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Across most of Australia, the electricity industry is in the midst of a major rollout of so-called "smart meters" led by retailers – your household may very well have one already.

With the exception of Western Australia and the Northern Territory (and Victoria which has them already), all new and replacement meters will now be smart. This means that instead of simply recording electricity use for later checking, they can give retailers detailed consumption data, measured at 30-minute intervals or less – and also allow the supply to be turned on or off remotely.

Read more: ***Smart meters don't make us any smarter about energy use***

Retailers can also offer to upgrade select customers' existing meters to smart meters (again with the exception of Victoria, which has a blanket rollout), and consumers are free to accept or decline (except where a broken or ageing meter is being replaced).

This is an important testing ground for the soon-to-be legislated Consumer Data Right, which aims to give consumers better access to their own data, which in turn will help them save money.

But our research has found that under the current policy settings consumers are not getting the full range of benefits from the smart meter rollout, for a few main reasons.

Getting smart on bills

The main consumer benefit of a smart meter is to reduce electricity bills. But to do this, consumers need easy access to their daily electricity usage data, which can then be translated into useful information that enables them to compare tariffs. Consumers ought to be able

choose such value-added services from third party providers by granting access to this data.

But consumers cannot currently access their daily electricity usage data when they need it free of charge . There is no common data format nor a simple way to authorise third-party access to the data, thus creating extra costs for third parties.

Retailers can charge a fee to access consumer data, effectively blocking rival companies that might be offering cheaper retail tariffs. But if consumers themselves could allow third parties to access their metering data, subject to security and privacy protections, it would give those consumers a much wider choice of tariffs and services.

Currently the federal government's Energy Made Easy website (run by the Australian Energy Regulator) does not let consumers compare tariffs and services in a timely and user-friendly way. There are proposals to reform the website, and there is no shortage of good existing examples on which it might be modelled, such as the Victorian government's Switch On and the North American Green Button initiative .

Getting involved

It is not enough that these tools simply exist; consumers must be actively encouraged to use them. This involves a wide-ranging, effective and ongoing consumer education campaign.

While there are highly active energy "prosumers" who generate and sell their own power and actively monitor and manage their energy use, most households do not fall into this category .

Most customers need information and encouragement to take up opportunities arising out of smart meter data. This will require much better communications by governments, retailers, networks, consumers and community organisations as an integral part of the smart meter rollout.

No one left behind

Electricity is an essential service, and policymakers need to ensure that the benefits of smart meters flow to everyone, not just the most switched-on customers.

Even with the help of the tools and campaigns described above, there are those who may still miss out on the benefits – such as, for example, vulnerable consumers who engage with smart meters but end up making poor choices through a lack of financial or digital literacy.

What's more, remotely read meters make it easier to disconnect users , which again is likely to disproportionately affect the most vulnerable members of the community. Adequate consumer protections need to be built into the smart meter rollout. This involves ensuring that hardship provisions in the National Energy Customer Framework , concessions, and information provision keeps pace with developments in the metering market.

Read more: ***Smart meters, dumb policy: the Victorian experience***

The retailer-led rollout is likely to be slow and could lead to a highly uneven patchwork of meters across Australia, and therefore uneven customer benefits. There are many reasons for this. Existing "dumb" meters have a long useful life and regularly last more than 30 years (some are more than 40 years old!); there is a lack of scale in the deployment by retailers who do not have contracts with all customers in a local area; certain customer groups may be deemed "uneconomic" by retailers and not offered new meters; and households in areas with poor mobile network coverage (most likely rural and regional areas) are unlikely to be offered a smart meter.

Such a large-scale rollout of new meters, which is piecemeal in some places and not in others, is bound to be difficult and there is no perfect model. The market for smart meters is in its infancy and needs careful monitoring and evaluation as it develops. But policymakers

nevertheless need to get on the front foot and guarantee simple access to smart meter data and services for all consumers; actively encourage and demonstrate to consumers how these services can lower their electricity costs; and most of all ensure that no one is left behind in this emerging market.

This article was coauthored by Gavin Dufty, Policy and Research Manager, St Vincent de Paul , and
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Read more http://theconversation.com/smart-electricity-meters-are-here-but-more-is-needed-to-make-them-useful-to-customers-92029