THE BY BROOK SUSTAINABILITY CALENDAR

SEPTEMBER – ENERGY

This month we cover energy with a focus on the home.

Our prodigious use of energy is hitting us hard, with both huge price increases and the impacts of climate change largely caused by the related emissions.

The only good news is that as prices rise, people become more incentivised to reduce energy use and investment in energy efficiency becomes more financially beneficial.

But this Grandaddy of all environmental issues needs tackling now.

Where do we start?

It's a controversial phrase, but 'Insulate Britain' is not a bad starter for ten. Reducing use should always be the priority. The UK is renowned for its old, leaky housing stock and here in By Brook, it's even older and leakier than average. Upgrading our housing needs to be considered as a massive infrastructure project, which unlike Crossrail and HS2, would actually benefit the people who really need help. Unfortunately Governments have failed miserably with unambitious and flawed strategies achieving precious little.

This is about more than just some extra lagging in the loft, many homes need wall insulation, new glazing and other intervention. We need a package of incentives, grants and a huge training programme to build the necessary resources.

But isn't it getting hotter?

Yes-and there is a danger that we put all our focus on renovating our homes for the colder climate that we used to have and forget the need to keep our homes cool in our increasingly sizzling summers. We will need to look at shading windows to reduce solar gain, and ventilation strategies more associated with Mediterranean climes. Outside we should minimise hard, dark surfaces and maximise lush vegetation for its natural cooling effect. And we do need to avoid more air conditioning, which will just add to our energy problems.

So what about climate change?

The burning of fossil fuels is, alongside destruction of our natural landscapes, the biggest cause of climate change. We need to move to renewable energy as quickly as possible.

The UK has the fastest decarbonising electricity system in the world. Emissions have dropped from 500 grams of CO2 equivalent per kWhr to below 200, due to the rapid phasing out of coal and increases in wind power in particular. This however has been the easy bit and the journey to a net zero electricity supply is going to be challenging.

But aren't renewables unreliable and expensive?

National Grid ESO is the organisation that ensures that Great Britain has the essential energy it needs by making sure supply meets demand every second of every day and it is fully committed to delivering a net zero electricity supply.
It is of course no easy task and a whole range of measures are required including demand management, energy storage, smart grid technology, back-up facilities and a wide mix of generators. Read more at www.nationalgrideso.com

Over 10 years, the cost of offshore wind has fallen by 60% and large scale solar by 88%. It is estimated that new renewables in 2021 will reduce generation costs by over $55 billion this year. Despite our reduced dependency on gas, it is global gas prices that have led to the huge increases in our fuel costs over the last year.

How will we heat our homes?
The Government plans to ban fossil-fuelled boilers in new homes by 2025 and stop all installations by 2035. Heat pumps are considered as the main replacement, but they are not well- suited to period homes in particular. Hydrogen boilers may become a real alternative, and it may be possible to convert oil-fired boilers to run on HVO, a fuel which claims 88% lower emissions. www.futurereadyfuel.info

What can we do now?

Get your home winter-ready. Check your loft insulation-if it's not nearly a foot deep, it's probably inadequate. Ensure windows have effective double or secondary glazing-Mitchell & Dickinson specialise in period homes. Do DIY draught proofing-don't forget letter boxes and loft hatches.

Don't standby; large amounts of energy are consumed by not turning off and leaving items on stand-by. Your smart meter will show you how much you are using and the impact of say boiling your kettle but linking with this app can provide more information and help to cut 10% from your bill. www.loophome.app

Aim for 'A's. Only buy the most energy efficient electrical items. Domestic appliances are energy rated-beware that the system is changing, the old G to A+++ is changing to G to A. An 'old-A' is poor-a new A will be amongst the best. www.energysavingtrust.org.uk

Save by Degrees-Turning your thermostat down by 1 degree can save over £100 per year and as my/everyone's Dad used to say, 'put a jumper on'! You can find 102 energy saving tips at www.uswitch.com

Support Renewables. Probably best not to switch now, but the greenest renewable tariffs are from Ecotricity and Good Energy.
Not all renewable energy projects are in the right place, but we need more wind and solar and change is not without impacts.
Look at installing PV or solar thermal on your home or own part of a wind farm and get affordable, zero-carbon electricity to your home via the grid www.rippleenergy.com

Next month's edition is all about Community. Get in touch at mike@vertigosdc.com

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