ELECTRICITY NETWORK TARIFF REFORM HANDBOOK
AT A GLANCE

Purpose of the handbook

Customers are transforming the electricity system by embracing new technologies and rethinking how they source and use electricity.

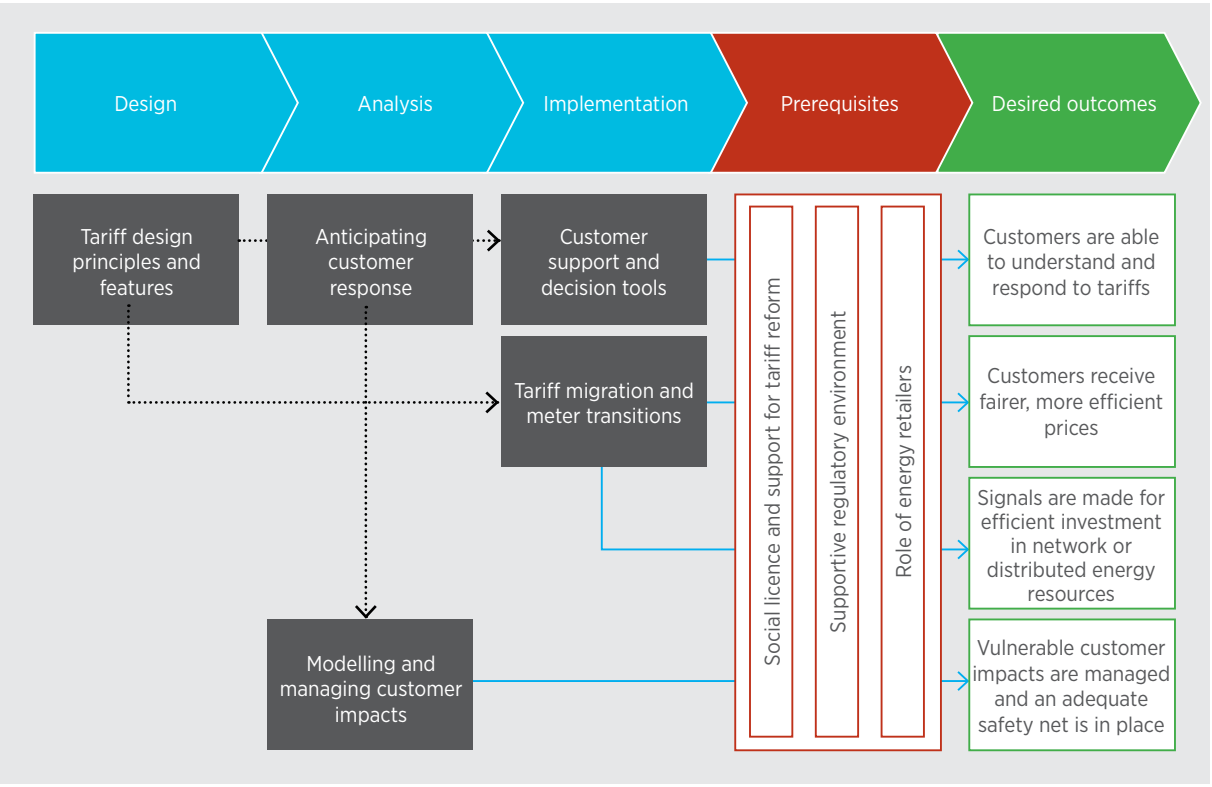
Australia's electricity distribution networks have an important responsibility to work with other stakeholders to help customers unlock the full benefits of these new technologies, while delivering safety, reliability and efficiency important to all.

Tariff reform has a vital role to play in the transformation and delivering customer benefits. There is strong consensus from industry, government and customer advocates that current pricing frameworks are outdated and do not reflect the changing ways we use the electricity network.

The Handbook has been developed as a toolbox for electricity distributors and industry stakeholders – including governments, consumer advocates and retailers – to assist them in planning and implementing successful tariff reform. It will support efforts to make prices fairer now, deliver lower prices over the longer term and enable customers to use new technologies efficiently.

The Handbook is informed by a range of studies including the experience of tariff reform programs in Europe, Canada and the United States of America and these case studies are presented in the Handbook. Australian and international analysis and experience strongly supports the introduction of cost-reflective pricing by Australia's distribution networks.

Figure 1 Interaction between elements of successful tariff reform



Delivering fairness for customers and lower medium to long term prices

The first step is to re-design distribution network charges to reflect the cost of providing the service. Today, most network charges and retail tariffs charge customers for how much energy they use, regardless of when they use it. However, the real driver of network costs is the maximum electricity demand at a point in time. In a society which depends on secure, safe and reliable electricity, this peak demand has been a key driver of network investment.

However, customers are using the electricity network in increasingly different ways and our outdated tariff structures can result in big, unintended subsidies from some customers to others.

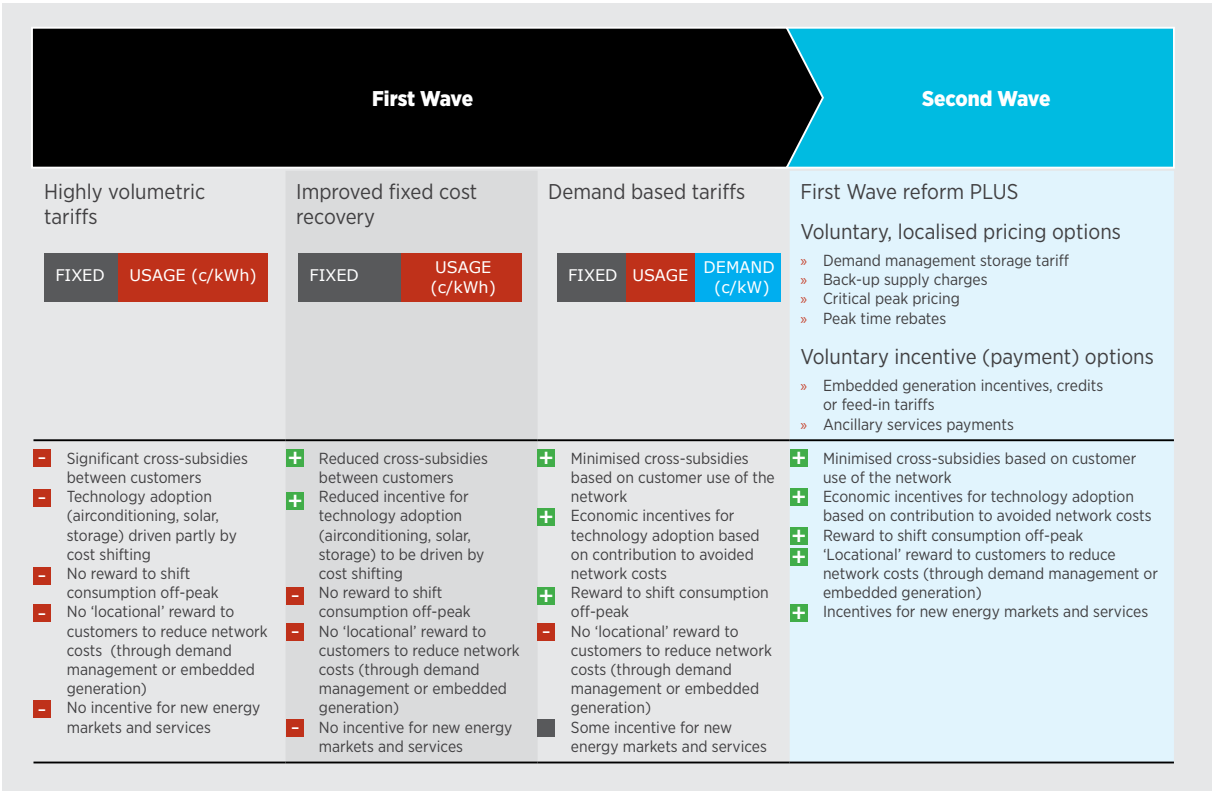
Cost-reflective prices – like demand-based tariffs - reward customers for using electricity outside of peak hours, using smart appliances or using local energy sources at peak times. This provides customers with increased control over their bill and improves fairness in cost-sharing.

Over the medium to longer term, network costs will be lower than they otherwise would have been. It is estimated that Australians could save $255 per annum on an average electricity bill or $17.7 billion over the next 20 years.

These 'first wave' changes will be the foundation for the development of new markets for Distributed Energy Services (DER), like battery storage, and we are likely to see a 'second wave' of new services and incentives, in which customers may voluntarily participate. Effective tariff reform must incorporate:

- Close collaboration across multiple stakeholders on the tools and communication provided to customers;
- Recognition by all stakeholders of the respective value each stakeholder could provide to customers;
- Choice in the range of different supporting tools reflecting the different needs of customers;
- Information that is simple, clear and engages with customers; and
- Easy-to-access feedback loops for customers on how their response has delivered savings for them.

Figure 2 Two "Waves" of tariff reform to 2025



Customer-centred reform

Customers are at the centre of electricity network tariff reform. The Handbook identifies four outcomes of tariff reform which will benefit customers:

1. Customers understand and can respond to price signals;
2. Customers receive fairer prices;
3. Tariffs signal efficient investment in networks and DER (like solar panels and battery storage); and
4. The effects on vulnerable customers are managed.

Well-designed electricity network tariffs will promote:

Economic efficiency

Tariffs will drive efficient use of and investment in network services;

Equity

Tariffs are non-discriminatory with each customer's charges reflecting the costs their electricity use creates; effects on vulnerable customers are managed and network costs are recovered over time;

Simplicity

Tariffs are easily understood so customers can source and use electricity to minimise their costs if they so choose;

Pricing stability

Unexpected adverse tariff changes are minimised;

Network viability

Tariffs enable distributors to recover at least their efficient costs so they are able to maintain services;

Minimisation of cross subsidies between customers

Avoid introducing new levels of cross-subsidy with the deployment of DER.

THE HANDBOOK IDENTIFIES APPROACHES FOR SUPPORTING VULNERABLE CUSTOMERS AND OPPORTUNITIES FOR COLLABORATION

Customer responses to tariff reform

It is essential that distributors understand the effects of proposed re-designed tariffs on their customers. The Handbook identifies options to quantify the effects of existing cross-subsidies, modelling the long term outcomes of different tariff design options and analysing the effects on the bills of different groups of customers.

Distributors recognise that they must engage with customers to design tariffs that send customers price signals to which they can respond. Energy management tools could be offered to customers to help them to understand and manage their electricity usage. In addition to improved bill communications and energy portals, a range of in-home tools are identified. These may include simple "glowing orbs" which change colour to indicate to a household its peak demand consumption; simple demand management communications; or more complex, real-time in-home displays. Well-recognised human factors such as aversion to risk, inertia and a tendency to place more weight on potential losses than on the prospect of benefits should also be considered in implementing tariff reform.

Protecting vulnerable customers

There will be customers who are vulnerable to price changes and less able to benefit from new technologies. The Handbook identifies approaches for supporting these customers and opportunities for distributors to collaborate with governments, retailers and customer advocates.

The Handbook sets out possible "transition paths" to cost-reflective network pricing. It provides insights to the effectiveness of alternative approaches such as customer assignment, and 'opt-out' and 'opt-in' frameworks. International experience suggests that assignment and opt-out approaches deliver more certain and quicker transition to cost-reflectivity, important at a time of rapid technology change where the potential for cross-subsidies increasing exists under current tariffs.

Prerequisites for successful tariff reform

The Handbook identifies three prerequisites for tariff reform. Effective engagement between electricity distributors and electricity retailers will be essential. In the Australian market, most customers' network costs are bundled with energy and other costs by their retailers. How retailers include network costs in their retail tariffs could influence the effectiveness of network tariff reform and affect choices customers make. Distributors should consider the commercial and regulatory drivers retailers face to maximise the prospect of successful tariff reform.

Tariff reform also requires a supportive regulatory environment. Australian Energy Ministers endorsed the shift to cost-reflective pricing through tariff reform in November 2014, and the Australian Energy Market Commission has made Rules that require distributors to transition to cost-reflectivity over time. The regulatory environment must remain supportive of a reform that will take several years to implement and deliver the full range of benefits to customers.

Distributors must obtain and preserve a social licence to implement network tariff reform as it has the potential to affect every electricity customer.

Distributors recognise that to develop and maintain this social licence they must:

- Explain the case for change and the customer benefits it will deliver;
- Work closely with other stakeholders and be open, transparent and equitable in all of their dealings (including equipping customers to reap the benefits of reform); and
- Be willing and able to adapt and change over time, particularly as new learnings emerge from the staged implementation of the reform.

RESULTS OF CONSULTATION

ENA released a draft version of the Electricity Network Tariff Reform Handbook for public consultation from Monday 18 April to Monday 9 May 2016. ENA and KPMG have incorporated advice from stakeholders which has improved the final Handbook. ENA looks forward to continued engagement and discussion on the issues affecting the implementation of electricity network tariff reform.

For further information please contact ENA at **info@ena.asn.au**

REWARDING CUSTOMERS FOR SMART ENERGY USE