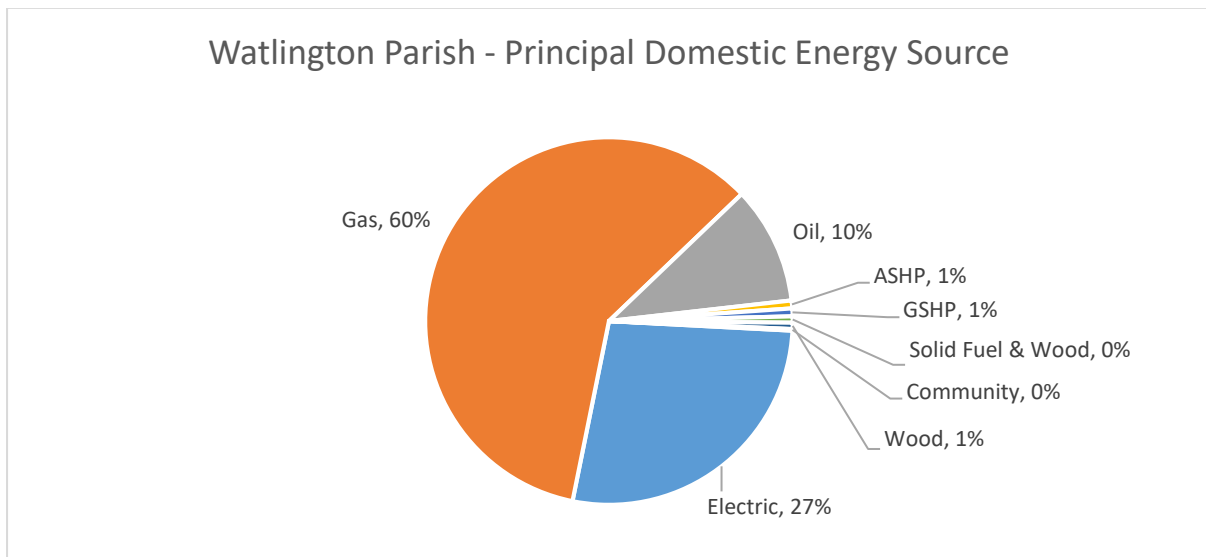


Watlington Climate Action Plan: Your home and “Net Zero”

Last time we looked at Watlington’s Carbon Footprint, the amount of carbon dioxide and other greenhouse gasses that we emit as a parish: about 13,400 tonnes every year or around 5 tonnes for each resident.

The largest single source of our emissions is the energy we use in our homes. Heating, lighting, cooking, running computers, washing machines and other appliances produce 40% of our emissions either directly when we light the gas boiler or generating the electricity we use.

In Watlington most houses use gas as the principle energy source.



Sooner or later, we are all going to have to do something to reduce this if we are to get to “Net-Zero” and stop the planet warming up.

You can reduce the amount of energy you use (and your emissions) right now. Insulating your home (double glazing, loft insulation and cavity wall for example) can make a difference and government grants may be available. Turning down thermostats and not heating rooms you don’t use can also help. Depending on your house, this could reduce your household emissions by up to 15%.

To get to zero though you need to change the source of energy away from fossil fuels. Biofuels (wood burners for example) are one choice but can have air quality impacts.

The cleanest solution is to install electric heating and switch your supplier to one that offers “Green” electricity from renewable sources. We’ll come back to how the electricity supply is changing to zero-emissions in a future article.

Electric heating has a reputation as being expensive or, like storage heaters, difficult to control but two new technologies are changing the picture.

Air Source Heat Pumps (ASHP) work a bit like a fridge in reverse. Instead of using a pump to cool down the inside of a fridge and “pumping” the heat out, they pump heat from outside air into your house as warm water to feed your radiators and hot water system.

Because ASHPs only move the heat around rather than creating it, they are 3 or 4 times more efficient than an electric heater. Even better, the Government will pay you for the heat they produce! It all sounds too good to be true but it does work even when it is cold outside – they are widely used in Sweden for example.

A Ground Source Heat Pump (GSHP) does something similar but pumps the heat from underground, using the Earth’s natural warmth. You need a big garden or a deep borehole to get enough heat, so these may not be suitable for many houses in the town and are more expensive to install than ASHPs.

Other options, such as Green Hydrogen to replace natural gas, are emerging but won’t be available in Watlington for the foreseeable future.

Of course, changing your gas boiler to a heat pump isn’t going to be cheap. Prices are expected to fall as they become more popular. A trend that will accelerate when gas boilers are banned in new build houses from 2025. A ban that is likely to be extended to replacement boilers after 2035.

So, when you are thinking about replacing your old boiler, consider installing a zero emissions alternative instead. It may be more expensive to install but with the recent spike in gas prices and money back from the Government, it will be cheaper to run.

Steve Bolingbroke

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