District heating could take the fear out of scrapping our old boilers

OPINION



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THE world of net zero can sometimes seem like a land of promise in which if you are lucky enough to be wealthy (and therefore probably have contributed more than your fair share to greenhouse gas emissions), there is a bright new future of electric cars, solar panels, heat pumps and other technological wonders.

But, for those that are less well off, including many low to middle-income people, there is, particularly in this time of cost of living crisis, mostly fear. Fear, for instance, when Patrick Harvie announced last weekend that there will be penalties in the future for sticking with an old fossil fuel boiler.

You will be left behind and on your own. Somehow you will miss out on the £7,500 grant for air heat pumps and it will cost you. Even if you do get a grant there may be extra costs that you can't afford, or it will be a mistake, and you feel you can't afford a mistake.

Fear, along with confusion, haunts our decisions on heating and one of the reasons for this bewilderment is that there is no one answer to the problem of what to replace the old gas boiler with, nor will there ever be. There are still different answers to different housing stocks. You can, of course, consult Home Energy Scotland. But that only goes some way towards removing the doubt.

In spite of the clear signal given by the £7,500 grants now available in Scotland for air heat pumps, there remain other options, and therefore lack of clarity. Even Patrick Harvie in a recent Herald article didn't land on one single answer. "For most people," he wrote, "it means either a very energy-efficient heat pump or

another modern form of electric heating."

Notably, he also mentioned heat networks. These are, he wrote, "systems of pipes used to transfer heat from one central source to nearby homes, schools or offices."

He added that they are "commonplace in Europe and 30,000 homes already access a heat network in Scotland". He even highlighted Queens Quay project in Clydebank where more than 1,000 new homes are set to be heated by water pumped from the Clyde.

This made me want to cheer. The idea of the network, district heating system, or a street-by-street answer, should surely be key to future strategy. I don't just mean as a technological solution, but a principle of togetherness – a feeling of being part of a community making a shift; a war effort transition.

What if your entire street were looking at whether the answer was ground source heating along the model that is being trialled by Kensa Utilities in Cornwall and which involved drilling 200 boreholes 100m into the ground to create a "heatmain" – or heat from the river, like

the Queens Quay Heat Pump scheme on the Clyde? Or if your high-rise was looking to the saddlebag-style air heat pumps trialled on New York buildings? Or a ground source borehole dug into a local car park was being mooted in your area? Wouldn't that be something you could get behind?

One of the reasons the question of decarbonising our heating is so difficult and toxic is because our housing market and model of ownership is so atomising and individualistic. It's also because of how clear it is that middle-class homeowners have always capitalised on green grants. It's no wonder many are sceptical, even angry; or that people still talk about "green crap".

But, wouldn't it be different, if we were to feel this was about making the right choice together?

Back around the time of COP26, I looked into district heating and I've been hoping to see it develop further since. There are, of course, some astounding projects, but there isn't yet a drive to roll it out widely.

Back then I talked to David Pearson of

Glasgow-based firm Star Renewable Energy, who worked on the Clydebank scheme. He clearly thought that it was ridiculous to try decarbonising a whole city using individual heat pumps. "In Scotland," he said, "all the major cities are on rivers and the ability to take heat out of the rivers is massive. If we repeat what we've done in Clydebank 25 times, there's enough heat for all the central area of Glasgow."

Two years later it still feels the progress is mostly around individuals and the story still around assets and house values. That's why I applaud Harvie's mention of heat networks.

We will still, of course, have the problem of how to pay for it; some will say it's too expensive, or too much of an engineering challenge. But look at what it would cost even to convert every home to air heat-pump on that £7,500 grant: around £20 billion, I estimate and that's factoring in the fact that around 19,000 homes out of our 2.67 million already have had them installed.

One by one is all very well, but together is what the climate effort needs.