

JEMENA ELECTRICITY NETWORKS (VIC) LTD

JEMENA'S SUBMISSION ON ITS 2016 PLAN:
2016 – 20





An appropriate citation for this paper is:

Jemena's Submission on its 2016 Plan:
Consumer Overview

Contact Person

Robert McMillan
General Manager Regulation
Ph: (03) 9173 7000
robert.mcmillan@jemena.com.au

Jemena Electricity Networks (Vic) Ltd

ABN 82 064 651 083
Level 16, 567 Collins Street
Melbourne, VIC 3000

Postal Address

PO Box 16182
Melbourne, VIC 3000
Ph: (03) 9713 7000
Fax: (03) 9173 7516

CONTENTS

INTRODUCTION	4
OUR 2016 PLAN	6
WHAT IS OUR 2016 PLAN?	6
HOW WE DEVELOPED THE 2016 PLAN	7
THE AER PRELIMINARY DECISION ON OUR 2016 PLAN	9
WHAT OUR 2016 PLAN MEANS FOR YOU	12
CONTINUING TO PROVIDE SAFE, RELIABLE AND RESPONSIVE NETWORK SERVICES	13
BEING MORE TRANSPARENT ABOUT OUR COSTS AND REVENUE	17
REDUCING OUR NETWORK PRICES FOR RESIDENTIAL CUSTOMERS	20
UPDATING OUR PRICE COMPONENTS TO ENCOURAGE INFORMED ENERGY DECISION MAKING	21
EMPOWERING YOU TO TAKE CONTROL OF YOUR ENERGY DECISIONS	24
PROVIDING MORE ASSISTANCE TO VULNERABLE CUSTOMERS STRUGGLING TO PAY ENERGY BILLS	26

INTRODUCTION

INTRODUCTION

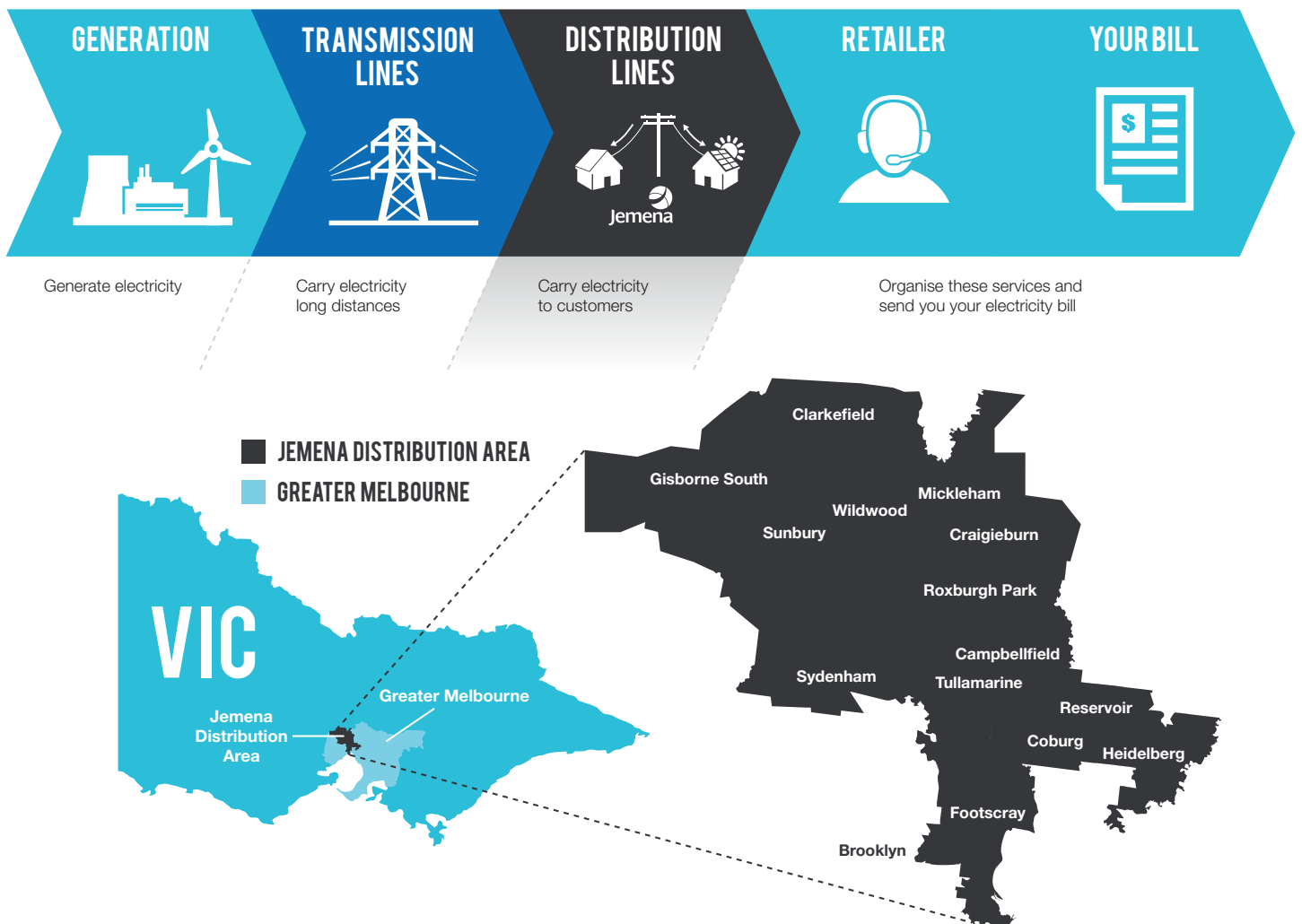
Like many Australians, you've probably noticed your electricity bills rising over recent years—and would like to have more control over your bills and energy usage. However, you might not be aware of Jemena Electricity Networks (JEN)—the company that transports electricity to your premises.

We own and manage the 6,000 km of distribution power lines that transport electricity to over 320,000 homes and businesses across north west Melbourne—from Mickleham to Footscray, and Gisborne South to Ivanhoe. **[Figure 1]** We also own, maintain and read the meters that allow retailers to bill you for your electricity usage, and provide you with information to help you better manage this usage.

It's our job to make sure you have electricity when you need it. To do this, we must design, operate and maintain our network so it can cope with extreme fluctuations in weather conditions and electricity demand and promptly restore power on the rare occasion when a severe storm or accident results in power outages. Increasingly, we must also manage the 2-way flow of electricity between the network and those customers with solar PV units.

Like most businesses, we need to recover the costs of providing our services from the customers who use them. We do this through the distribution network prices that form part of your electricity bill. Currently, our charges typically make up around 32% of your electricity bill, which is lower than all other states in Australia. **[Figure 2]**

Figure 1: We own and manage the distribution lines and other assets that deliver electricity to your premises



Over the last two years we have developed our 5-year plan that sets out our services, costs and prices for the period 1 January 2016 to 31 December 2020 (our 2016 Plan). As part of this process, we engaged with you - our customer - as well as our stakeholders and the community to better understand your priorities and preferences for this period and beyond—including what you want and value in your electricity supply, and what role you want us to play in meeting your energy needs. We want to ensure the decisions we make reflect your priorities and long-term interests.

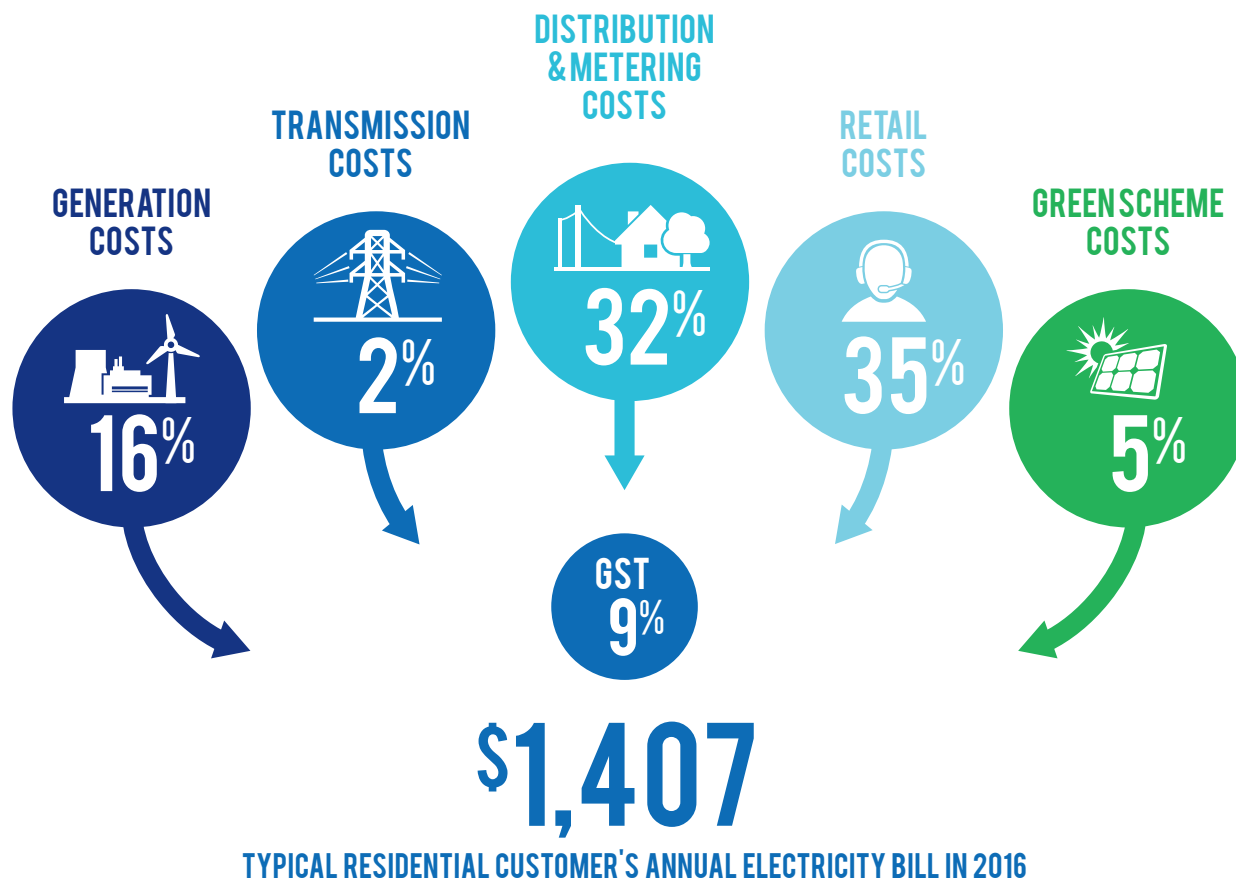
Under our 2016 Plan, we propose to lower our network charges by 13% for typical residential customers over the 5-year period (excluding the impact of inflation). This will deliver average savings of \$85 per year for our typical residential customers (excluding the impact of inflation). We also propose to update the individual components of our charges so they send better signals to encourage you to make more informed decisions about when and how you use our network—and to make it easy for you to get the information you need to take control of your energy needs and costs.

The prices we can charge for distributing electricity are determined by an independent body, the Australian Energy Regulator (AER) (refer Figure 3). The AER has reviewed and made a Preliminary Decision on this plan. We have now revised our 2016 Plan to reflect updated information, feedback from our customers and stakeholders and to respond to the AER's Preliminary Decision.

This document:

- provides an overview of our proposed 2016 Plan, and what it means for you including some of the benefits and risks
- explains how we developed this plan including how we engaged with customers and stakeholders and responded to the AER's Preliminary Decision.

Figure 2: Our distribution network prices make up less than 40% of a typical residential customer's annual bill



OUR 2016 PLAN

WHAT IS OUR 2016 PLAN?

Like other electricity distribution network businesses in Australia, JEN is regulated under a national framework of regulation. Every 5 years, we submit a proposed plan to the AER, explaining the services we will offer, the costs we are likely to incur, and the prices we propose to charge over the next regulatory period.

This plan must promote the “long-term interests of customers”, and comply with all other requirements of the National Electricity Law (NEL) and National Electricity Rules (NER).

The AER recently reviewed our proposed plan to check that it complies with all of these requirements. **[Figure 3]**

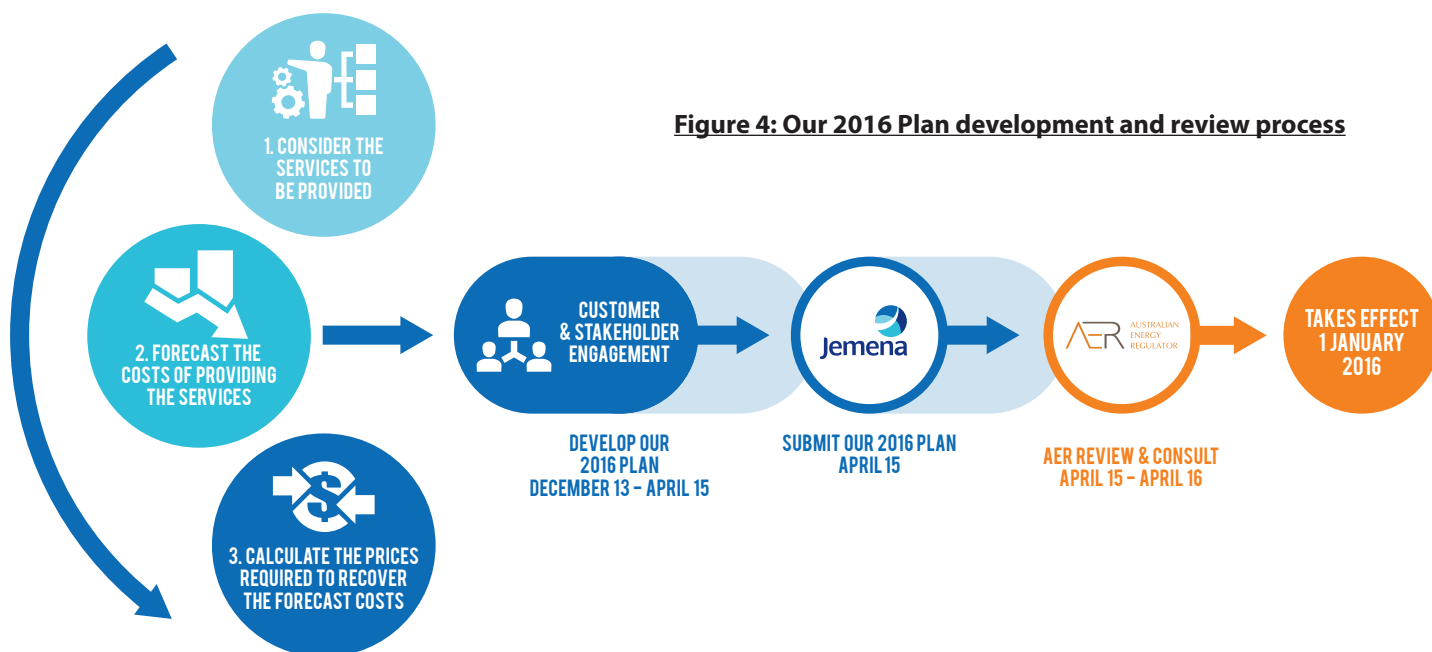
Figure 3: Our network services and prices are regulated under the national energy regulation regime



HOW WE DEVELOPED THE 2016 PLAN

To develop our proposed 2016 Plan, we:

- considered the safety and service levels you expect (and are willing to pay for) over the 5-year period from 1 July 2016 (and future periods)
- forecast the efficient level of costs we will incur over this period (and future periods) to meet these safety and service levels, and run our business in a way that promotes your long-term interests, and
- calculated the prices we need to charge to recover these costs, and structured these prices to encourage you to make informed decisions about the way you use our network. **[Figure 4]**



During this process, we engaged with you as well as our stakeholders and the community to help us understand your preferences and concerns, and to test whether our proposed service levels, costs and prices promote your long-term interests. **[Box 1: How we engaged with our customers]**

We also took into account the changes occurring in the electricity market, and how they will affect our network and your interests. **[Box 2: How the energy market is changing]**

BOX 1: How we engaged with our customers

To help us develop our 2016 Plan, we engaged with a wide range of customer and stakeholder groups as well as the broad community. **[Figure 5]** As part of this engagement, we explained the key context for our

plan, so participants could provide informed feedback. We also asked participants about the safety and service levels they expect in their electricity supply, and how they intend to manage their energy needs for the next 5 years and beyond – particularly, how they will use our network in managing these needs.

Next, we sought participants' views on the key decisions we need to make for the next 5 years, to help us find the right balance between the long-term safety of our distribution network services, the service levels we provide to current and new customers, and the level and structure of the prices we charge. Some of the specific issues we sought feedback on were:

OUR 2016 PLAN

- the safety and service levels we currently provide, and whether we should invest more to lift the quality of our services across our network, or cut costs by lowering this quality
- our proposed investments to manage expected changes in our network and the energy market, as new customers join the network and new technologies become available
- our proposed changes to the structure of our network prices, which we think will help you make more informed decisions about the way you use our

network, lower our network costs and help you save money in the long term

- what we can do to help you manage your energy needs, and assist the most vulnerable customers in our community.

We are committed to learning from our engagement and striving to continue to develop a best-practice approach to customer engagement as part of our day-to-day business.

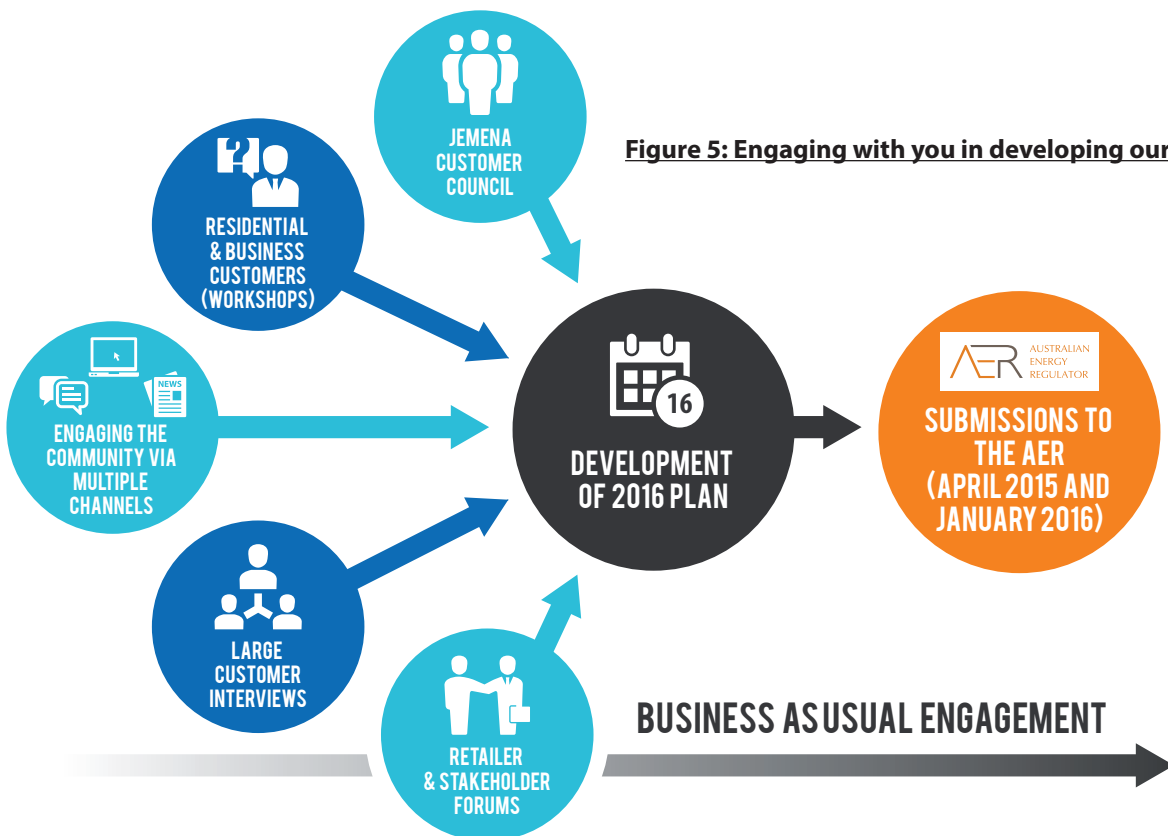


Figure 5: Engaging with you in developing our 2016 Plan

“Safety is a non-negotiable and the most important priority.”

Residential Customers
Moonee Ponds forum, 17 September 2014

THE AER PRELIMINARY DECISION ON OUR 2016 PLAN

The AER issued a Preliminary Decision on our plan and specified a number of changes that we should make - including relating to the forecast of the efficient level of costs we will incur over the period, and the prices we need to charge to recover these costs.

We have carefully considered the AER's Preliminary Decision and the extent to which it is likely to promote the long-term interests of our customers.

We welcome many aspects of the Preliminary Decision such as the AER's recognition of our operating efficiency and the need for increased capital expenditure to replace and augment parts of our network.

We have also sought to provide the AER with further information—such as the

efficiency of the targeted investments we plan to make to maintain our current service levels in new growth areas.

However, we are concerned that the Preliminary Decision overlooks the:









- changes in our operating environment and our customers' preferences (for example, programs to assist vulnerable customers) and the need for increased operating expenditure to meet these changes
- the continued importance of an incentive framework that remains aligned to our customers' interests for service improvements and investments in demand management, and
- the benchmark funding costs that network businesses such as JEN require to invest in the services that our customers value.

To assist our customers, stakeholders and the AER consider our submission, **Figure 6** clearly highlights which aspects of the Preliminary Decision we consider are likely to promote the long-term interests of our customers.

For example, it includes those aspects of the Preliminary Decision to which we have:

- Accepted and have incorporated into our 2016 Plan (including those aspects of our April 2015 proposal that the AER has accepted) ('**green light**')
- Partially accepted, and have incorporated aspects of the Preliminary Decision into our 2016 Plan ('**amber light**')
- Do not accept and have not incorporated into our 2016 Plan ('**red light**').

Figure 6: Overview of our response to the Preliminary Decision

Revenue requirement for our distribution and regulated metering services 	ARR, MAR and X-factors	✗	Opex for our distribution services 	Base year efficiency	✓
	Regulatory Asset Base (RAB) roll-forward	≈		Opex step changes	✗
	Tax Asset Base (TAB) roll-forward	✓		Rate of change	✗
	Depreciation	✓			
Rate of return 	Tax compensation	✗	Form of regulation 	Service classification	✓
	Cost of equity	✗		Control mechanisms	≈
	Cost of debt and transition	✗			
Capex for our distribution services 	Replacement capex	✓	Incentive framework 	Efficiency Benefit Sharing Scheme (EBSS) and Service target performance incentive scheme (STPIS)	✓
	Augmentation capex	≈		Capex expenditure sharing scheme (CESS) and Demand management incentive scheme (DMIS) ¹	✗
	Connections capex (including capital contributions)	≈		F-factor scheme	✓
	Non-network IT capex	✓	Risk management framework 	Cost pass through framework	≈
	Non-network other capex	✓		Charges for other services 	Fee-based services and quoted services (ancillary network services)
		Public lighting ²	≈		
		Negotiating services	✓		

¹ Also known as Demand Management and Embedded Generation Connection Incentive Scheme (DMEGCIS)

² Covers the operation, maintenance and replacement of public lighting

BOX 2: How the energy market is changing

Once, Australia's electricity markets were largely the domain of technical regulators and engineers—most likely you did little more than consume electricity and pay your bills. Without access to information on your energy usage patterns or viable options to change your energy supply, there was little opportunity for you to make your own well-informed decisions.

However, all this has changed.

Empowered by a range of technological, market and policy changes - including our investment in smart meters - you can increasingly take control of your energy needs. You may be responding to changing prices and shopping around for better retail offers to manage your usage and lower your bills. You may also be looking to new (and increasingly affordable) technologies to help you produce your own energy and reduce your energy consumption.

This has changed the way you use our network and is increasingly changing the services we provide.

For example, our network no longer provides a one-way flow of electricity, with the increasing installation of solar PV units meaning we increasingly provide a two-way flow. This is particularly during daylight hours when excess energy generated by solar units needs to be transported across our network to other local customers.

[Figure 7]

Figure 7: New technologies like solar PV change the way customers use our network

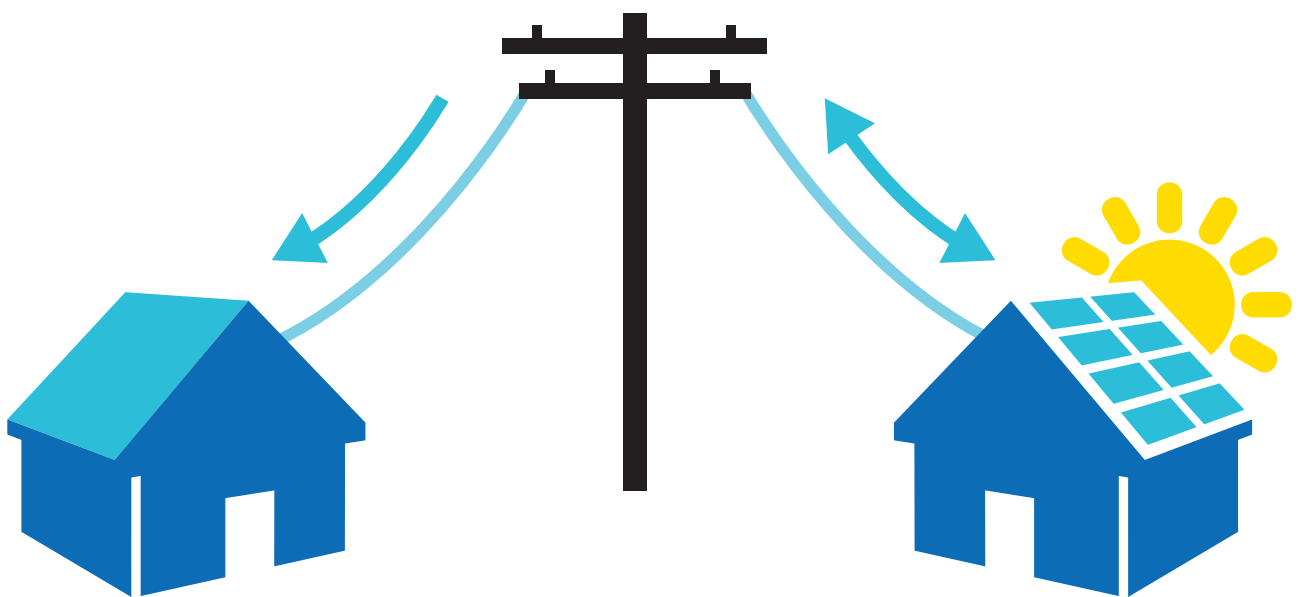
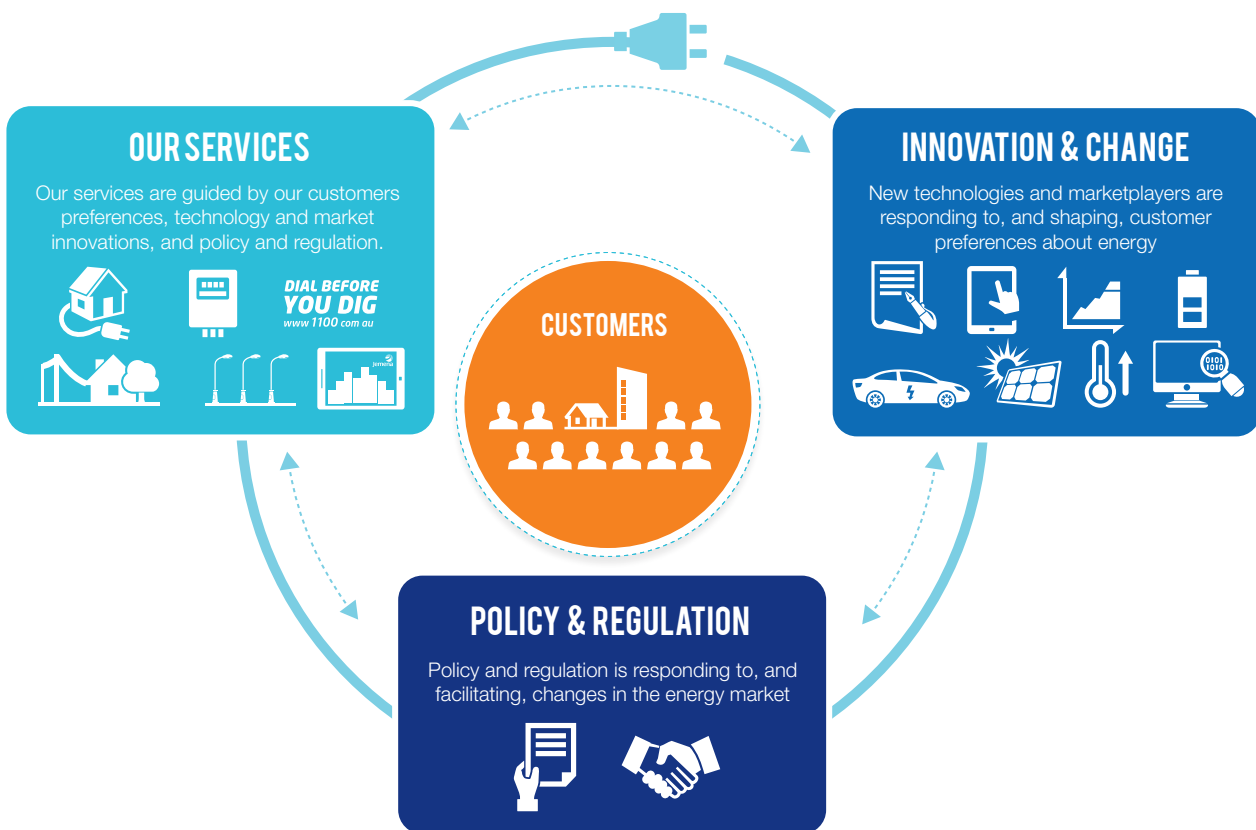


Figure 8: Our services are evolving in response to customer, market and policy changes



Our services are guided by your preferences as well as technology and market innovations. We see our role as facilitating these changes to promote your long term interests. **[Figure 8]**

For example, we expect new technologies such as battery storage, electric vehicles and smart grids to become increasingly viable, and new market players to emerge

to assist you in managing your energy needs.

We are committed to providing network services that empower you to take control of your energy bills – for example, by making it fast and easy for you to connect solar PV units and other technologies to our network, and by safely and reliably transporting any excess generation to other homes and businesses.

[Box 6: Investing in measures to empower our customers - Implementing the AEMC’s Power of Choice reforms] We also aim to price our services in a way that takes account of the different ways you may use our network, and the different costs involved. This will encourage our you to make more informed energy decisions which is ultimately in your long-term interests. **[Figure 14]**

WHAT OUR 2016 PLAN MEANS FOR YOU



WHAT OUR 2016 PLAN MEANS FOR YOU

Through our customer and stakeholder engagement process, you have told us what you want and expect from us and we have listened. In line with your feedback and priorities, our proposed 2016 Plan means we will:

- Continue to provide the safe, reliable and responsive network services that you value
- Put downward pressure on our network prices
- Be more transparent about our costs
- Update the individual components of these prices to encourage you to make informed and efficient energy decisions

- Empower you to take control of your energy decisions
- Better assist vulnerable customers who are struggling to pay energy bills
- Continue to engage with you on our services, costs and prices.

We think this plan strikes the right balance between the business and customer outcomes necessary to promote your long-term interests. **[Box 3: What does “the long-term interests of customers” mean?]**

We expect it to provide a range of benefits for you and our stakeholders. **[Figure 10]** However, there are also some risks which may affect our ability to deliver these benefits. **[Figure 11]**

BOX 3: What does “the long-term interests of customers” mean?

To ensure our 2016 Plan promotes “the long-term interests of customers” (as required by the National Electricity Law), we considered what this means in practical terms.

After engaging with our customers, we think it means being customer-focused, striving to run our business as smartly and efficiently as possible, and thinking and planning for the long term so that:

- Our service levels reflect what our customers want and are willing to pay for

- Our prices reflect the lowest sustainable cost of meeting the required safety and service levels (and are not higher than they need to be because of inefficient operations or poor investments)
- Our services are priced to encourage customers to make informed energy decisions about the way they use our network, which over time will lower network costs and help drive innovation in new technologies
- Our combination of price and service levels represent good value for money and encourages customers to continue to use our network efficiently, reducing prices for our customers.

CONTINUING TO PROVIDE SAFE, RELIABLE AND RESPONSIVE NETWORK SERVICES

Like any business, we need to strike a balance between the safety of our services, the service levels we provide and the prices we must charge to recover the costs of these safety and service levels. **[Box 4: Balancing safety, services and prices in the long-term interests of customers]**

On one hand, power outages can be more than an inconvenience—they can affect your entire family or business. On the other, ensuring outages never occur involves spending more on network assets and employees—which increases our costs and prices.

To help us get this balance right, we asked you about the current balance between our safety, services levels and prices. **[Box 5: What do we mean by our service levels?]** For example, we checked you agree that the safety of our customers, the general public and our employees should be our number one priority. In line with your feedback, our 2016 Plan ensures that safety will not be compromised.

We also asked whether you:

- Are happy with our current levels of service reliability and responsiveness—which mean that, on average, each customer has about one blackout per year and each blackout lasts around one hour—or would prefer to pay higher (or lower) prices for higher (or lower) service levels
- Are happy with the current visual impact of our network in your local area—including the look of our overhead wires, tree-trimming and substations—or would prefer to pay more to improve this visual impact
- Support the investments to maintain our current service levels across our network—including in new growth areas, in established areas where assets are ageing, and IT systems that support our operation and maintenance programs.

You told us you are happy with our current service levels. In line with this feedback, we are committed to undertaking targeted investment across our network to enable us to maintain our current service levels.

Our proposed 2016 Plan includes investing in

- network augmentation projects around the Craigieburn, Flemington and Sunbury areas to ensure the network can accommodate new residential growth in these areas
- new connection projects to ensure the network can accommodate new commercial growth areas and facilitate the development of significant infrastructure for Melbourne
- targeted condition based risk management programs to maintain our safety and service levels in areas where our assets are ageing—including replacing 19,000 of the oldest pole top structures—in line with recommendations by Energy Safe Victoria
- lifecycle maintenance of our IT systems to ensure we can provide a technology platform that supports future growth and has the capability to deliver better access to data as required by the AEMC's Power of Choice reforms. **[Box 6: Investing in measures to empower our customers - Implementing the AEMC's Power of Choice reforms]**

This investment will result in an increase in our operating and capital costs relative to what we've invested over the last 5 years. **[Box 7: What costs are involved in providing our network services?]**

To help minimise the impact of these investments on prices, we will continue to follow our world-class approach to planning and asset management. **[Box 8: Improving our efficiency to put downward pressure on our prices]**

"I'm happy with the service at the moment"

*Residential Customers
Moonee Ponds forum, 17 September 2014*

WHAT OUR 2016 PLAN MEANS FOR YOU

BOX 4: Balancing safety, services and prices in the long-term interests of customers

Like many businesses, we need to make decisions on behalf of our customers – including what safety and service levels we provide to meet our regulatory obligations and customer expectations.

Making these decisions inevitably involve trade-offs. For example, our customers consistently tell us they value a safe, reliable and responsive supply of electricity. But they also tell us that rising energy prices have become a household and commercial concern, and they want us to put downward pressure on our costs and network prices. These priorities are potentially conflicting, as higher service levels usually involve higher costs.

Our investments in electricity infrastructure and other assets also last for a long time (in some cases, up to 50 years). This means the decisions we make today will affect our services, costs and prices over many years.

Figure 9: Balancing safety, services and prices in the long-term interests of customers



With our energy markets expected to undergo big changes in the future, we need to understand your priorities and preferences if we are to make decisions that promote your long-

term interests. This includes what you want from our network, and how you are likely to use our network over the short and longer term.

BOX 5: What do we mean by our service levels?

Our service levels have 4 key aspects:

1

Reliability – making sure electricity is available whenever and however you choose to power your home or business

2

Responsiveness – minimising the time we take to restore power on the occasions when outages do occur

3

Public amenity – considering the visual fit of our network within your local area, such as the look of our poles and wires, tree-trimming and substations

4

Empowering customers – assisting you to better manage your electricity use and costs, for example by making it easy to get the information you need to make energy decisions

Box 6: Investing in measures to empower our customers - Implementing the AEMC's Power of Choice reforms

The Australian Energy Market Commission (AEMC) recommended a suite of reforms to the electricity market to provide customers with greater opportunities to make informed choices about the way they use electricity ('Power of Choice' reforms).

We want to facilitate these reforms to empower you to take control of your

energy needs. To do this our proposed 2016 Plan involves making targeted investments to:

- facilitate the introduction of metering competition and services for you and other residential and small business customers
- enable you to access and understand your electricity usage information
- facilitate the introduction of new cost reflective network tariff

components — a 'maximum demand charge' — that will encourage you to make informed decisions about using our network, and shares our costs between customers in a more fair and equitable way. **[BOX 9: Our proposed changes to individual network charges]**

We are confident that the targeted investments in our proposed 2016 Plan to facilitate the AEMC's Power of Choice reforms will empower you to take control of your energy needs and promote your long term interests.



WHAT OUR 2016 PLAN MEANS FOR YOU

Figure 10: Our 2016 Plan responds to what you told us





	What you told us	Our response and the benefits for you
<p>Our safety and service levels</p> 	<p><i>Safety should remain our top priority</i></p> <p><i>You want us to maintain our current service levels, and support our planned investments to enable this</i></p>	<p><i>We will maintain our current safety and service levels, continuing to provide the safe, reliable and responsive services our customers expect.</i></p> <p><i>We will make efficient investments to ensure demand from new growth areas and aging assets in well-established areas don't compromise our service levels and our investments in new growth areas will enable local economic development.</i></p>
<p>Our costs</p> 	<p><i>You want us to be transparent about our costs</i></p> <p><i>You want us to continually improve our efficiency and put downward pressure on customer bills</i></p> <p><i>You support us exploring innovative technologies which can help lower our costs over the long term</i></p>	<p><i>We will keep our average prices as low as possible by:</i></p> <ul style="list-style-type: none"> <i>continuing to improve our cost efficiency</i> <i>passing through the benefits of the reduction in our funding costs</i> <i>ensuring our customers only pay for expenditure that is necessary, and exploring new alternatives to future network investment.</i>
<p>Our prices</p> 	<p><i>You want prices that better reflect and more equitably share the costs of using our network</i></p>	<p><i>We propose to update the individual components of our network tariffs to provide better price signals and reduce cross-subsidies between customers. This will empower you with new ways to save on your bills, and encourage you to make informed choices in using our network.</i></p> <p><i>We have proposed measures to minimise the adverse impacts of the proposed changes in our price components.</i></p>
<p>Empowering customers</p> 	<p><i>You want to be more active decision-makers and take control of your energy decisions</i></p>	<p><i>We will continue to facilitate your use of new technologies to manage your energy needs and provide information you need to take control of your energy decisions.</i></p>
<p>Helping vulnerable customers</p> 	<p><i>Some customers are struggling to pay electricity bills</i></p> <p><i>You think we have a role to play in assisting vulnerable customers</i></p>	<p><i>We will assist vulnerable customers struggling to pay electricity bills by helping them to replace inefficient appliances and providing them with targeted information about their energy usage and bills.</i></p>
<p>Engaging and responding to our customers</p> 	<p><i>You value us engaging with you on a range of issues</i></p>	<p><i>We will continue to engage with our customers, stakeholders and the community on our services, costs and prices.</i></p> <p><i>We will continue to learn from and improve our engagement processes.</i></p>

Figure 11: There are also some risks which may affect our ability to deliver the benefits of our 2016 Plan

Risks		
Reduced service levels	Price volatility	Tariffs
If the AER does not approve our forecast efficient costs and we cannot implement our capital program, our service levels may not meet customers' expectations	The AER has determined that our revenue from customers will be capped. If our customers' total electricity consumption falls, our average prices may increase	If policy makers allow customers to 'opt-out' of our proposed tariffs, or retailers do not pass through these price signals to customers, cross-subsidies will continue and network prices will be higher than they need to be

BEING MORE TRANSPARENT ABOUT OUR COSTS AND REVENUE

You told us you want to know where your money goes, so we're going to be more transparent about our costs over the 5-year period, and how much revenue we need to earn to recover those costs.

Like most businesses, we incur two broad types of costs in providing our services – operating and capital costs. **[Box 7: What costs are involved in providing our network services?]** However, our prices don't aim to recover all these costs in the period we incur them. Rather, we calculate how much revenue we need to recover in the period using the 'building block' approach specified in the electricity regulatory framework. This involves estimating:

- Our funding costs over the 5-year period (interest and other costs related to our 'borrowings' for our debt and equity for past and forecast capital costs)
- Our forecast operating costs over the 5-year period (including any revenue adjustments to account for any rewards or penalties or use of shared assets)
- The depreciation on our assets over the 5-year period (the amount we need to recover over this period so we will recover our capital costs over the expected life-time of

each asset), and

- Our tax costs over the 5-year period (to pay our tax liabilities to the Australian Tax Office)

After considering our estimates, the AER determines our revenue requirement for the period. We then adjust our current network prices up or down to enable us to recover this revenue from our customers.

In our proposed 2016 Plan, we calculate we need \$1,603m in revenue for our distribution network and metering services over the next 5-year period (excluding the impact of inflation). This represents revenue of \$939* per customer per year —or an increase of 7.6% per customer per year compared to the current period (excluding the impact of inflation). **[Figure 12]**

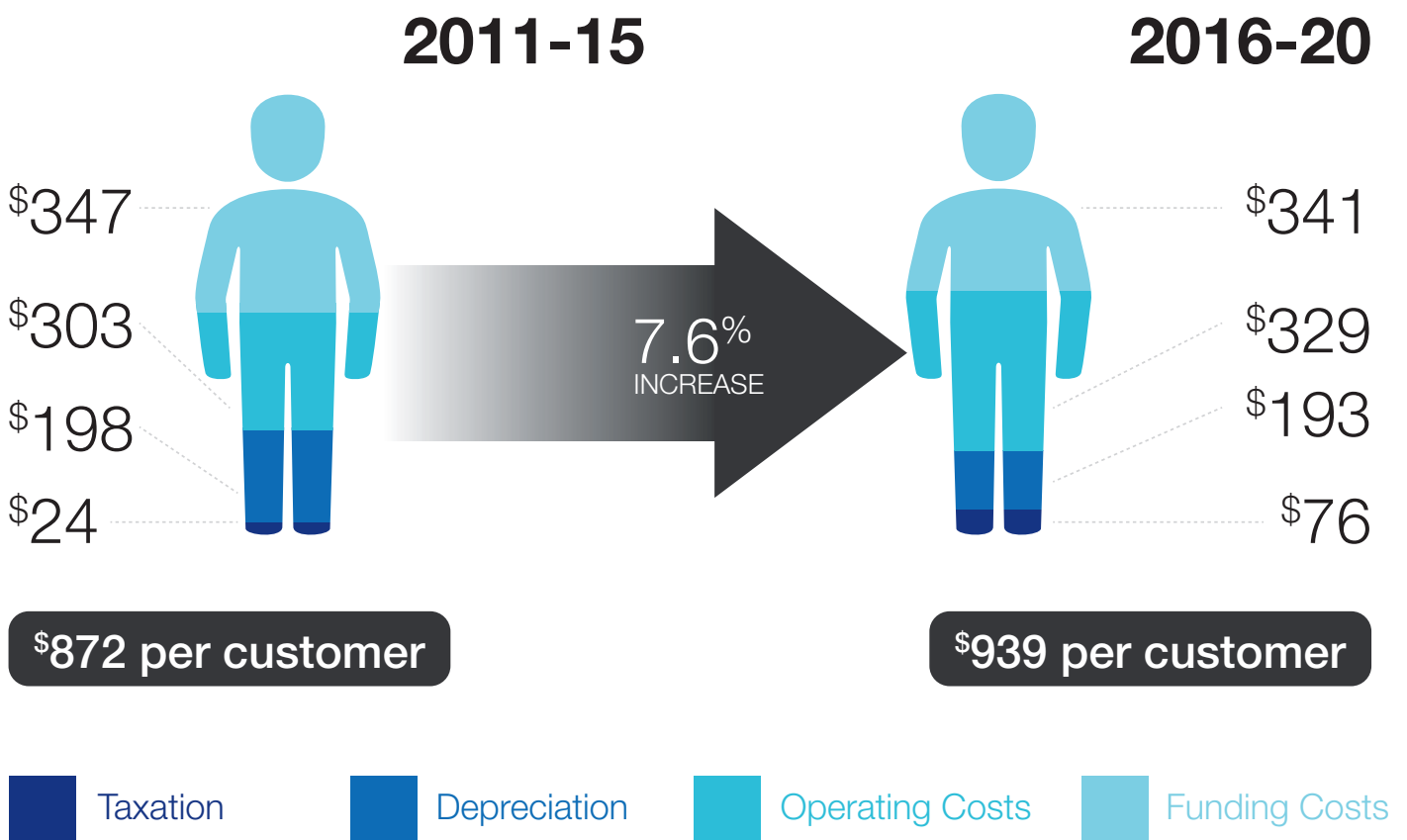
There are several reasons for the increase in our required revenue per customer.

First, our capital and operating costs for providing our distribution services are higher over the next 5-year period reflecting changes in our operating environment (including new safety and reporting obligations) and targeted investments to maintain our current service levels across the network—including in new growth areas, in established areas where assets are aging, and in IT systems to support the services our customers have told us they value.

*The average revenue per customer is significantly higher than a typical residential customers' annual network bill.

WHAT OUR 2016 PLAN MEANS FOR YOU

Figure 12: Our required revenue per customer per year in the next 5-year period is higher than the current period (\$ 2015)

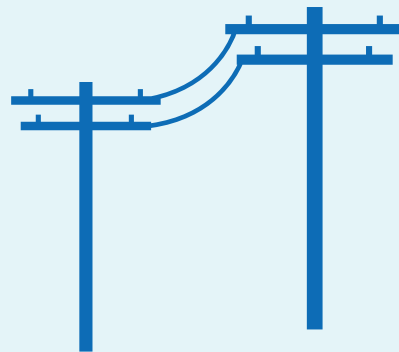


Second, our customers' total electricity usage is continuing to grow, mainly due to the new residential and industrial growth areas. While our total revenue requirement is increasing by 19.7% compared to the current period, increasing customer numbers and electricity usage helps to lower the average revenue we must recover from each customer - and lower our network charges - to generate our overall revenue requirement.

Third, our funding costs for the period are lower than for the current period. Like home interest rates, the costs of funding our past and forecast capital costs vary with economic and financial market conditions. When we submitted our current plan 5 years ago, our rates of 'borrowing' were high due to the unusual conditions in financial markets at that time (the global financial crisis). Since then, conditions have improved and our costs have come down.

BOX 7: What costs are involved in providing our network services?

Like most businesses, we incur two broad types of costs in providing our distribution and metering services – operating and capital costs.



- **Operating costs** include the costs of operating and maintaining our physical assets (such as poles, substations, meters and IT systems); responding to outages or damage caused by storms; and minimising the potential for trees and vegetation to damage our network. They also include the costs of performing other functions like reading meters and providing billing information to retailers, and meeting legal and regulatory requirements.
 - These costs are generally recurrent, much like the costs of running a household (buying groceries, paying bills, general home maintenance) and we recover these costs on an annual basis.
 - We expect our operating costs for providing distribution and metering services to increase to \$533m over the next 5-year period, an increase of 24% compared to the current period (excluding the impact of inflation).
 - The reasons for this increase include the cost pressures from competing for skilled labour with other sectors in the economy, and by the costs involved in meeting new regulatory obligations (such as the new inspection and maintenance requirements for aging assets and implementing the AEMC's Power of Choice reforms) and providing programs that reflect our customers' preferences (for example, programs to assist vulnerable customers).
- **Capital costs** include the investments we make to buy and build the physical assets required to deliver our services and meet our safety and service levels now and in the future. Our capital works range from small standard projects (like installing a small length of wire and a meter to connect a new customer to the existing network) to large multi-million-dollar projects (like installing new substations to ensure our network can accommodate growth in electricity usage or replacing aging poles and other assets to maintain the safety and reliability of our network).
 - These costs are generally funded through borrowings from debt and equity markets and paid back over the long term to ensure both current and future customers who benefit from the assets contribute to their costs.
 - We expect our total capital costs for providing distribution and metering services to increase to \$876m over the next 5-year period, an increase of 4% compared to the current period (excluding the impact of inflation).
 - Some of the things that influence our capital costs include growth in our customers' total electricity usage, the age of our assets, the costs to connect new customers to our network and changes in regulatory requirements, upgrades to our billing and IT systems and your evolving expectations.

WHAT OUR 2016 PLAN MEANS FOR YOU

REDUCING OUR NETWORK PRICES FOR RESIDENTIAL CUSTOMERS

You told us that rising energy prices have become a household concern, and you want us to put downward pressure on our costs and network prices.

While we can't influence all the costs that make up your electricity bill, we are committed to keeping the distribution network and metering component of this bill as low as

possible. In fact, our proposed 2016 Plan includes decreases in our network charges of 13% for our typical residential customers over the 5-year period from 2016 (excluding the impact of inflation).

For you and other typical residential customers, this means your annual electricity bills will fall by an average of \$85 per year over the period (excluding the impact of inflation). However the change in annual electricity bills will be different for other customers. **[Figure 13]**

BOX 8: Improving our efficiency to put downward pressure on our prices

You told us that you want to see us continually striving to improve our efficiency so our services provide more value for money.

Currently, we are one of the lowest

cost and most efficient electricity utilities in Australia. For example, a comparison of the total costs we incur to provide network services relative to other electricity utilities in Australia has been found to be among the most efficient of these businesses.

However, as markets change and knowledge and technologies improve, there are always opportunities for

further improvements in efficiency. Improving our efficiency by being smarter and more innovative in how we plan and operate our network helps lower our prices over time.

That is why we are committed to pursuing more efficiency improvements over the next 5 years.

In setting our proposed prices, we have taken account of your concerns about the affordability of energy. We have proposed a reduction in our prices in 2018 to minimise any adverse impacts of the proposed changes in price components (discussed below) on specific customers. **[Box 9: Our proposed changes to individual network charges]**

At the same time, our plan ensures we can fully recover our efficient costs over the next 5 years, so we can maintain the safety, reliability and quality of our services that our customers value, both today and in the future. We think this strikes the right balance between the business and customer outcomes necessary to promote your long-term interests.

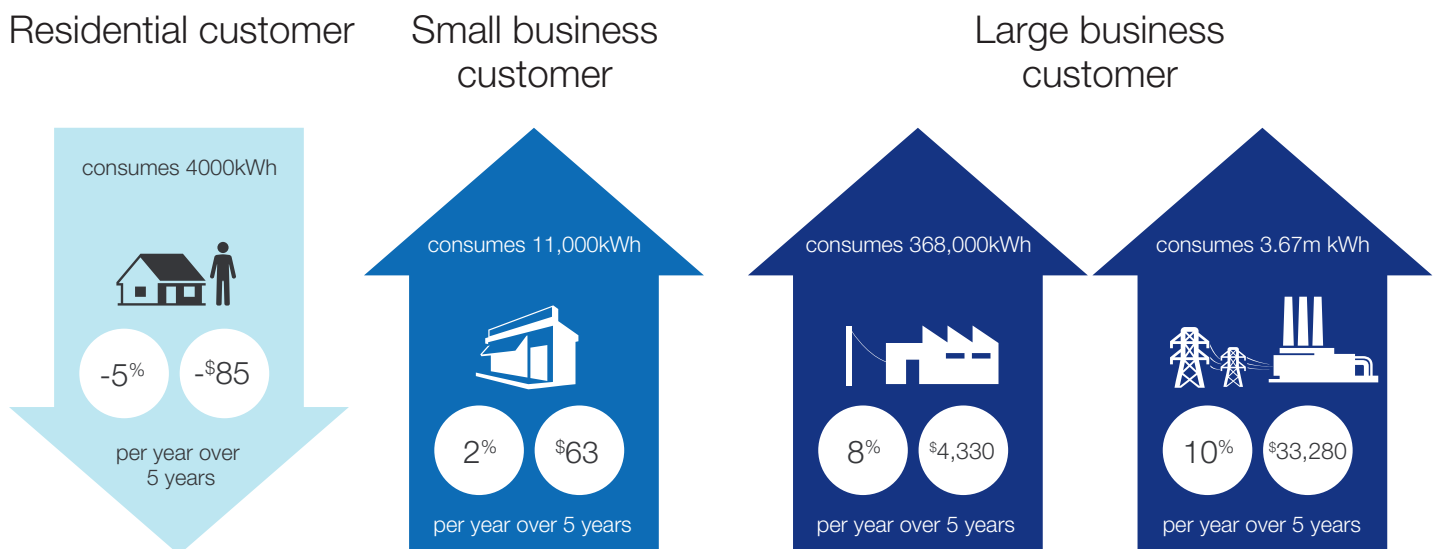
You may not see our network charges itemised on your electricity bill, as retailers typically incorporate our charges in their end prices and charges, along with the other costs of supplying electricity. But you should continue to shop-around and find which retailer offers the best deal for you. The Jemena Electricity Outlook Portal gives you easy access to your electricity usage information to compare retail market offers. **[Box 10: Jemena's electricity portal empowers customer to take control of their energy decisions].**

The Victorian Government's independent website - <https://switchon.vic.gov.au/> - also provides advice about shopping-around for retailer offers and how you can manage your energy costs.

“Changing behaviour over time requires changes to pricing”.

*Residential Customers
Moonee Ponds forum, 17 September 2014*

Figure 13: Changes in annual electricity bills over the 5-year period for typical customers (excluding the impact of inflation)



Annual electricity bills include distribution, metering, wholesale and retail costs. Our analysis assumes that the wholesale and retail cost components remain constant in real terms, while the distribution and metering components vary as per this submission

UPDATING OUR PRICE COMPONENTS TO ENCOURAGE INFORMED ENERGY DECISION MAKING

Our network prices or ‘tariffs’ are made up of a number of charges, so that the total network cost incorporated into your electricity bill comprises several separate components. Typically, these include a fixed (or ‘standing’) charge that applies to each premises we supply, and a variable charge that applies to the volume of electricity consumed.

You have probably paid for electricity this way for as long as you can remember. But our energy market has changed, and there is now more diversity in how our network is used. **[Box 2]** As a result, our current charges don’t send clear signals about the different costs of using our network in different ways—and mean some customers are paying more than the cost of their use of the network, while others are paying less.

We don’t think this encourages you to make informed decisions about using our network, or shares our costs between customers in the most fair and equitable way. It

is also out of step with recent changes to the electricity regulatory framework, which require network charges to signal the cost of using the network.

To help us address this issue in a way that promotes your long-term interests, we consulted extensively with you. You agreed that our network charges need to be updated to respond to the changes in the energy market, to accommodate the future changes in how you may use our network and to use the benefits of the smart meters we have installed across our network to deliver better (as well as cheaper) services. You also told us it made sense to transition to the updated charges as soon as practical.

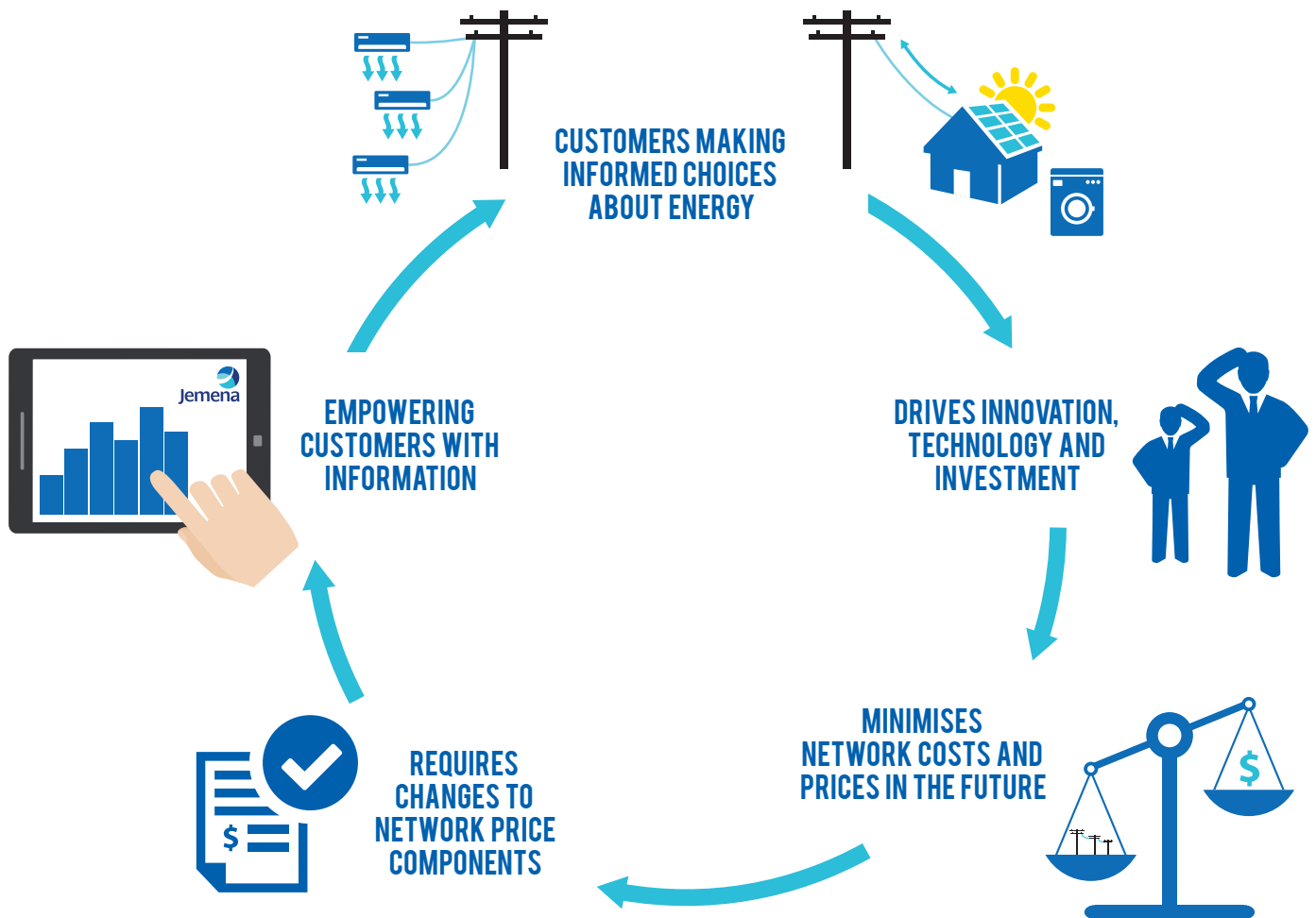
In line with this feedback, our proposed 2016 Plan includes the introduction of a new ‘maximum demand charge’. This new charge will mean that over the next 5 years, how much you pay for using our network may increasingly depend on how and when you use the network—that is, on your maximum demand in kilowatts (kW) during the specified period of peak demand on our network. **[Box 9: Our proposed changes to individual network charges]**

WHAT OUR 2016 PLAN MEANS FOR YOU

This will encourage you to make decisions about using the network that take better account of the costs involved—which, in turn, will drive continued technological and market innovation to assist you in managing energy use, and put downward pressure on network costs and average prices over the long term. **[Figure 14]**

While the new charge will not mean we recover more costs from customers in total, it may affect how much you will pay for using our network. How you are affected will depend on how and when you currently use the network, and if you choose to take up this new tariff, how you respond to the new price signals. We will publish information on our website and engage with our stakeholders to help you understand what you can do to respond to these signals and take control of your electricity bills.

Figure 14: Ensuring our network prices encourage customers to make informed choices about energy



BOX 9: Our proposed changes to individual network charges

Our network must be built and maintained to meet our customers' total maximum demand for electricity from the network at any moment in time. Daily peaks in residential demand typically occur between 3pm and 9pm on weekdays – when most people are at home and using a variety of appliances. The largest peaks occur on just a few days per year—when weather conditions are extreme and when many people are using air conditioners.

When the size of these large peaks in demand increases, we must make significant investments in the network to maintain the reliability of our services. This means that your maximum demand on our network at any time influences our costs.

To encourage you to take account of this effect in making your energy decisions, we propose to change how we recover our costs from customers. From 1 January 2018, we will introduce an additional charge for residential and small business customers—a 'maximum demand charge'.

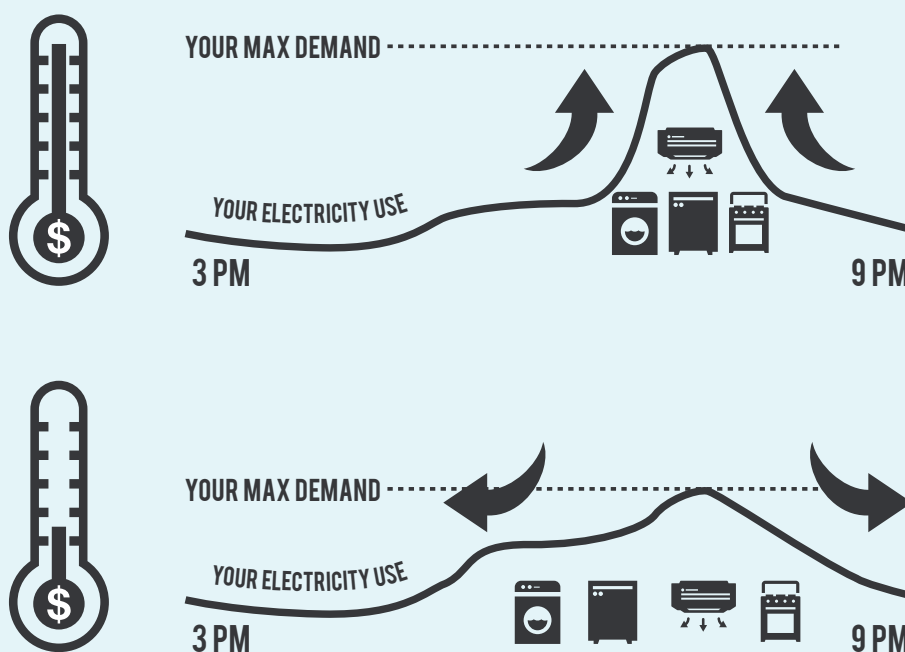
For residential customers this maximum demand charge (\$ per kilowatt) will depend on the maximum amount of electricity you draw from the network during the specified window of 3pm to 9pm on weekdays over a month. The new charge will empower you with new ways to save on your electricity bills by encouraging you to reduce your maximum demand during the demand charging window—for example, by:

- lowering your consumption by purchasing energy efficient appliances and light bulbs
- shifting your consumption by choosing to use appliances, such as dishwashers and washing machines, outside of these periods
- 'smoothing' your consumption by avoiding using multiple appliances simultaneously. **[Figure 15: Reducing your network bill by smoothing your consumption during the demand charging window]**

The impact of the maximum demand charge on your electricity bills will depend on how and when you currently use the network, how retailers incorporate the new network price signals in their retailer offers and whether you choose to take up this new tariff.

This doesn't mean we will recover more money from our customers. Rather, it changes the way we recover money from our customers. We will continue to have a fixed standing charge and variable usage charges to recover our other fixed costs, and on average these components will be lowered.

Figure 15: Reducing your network bill by smoothing your consumption during the demand charging window



WHAT OUR 2016 PLAN MEANS FOR YOU



EMPOWERING YOU TO TAKE CONTROL OF YOUR ENERGY DECISIONS

You told us that you want to be an active decision-maker and take control of your energy needs. We think we can play a useful role in facilitating and empowering you to do this.

Our proposed 2016 Plan commits to facilitating the use of new technologies to manage your energy needs—such as solar PV and, in the future, battery storage—by making it fast and easy to connect these technologies to our network and to implementing the AEMC’s Power of Choice reforms to empower you to take control of your energy needs. **[Box 6]**

Our proposed 2016 Plan also commits to empowering you with the benefits of our smart meters — including providing you with easy-to-access information on your electricity usage, and to trialling specific measures to assist vulnerable customers access their usage information on a real-time basis. **[Box 10]**

In addition, we have:

- Provided clear and accessible information available on our website on how electricity prices are set – including how our network prices are regulated and how customers can get involved
- Published a Tariff Structure Statement on our website that provides clear, accessible guidance on how we decided on our proposed prices, and how our price structures and levels may change in the future.
- Published information and committed to undertaking workshops with community organisations to assist you in understanding how you can respond to our proposed maximum demand charge to take control of your electricity bill.

“Building more infrastructure to cater for one week per year does not make sense.”

*Residential Customers
Moonee Ponds forum, 17 September 2014*

“And if you’re educated as to how to best use it, it’s going to be better for everybody.”

“I understand the fact if you want more appliances at once you need more infrastructure.”

*Residential Customers
Moonee Ponds forum, 17 September 2014*

BOX 10: Jemena’s electricity portal empowers customer to take control of their energy decisions

We want to empower you in your energy decision making.

We have developed a powerful tool—Jemena Electricity Outlook Portal—that gives you easy access to your electricity usage. Utilising the benefits of our smart meters, you can:

- see how much electricity you are using and when you are using it—in real-time through in-home energy displays
- set savings targets and track your progress
- use your usage information to compare retail market offers and shop-around to find the best plan for you.

We are working with a range of stakeholders—including community groups—to encourage our customers to take advantage of this powerful tool. You can access the portal here: <https://electricityoutlook.jemena.com.au/>

We also want to ensure that vulnerable customers in

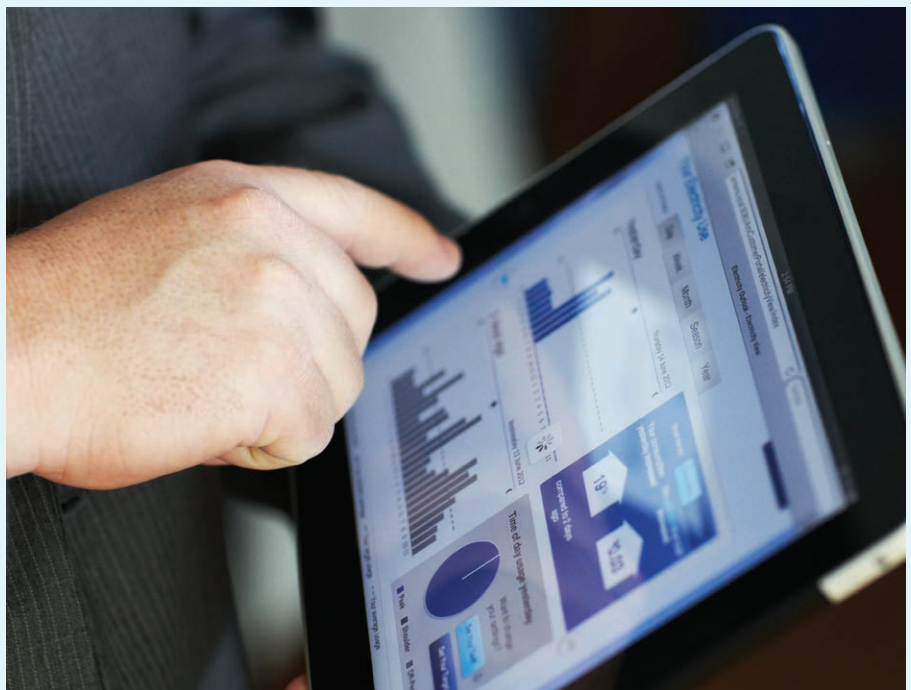


Figure 15: Jemena’s electricity portal and advanced metering can help you take control of your energy decisions

our community have easy access to information to take control of their electricity bills. Under our 2016 Plan, we will trial the installation of 500 in-home energy displays to assist vulnerable customers better understand how much electricity they are using and when they are using it in real time. We think this will assist them to better manage their electricity bills.

WHAT OUR 2016 PLAN MEANS FOR YOU

PROVIDING MORE ASSISTANCE TO VULNERABLE CUSTOMERS STRUGGLING TO PAY ENERGY BILLS

You told us that vulnerable customers in our community need assistance to manage their energy bills, and that we should play a role. In response, we are committed to taking the following steps:

- Making it easier for vulnerable customers to manage their electricity bills by:
 - providing clear, accessible information—including communications tailored to our increasingly culturally and linguistically diverse customer base—to make it easier for them to manage their electricity consumption, find a better retail market offer, and take advantage of any rebates that may be available to them
- continuing to engage with our community to build vulnerable customers' energy literacy, helping them navigate the complicated energy market and take control of their energy decisions
- Assisting vulnerable customers to reduce their energy consumption by using electricity more efficiently:
 - trialling 500 in-home energy displays to assist vulnerable customers see how much electricity they are using and when they are using it in real time. **[Box 10]**
 - becoming a partner of NILS, a No Interest Loan Scheme, to help vulnerable customers access funds to replace old their electricity appliances with new, more efficient models **[Box 11]**

“The cost is very minimal, hardly worth talking about, but the assistance is very valuable.”

I think it's a very good thing for Jemena to help vulnerable customers.”

*Residential Customers
Moonee Ponds forum, 17 September 2014*

BOX 11: NILS helps low-income customers improve their energy efficiency

The first No Interest Loans Scheme (NILS) was started by the Good Shepherd Sisters in Victoria in 1981. It offered men and women no interest loans to purchase essential household items. It aimed to:

- make cash available as a loan, not as charity

- show respect for clients by entering into a professional business relationship – a formal loan agreement
- educate clients to negotiate a loan and, importantly, create a system that would make it easy to pay it back
- charge no interest and encourage people to return the money so that their friends and neighbours may also benefit.

Since then, NILS has gone from strength to strength. The total number of loans made in the last financial year was valued at just over \$18 million, with a range of schemes assisting vulnerable customers in different ways.

NILS are typically funded by partner organisations which include government departments, companies and charities.



HAVE YOUR SAY & STAY INFORMED



We welcome your views on our 2016 plan

We will keep you informed of the AER's review process and how it impacts you



www.jemena.com.au



haveyoursay@jemena.com.au

