

Nikhil Sharma, Visiting Faculty at SIAS talks about smart meters in Great Britain on BBC Norfolk Radio

Audio file

[Record-BBC Norfolk.mp3](#)

Transcript

00:00:59 Chris Goreham

Let's bring you a bit more on our top story now. We've been talking about this since 6:00 this morning and have had some interesting calls and comments from you already. The BBC has discovered big inconsistencies in the way smart metres transmit data to our energy companies. A Panorama programme, which you can see on the TV tonight reveals where you live in the country will affect how accurate your communication with your energy company is.

00:01:24 Chris Goreham

It's because they depend on a stable mobile phone signal which we know is often lacking in some parts of Norfolk. The report also raises questions about why it is that only 2/3 of homes have them, why millions of them don't work as they should, and why there are so many problems which could be leaving customers out of pocket. Nikhil Sharma is based at the University of East Anglia, and is researching smart energy technologies and joins us now. Nikhil, good morning. Thanks very much for joining us.

So does any of this from Panorama any of these discoveries come as a surprise to you that smart metres don't seem to be working consistently across the country?

00:02:06 Nikhil Sharma

Good morning, Chris. Unfortunately, not. This is definitely not a surprise for those of us who have been researching this area.

00:02:13 Nikhil Sharma

And I think just to give a little bit of a background smart metres, they have been a topic of discussion in, like academia, but also on the BBC, on other news channels and also have been a topic of conversation, you know, among organisations like Citizens Advice who are watching out for consumers.

00:02:33 Nikhil Sharma

Since they started rolling them out in 2011, there have unfortunately been lots and lots of problems, even though technically they're very, very simple Internet enabled device. So, as you rightly said, it's really mind boggling to think why there are so many problems.

00:02:49 Chris Goreham

Now from the energy companies point of view when they get in touch with you and I don't have a smart metre but I've had my energy provider get in touch a number of times saying that they'd

like to fit one. They always talk about it as something that could possibly save me money and I suppose we should look at the motivation for energy companies wanting to put these in. And is it better for the customer to have one of these or not?

00:03:12 Nickhil Sharma

Well, theoretically yes, it is good to have a smart metre provided they're functioning properly. So essentially just for the listeners. So if you don't have a smart metre, if you get one, you're going to have a smart metre, which is this simple device. As I was saying earlier, it's Internet enabled and you will probably not be interacting much with the smart metre. What you will be interacting with is a display monitor, which is probably going to be placed on your kitchen table. It's going to show you how much electricity you're consuming, how much gas you're consuming. If you have a gas connection and it is going to show you what the energy prices are. It's going to show you how much you've consumed over a month, and technically it should sort of guide your behaviour in the direction that you actually end up using less energy. You know, if you feel like, hey, I'm actually exceeding my budget, so technically they should be helping consumers quite a lot, but...there have been lots of inquiries on their performance... there was one inquiry of the House of Commons last year and that showed that actually a lot of these benefits are not being passed on to consumers and...

00:04:15 Nickhil Sharma

I think you rightly asked what is the motivation for suppliers to get smart metres to consumers and from my research and from what I have been looking into, it seems like the main motivation is just you know there's a very, very strong push from the government from the Department for Energy Security and NetZero (DESN

00:04:35 Nickhil Sharma

They're really pushing the suppliers to really get this done, to really get smart metres into people's homes. And so, they're really actually bothered about making sure everybody has a smart metre, not so much whether these smart metres are working or not. So, I think that's where the problem is.

00:04:52 Chris Goreham

Yeah, and this Panorama investigation is fascinating because it's looking at the way the smart metre gets the data back to the energy companies and it's broadly speaking, it's different in the north of England and Scotland to what it is in the South and the Midlands. And we've checked where their line is, where North versus South is for them and Norfolk is indeed in the South as far as they're concerned.

00:05:13 Chris Goreham

But of course there are bits of Norfolk that don't have good Internet connections, certainly don't have particularly good mobile phone signals, so surely that must cause a problem in in some parts of Norfolk in terms of getting this data back to the provider.

00:05:26 Nickhil Sharma

Right. Well, that's a great question actually. So, I have to get a little bit into the technical details here. So, there are actually essentially two types of smart metres. And so if you have a smart

metre and if you're worried that it's not working properly, you can definitely check out a tool from Citizens Advice. It's called smart metre checker. You just need to enter your post code.

00:05:47 Nickhil Sharma

You need your energy bill. You need to enter your bill number and you will know whether it's working or not.

00:05:52 Nickhil Sharma

But there are two kinds of smart metres, one of them. So if you probably had a very early installation somewhere between 2013 and 2015, it's very likely that your smart metre relies on mobile and network data and that's when it's going to be a problem for people living in remote areas in Norfolk, if you don't have good coverage.

Then it's likely that your smart metre does not send the right energy readings to your supplier. However, if you have a new smart metre, at least on paper, these new smart metres do not rely on mobile network. They rely on the network that's created specifically for smart metres by the DCC. The data communications company. So, if you have one of these, if you have one of these new metres, then it shouldn't really be so much of a problem and you should be OK. But it's better to check just to be on the safe side.

00:06:43 Chris Goreham

Yeah, it's. It's interesting, isn't it? I suppose we're in a situation here where technology is developing all the time. And I wonder whether the infrastructure and the energy companies are actually able to keep up with it.

00:06:54 Nickhil Sharma

Yeah. I mean, that's really a million-dollar question. I think a lot of my research has also looked at how a lot of the benefits. So there are lots of benefits of having a smart meet and I think you brought this up earlier as well. So you know, apart from just consumers having a better understanding of how much energy they're consuming and thereby you know, saving energy and costs...

00:07:15 Nickhil Sharma

They can also participate in what is called as demand flexibility. So you can actually be paid by your supplier to not use energy during certain times of the day when the electricity grid is really, really stressed out, right. And again, this Parliamentary committee that I was talking to you about found that a lot of these benefits are unevenly distributed as well, so you spoke about the north-south divide, but across the country what they found was households that have older male residents that are on higher incomes. They also have, you know, access to technologies like solar panels or EVs. They're the ones who tend to actually be able to access these benefits better as well, so it's also very unfair that you know we sort of push this technology with so much fervour and we want to roll out smart metres, we want everybody to have a smart metre, but then we don't really make sure that it actually gets done properly on the ground and that really is where the smart metre rollouts are going wrong and you know, there's lots and lots of efforts being put into this. There's incredible work being done by Citizens Advice, by Which?, by the Centre for Sustainable Energy. Yeah, so if you feel that there's something wrong with your smart metre look at these online resources.

00:08:36 Chris Goreham

Nikhil, thanks very much for joining us. Nikhil Sharma, a research student at the University of East Anglia, talking about tonight's Panorama programme and smart metres and their issues.