Energy matters enough to force smart solutions

Heat networks in local energy centres are the foundations of future supply, says Alastair Martin

here won't be blackouts" announced a recent headline. Whatever next? Perhaps "wind farms working quite well" or "apple pie 'nice', scientists confirm".

Electricity is important. Being trapped in a lift by a power cut is infuriating, but failing to power a hospital – or your economy – is reckless. Have we gone from panic to complacency in one step?

The Scottish Government's newly-published draft energy strategy mentions supply security just three times in 75 pages, while the UK government's 100 pages on smart, flexible energy systems include five instances of the term. To be fair, electricity security comes under reserved powers, and Westminster produces enough paperwork on the subject to fuel a power station.

This winter, the UK's flagship energy security policy—the Capacity Market—committed another £1.6 billion of bill-payers' money to an ecumenical mix of power stations and flexible demand to keep Britain's lights on. In that goal, the Capacity Market will succeed.

But it's a single-issue policy, and such things are terrible at strategy. We use far more heat than electricity. But the Capacity Market's new power stations will throw away more heat than they produce in electricity. That's not so smart.

This is where Scotland could score. While Westminster's consultation uses the word "community" three times, the Scottish energy strategy gives it 33 mentions. The community is where heat and electricity meet, in the networks of insulated hot water pipes that are gradually being connected to homes and busi-

nesses in most of Scotland's cities.

Heat networks are the foundations of future energy supply. It's now commonplace to burn natural gas in a power generator within a local energy centre. Instead of blowing the inevitable leftover heat into the sky, it goes into the network. That's your basic combined heat and power (CHP) installation. Its natural home is in the community, so it's welcome that Holy rood has prioritised community ownership for energy resources.

Scotland's food and drink industry is a source of great pride—and of huge amounts of energy-rich waste, which can become biogas, which can become electricity and heat. If there's no need for either, the biogas can now be fed into gas mains. Community energy schemes join all this together.

At Flexitricity, we've never seen a conflict between security, affordability and cutting emissions. We've also never seen a problem with using electricity to decarbonise heating and transport. You just need flexibility.

This is what we've built up over a decade: a portfolio of flexible generators and electricity users of all types and sizes, balancing supply and demand round the clock from our Edinburgh control room.

Holyrood's energy strategy and Westminster's flexibility review are both positive moves. But it's communities who will deliver.

 Dr Alastair Martin, founder and chief strategy officer, Flexitricity, Edinburgh

