## Home energy efficiency and heat pumps







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### **West Suffolk Council - introduction**

## West Suffolk Council

- Net Zero Emissions Commitment
  - Reduce council emissions to net zero by 2030
  - Focusing on the themes of transport, buildings and renewable energy
- The council has installed heat pumps and solar PV at
  - West Suffolk House and Apex
  - West Stow
  - Bardwell Sports Pavilion
  - Mildenhall Hub

Council		ident Business	Visitor	Council	A-Z	٩
fficiency	rgy enciency					
Support for reducing domestic carbon emissions The council is supporting the residents and communities of West Suffolk to improve their home energy efficiency and the government has launched a series of funding initiatives to support home insulation and renewable energy installations.	Ó	Heat pumps a page of information on heat numps and different varieties of hem		Improv of your money	ess energy eff ing the energy eff business will sav and help manag imental impacts.	ficiency ve you e
Community energy planning Information on energy and ideas about the future of heating and power in West Suffolk		Home energy efficiency Being energy efficient can save ou money and help the invironment.	2	Comm Low-C Syster Informa Commu Carbon	dvancing nunities Towa Carbon Energy ms (ACCESS) p ation on The Adv inities Towards L Energy Smart Sy S) project.	/ Smart project ancing ow-

www.westsuffolk.gov.uk/protecting-our-environment

### **Support for residents**

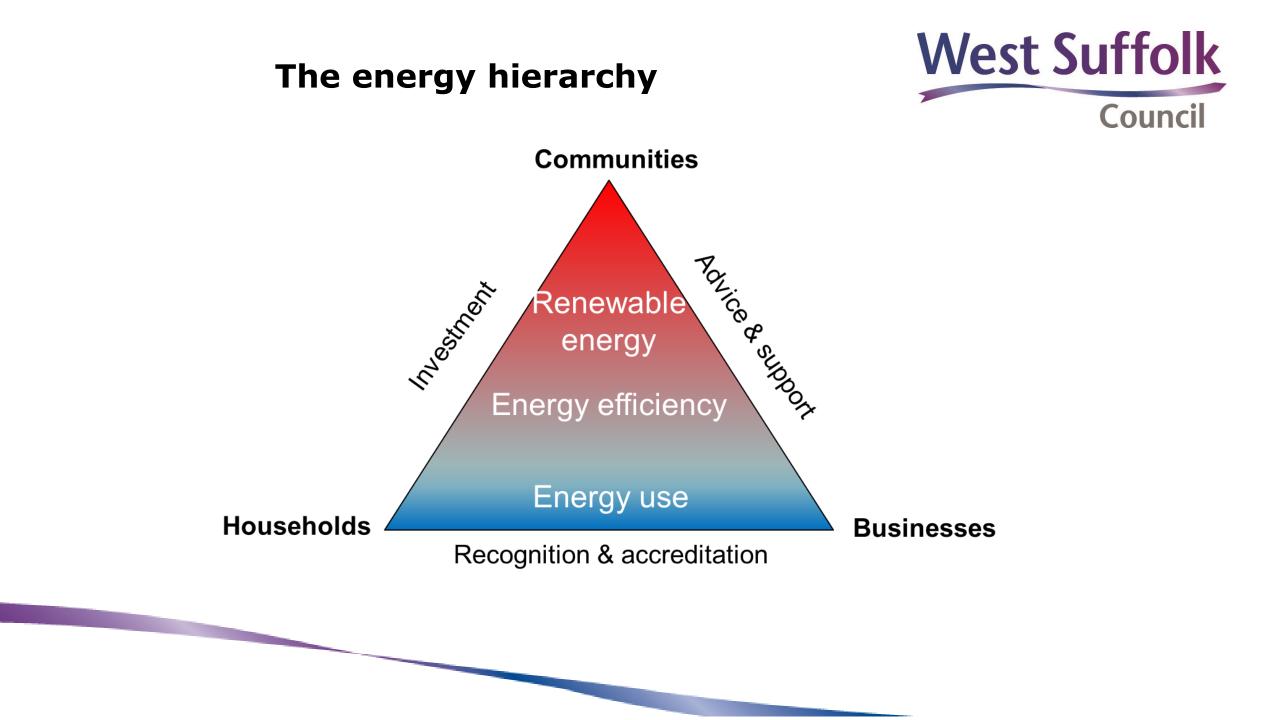


- Advice and information
- Warmer Homes- first time central heating
- Insulation schemes
- Solar Together
- Advice on electric vehicles
- 0% Energy Saving Loan

And funding options and support for communities and businesses



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Creating the Greenest County Home Events News	Contact Us About	est Suffolk
Search Go	At Home » Energy » Loans for Energy Efficiency	Council
Flooding	Loans for Energy Efficiency	
Climate Ready?	Suffolk Greener Homes % Loan scheme	
Plug in Suffolk	The Greener Homes Loan Scheme offers loans of up to £5,000 at 0% APR to help homes cut their energy use. Loans are available for energy saving measures such as insulation, boiler upgrades and	
Natural Solutions	renewable energy systems. Loans are only available for the installation of approved materials and technologies by accredited installers.	
At Home	There are two types of loan available. Short term loans (2 to 12 months) of up to £1,000 for smaller improvements such as insulation, and long term loans (1 to 3 years) of up to £5,000 for more expensive	
Energy	measures such as renewable projects.	
Recycling	The following measures will typically be supported:	
Water	<ul> <li>Solar PV panels and associated efficiency equipment (immersion switches, battery storage)</li> <li>Solar thermal</li> </ul>	
Carbon Footprint	<ul><li>Air source heat pumps</li><li>Ground source heat pumps</li></ul>	
At Work	<ul> <li>Domestic wind turbine</li> <li>Biomass boiler</li> </ul>	
At School	<ul> <li>LED lighting</li> <li>Loft and floor insulation, cavity wall fill, internal and external solid wall insulation</li> </ul>	
Suffolk Recycling	<ul> <li>Draught-proofing</li> <li>Double and triple glazing</li> <li>Electric vehicles and charging points</li> </ul>	
Greener Travel	<ul> <li>Water conservation measures (e.g. rainwater harvesting)</li> </ul>	





### **Insulation First**



### **Insulation measures**







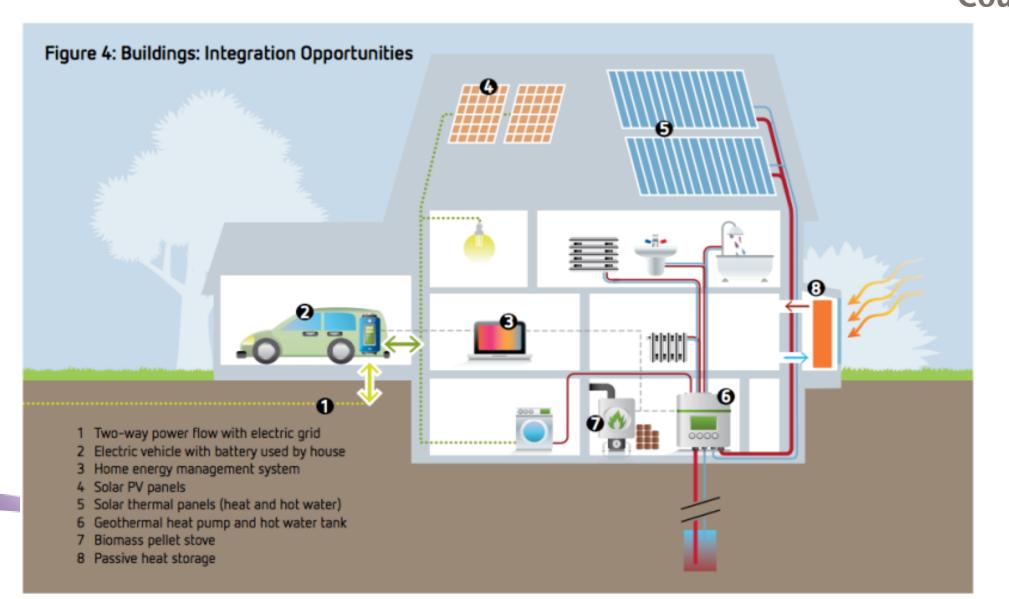
# West Suffolk







### **Range of suitable technologies**





### **Green Homes Grant**

- The Government have announced a new £2 billion scheme to help homeowners across England improve the energy efficiency of their homes. Households will be able to apply for the Green Homes Grant in September 2020 and it will run until March 2021.
- For most people, the grant will cover two-thirds of the cost up to a maximum of £5,000. For homeowners on lower incomes, the scheme could give you free energy-efficient measures up to a value of £10,000.
- The grant covers insulation measures such as solid wall, cavity wall, under-floor, loft, flat roof, room in roof and park home
- You also have an option to buy a heat pump using the grant. Alternatively, you can buy the hybrid heat pump offer which is already subsidised by EDF
- Homeowners across England will be able to access advice and support on improving the energy
  efficiency of their homes via the <u>Simple Energy Advice Service</u>

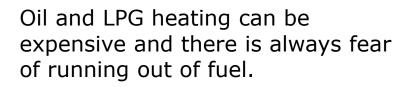
### **Renewable heat incentive (RHI)**



- Homeowner funds installation of renewable heat technology including heat pumps and solar thermal
- RHI subsidy is paid to residents quarterly for 7 years and should exceed initial capital outlay
- The RHI can be combined with the Green Homes Grant
  - You can claim both the Domestic RHI and the Green Home Grant for a renewable heat installation. You must claim the Green Home Grant voucher first and then notify Ofgem that you have used it when you apply for accreditation to the Domestic RHI. The Green Homes Grant will then be deducted from your Domestic RHI payments.
- There are several local installers who could install a heat pump, here are 3 that have carried out work through council schemes:
  - www.finn-geotherm.co.uk
  - www.eocservices.co.uk/air-source-heat-pumps
  - www.greenscapeenergy.co.uk

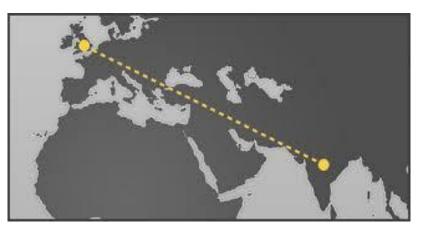
### Why heat pumps?

Did you know, a typical household using oil heating is estimated to generate the equivalent of 10,000\* miles of carbon every year – that's a round road trip between the UK and India.





Heat pumps are low carbon heating solution that can be up to four times more efficient than an A-rated boiler



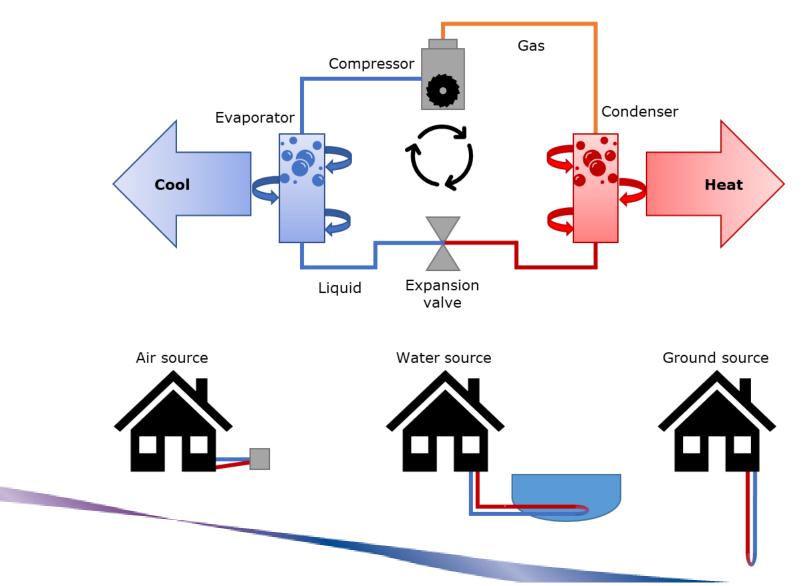


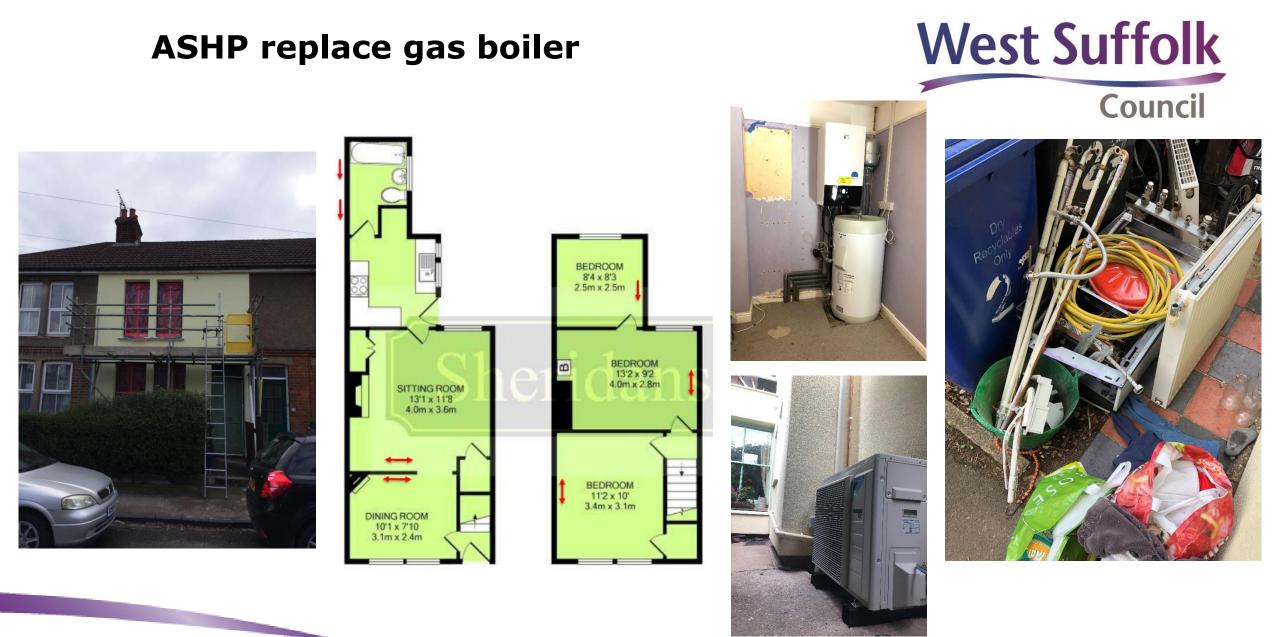


\*A household consuming 1000 litre of oil every year. Carbon calculated from http://www.carbon-calculator.org.uk/



### **Heat pump schematic**





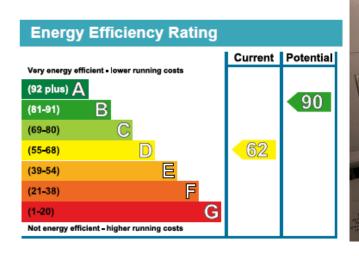
## West Suffolk Council

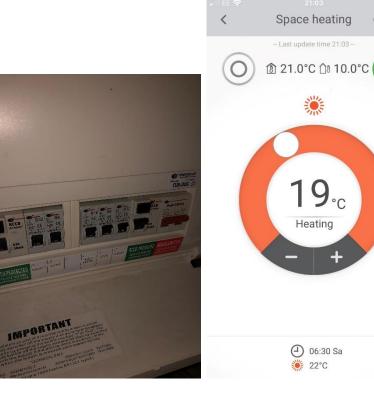
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### Things you will need

- Floor plan with room areas
- Radiator sizing
- Energy Performance Certificate –kWh
- Electrical supply 60 Amps / 100 Amps
- Controls







### **Costs and Savings**

#### • Costs

- Electrician £600
- ASHP £8,500
- Additional Controls £250
- Total £9,350

#### Savings

- Replace boiler with TRVs -£5,000
- $RHI = \pounds 680/year 7 years (\pounds 4,760)$
- Gas to electric -cost neutral
- Total £9,760

### **EDF Hybrid Heat Pump Offer**



- We are participating in a government subsidy scheme (Renewable Heat Incentive) to bring a subsidised heat pump to consumers.
- You will get a state-of-the-art hybrid heat pump that can switch up to 80% of your heat-to-heat pump. The offer includes
  - Heat Pump including installation
  - Smart controls that intelligently switch between your boiler and heat pump
  - Optional 100% renewable tariff starting from 12p per kilowatt hour
- You pay- £1350 over 7 years
  - £399 upfront
  - £14.99 per month for 7 years
- You are eligible for an optional government metering subsidy of £1610

### What is a Hybrid Heat Pump?

Link to video introducing domestic hybrid heat pumps

https://youtu.be/ge\_69JiiqX8









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### **Hybrid Heat Pump**



- Go online to: https://www.edfenergy.com/upgrade-to-hybrid
  - Complete the web enquiry form using the link above. Select 'other' when asked where you heard about the scheme and enter 'Westsuffolk' in the field provided.

Getting your hybrid heating system

	E		$\bigcirc$
1. Register your interest	2. Call-back from our team	3. Home survey &	4. Installation & registration
Complete our online form and an expert at PassivSystems will call you back	If you have the following info to hand it will be really helpful • How much you pay for your fuel • How many litres of oil or LPG do you use a year • What is your annual fuel bill	proposal A surveyor will visit your home for a no-obligation survey to assess suitability. You'll receive a free Energy Performance Certificate (EPC), and an offer pack if your house is deemed suitable.	An expert installer will install the hybrid heat pump and smart controls – they'll also show you how to use the smart controls. You'll have to register the system on the government portal for us to receive the government subsidy.

> If you're interested in hybrid heating, or just need to find out more about it, fill out the contact form and one of our experts at PassivSystems will be in touch to discuss your options



#### Get us to call you

Scheme Eligibility

- Spend at least £800 per year in your heating using Oil or LPG
- Own your home and have some outdoor space ٠
- Have a home internet connection ٠
- Have a working and serviceable existing heating • system
- Have loft insulation that's a depth of at least 150mm ٠
- No microbore or underfloor heating ٠
- Meet the scheme criteria (our team at Passivsystems ٠ will talk you through this)



### **Questions and answers**

For more information see <u>www.westsuffolk.gov.uk/protecting-our-environment</u>

Or contact Environment@westsuffolk.gov.uk

