastructure	Development Project (Multi-Year Contract) - Biomass Plant/Vertical Farming/ Plastic Recycling - Waste to Energy
Oru Space	East Dulwich	Concept Study/ Renewable Energy Infrastructure
Aster Village LLP	Eco-Village Renewable Energy/Waste to Energy	Concept Study/ Development Project
European Energy Efficiency Fund	Livland Biomethane	Technical Due-Diligence; Biogas Plant
CISCO	Digital Healthcare, Smart Hospitals and Virtual Wards	On-Site Renewable Generation, Energy Efficiency Measures

## C. Electric Vehicle Charging

Client	Project Reference	Description
Chroma Developments Ltd	Level 2 EV Charging Facility	Contactless Payment Technology
Isle of Gigha Community Trust	Level 2 EV Charging Hub Solar PV and Battery Storage Project	On-Site Renewable Generation
ADV Holdings	EV Fast Charging	Contactless Stations
Garrison House, Isle of Cumbrae	Level 2 EV Charging Facility	Monta Back-office System
Private Client - Wiltshire	Solar Carport	With EV charging and BESS

## D. Battery Energy Storage

Client	Project Reference	Description
AgriVolta Ltd	Dairy Farming Sector On-Site Energy Generation	Battery Storage Infrastructure Project Phase 1 - 10 MWh Phase 2 - 25 MWh
Isle of Gigha Community Trust	Campsite Office New Build	Battery Storage Installation Phase 1 - 15 kWh
ABB FIA Formula-E	2nd Life Battery Storage Strategy	Proposal for secondary usage of race car battery units
Private Client - Wiltshire	Solar Carport	Microgrid: EV charging and BESS

## Find out more...

Call: +44 (0)1382 657 457

Email: [info@pureenergyuk.com](mailto:info@pureenergyuk.com)

Website: [www.pureenergyuk.com](http://www.pureenergyuk.com)

Social Media:    



**Business  
Declares**



# Talk

## Home Energy Saving Support for Residents



# Speaker

*Andy,  
Senior Energy Project Officer*

*James,  
Warm Homes Engagement  
Project Manager*





# Surrey County Council – Home Energy Improvement Programme 2025/26

Andy Gaisford and James Heron

Warm Homes and Net Zero  
2050 team

Surrey County Council

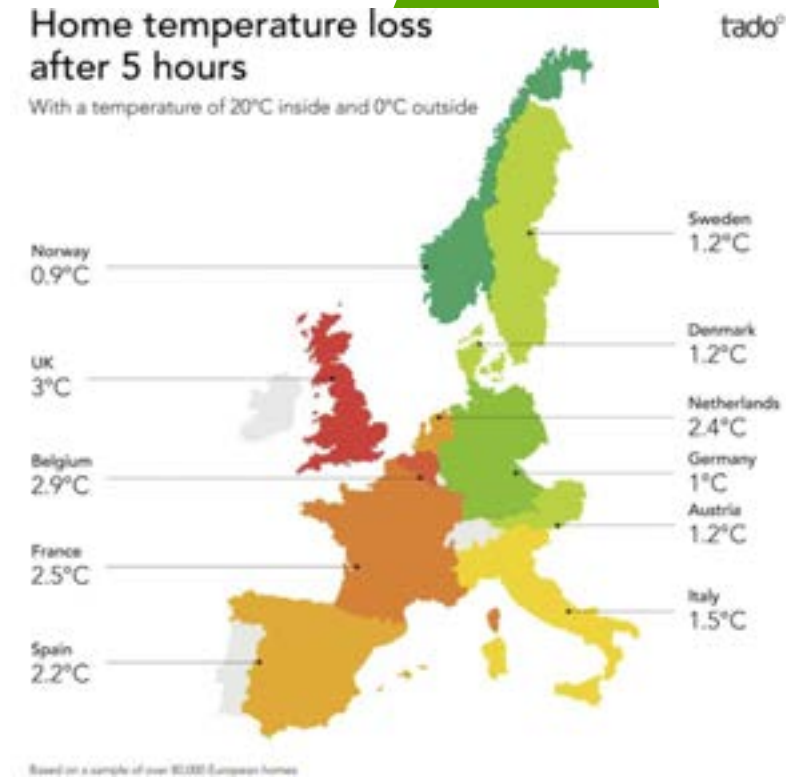
# What will we be discussing today

- Why home energy improvements? The benefits
- Surrey CC progress to date
- Live support on offer for Surrey homes
- Useful web links / phone numbers for advice and assistance



# What is home energy improvement (aka 'retrofit')?

- Any improvement work to an existing home to improve its energy efficiency, making them easier to heat, able to retain that heat for longer, and replacing fossil fuels with renewable energy.
- 8 out of 10 buildings in use today will still be inhabited in 2050
- UK has the leakiest homes in Europe – we leak heat 3 times faster than the Scandinavian countries



# The benefits of saving energy for households



lower energy  
bills



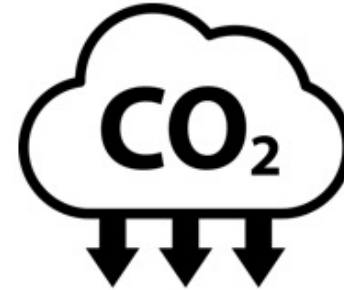
thermal  
comfort



stop  
condensation



health  
benefits



reduced  
emissions

***A Public Health issue: Improving the energy performance of UK homes could save the NHS £2bn by 2030 alone, and £600m every year after that until 2040 – [Citizens Advice](#), June 2023***

# The benefits for Surrey



**UP TO £9BILLION  
MARKET  
OPPORTUNITY**



**30% OF SURREY'S  
EMISSIONS**



**UP TO 3,000 – 5,000 LOCAL  
JOBS SUPPORTED EACH  
YEAR UNTIL 2050**



**SURREY  
COUNTY COUNCIL**

# Progress in Surrey

**Warm Welcome venues:** 134,000+ residents supported

**Fuel poor grants:**

- Prior to April 2025: 1,421 low-income households gifted measures
- Since April 2025 (new scheme): 21 homes completed installs; 97 approved/progressing

**Solar Together:** 3,189 installs and £23m+ invested to date

**Switch Together (heat pumps):** Pilot scheme – installs ongoing

**Green Skills:** 200+ green construction/retrofit courses filled → 48 new jobs (as of Nov2025)

**Home Energy Advice Team (HEAT) success:** over 2,000 home visits to Surrey households

- Plenty of positive **case studies** to combat press horror stories

What support is currently available for Surrey homes?



SURREY  
COUNTY COUNCIL

# Warm Homes Local Grant – Applications Open

All information and how to apply : [www.surreycc.gov.uk/community/climate-change/residents/home-energy/warm-homes-local-grant](http://www.surreycc.gov.uk/community/climate-change/residents/home-energy/warm-homes-local-grant)

- ✓ Open to **Owner Occupiers** and **PRS** (Tenants apply / Landlords subject to further checks)
- ✓ General Eligibility : **Low Income** (under £36K ) and **Low EPC** ( D – G )
- ✓ 4 additional Pathways for financial eligibility (**Means tested, After Housing Costs, Auto-eligible postcode, ECO4 route 2**)
- ✓ Retrofit Assessments / Retrofit Coordination / Installation conducted by trusted **PAS / MCS** accredited network of installers.
- ✓ Energy Improvements : **Insulation** (Loft, Cavity, External Wall, Internal Wall , Windows, Doors ) and **Renewables** (PV, Battery , Thermal , Heat Pumps, Storage Heating)



How to get in contact with the team :  
[energy@surreycc.gov.uk](mailto:energy@surreycc.gov.uk)

WHLG phone line : 01483 404 505



## Celia from Tandridge who did Loft and PV !

*“ Regarding Solar Panels, the service was excellent, with electrician being very professional and helpful and good co-ordination between the team and their HO administration, meaning everything happened when and how I was told - so I would have put 9 or 10 for that ”*

*“ I am so happy as the works may mean I can be sufficiently warm, and financially able, to stay in my home in my very old age, which I thought I may not be able to do 😊 ”*



## Peter from Spelthorne is loving his new energy efficient doors and windows!

**"I just wanted to say thank you and tell you how much I appreciate the grant"**



**"There is no way I could afford to replace the old over-30-year old windows on my meagre wages (having been unemployed for half of last year) and they are a massive improvement. It's really great to look out of them and not see clouded-up panes where the seals have gone!"**

**"All of the contractors involved have been impeccable - polite, helpful and the level of workmanship has been very high indeed. When I got home I was blown away by the lack of mess"**

Rosemary from Woking was one of our very first Ground Mounted Solar PV !! 1.32Kw. She is very happy with her mini solar farm.



## Robert From Runnymede ! who installed ASHP, Loft and PV

*"Every body involved in the surveys and installations were excellent. I've been wanting to go green for a while, held back by cost, but this grant made it possible "*



Robert's EPC went up from a low E to a high C , which is the purpose of the Home Upgrade Grant.

Melannie from Waverley !  
Did a portion of EWI , PV  
and she is now in the  
process of installing an  
ASHP...

Hello

This looks great, thank you very much 😊



**Clive from Runnymede ! Was very happy to get his Park Home Insulation finally done...**



These are some of the comments received by our residents :

***" The insulation has made a surprising difference to the warmth of the house "***

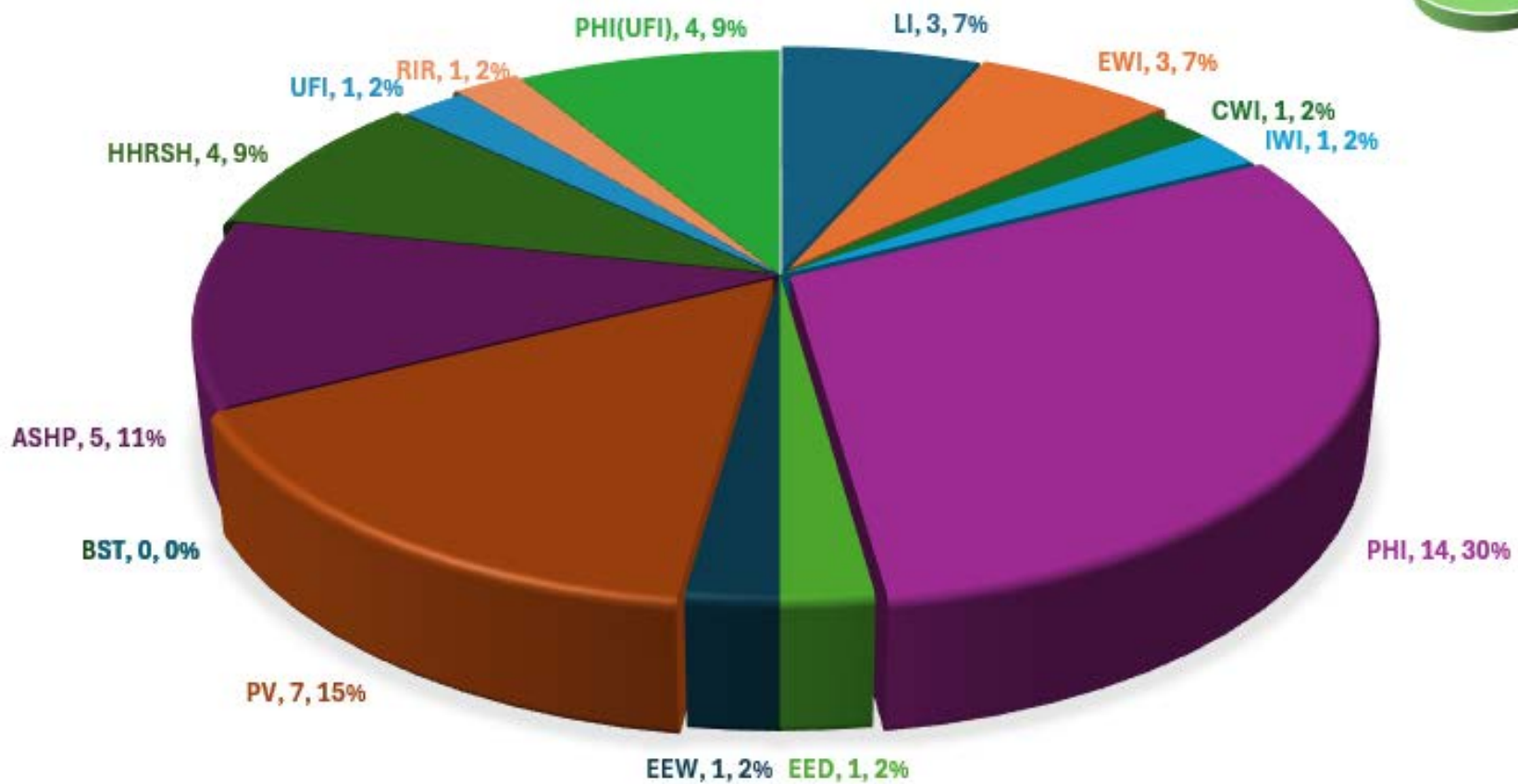
***" I would recommend you, we are very grateful that this is available for homeowners, The insulation has made a huge difference, the whole house feels warmer within a couple of days from installation "***

***" I would like to thank all the companies involved in my installation, I am very grateful to have been eligible for the grant "***



### MEASURES INSTALLED IN SURREY WITH TRUSTMARK- TO DATE

46, 100%



 Find financial support

## Skills Bootcamps

### What are Skills Bootcamps?

Skills Bootcamps are free, flexible courses of up to 16 weeks for Surrey residents. They enable you to gain new skills and fast-track your future.

With a guaranteed interview with a local employer on course completion, you could be giving your career a real boost!

For businesses, it's a great low-cost way to upskill your employees with knowledge to help your organisation evolve and grow in the future.

Scroll down for details of the courses available until March 2026.

Sign up direct with the provider or register your interest via the [Get Support Now form on the Step Surrey website](#).



# Communities Are Key To Delivery...

## Home Energy Advice Team Example

- Over 2,000 Surrey homes supported with free in-person energy advice
- Bespoke reports tailored to home & financial situation, including signposting to grants
- Great customer satisfaction and knock-on impact effect
- £600k further funding secured with EARR & Circular Dorking to continue delivery

Overall how happy are you with the free in-person energy survey you received. (With 1 being 'Not Satisfied' and 5 being 'Very Satisfied')

152 Responses



4.91

Avg. Response

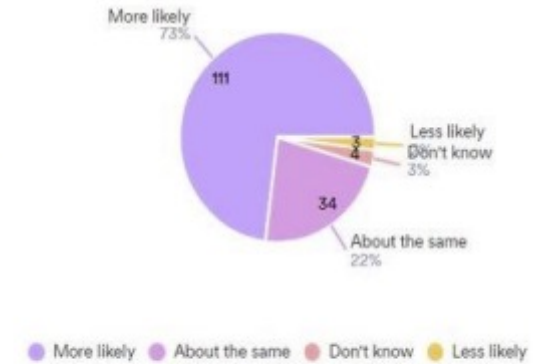
152

Responses

Data	Response	%
★★★★★	142	93%
★★★★☆	8	5%
★★★☆☆	1	1%
★★☆☆☆	1	1%

How likely are you to install a significant 'retrofit' or energy saving measure at some point in the future, as a result of having received your in-person energy survey? (For example: loft, cavity or solid wall insulation, a heat pump or solar panels)

152 Responses



£582,153

Of free thermal imaging provided



£369,861

energy bill savings



961 tonnes

of CO2e avoided



120

residents upskilled & 6 jobs created

# Make your home energy efficient, without the hassle

Get 20% off your Home Energy Plan and 35% off Design & Project Management support.



Surrey County Council and Furbnow have partnered to plan and install home energy improvements for homeowners across the county.

We survey your home and provide expert advice on how to make it energy-efficient and comfortable, year-round.

From there we can produce detailed plans, provide vetted installers and project manage the upgrades.

Contact us today to book your survey.

How It Works

Get Started

<https://furbnow.com/surrey>  
or phone 0330 165 6147



# The Surrey Home Energy Improvement Guide



## Medium semi-detached house

This house type covers a wide range of different types of houses which may not look identical. Their size, construction age and condition will also be different and will have a significant impact on how much work might be needed and what measures are appropriate.

However, a variety of characteristics and constraints are common to semi-detached houses.

This guide aims to communicate clearly solutions likely to be suitable for one 'typical' version of a semi-detached house, a 'medium terraced house':

Do not worry if your house does not exactly fit into this description though. For example, you might live in a larger semi-detached house built in the 1950's. This guide will still be useful to you, but you will have to consider the advice with caution and consider it as a starting point. A building professional can help you identify specific recommendations for your house.

Built in 1900-1920

Approximate floor 120m<sup>2</sup>

Solid walls

Suspended floors

Presence of loft



# Medium semi-detached house

## Heat pump ready ✓

If your home is **heat pump ready** it is likely you could install a heat pump without doing anything else. However, if you do not already have the features highlighted on this page, we recommend implementing them as they are cost effective and will improve your home, increase the performance of the heat pump and reduce your energy bills.



### Solar panels

They work on south, east or west facing roofs and can significantly reduce your electricity bills.

### Insulate loft

The loft is generally the easiest place to install insulation and can even be done as a DIY project. 300mm depth is best.

### Install a heat pump and hot water cylinder

You will need a hot water cylinder inside and a heat pump unit outside. The back garden is likely to be the best option, but other locations may be possible too.

### Improve ventilation

Fans extracting air from your kitchen and bathrooms will improve air quality in your home and reduce condensation.

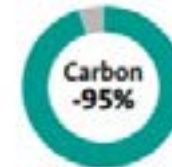
### Electricity supply

You will need to check your electricity supply is 80A – suitable for your heat pump installation.

### Minimise draughts

Air leaks around the house (e.g. around windows and doors, through the chimney) waste a lot of energy (and money). Fixing them is possible and cost effective.

### Savings



### Estimated costs

**Heat Pump**  
from £500\* to £15,000

**Solar Panels**  
from £3,000 to £9,000

**Draughtproofing**  
from £300 to £500

**Loft insulation**  
from £2,000 to £4,000

\* Lower range assumes the contribution of funding and/or financing. Not all households will be eligible, see pages 41-42 for more information.

## Energy Support Options

Grants, loans, and local schemes that you might be eligible for.



Book Your FREE Energy Survey

Learn more →

Surrey Coalition of Disabled People – Energy  
Helping you save on energy bills  
and ease the cost of living.

Learn more →

Warm Welcome Venues  
Your local place for warmth, support  
and a welcoming community.

Learn more →

Warm Homes Local Grant  
Funding for home energy  
improvements

Learn more →



<https://www.fairerwarmth.com/surrey>

## Tips and Tricks

Discover simple and affordable options for saving energy.



Carbon Monoxide Risk



Smart Meters

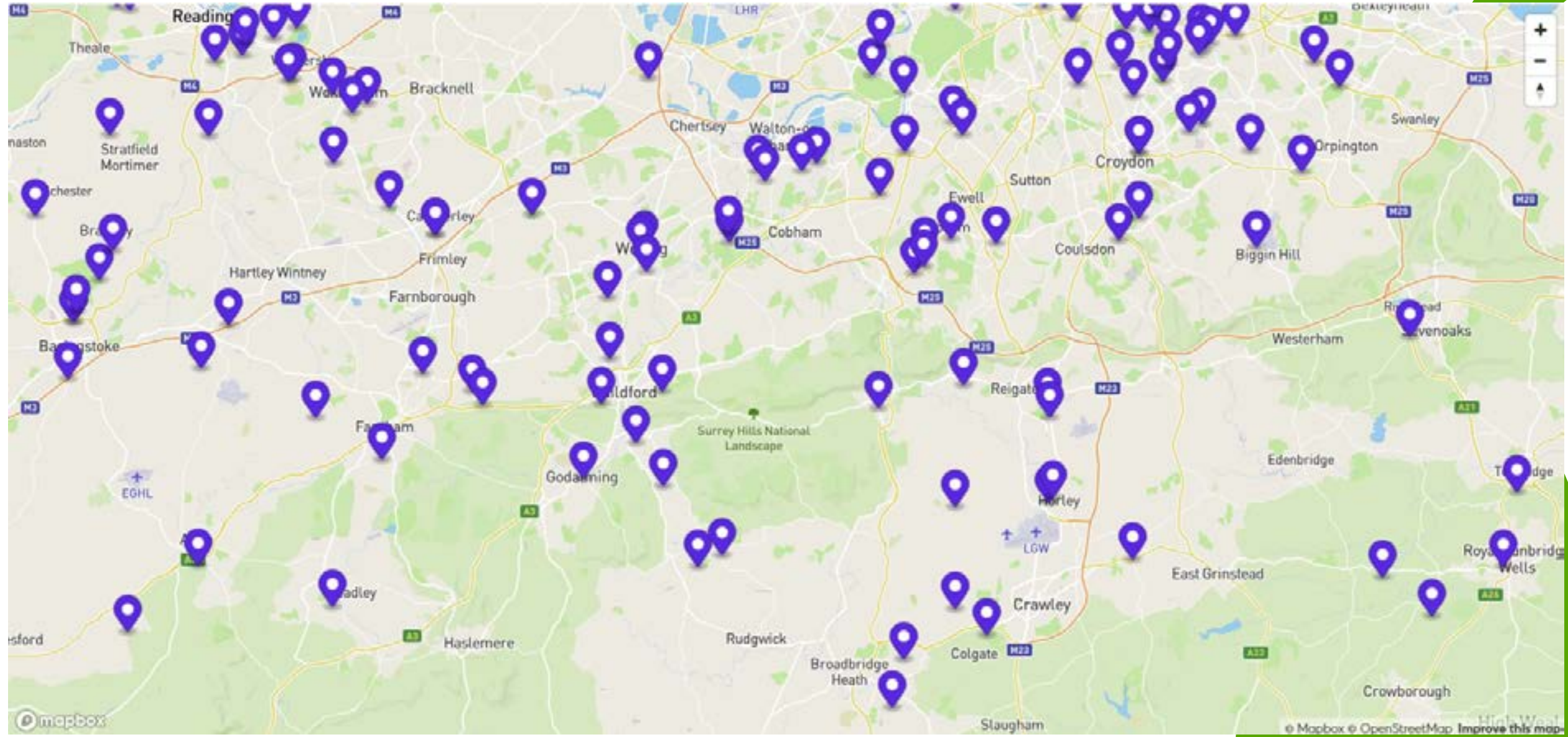


Energy Savings on Home Appliances



Optimising Boiler Flow Temperatures










Home / Guy Martin's House Without Bills

# GUY MARTIN'S HOUSE WITHOUT BILLS

Guy's rolling up his sleeves as he explores how to make your home cheaper to heat. Using all his engineering experience, can Guy make energy bills a thing of the past?

 **Sign in to play**  
 Guy Martin's House without Bills
  My List
  Go ad free

# Useful links and phone numbers – please share!

- Apply for the **Warm Homes Local Grant**: [www.surreycc.gov.uk/community/climate-change/residents/home-energy/warm-homes-local-grant](http://www.surreycc.gov.uk/community/climate-change/residents/home-energy/warm-homes-local-grant) or **phone 01483 404 505** or **email [energy@surreycc.gov.uk](mailto:energy@surreycc.gov.uk)**
- **Encourage** new talent into the sector: [Skills, Training & Employment Portal - STEP Surrey](#)
  - [Skills Bootcamps](#) – 48 green construction/retrofit jobs secured for local people to date!
- **FREE** in-person home energy visit: [www.zerocarbondorset.org/energy-surveys](http://www.zerocarbondorset.org/energy-surveys) or **phone 0300 123 3033**
- **Furbnow** home energy **one-stop shop**: [www.furbnow.com/surrey](http://www.furbnow.com/surrey) or phone **0330 165 6147**
- **Surrey Home Energy Improvement Guide**: [www.surreycc.gov.uk/energyguide](http://www.surreycc.gov.uk/energyguide) or to request a print copy or different format, email [energy@surreycc.gov.uk](mailto:energy@surreycc.gov.uk)
- **Check out** all our other schemes here: [www.surreycc.gov.uk/saveenergy](http://www.surreycc.gov.uk/saveenergy)
  - Or access **Fairer Warmth** (<https://www.fairerwarmth.com/surrey>)
  - **Email [energy@surreycc.gov.uk](mailto:energy@surreycc.gov.uk)** in case you need support
- Contribute to a more sustainable Surrey: [www.togetherforsurrey.org/](http://www.togetherforsurrey.org/)
- Useful Government clean energy campaign page – <https://cleanenergy.campaign.gov.uk/>



# Talk

## Case Study: Air Source Heat Pump in an Older House



# Speaker

Ken Caldwell , Betchworth  
Heat Pump Experience



# HEAT PUMP CASE STUDY: GLEBE COTTAGE

Circular Dorking Home Energy Showcase  
8<sup>th</sup> March 2026

## GLEBE COTTAGE



- Original 2 up 2 down cottage built 1860s (solid wall), subsequent extensions added five rooms (cavity wall)
- Loft and cavity walls insulated, not solid walls, single glazing
- Solar panels installed 2013
- Central heating and hot water was from 36 year old gas boiler
- Total heat demand c. 22,000 kWh pa

# WHY A HEAT PUMP?

- Biggest way to reduce our carbon footprint
- Make better use of our solar panels
- Net installation costs and running costs expected to be similar to new gas central heating system
- Increase future value of house for green-minded people?

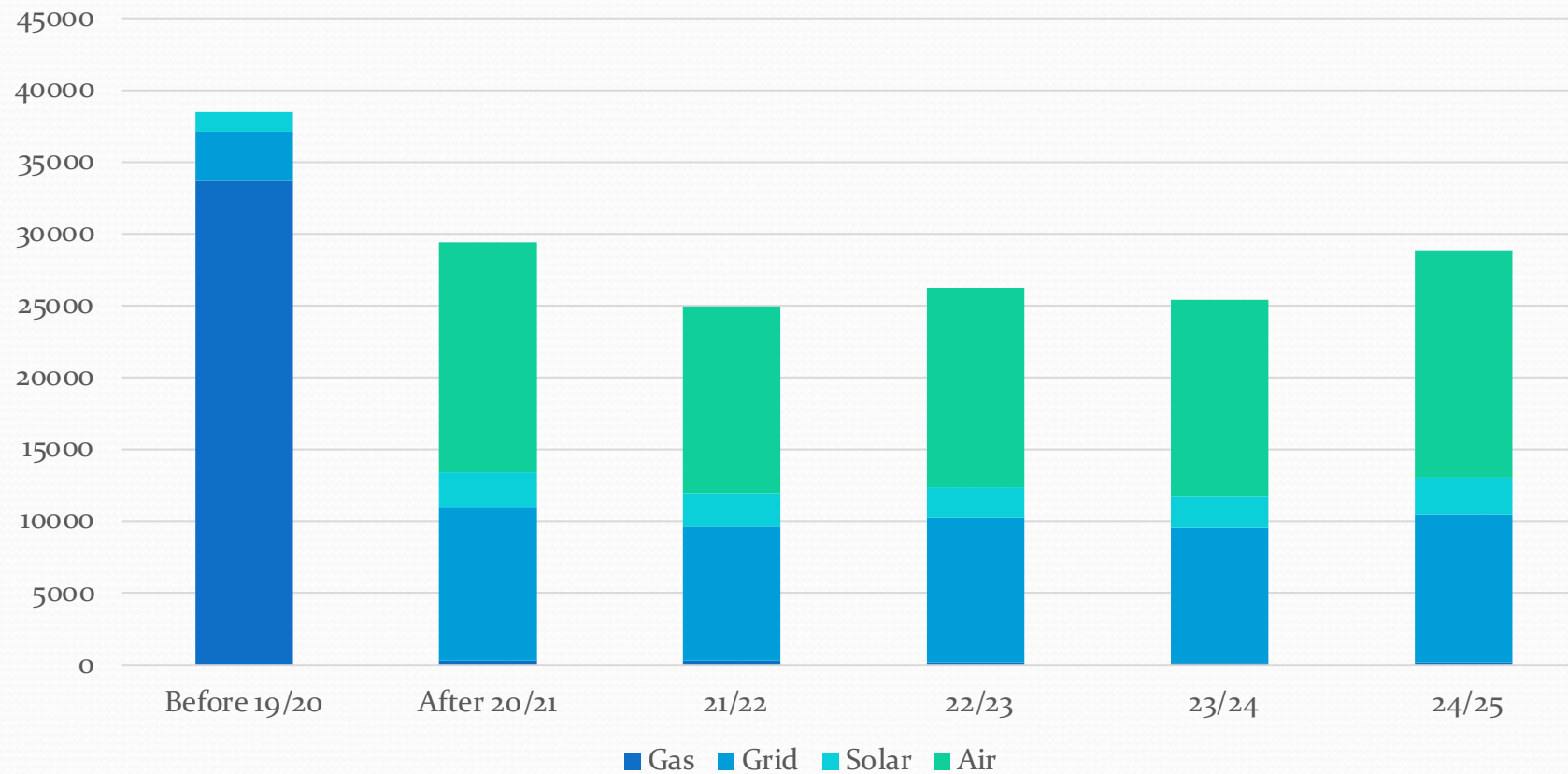
# AIR SOURCE HEAT PUMP AT GLEBE COTTAGE



- Installed 2020
- 3 quotes from MCS certified installers
- Mitsubishi 14 kW air source heat pump and replacement hot water tank (300 litre)
- 50% of radiators replaced
- Installation over 4 days
- Total cost £14k, grants covered £11k, net capital cost £3k

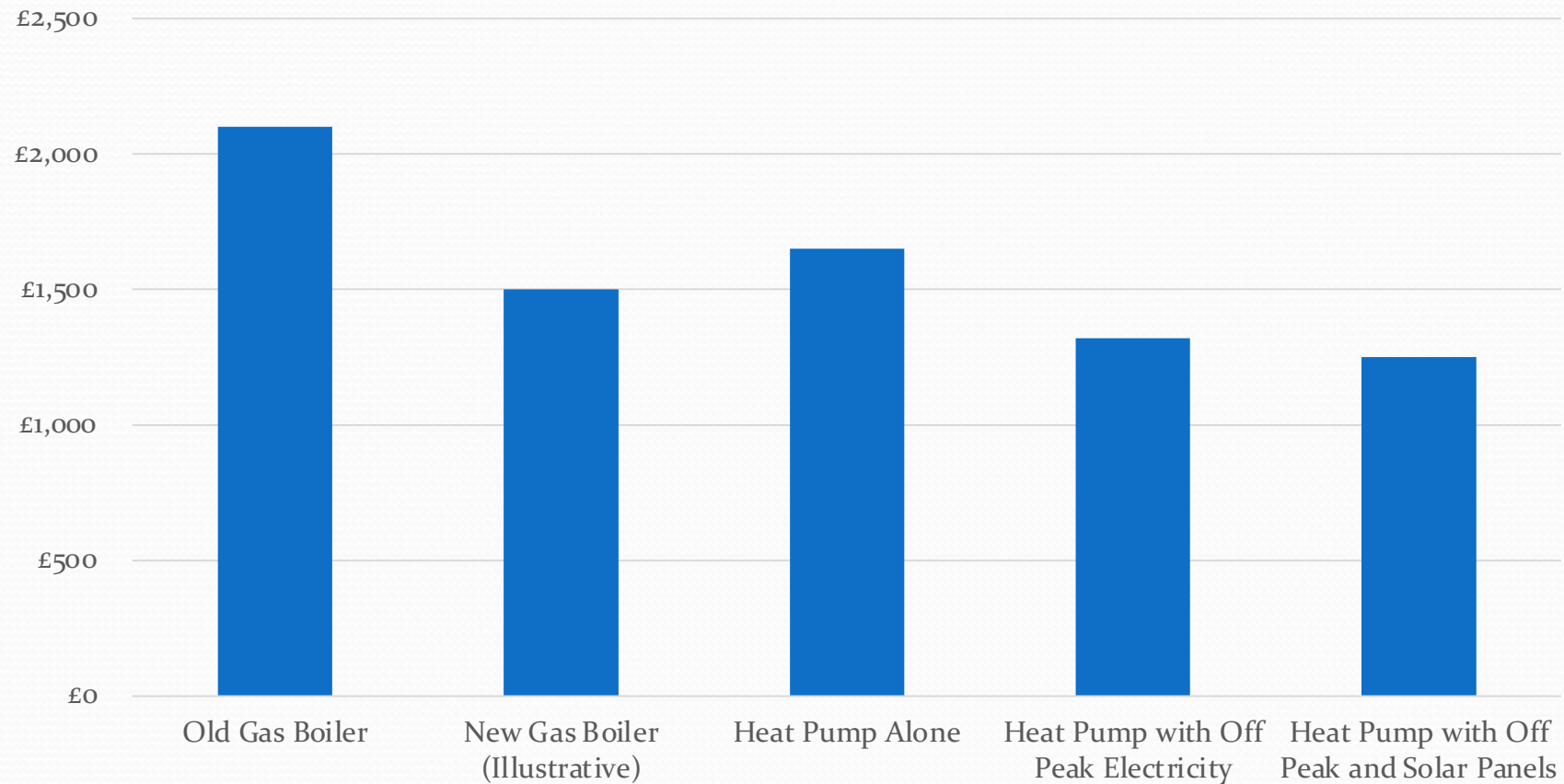
# TOTAL HOUSEHOLD SOURCES OF ENERGY

Before and after heat pump installation, kWh pa



# HOUSEHOLD ANNUAL HEATING COSTS

Central Heating and Hot Water. Comparison at current prices

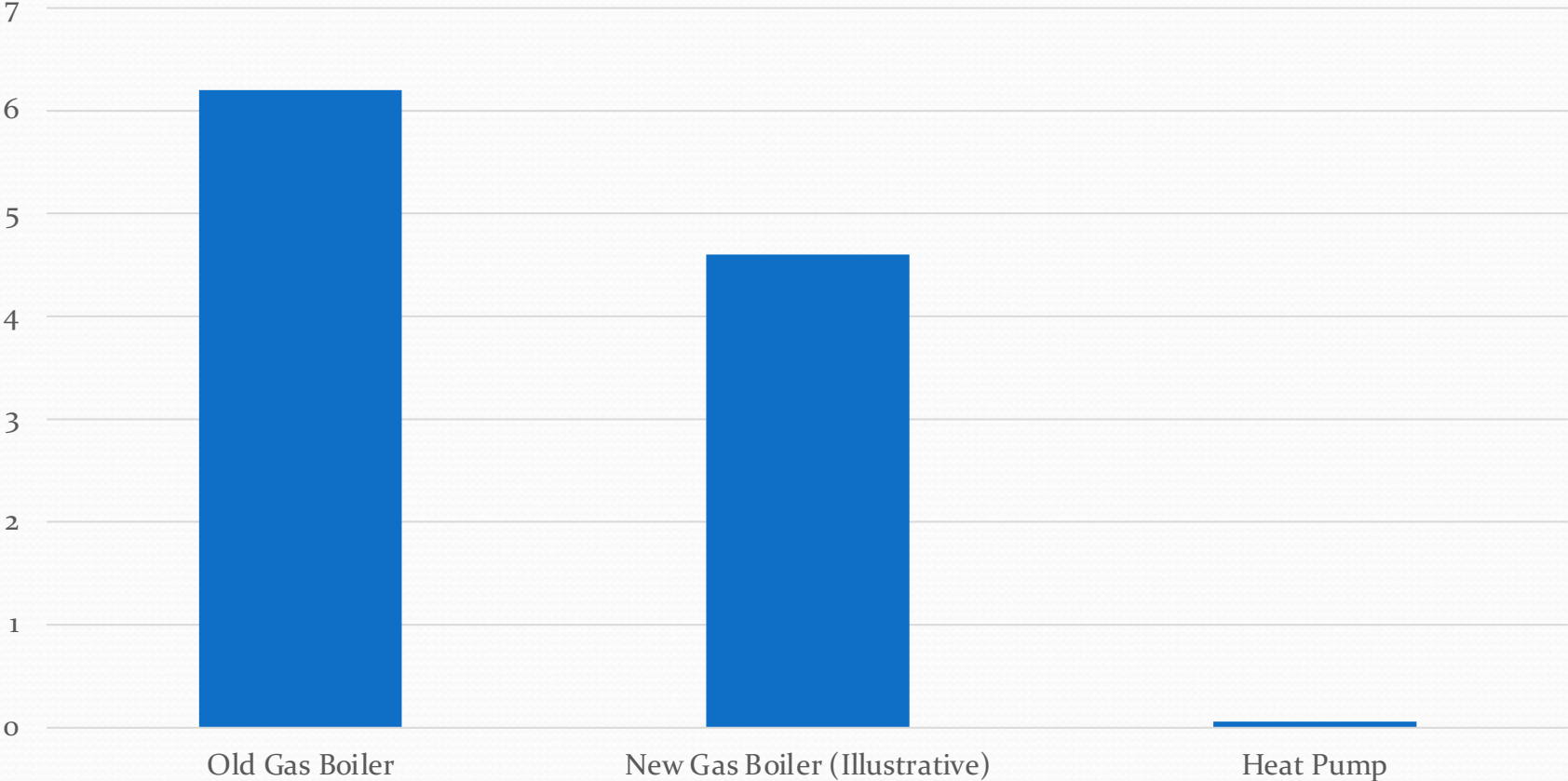


Note: Prices are OFGEM price caps at Nov 25, including VAT, excluding standing charges

# GLEBE COTTAGE

## CARBON EMISSIONS FROM HOUSEHOLD HEATING

Tonnes of CO2 equivalent pa



Note: Heat pump assumes green electricity supplier

# Talk

# Save Energy, Save Money



# Speaker

Jane Tyson,  
HEAT Plus Community  
Engagement Officer



# Save Energy

# Save Money

Name: Anna Jolley



# Who are we?

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Coalition of Surrey community groups



We are independent and impartial.






We are made up of volunteers and some paid staff.

# What do we do?

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-  Help Surrey residents make their homes cosier and reduce their bills.
-  Run events, projects, coordinate volunteers, provide advice.
-  This home energy advice project is funded by UK Power Networks, SGN and The Energy Redress Scheme.

**Energy in  
your home**

# What's the energy price cap?

---



The **Price Cap** is set by the energy regulator Ofgem and is updated quarterly. It's the maximum amount energy suppliers can charge you for each unit of energy *and* standing charge - if you're on a standard variable rate.

It is *not* a cap on the maximum you will be charged - use more pay more!

- On 1<sup>st</sup> October 2025 the Energy Price Cap increased by 2%
- On 1<sup>st</sup> January 2026 it was increased slightly again by 0.2%



The key takeaway here is that energy efficiency & reduction is the best way to lower your bills!!

# What's your energy use?



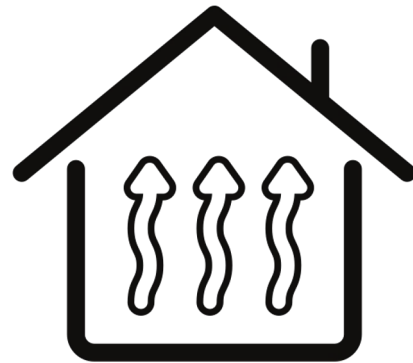
Energy use	Example - home type & no of residents	Typical annual gas use (kWh)	Typical annual electricity use (kWh)	Typical annual electricity use (multi rate) (kWh)	Estimated cost/year
Low	Flat or 1-bedroom house, 1-2 people	7,500	1,800	2,200	£1,148
Medium	2-3 bedroom house, 2-3 people	11,500	2,700	3,900	£1,568
High	4+ bedroom house, 4-5 people	17,000	4,100	6,700	£2,182

# Why save energy?

---



lower energy  
bills



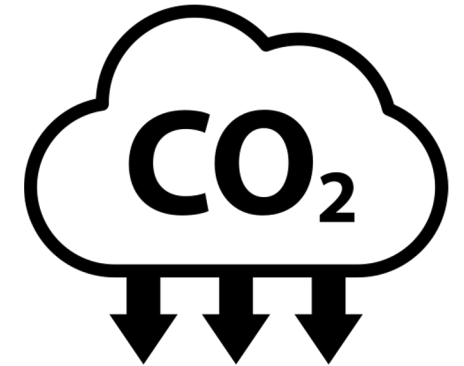
thermal  
comfort



stop  
condensation

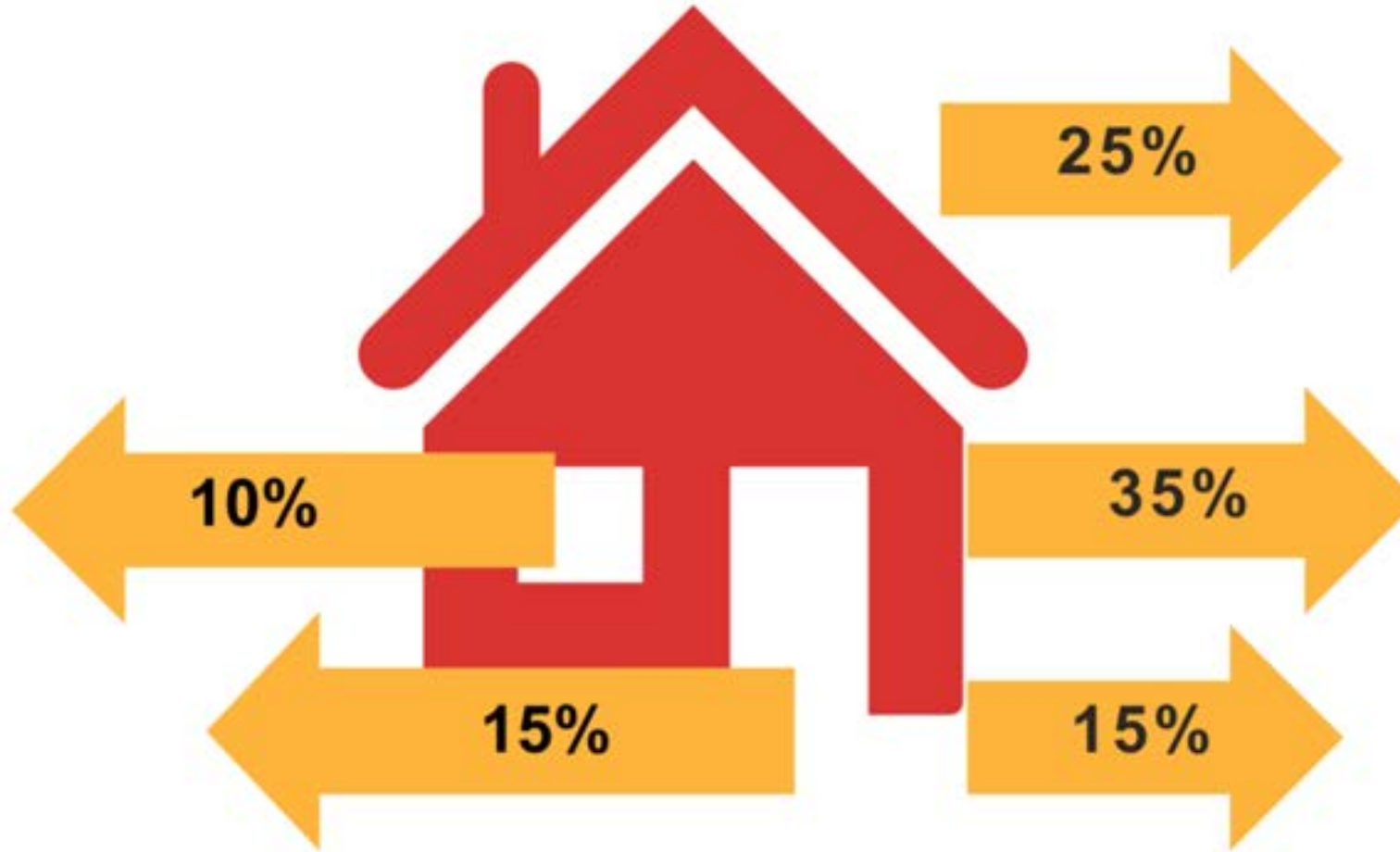


health  
benefits



reduced  
emissions

# Where does the heat go?



# Cavity wall spray insulation

Suitable for houses built.... **1923 - 1986**

- ➔ Cheapest option
- ➔ Non-disruptive
- ➔ Very reliable when done correctly
- ➔ Not a DIY job
- ➔ Use a trusted company that guarantee work



# Loft insulation

---

**Min 270**



**Less effective if squished!**



# Heat leaks

---



# High & low cost appliances

Phone Charger  
Router  
Air Fryer  
Microwave  
Toaster  
LED lights

£

Hairdryer  
Vacuum cleaner  
Games Console  
Desktop Computer  
Iron  
Kettle  
Fridge Freezer

££

Electric Shower  
TVs  
Washing Machine  
Tumble Dryer  
Dishwasher  
Oven  
Electric immersion heater  
Electric room heaters

£££

# Quick wins

---



Turn the thermostat down by 1 degree

**£100**



Draught proof windows, doors, service entry points, floorboards

**£125**



Reduce shower from 15 min to 4 min

**£95**



Lower your boiler flow temperature to 60 degrees

**£112**



Cylinder lagging

**£70 - £300**

**5 inexpensive tips can save you on average**

**£502 a year**

# Smart meters

- ➔ A smart meter can make saving energy and money easier.
- ➔ They are normally available for **FREE** from your energy supplier.
- ➔ They transmit your meter readings automatically.



# Support & grants

---



## **Warm Homes Local Grant**

Provides up to £30k worth of improvements to a property – insulation measures and low carbon heating

## **Fuel vouchers**

Reduces energy debt by giving vouchers for small amounts to be taken off bills

## **ECO Flex**

Administered by Surrey County Council and allows eligibility through local authorities & the NHS for up to £30k retrofit measures

## **Boiler Upgrade Scheme**

grant contribution to help you change your fossil fuel boiler to a heat pump or biomass boiler

## **ZCG Loft Insulation**

Free/discounted loft insulation for those with 100mm or less loft insulation

# Help with cost of living

---



**Pension credit:** pensioners on a weekly income of under £218.15 (single) or £332.92 (couple).

**Attendance allowance:** if one pensioner has a disability and their partner cares for them then they may be eligible for Attendance allowance; circa £70 - £100 per week towards the cost of care.

**Benefits calculator:** find out what you could be eligible for: <https://benefits-calculator.turn2us.org.uk>

**Water social tariff:** on a means tested benefit? Get the social tariff; circa 20% cheaper.

**Citizens Advice** has lots of help and info: [www.citizensadvice.org.uk/debt-and-money/](http://www.citizensadvice.org.uk/debt-and-money/)

**Other sources of help:** Age UK, Surrey Coalition of Disabled People, your local Council.

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# BE ON YOUR GUARD

# AGAINST FRAUD



TO STOP FRAUD™

## Watch out for:

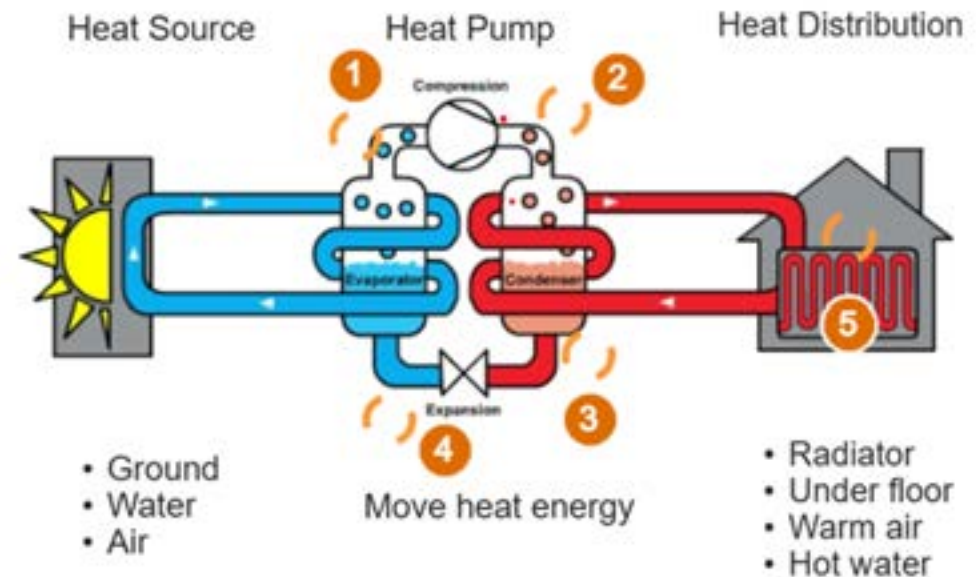
- Deals that seem too good to be true
- Deals with a strict time limit ('offer ends today')
- Salespeople who ask for payment details immediately
- Salespeople who won't give you contact details so you can get back to them

## Protect yourself!

- Don't be rushed
- Take a moment before giving money or information to anyone
- Remember - no reputable business will put pressure on you to make a deal quickly
- Contact your bank immediately if you think you might have been scammed.

# New & renewable technology

- Solar photovoltaics – PV
- Solar thermal (heats up water)
- Heat pumps (low carbon heating)
- Home battery packs (store electricity)
- Electric vehicles
- Flexible energy tariffs







**Take action**

# What can you do to save ££?

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-  Can you think of 3 things to save energy and money at home? Make a plan and start saving.
-  Stay in touch – sign up to hear about tips and funding.
-  Book a HEAT survey and find out where your home can save energy and money.
-  Take part in the customer satisfaction survey.

# Thank you!

Book a home energy visit:

[Anna.jolley@zerocarbonguildford.org](mailto:Anna.jolley@zerocarbonguildford.org)

