



octopusenergy 

Investment & Innovation

Renewable ENERGY INSTALLER & SPECIFIER

Renewable Energy Installer

HEAT PUMPS ▾ SOLAR ▾ HYDROGEN ▾ LOW CARBON ▾ GREEN ENERGY ▾ TRAINING ▾ EVENTS ▾ MORE ▾ 🔍

HEAT PUMPS

News

Octopus Energy acquires Irish heat pump manufacturer RED

Octopus Energy Group has announced a strategic investment into heat pump manufacturer Renewable Energy Devices (RED).



EXPRESS

Octopus Energy throws UK energy crisis lifeline with plan to guarantee homebuyers NO BILLS

OCTOPUS ENERGY has handed the UK an energy crisis lifeline after teaming up with housebuilder like Homes with a scheme to guarantee homebuyers no energy bills.

By ANZOR PAUL
ON 10 JUL, Jul 9, 2022 (UPDATED 10 11, Jul, Jul 9, 2022)



Installation and Running Costs

Goods and Equipment		Cost
Heat Pump		£1,884.11
Hot Water System Upgrades as Required		£680.35
Radiator Upgrades as Required		£277.12
Plumbing Components		£791.36
Electrical Installation Components		£449.90
Additional Costs (Access Equipment, Scaffold etc.)		£0.00
Subtotal		£4,082.84
Goods & Equipment Cost Including VAT @ 0.0%		£4,082.84
Services	Qty	Cost
End to End Installation Services	1	£4,290.00
Waste collection	1	£55.00
Additional Services	1	£0.00
Testing & Commissioning	1	£0.00
MCS Registration	1	£30.00
Sub Total (ex. VAT)		£4,375.00
Services Cost Including VAT @ 0.0%		£4,375.00
Total Installation Cost (inc. VAT)		£8,457.84
Boiler Upgrade Scheme Grant		£5,000.00
Total Installation Cost (inc. VAT)		£3,457.84

Heat Pump

£1,440

Methane

£1,761

Annual heating

£321

ASHP saving

£210

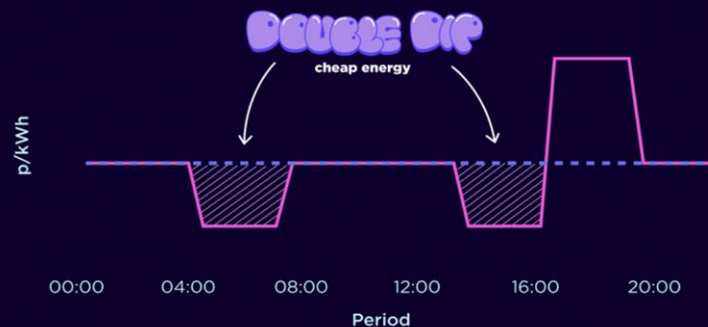
Cosy Octopus saving

£104

Gas standing charge

£635

TOTAL saving



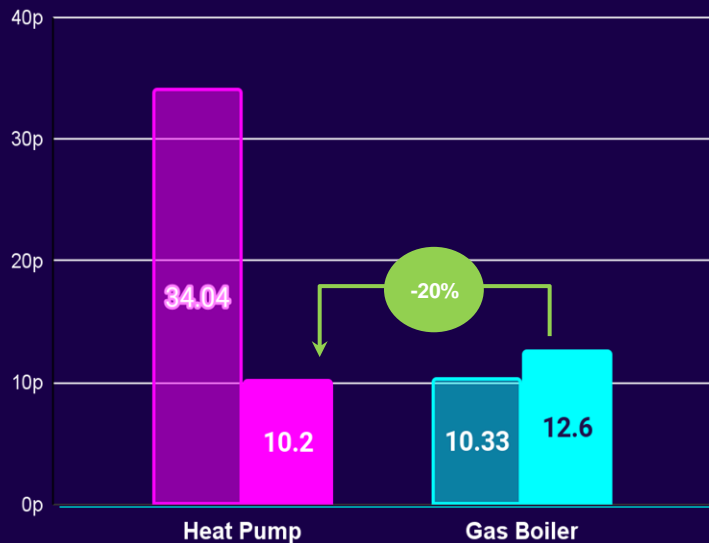
Cosy Octopus

An ASHP is cheaper to run than Methane

Cost of kWh of heating is **20% less than methane**

Which is a **£321 saving** and **74% less CO2**

Cost per kWh vs. Unit of Heat (p/kWh)



	Heat Pump	Gas Boiler
Avg heat (kWh)	14,105	14,105
Efficiency	333%	83%*
kWh energy req.	4,236	17,097
Price per kWh	34.04p	10.33p
Annual cost	£1,440	£1,761
Annual CO2	818 kg	3,124 kg

*Average heat pump consumption % efficiency taken from our monitored homes, average gas boiler efficiency taken from [BEIS study](#). CO2 based on [UK Gov](#) data showing 0.192 kg/kWh for UK electricity and 0.183 kg/kWh for gas

Green levies are at odds with Net Zero

Electricity tax is 13.5x higher per kWh

Shifting levies to Methane will drive green tech

Average Prices incl. Green Levy (p/kWh)



Prices after Re-assessment of Levy (p/kWh)



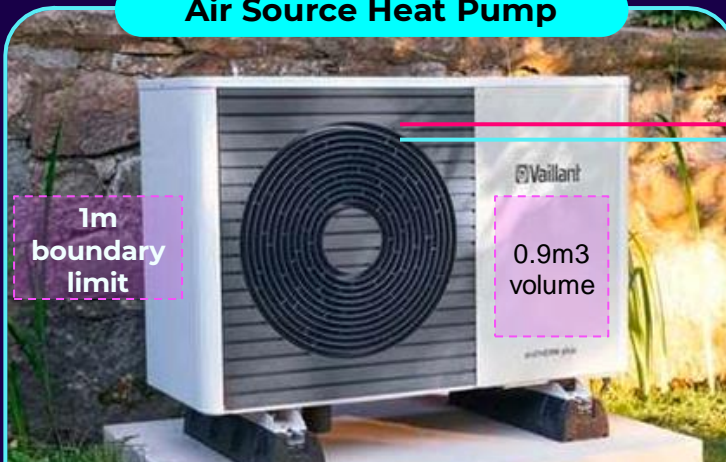
One of these has planning permission issues

External Oil Boiler



Energy consumption: **15,500 kWh**
Noise level: **up to 70 dB**
CO2 emissions: **3.7 tonnes**
NOx emissions: **2 kg**
Size: **1.3 m³**

Air Source Heat Pump



Energy consumption: **4,235 kWh**
Noise level: **56dB**
CO2 emissions: **0.8 tonnes**
NOx emissions: **None**
Size: **0.9 m³**

42 dB | 9.6 meters

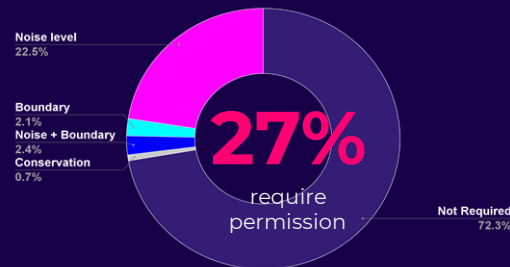
47dB | 5.1 meters

Increase the noise threshold for planning permission to **47dB**

Remove the **1m boundary limit**

Remove the **0.9m³ volume limit**

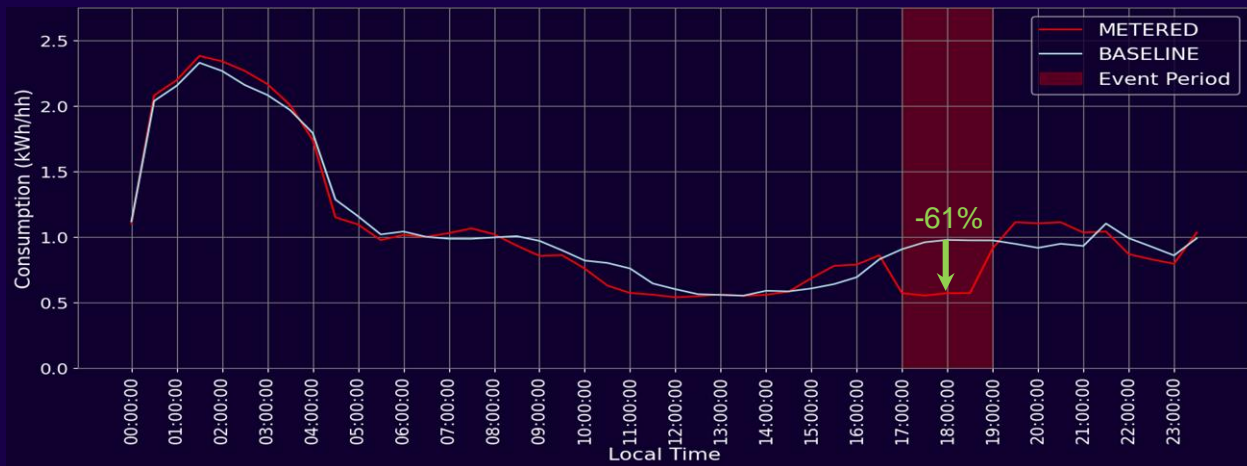
Heat pumps requiring planning permission by reason



Equinox Trial

Equinox—an NGED-led demand-shift trial to measure how heat pump flexibility can reduce system stress & cost to support local grid resilience.

Participants are proving the impact of heat pump flexibility by reducing **peak heating energy usage 61%** during trial events, with **93% reporting no major impact on comfort**



NGED asks participants to turn their heat pump off for 2 hours to measure impact on peak demand.

HEAT PUMPS

by octopusenergy **services**



“Pioneering the low-cost heat pump revolution to accelerate net zero”