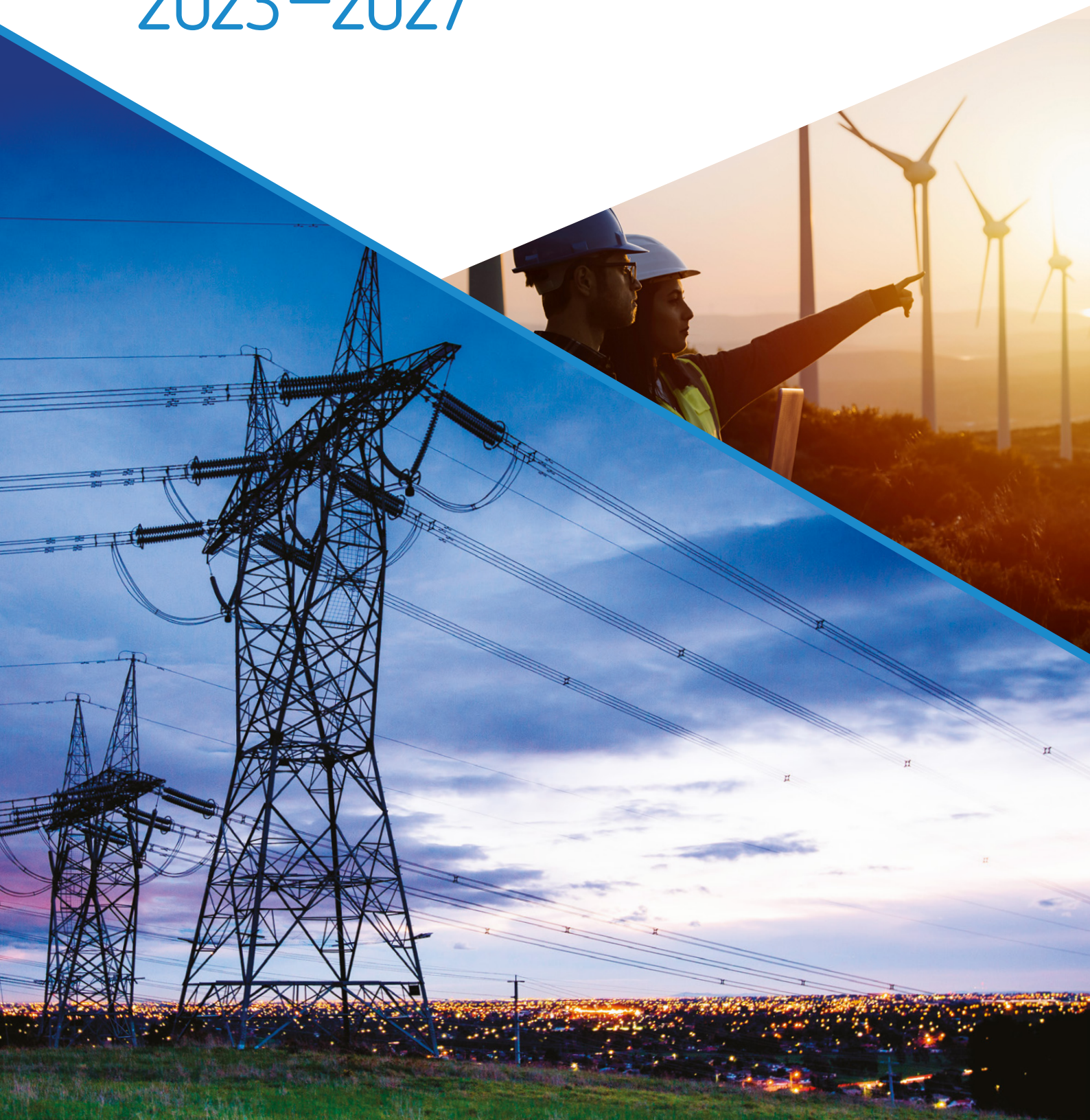
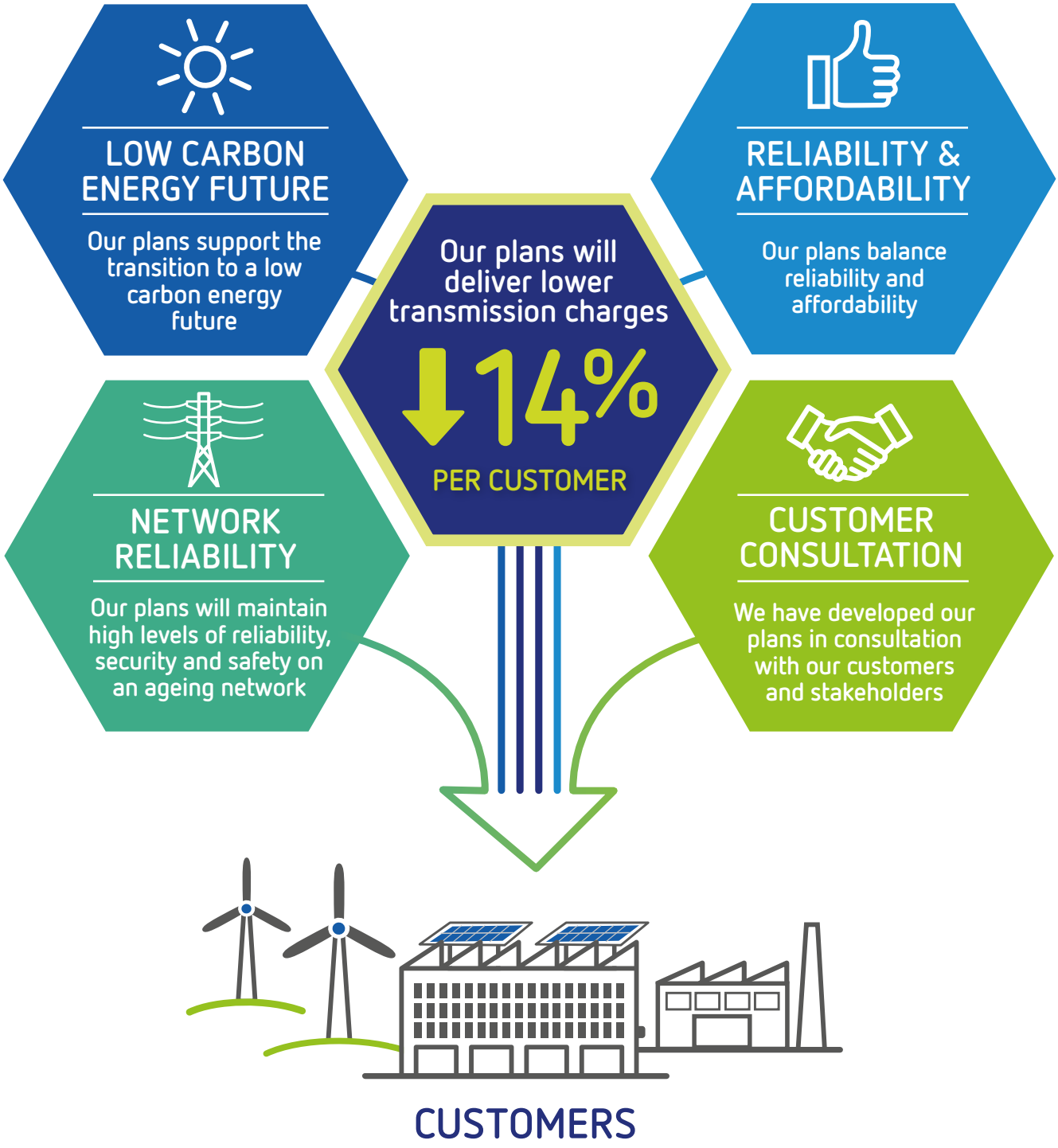
AusNet services

TRANSMISSION NETWORK REVENUE PROPOSAL 2023–2027



OVERVIEW

CUSTOMER BENEFITS OF OUR PLANS



CEO Foreword

AusNet Services delivers safe and reliable electricity and gas to more than 6 million Victorian customers. Our aim is to maintain affordable, safe and reliable energy supply for our customers, and ensure they are well placed to benefit from the energy system transformation that is underway.

In Victoria, the Australian Energy Market Operator (AEMO) is responsible for planning upgrades to connect new renewable generation sources to the transmission network. However, as the owner and operator of the Victorian transmission network, AusNet Services also plays a vital role in ensuring generators are connected to a reliable, secure and safe existing network.

In preparing this Revenue Proposal, which sets out our plans for the electricity transmission network from 2023 to 2027, we engaged with a broad group of customers and stakeholders in developing our Revenue Proposal through a Customer Advisory Panel. We also hosted open forums to hear from other interested stakeholders on our planned approach for specific aspects of our preliminary plans. Our approach recognises that whilst only generators, large industrial customers and distributors engage directly with the transmission network, all Victorians depend on it to meet their energy needs. I would like to thank the Customer Advisory Panel members, who have given their valuable time and insights throughout our engagement process, and to all who contributed input via our stakeholder meetings.

Our proposal has been prepared during a time of great economic uncertainty, as a result of the COVID-19 pandemic. It has not been possible to incorporate possible economic impacts of the pandemic into our plans. However, we plan to continue to consult as new information becomes available during the review conducted by our regulator, the Australian Energy Regulator (AER). We will also undertake further consultation with our customers and stakeholders where our plans have been impacted by COVID-19 effects, prior to lodging our Revised Revenue Proposal in September 2021.

Many transmission assets are designed to have long useful lives. Some of our assets have been in service for 60 years or more, and based on their condition, need to be replaced. We have accordingly developed an efficient capital replacement program to ensure the network remains safe, secure and reliable.

Affordable energy remains our customer's primary concern and I am proud our proposal provides for a reduction in average revenue per end-use customer of approximately 14% in the 2023-27 regulatory period, falling from $191 to $164 per annum. These reductions pass on to customers the benefits from AER Decisions and lower interest rates that have significantly reduced our cost of capital and the efficiencies we have achieved this period. These cost reductions have allowed us to deliver price falls despite moderate increases to expenditure to meet new tax imposts, new cyber security and environmental legislative obligations and increased investment to replace aging equipment. Indeed, excluding taxes and rates increases that are outside of our control, average revenue per end-use customer is forecast to fall by 21%, from $138 to $109 per annum. This builds on our 20 year record of cost control with prices remaining more than 60% lower in real terms than at privatisation more than 20 years ago, excluding taxes. We will continue to drive efficiency savings through our business to keep our costs below our peers and help keep Victorian energy prices lower.

Our plans will also help offset the future costs of the major transmission upgrades planned for Victoria as set out in AEMO's ISP. Including the indicative cost of these projects, average revenue per end-use customer is forecast to decrease by 8%, from $191 to $176 per annum.

Overall, we will continue to provide Victorian electricity customers with efficient and low-cost transmission services, excellent reliability and help address emerging system security challenges.

The AER will now review the proposal and will seek further feedback, including from all customers. You can engage with this process through the AER website.

Tony Narvaez

Managing Director
AusNet Services

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INTRODUCTION

AusNet Services owns and operates the electricity transmission network in Victoria transporting electricity from large coal, gas and renewable generators across Victoria and interstate, to terminal stations that supply large customers and the distribution networks. Those networks then deliver the electricity to households and businesses. All distribution customers are also transmission network customers.

The services provided by the transmission network are monopoly services, as it is not commercially viable or practical to build competing networks. For this reason, the Australian Energy Regulatory (AER) decides how much revenue AusNet Services should earn to provide those services.

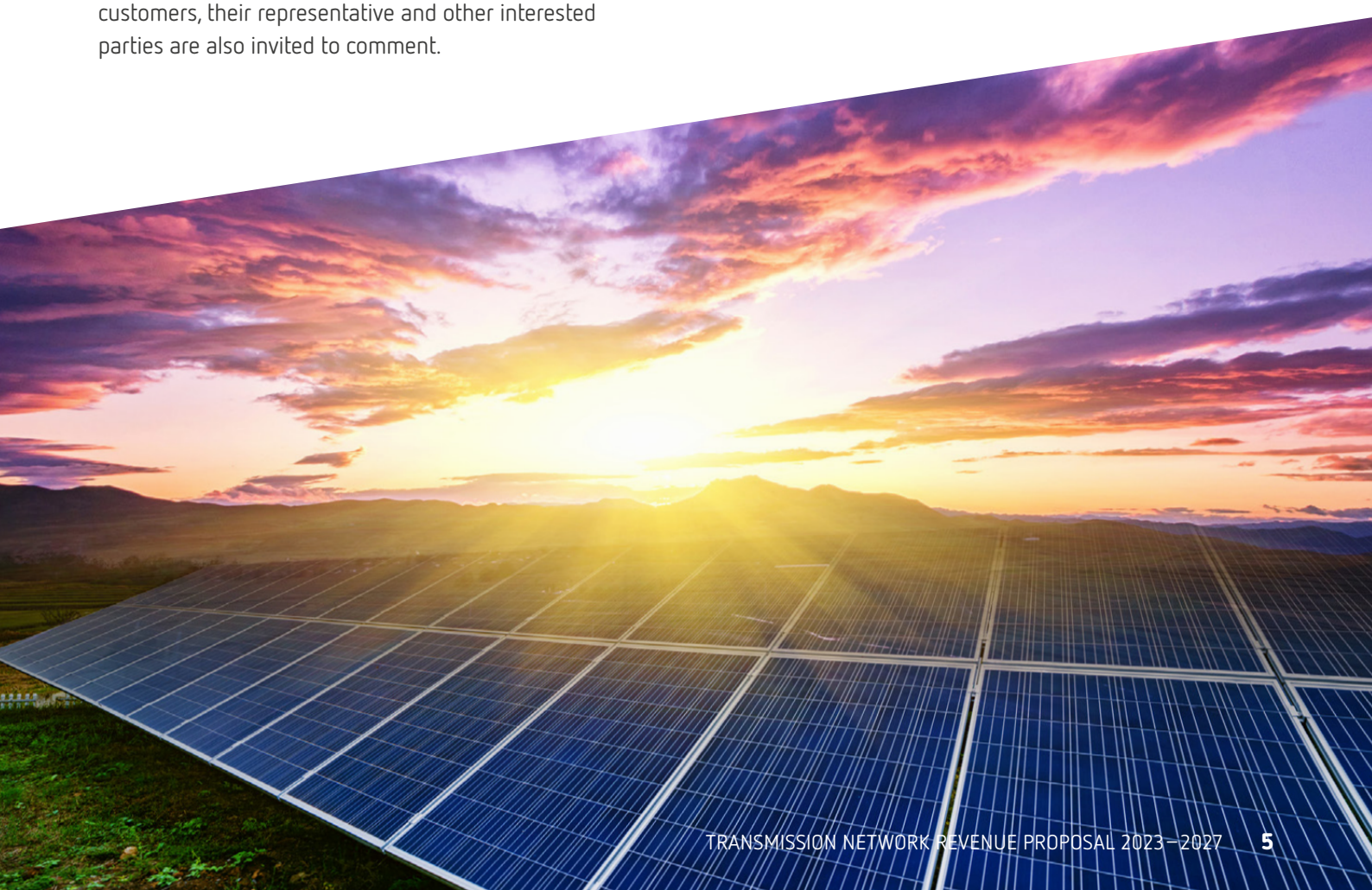
The AER sets AusNet Services' revenue and prices typically every five years. The current five-year period expires at the end of March 2022.

The process for setting revenue and prices begins with AusNet Services submitting a proposal to the AER. This includes details of our spending plans, which are designed to maintain the reliability and safety of the network in an efficient manner. The AER reviews this proposal and customers, their representative and other interested parties are also invited to comment.

Unlike in other states, our transmission business does not plan for growth. Instead the Australian Energy Market Operator (AEMO) and the Distribution Businesses plan all growth on the Victorian network. AusNet Services is responsible for maintaining the reliability and safety of the existing network. Therefore, this proposal relates only to the expenditure and revenues required to maintain the network.

This overview document forms part of our Revenue Proposal. Its purpose is to summarise our proposal in a way that stakeholders will find helpful and informative. It explains how we have engaged with customers and stakeholders in developing our proposal including via establishment of a purpose-formed Customer Advisory Panel.

We also invite further comment and input throughout the AER's review process. Further information on our engagement activities and how to provide feedback can be found **here**.



OUR CUSTOMERS AND NETWORK

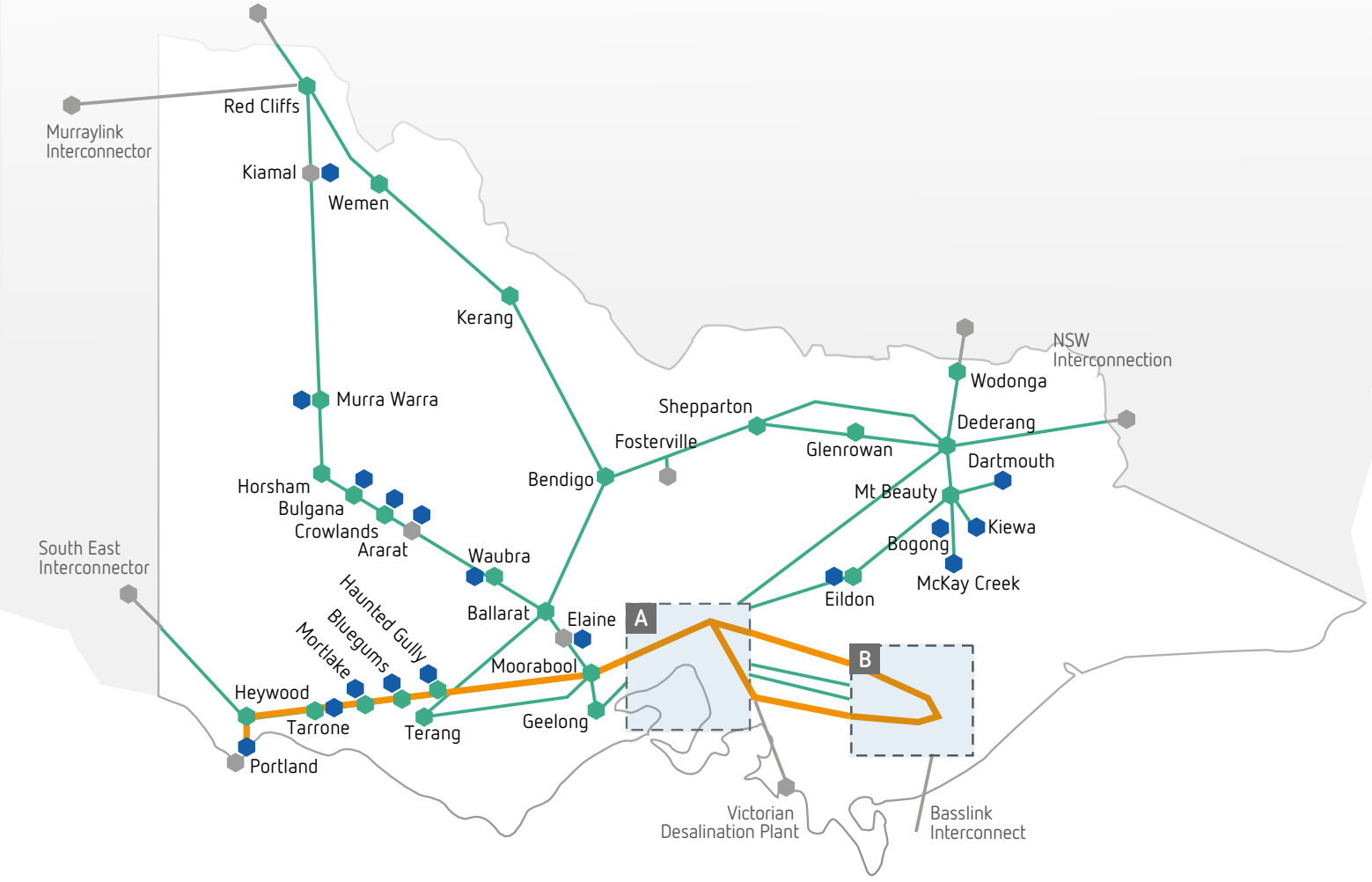
Our electricity transmission network serves electricity customers throughout Victoria. It delivers reliable electricity to over 6 million customers from traditional generation sources and a rapidly increasing fleet of renewable generators.

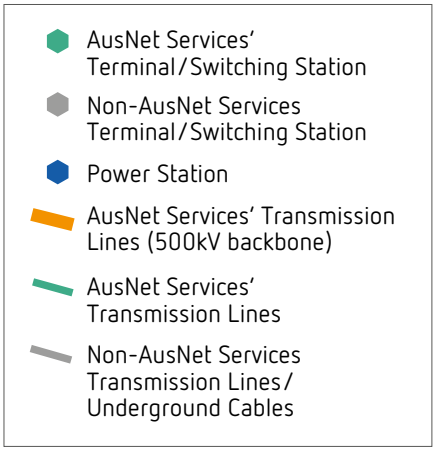
AusNet Services is Victoria's largest energy delivery service business. We own and operate $11 billion of electricity and gas network assets. We employ more than 2,600 staff and contractors in regional and metropolitan Victoria and our distribution networks supply electricity and gas to more than 1.3 million residential and business consumers.

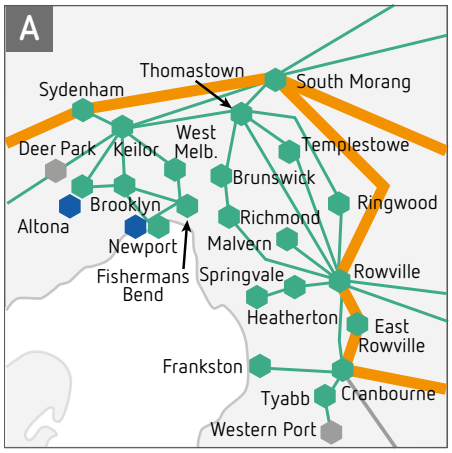
Our transmission network transports bulk electricity from large scale generation to large directly connected customers like smelters and to Terminal Stations from where Victoria's five distribution networks take supply before transporting the electricity to households and businesses. Importantly, the transmission network also connects Victoria to South Australia, New South Wales and Tasmania, allowing the states to trade electricity between them. This 'interconnection' lowers costs and increases reliability as each state can share their neighbour's generation.

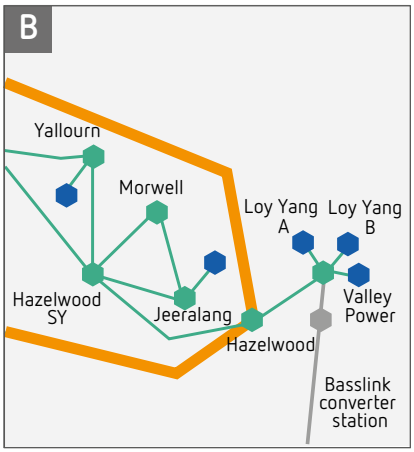
The layout of the network is shown in Figure 1. The core of the Victorian transmission system consists of a 500,000 volt (500kV) backbone stretching from the Latrobe Valley, curving north around Melbourne and Geelong and then west to the South Australian border. Major switching stations along this route convert the electricity to 220kV for the Melbourne and Geelong metropolitan transmission supply, as well as the major western, northern and north western regional areas. The 500kV backbone interconnects with South Australia at Heywood and Redcliffs (220kV), with Tasmania at Loy Yang, and with New South Wales at Dederang (330kV) and Redcliffs (220kV).

Figure 1: The Victorian transmission network





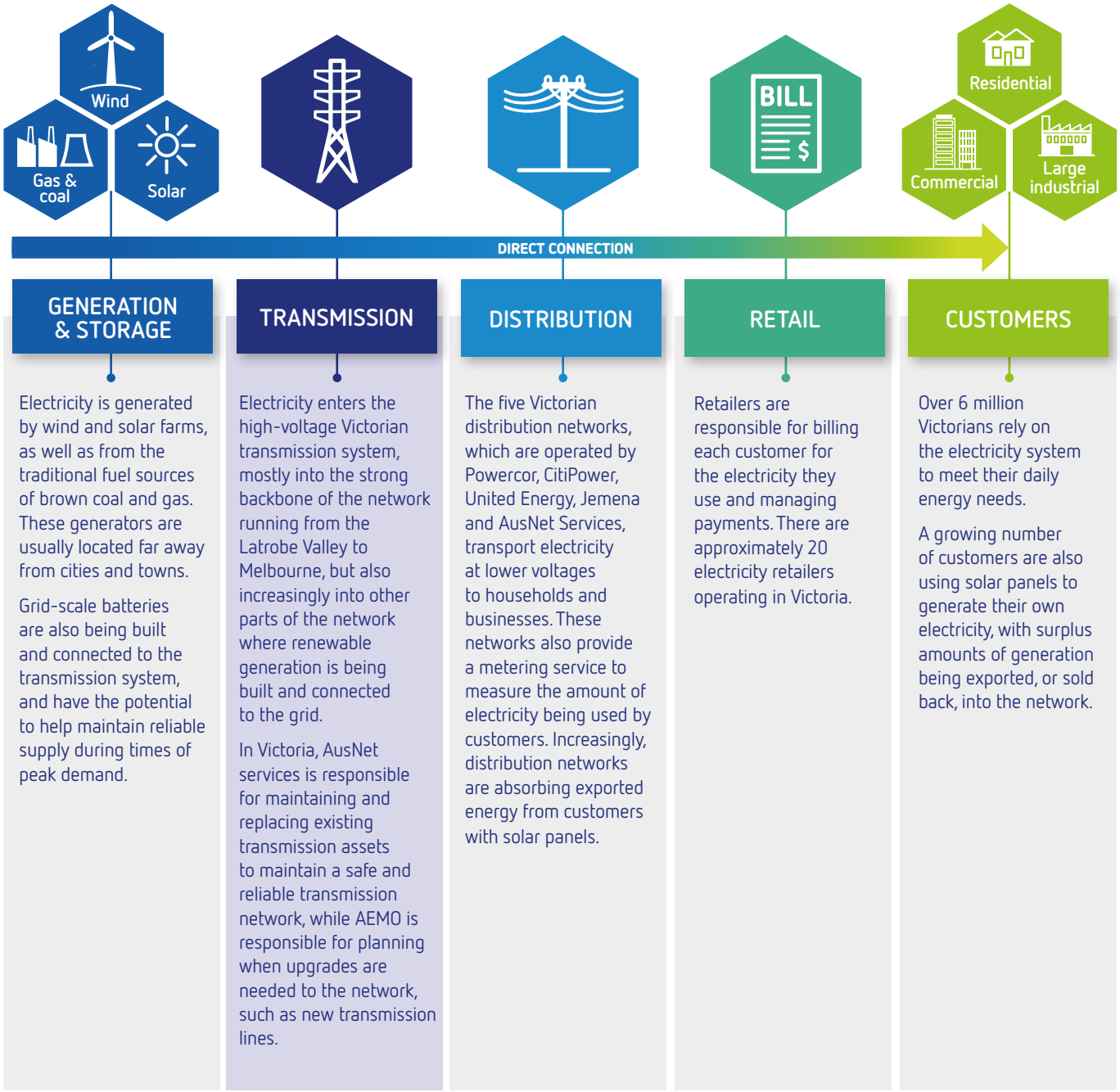




Source: AusNet Services

The role of our transmission network in the Victorian electricity supply chain is shown in Figure 2.

Figure 2: Electricity supply chain



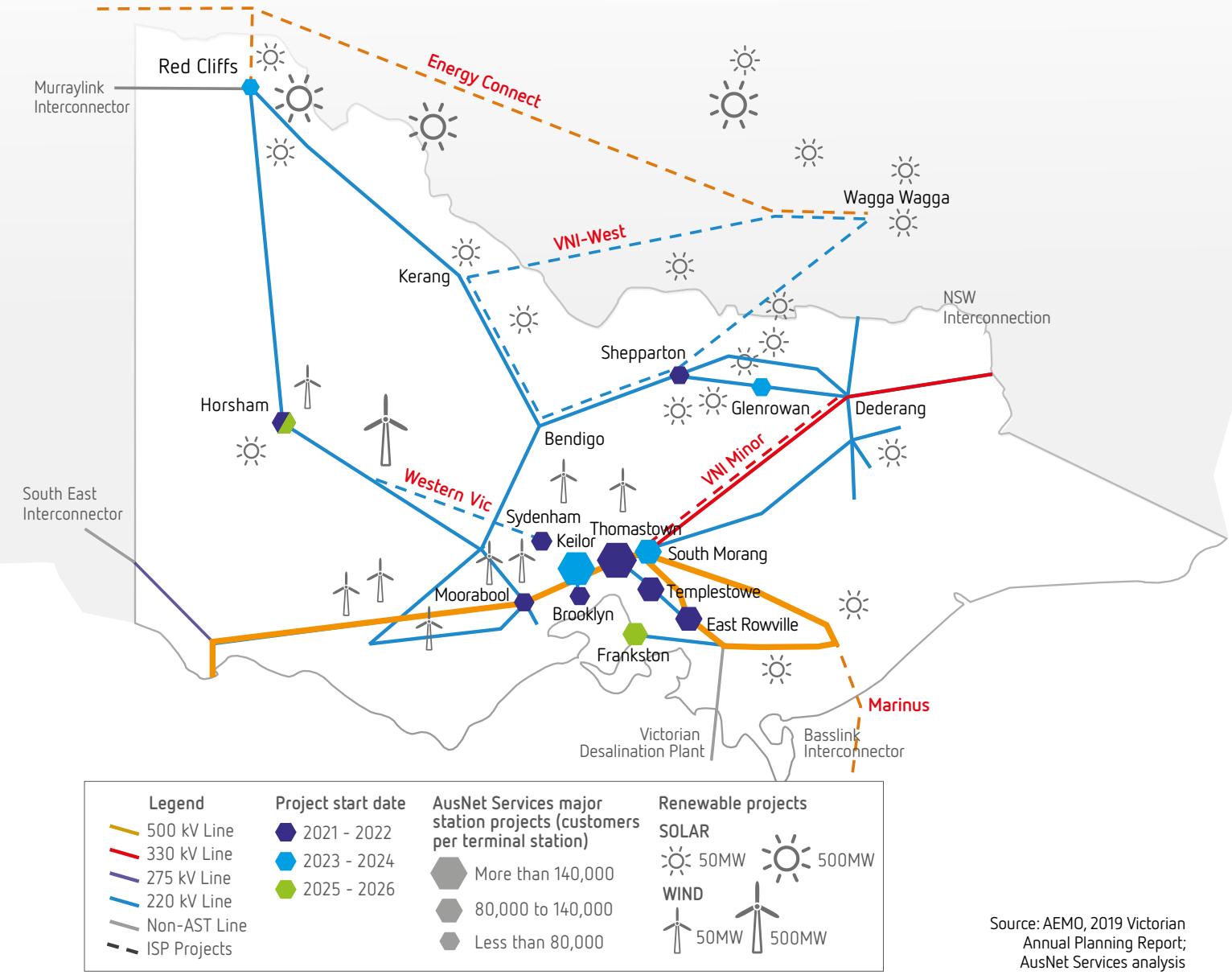
Source: AusNet Services

The Victorian transmission network was originally established to transport energy from the principal coal generation hub in the Latrobe Valley. However, as Victoria's energy system transitions to a low carbon future, usage of the transmission network is changing. New renewable generation is widely spread across the network, resulting in very different power flows. New and planned locations for large scale generation are shown in Figure 3.

To ensure transmission service reliability is not compromised by the significant growth in renewable generation the network must be changed.

Many of the required changes have been mapped out by the national transmission planner, AEMO, in the national transmission blueprint called the Integrated System Plan (ISP). These proposed changes significantly expand the capacity of Australia's transmission system to connect renewable generators in the regions and access the energy storage being planned as part of Snowy 2.0 as well as upgrading the links between states. These ISP projects are also shown in Figure 3, along with the major station replacement projects that are included in our Revenue Proposal.

Figure 3: Location of AusNet Services' major station projects, ISP upgrades and renewable generation developments



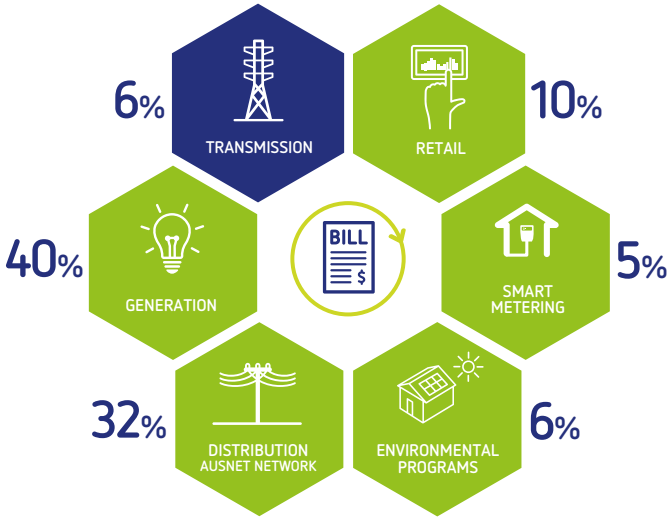
Source: AEMO, 2019 Victorian Annual Planning Report; AusNet Services analysis

In this context, our proposal supports the energy transition by maintaining the reliability and security of the existing Victorian transmission network. The replacement of ageing assets before they present a supply or security risk to the transmission system is central to these plans. The full benefits expected from increasing interconnector capacity to allow renewable energy to flow between states will not be realised without reliable transmission pathways.

AusNet Services' proposed revenues will provide funding to maintain the transmission system, the distribution network connections and some smaller upgrades requested by the Victorian network planner, AEMO.

In Victoria, electricity transmission revenue recovery accounts for around 6% of the average residential customer electricity bill. Figure 4 shows the different parts of electricity supply costs in Victoria.

Figure 4: Build-up of electricity supply costs in Victoria



Source: AEMC, Residential Electricity Price Trends 2019, December 2019; AusNet Services analysis

AUSNET SERVICES' PERFORMANCE

AusNet Services' asset management approach ensures it is the most efficient amongst its peers, supporting the lowest transmission costs in Australia for Victorian customers. These outcomes are achieved without compromising safety and reliability.

This section outlines our network's current performance.

With the Victorian transmission network getting old, our plans ensure it maintains its excellent safety and reliability record. The strength of our performance is best shown by comparison with other Australian transmission businesses.

We have maintained lower costs per customer than other Australian transmission networks over the last 20 years. The figure below shows we deliver our transmission services with the lowest capital costs (measured by the value of our Regulatory Asset Base) per customer (Figure 5) and the lowest operating costs per customer (Figure 6) in Australia.

Figure 5: Regulatory Asset Base (RAB) per customer ($ real 2019)

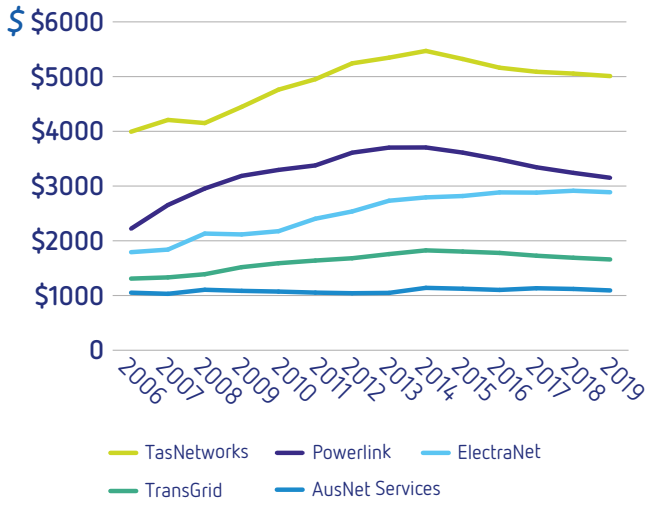
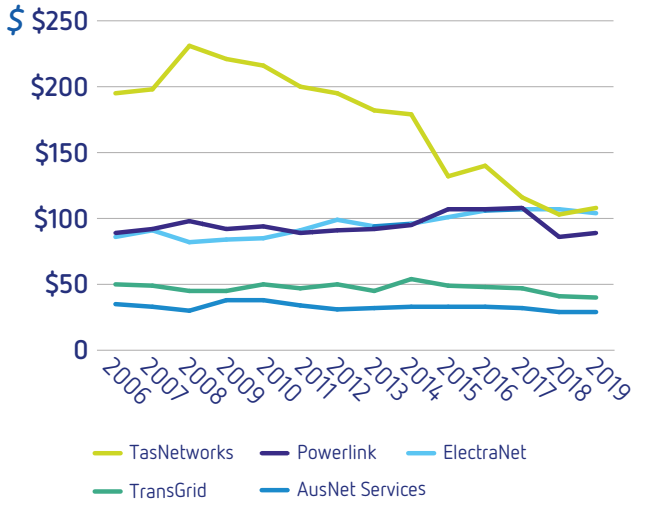


Figure 6: Opex per customer ($ real 2019)



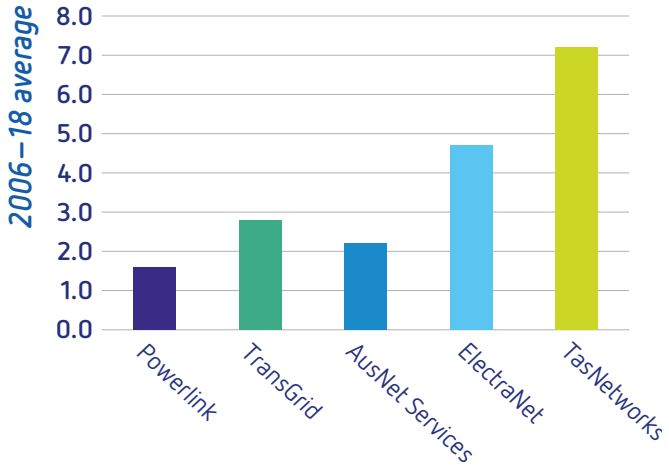
Source: AER, Electricity network performance report 2020, September 2020; AER, Electricity transmission benchmarking report 2020, September 2020; AusNet Services analysis.

Note: In Victoria (i.e. AusNet Services) investment for increased network capability that AEMO has competitively tendered for is not included, as this does not add to the RAB. However, if included, this investment (approx. $100M over the last two decades) would not materially change the RAB per customer shown in Figure 5.

This means that transmission costs make up the lowest portion of the typical residential customer bill in Victoria, compared to other states, at just 6%, compared to 7% in both NSW and Qld.[1] This has been achieved despite servicing the cost of an annual state land tax on transmission line easements introduced by the Victorian government in 2004. This tax is unique to Victoria and cost $161M in 2020 or around 30% of total revenue received from customers.

The reliability of AusNet Services' network also compares well with our peers. High reliability levels are particularly important for transmission due to the broad impact of a loss of supply event from a transmission outage. Figure 7 shows the average reliability performance of AusNet Services and its peers over the 6 years to 2018 averaging just two black out events per year.

Figure 7: Network Reliability Performance of Transmission Networks (no. of loss of supply events), average 2006–18



Source: AER, Electricity network performance report 2020, September 2020; AusNet Services analysis.

1. AEMC, Residential Electricity Price Trends 2019, December 2019; AusNet Services analysis

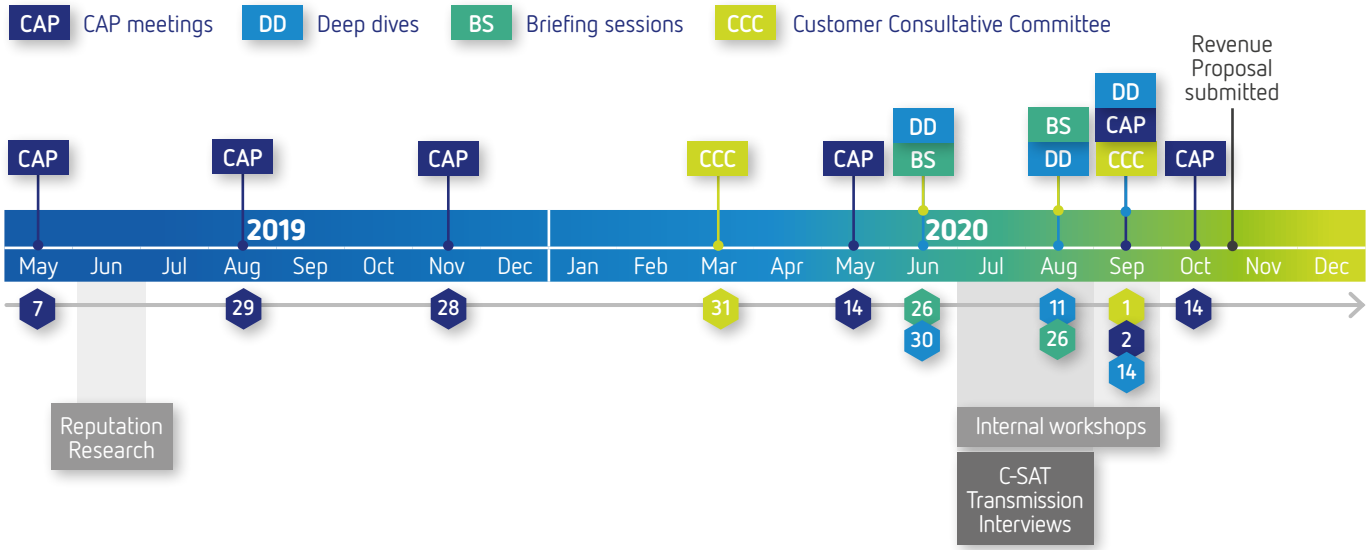
CUSTOMER INPUT TO OUR PLANS

Customer views have formed a critical input to our plans, and check against internal thinking, to ensure that our plans for the Victorian transmission network reflect customers' views and preferences.

AusNet Services has engaged extensively with customer representatives in formulating its plans for the forthcoming regulatory period. A customer representative group, the Customer Advisory Panel, was formed so that various customer perspectives could be collaboratively worked through. The panel included consumer advocacy groups and representatives of direct connect industrial customers, distribution networks and generators.

Open forums have also been held, so that AusNet Services could hear from other interested stakeholders. These sessions explored specific parts of our preliminary plans in greater detail, encouraging feedback on different options and outcomes. Our plans also benefit from ongoing customer engagement and research programs.

Figure 8: Customer engagement timeline



Affordability remains a key concern for all customer groups. AusNet Services recognises this customer priority, and its focus on efficiency improvements has been reflected in the proposed prices.

Transmission investment is based on an assessment of efficient costs versus customer benefits, such as the value customers place on reliability. This approach balances reliability and affordability and ensures that customers are only paying for prudent and efficient costs. Feedback from our customers and stakeholders suggest that they consider our asset management approach to be reasonable.

Directly connected customers (large loads, distribution networks and generators) indicated that better relationship management is a priority improvement area. The complex generator connection processes in Victoria, with transmission functions split between AusNet Services and AEMO, was also highlighted as an area that requires improvement. AusNet Services is responding to this feedback with action plans to improve our customers' experience.

The feedback we received from our customers and how we have addressed this feedback in our Revenue Proposal is summarised in Table 1.

> "AusNet Services recognises that affordability remains a key concern for all customer groups.

Table 1: Summary of outcomes from customer engagement

KEY INSIGHTS	HOW WE ARE RESPONDING
ENERGY AFFORDABILITY	
Affordability is the key concern to our customers. Most of our customers surveyed consider that bills are increasing and that affordability, particularly for vulnerable customers, is a strong concern. For business and large users, increasing energy costs can affect the viability of their businesses.	Transmission prices have declined in real terms over the last five years. Under our proposal, transmission prices are expected to continue to fall. To further address our customers' affordability concerns, we have also taken several specific actions in our plans, including: > Absorbing several operating expenditure step changes; and > Including a forecast of productivity improvements in our operating expenditure forecast.
ENERGY RELIABILITY	
There is generally high levels of satisfaction with current reliability levels. However, for business customers, failures in reliability can lead to significant production losses and equipment damage. For this reason, many business customers place a higher value on reliable electricity supplies than residential customers. While the reliability of our network is very high, there is a desire for better communication when outages do occur.	Our expenditure forecasts have been developed to maintain the performance and high reliability that our customers expect of the Victorian transmission network, in line with the updated Value of Customer Reliability values released by the AER in December 2019. We are also investing to improve the communication and management of planned and unplanned outages. While transmission outages are rare, this is a relatively low-cost way to improve our transmission customers' experience.
CUSTOMER RELATIONSHIPS	
Large customers want better managed strategic relationships.	We have established a team of dedicated customer relationship managers to provide a direct contact point for large users and proactively address customer concerns and issues. Regular meetings are now held.
CUSTOMER SATISFACTION	
While feedback recognises that customer service levels have improved in recent years, there is still considerable opportunity to improve.	We are developing and implementing ways to improve the customer experience and eliminate "pain points" for new generators seeking to connect to the network. As noted above, we are also investing to improve the communication and management of planned and unplanned outages.

Source: AusNet Services

Managing the uncertainty created by COVID-19

As a result of the global COVID-19 pandemic, this proposal has been prepared during a time of significant uncertainty.

We have sought to be transparent with our customers and stakeholders around how our plans may be impacted by COVID-19. Nonetheless, we expect that aspects of our plans will need to be modified as the longer-term impacts of the pandemic become clearer. We will continue to engage with our customers throughout the regulatory process to seek their views on the pandemic's long-term effects.

Table 2 below sets out our indicative post-lodgement engagement plan, which we will be inviting the members of our Customer Advisory Panel, as well as other interested customers and stakeholders, to take part in.

> "We have sought to be transparent with our customers and stakeholders around how our plans may be impacted by COVID-19.

Table 2: Post lodgement engagement activities planned

POST LODGEMENT ENGAGEMENT

NOVEMBER–FEBRUARY 2020

ONE-ON-ONE MEETINGS WITH STAKEHOLDERS
To discuss Revenue Proposal highlights and key customer outcomes

FEBRUARY 2021

BRIEFING SESSION 3
To inform Deep Dives and highlight implications of new information for our plans

APRIL–MAY 2021

FURTHER DEEP DIVES
Topics to be agreed with stakeholders

JUNE 2021

CUSTOMER ADVISORY PANEL MEETING 7
To agree how new information and insights from Deep Dives should be reflected in our Revised Revenue Proposal

SEPTEMBER 2021

REVISED REVENUE PROPOSAL LODGED

Source: AusNet Services

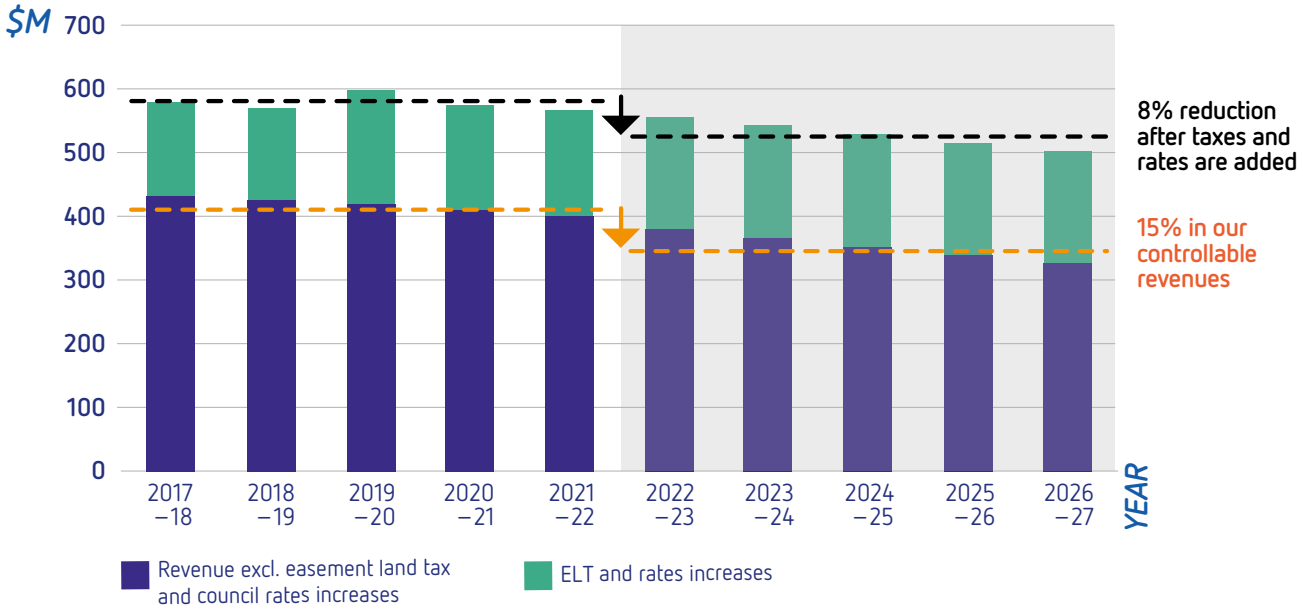
REVENUE REQUIREMENT

We are proposing to reduce the revenue we collect from customers for the next regulatory period.

The forecast revenue in our proposal, excluding the Victorian easement land tax and council rates increases, is $1,760 million, or $352 million per year. This is 15% ($322 million) lower than revenue in the current period as shown in Figure 9. Continuing low interest rates contribute materially to the reduction, together with several decisions made by the AER cutting the return on capital we are allowed to earn. The reduction is also driven by efficiency improvements we have achieved in the current period, which have reduced forecast expenditure by $90M. Including easement land tax and council rates increases, forecast revenue is 8% ($242 million) lower than revenue in the current period.

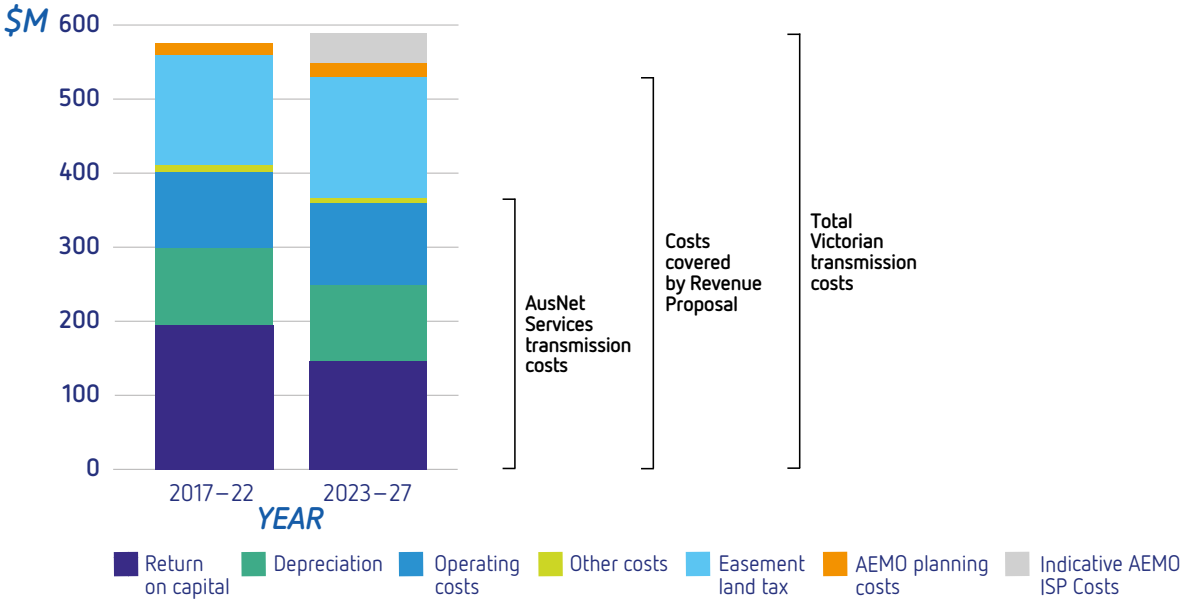
The reduction in revenue requirement is achievable while increasing expenditure to maintain safety and reliability on an ageing network and complying with various new regulatory obligations (outlined in sections below).

Figure 9: Actual, expected and forecast revenue ($M, real 2021–22)



Source: AusNet Services

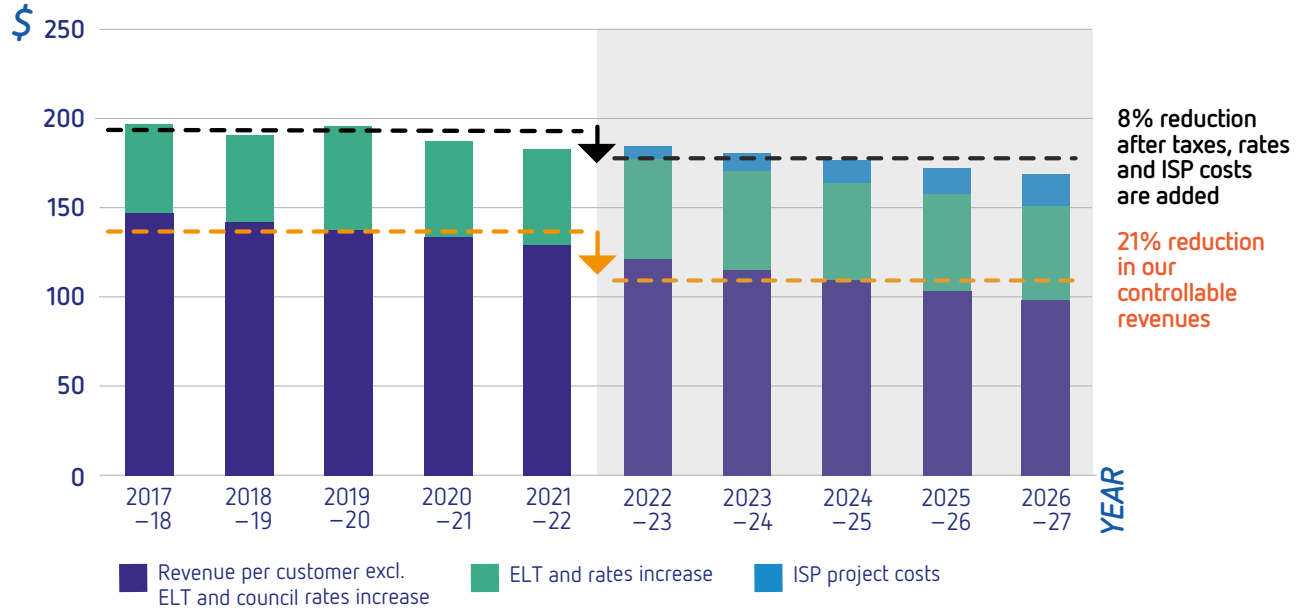
Figure 10: Total average annual Victorian transmission revenue by component ($M, real 2021–22)



AEMO calculates final Victorian transmission charges. These charges will include costs from AEMO Victorian planning responsibilities and any future costs associated with AEMO's 2020 Integrated System Plan (ISP). Our focus in this Revenue Proposal is to ensure that the costs that are within our control are managed efficiently and prudently in the long-term interests of our customers. The fall in our costs will help offset the future costs of the major transmission upgrades planned for Victoria which will be included in the total transmission charges that customers will pay. Including the indicative cost of these projects, revenue is forecast to remain stable as shown in Figure 10 above.

As the total number of electricity customers is expected to increase, average revenue per end-use customer for our transmission costs (excluding easement land tax and council rates increases) is forecast to be approximately 21% lower in the 2023–27 regulatory period, falling from $138 to $109 per annum, as shown in Figure 11. Including our estimate of future easement land tax and council rates increases, average revenue per customer is forecast to fall by 14%, from $191 to $164 per annum. Adding our estimate of ISP project costs, average revenue per customer is forecast to fall by 8%, from $191 to $176 per annum.

Figure 11: Revenue per customer ($ real 2021–22)



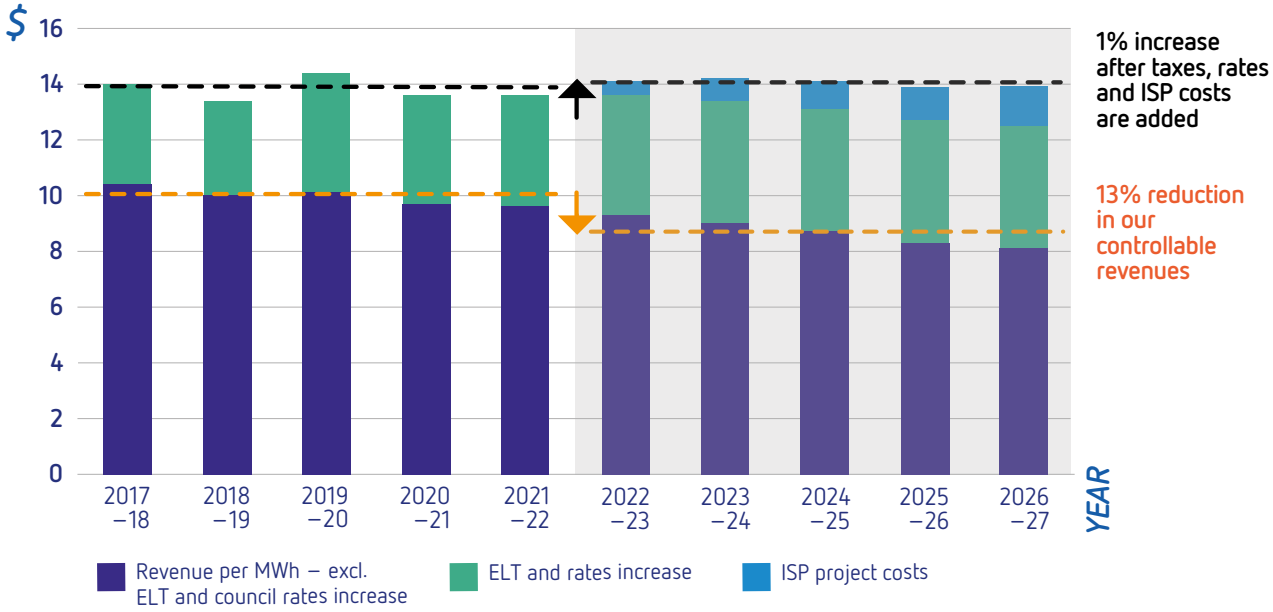
Source: AusNet Services

Note: ISP costs are included for indicative purposes only because it is AEMO, not AusNet Services, that is responsible for procuring and recovering the costs of contestable ISP projects through AEMO's Victorian transmission charges.

Another way to view of our revenue forecast is to consider the price trend, as shown in Figure 12. On this basis, revenue is forecast to fall by 13% in the next regulatory period. Including our estimate of easement land tax, council rates increases and ISP costs, revenue per MWh is forecast to increase slightly.

The major components of the revenue build up are financing costs for new and past capital investment, depreciation of new and past capital investment and operating expenditure. In terms of gross revenue requirement, the largest component is the Victorian easement land tax which, combined with council rates increases, accounts for more than a third our forecast revenue, following recent and expected increases.

Figure 12: Revenue per MWh ($ real 2021–22)



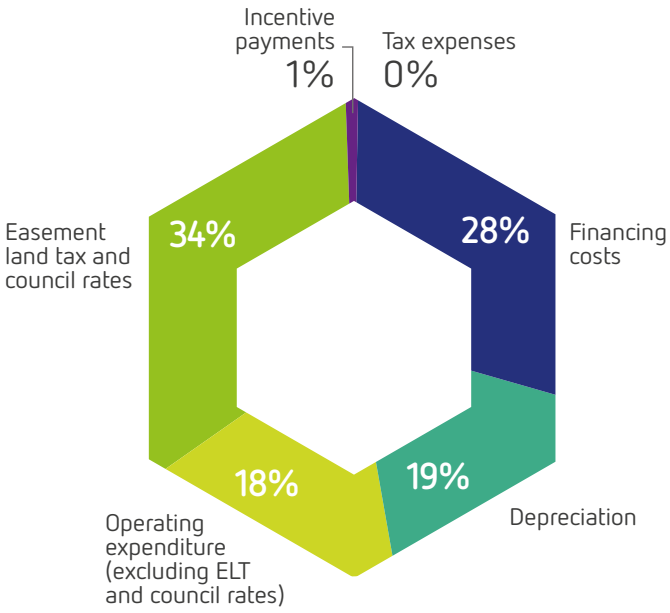
Source: AusNet Services

Note: ISP costs are included for indicative purposes only because it is AEMO, not AusNet Services, that is responsible for procuring and recovering the costs of contestable ISP projects through AEMO's Victorian transmission charges.

The relative contributions to our forecast revenue requirement (i.e. not including ISP costs) are shown in Figure 13, right.

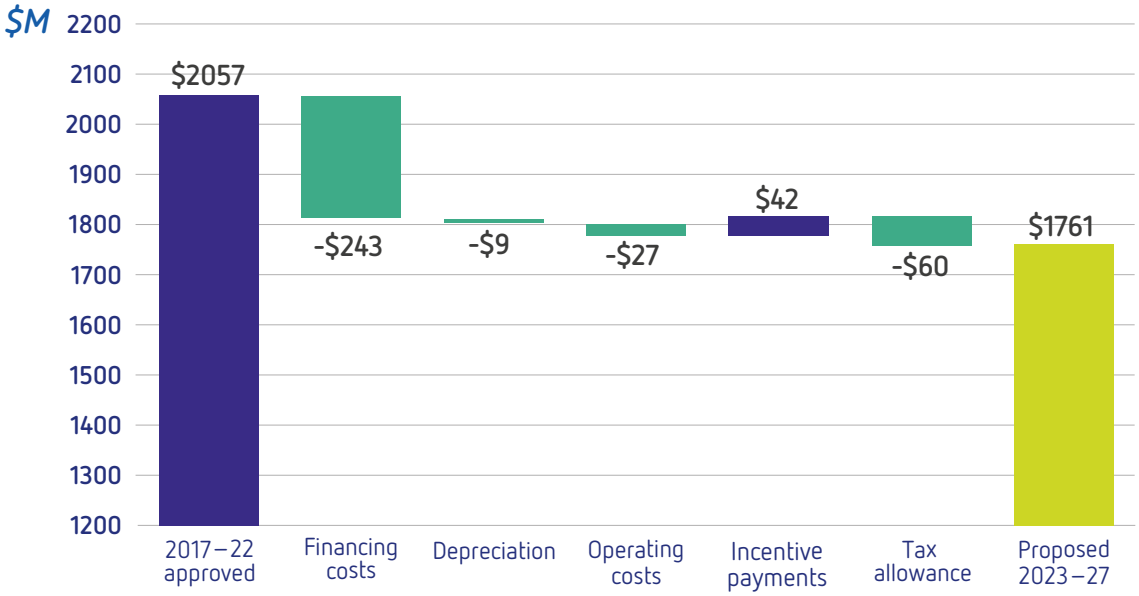
The waterfall chart shown in Figure 14 below, which excludes the easement land tax and council rates increases, shows how the components of our revenue forecast have varied from the previous revenue decision, to arrive at the lower revenue forecast for the 2023–27 regulatory period. This shows that lower financing costs, operating expenditure, depreciation and company tax expenses are the key drivers of the reduction in revenue forecast. These reductions are partly offset by higher incentive payments, reflecting the efficiency savings we have made in the current regulatory period.

Figure 13: Components of forecast revenue requirement (%)



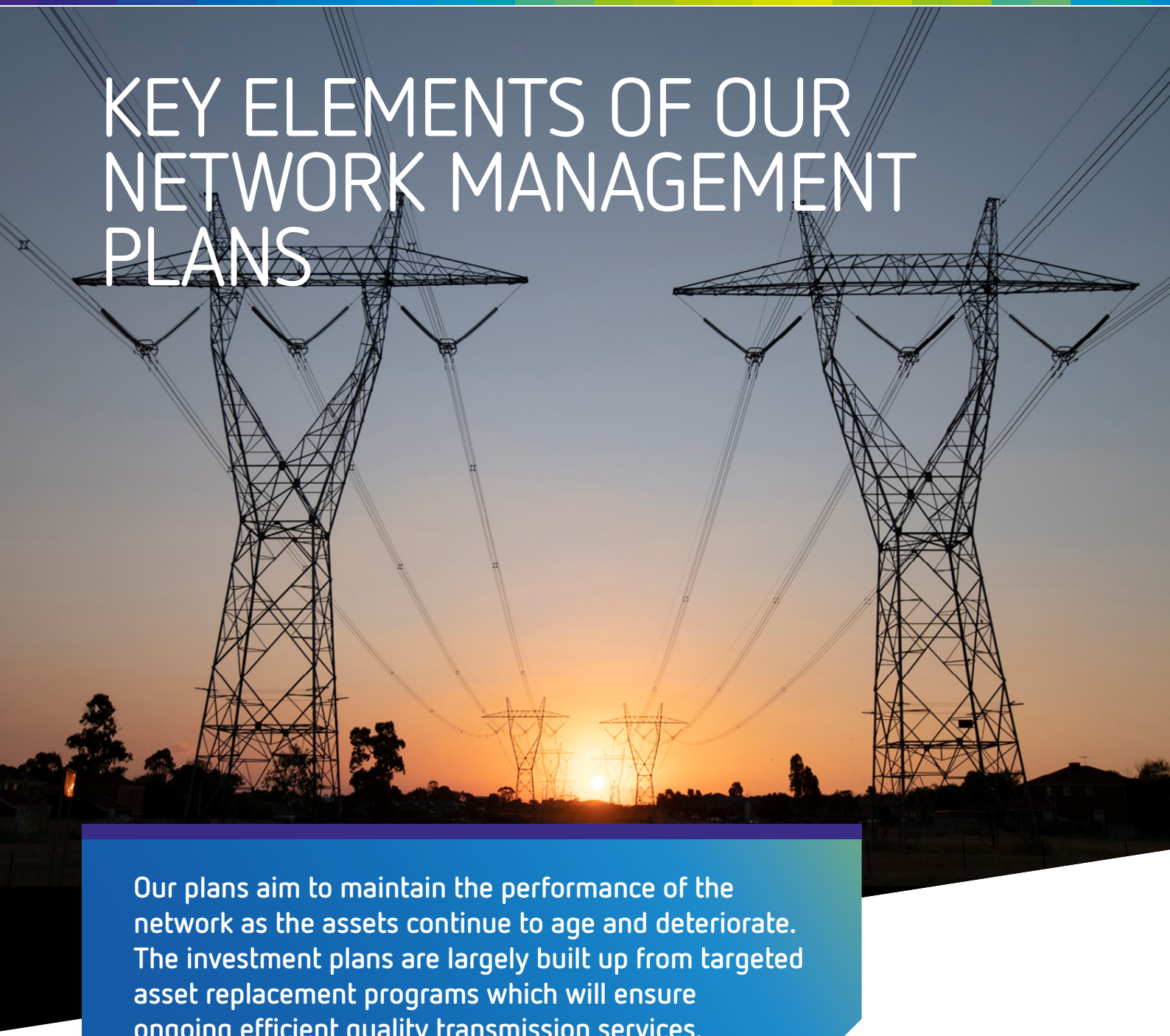
Source: AusNet Services. Note: ELT = easement land tax

Figure 14: Current period and forecast revenue, excluding easement land tax and council rates increases ($M, real 2021–22)



Source: AusNet Services

KEY ELEMENTS OF OUR NETWORK MANAGEMENT PLANS



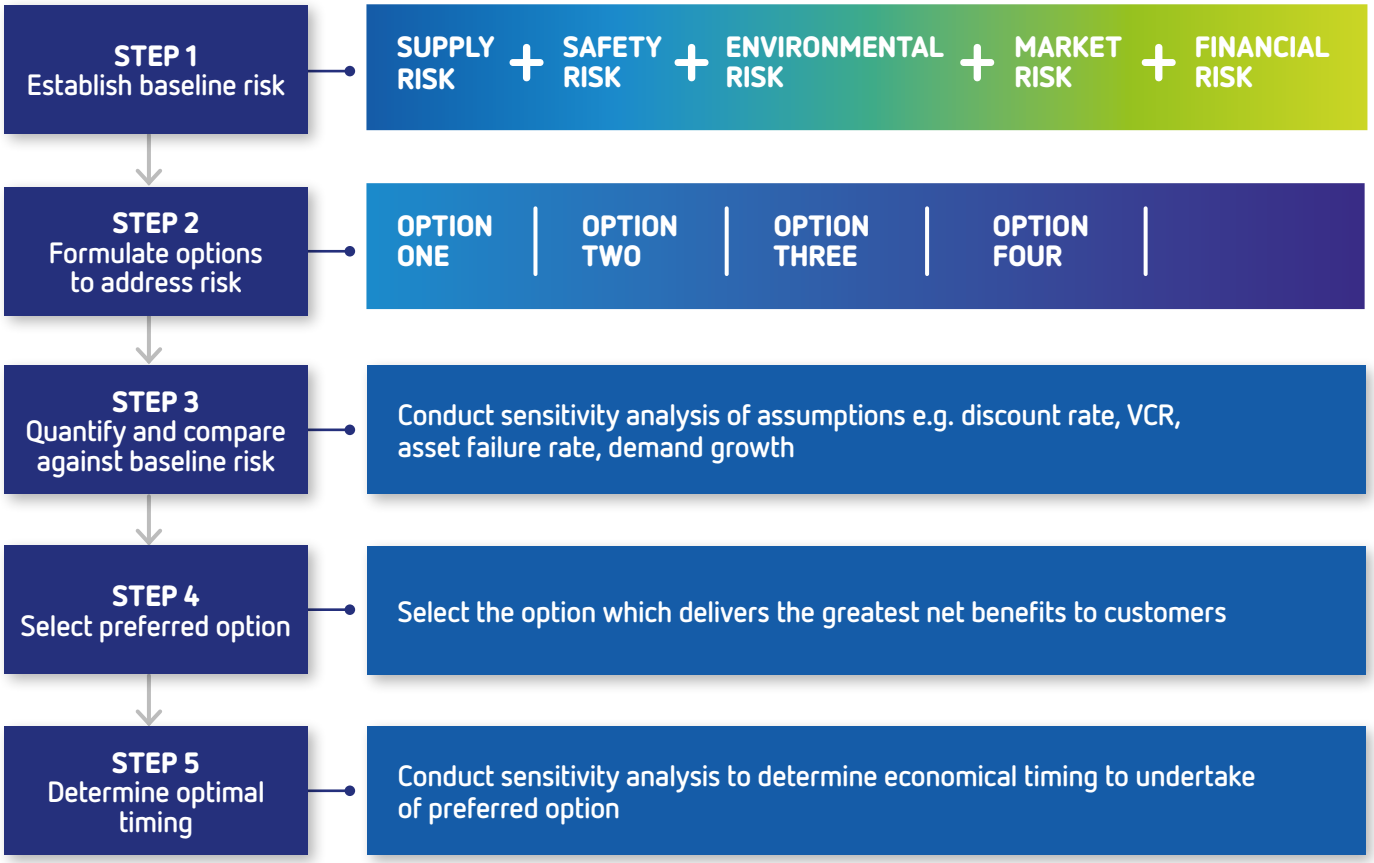
Our plans aim to maintain the performance of the network as the assets continue to age and deteriorate. The investment plans are largely built up from targeted asset replacement programs which will ensure ongoing efficient quality transmission services.

Capital expenditure plans

With significant development of the network occurring in the 1960s and 1970s, parts of the network are now very old, and asset condition is deteriorating. To ensure continued reliable and safe service, AusNet Services has developed investment plans to replace deteriorated assets progressively where the risks to reliability and safety outweigh the cost of replacement. This is a continuous measured program which ensures costs to customers are also kept stable over time.

Our forecasting approach for asset replacement capital expenditure (capex) is based on economic justification and comprises a robust assessment framework to determine the preferred option and its economic timing. The economic assessment framework is outlined in Figure 15.

Figure 15: Economic assessment framework



Step 1 in the process, establishing baseline risk that would identify a need for remedial action, is an 'expected cost' calculation, the product of probabilistic failure occurrence and the probability of resulting consequence (and cost impact) occurrences. The key risks assessed are shown in Figure 16.

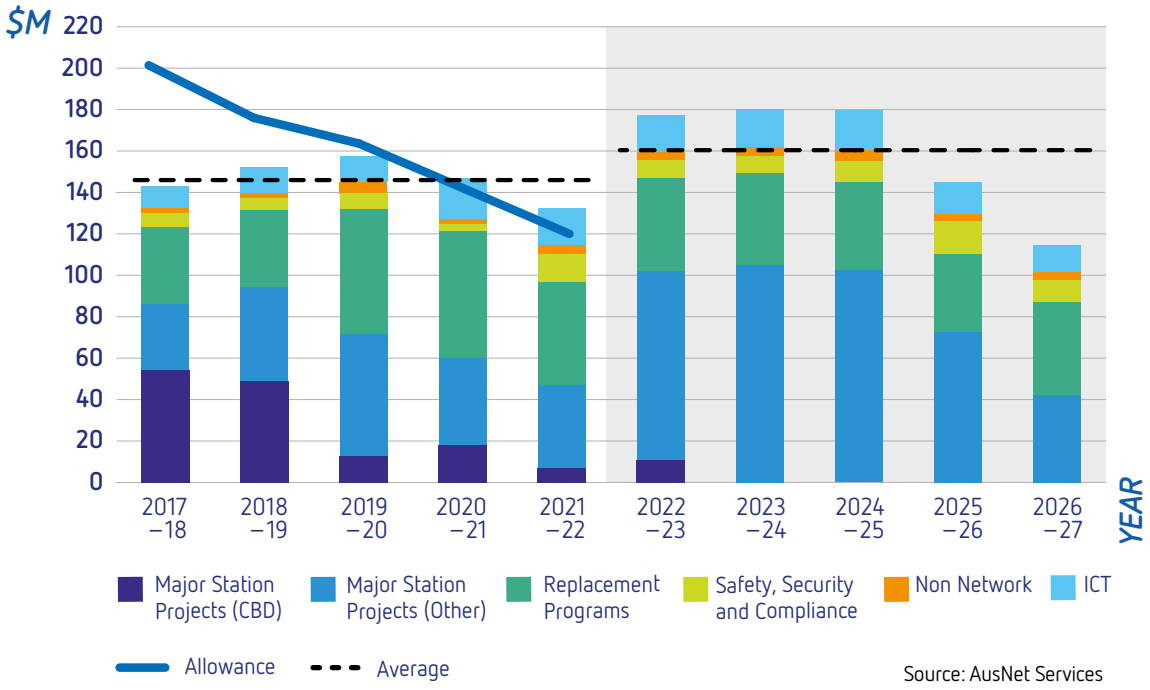
The expected cost for supply risk incorporates the value that customers place on reliability of supply (Value of Customer Reliability, or VCR). These values were established in December 2019, by the AER, following an extensive study based on a survey of over 10,000 customers.

We are forecasting total capital expenditure of $796 million for 2023 to 2027, which is 9% higher than the capital expenditure expected in the current period.

Figure 16: Baseline Risk Components

RISK COMPONENT	DEFINITION
SUPPLY	The risk of supply being lost to customers due to an asset failure
SAFETY	The risk of explosion and fire due to asset failures (e.g. design issues), causing injury/fatality to employees or the public
ENVIRONMENTAL	The risk arising from oil spills from plant (e.g. power transformers), resulting in costs due to clean-up and environmental impact costs
MARKET	The risk lower cost generators cannot supply the NEM, resulting in higher wholesale prices
FINANCIAL	The failure rate-weighted cost of undertaking reactive maintenence or replacing failed assets given the ongoing need for energy

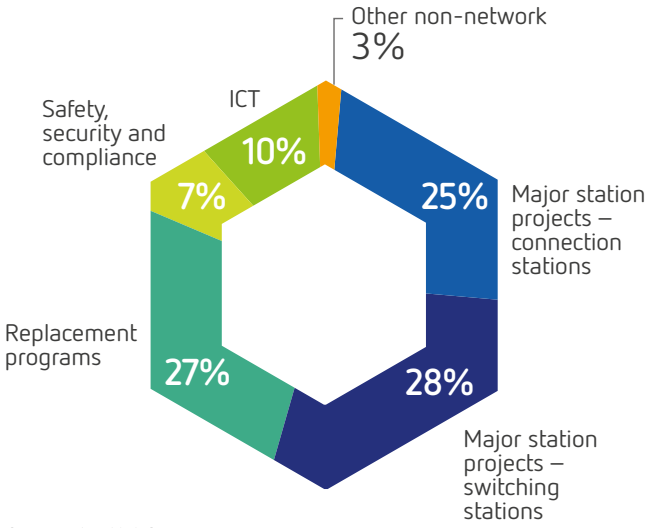
Figure 17: Historical and forecast capex 2017–27 ($M real 2021–22)



Source: AusNet Services

The composition of planned investment is shown in Figure 18, below.

Figure 18: Composition of capital expenditure forecast



Source: AusNet Services

Network replacement expenditure accounts for almost 90% of our investment plan. Over the last decade, the most critical replacement work was focused on supply to Melbourne's central business district. Now, with the renewable energy transition occurring, there is a shift in focus to switching stations that form the backbone of the Victorian transmission network or support interconnectors.

These stations are important nodes in the national grid, being critical to the overall reliability and security of the power system. This criticality has fundamentally increased since the closure of Hazelwood Power Station which saw Victoria moving from being a net exporter to net importer of electricity.

In this context, our proposal seeks to support the transition roadmap set out in the ISP by maintaining the reliability and security of the Victorian transmission network. The condition-based replacement of critical assets that present a supply or security risk to the interconnected transmission system is central to these plans.

The remaining major stations capex is for asset replacement at terminal stations where distribution networks connect to the transmission network. For all of these major station projects, we have conducted comprehensive cost-benefit analysis to ensure the proposed asset replacement activities are in the long-term interests of customers.

Outside our major station rebuilds, our replacement programs include the replacement of components such as insulators (which hold the conductors suspended on the transmission towers), ground wires (which protect the lines from lightning) and circuit breakers (giant switches). These replacements prevent the unacceptable reliability and safety consequences of asset deterioration as the asset base ages.

Investment in information and communication technology (ICT) constitutes 10% of the forecast. This reflects the essential role information technology plays in delivering and protecting modern transmission systems and services, including expenditure to comply with new cyber security regulatory obligations. The other major category in our investment plans is 'safety, security and compliance', for which forecast expenditure is significantly focused on preventing conductor drops and installing safe climbing systems on transmission towers and structures.

Operating and maintenance expenditure

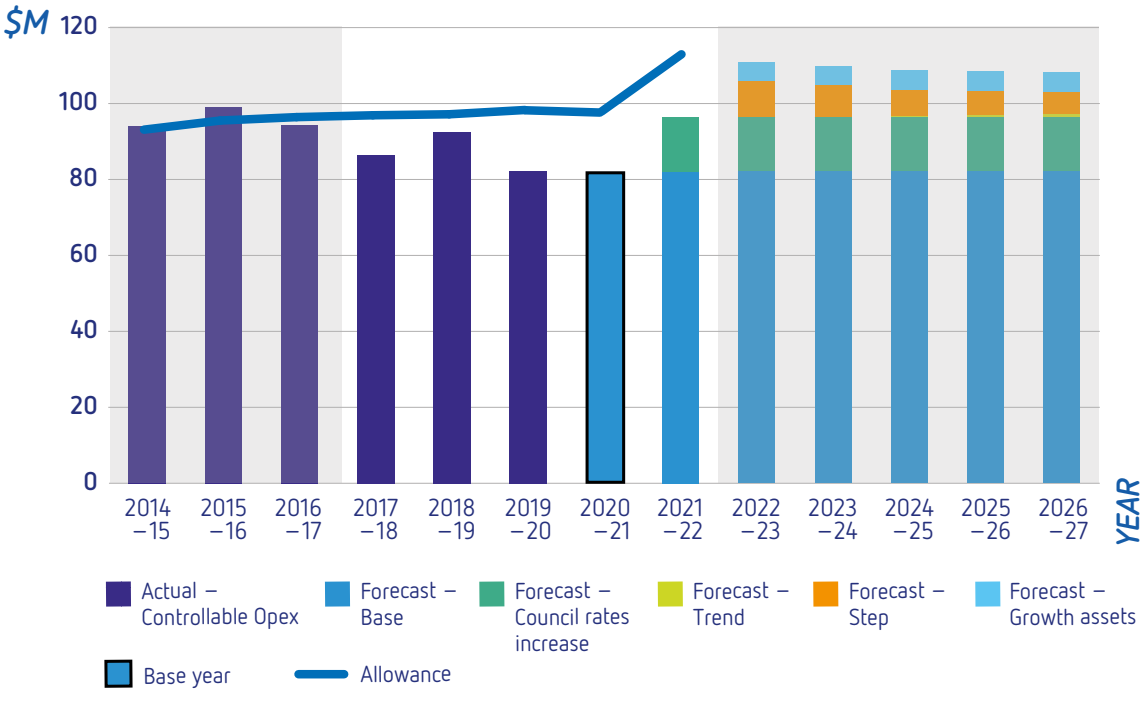
Our operating and maintenance expenditure (opex) proposal covers the costs of operating and maintaining the transmission network and paying the taxes and charges levied by state and local government (principally easement land tax and council rates).

AusNet Services does not control the amount of taxes and charges we pay. These charges are tied to land valuations and have grown substantially since privatisation with new taxes introduced, land revaluations and changes to the valuation method. These changes result in taxes and rates increases accounting for around 65% of total opex costs. As such, we often exclude easement land tax and council rates when presenting our opex proposal so customers can focus on the costs we can control. On this basis, our forecast opex is 5% ($27 million) lower than the allowance approved by the AER for the current regulatory period.

AusNet Services controllable cost proposal is developed to minimise costs whilst ensuring we can maintain the reliability and safety of network services and address new regulatory obligations. Within a regulatory period, AusNet Services is rewarded for reducing its expenditure and lowering costs to customers. These savings are then passed on to customers through lower prices in the following period.

The build-up of the forecast opex expenditure for the coming period, starting from performance against the AER's expenditure allowance in the current period, is shown in Figure 19. The allowance year by year is shown by the green line across the years to the end of the current period. The expenditure categories are discussed in the following paragraphs.

Figure 19: Actual and Expected and Forecast Controllable Opex ($M, real 2021–22)



Source: AusNet Services. Note: Excludes easement land tax and debt raising costs

AusNet Services uses the opex costs from the 2020–21 year as the start point or 'base year' for assessing future cost requirements.

To this base year we add new costs (step changes in the cost base, for example, from a new tax) and steady increases in existing costs (for example, cost trends from wage growth and network growth) that will be incurred in the coming regulatory period and are not represented in the base year. We have also included a productivity improvement (i.e. cost reductions from improved processes and efficiencies), as requested by the Customer Advisory Panel. This cost reduction is calculated from the long-term productivity improvement achieved across the transmission sector.

Our proposal includes the following step changes in costs that will be incurred in the next regulatory period.

- The largest is a steep increase in annual council rates levied on our terminal station land holdings. This is due to a change in the property valuation method used to determine rates, arising from legislative changes. Excluding this forecast cost increase, our opex proposal would be 5% lower than the allowance approved for the current period.
- There are also material operating cost increases due to legislated cyber security obligations. As well as investing in more advanced ICT systems, AusNet Services forecasts a material increase in ongoing resourcing to manage compliance with the obligations.
- New obligations in environmental protection legislation also impose additional costs.
- New obligations in the National Electricity Rules which govern the operation of the electricity market will also cause new costs to be incurred. These involve the transition from half hour to 5-minute energy market settlement. This change will benefit our customers by increasing competition in the wholesale energy market, lowering prices.
- Finally, our proposal includes a step change to transfer some ICT applications to cloud based services. This benefits customers by reducing capex costs.

AusNet Services is absorbing the costs associated with two step changes in response to feedback from customer representatives and stakeholders, funding the increases through productivity improvements elsewhere. These costs are:

- $1.8M arising from the application of the Regulatory Investment Test to asset replacements, which we were not previously required to do; and
- $2.5M to introduce an oil regeneration program for a significant part of the transformer fleet, to address corrosion caused by a recently discovered historic manufacturing flaw.

In addition to these step changes, it is necessary to include increased operating costs from network growth. As Victoria's population and economy has grown over the current regulatory period, new assets have been built to provide the increased transmission services requested by the distribution networks and AEMO which represent 8% of the total regulated asset base. We have projected a 6% increase in controllable operating and maintenance costs to service these new assets.

We have also projected a real increase in labour costs over the next regulatory period of less than 1% per annum.

Finally, as previously mentioned, we have also included a productivity improvement in our overall operating expenditure performance, offsetting external cost increases by around $4 million.

Other elements of our Revenue Proposal

This section describes other elements of our Revenue Proposal, which reflect standard approaches.

Incentive schemes

AusNet Services proposes that all incentive schemes designed for regulation of transmission services should be applied in their entirety. This is despite our concerns with the current version of the Market Impact Component of the Service Target Performance Incentive Scheme, which has become impracticable with the transformation underway within the energy system.

Financing costs

Financing costs reflect the AER's 2018 Rate of Return Guideline and a placeholder 10-year bond rate of approximately 0.90%. The actual rate used to set our revenue will be based on a 3-month averaging period from October to December 2021.

The annual return on capital is calculated as the rate of return multiplied by the value of the Regulatory Asset Base (RAB).

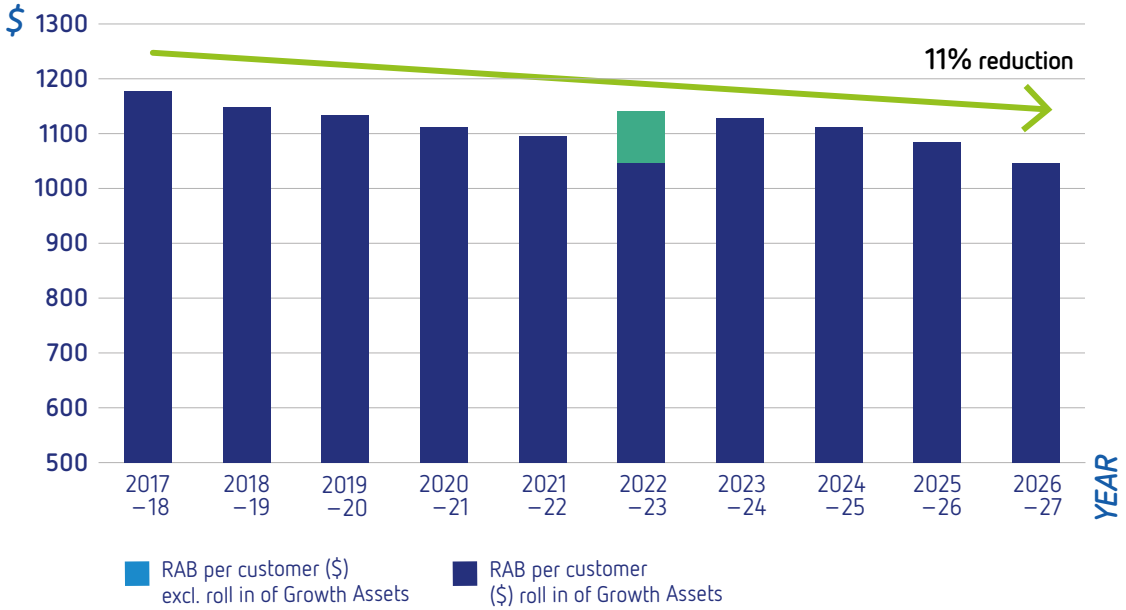
On a per customer basis, our RAB is forecast to reduce by 11% between the start of the current regulatory period and the end of the forthcoming regulatory period, as shown by Figure 20.

Depreciation

Depreciation is the gradual return of the original investment in the network much like the repayment of principal on a home loan. The National Electricity Rules require us to depreciate assets over their economic life. This approach ensures that the prices paid each year properly reflect the costs of using the network. This means that current and future generations of customers are treated equitably.

For the 2023–27 period, we propose to reduce the standard asset lives for insulators and instrument transformers to 40 years and 38 years respectively which better reflects their economic life. This approach is consistent with the National Electricity Rules and will provide for efficient and fair transmission prices over the long-term. While the depreciation charge for these assets will increase as the costs of the assets will be recovered over a shorter period, the overall depreciation charge is falling.

Figure 20: Forecast RAB per customer ($ real 2021–22)



Source: AusNet Services

KEY RISKS AND BENEFITS OF OUR REVENUE PROPOSAL FOR ELECTRICITY CONSUMERS

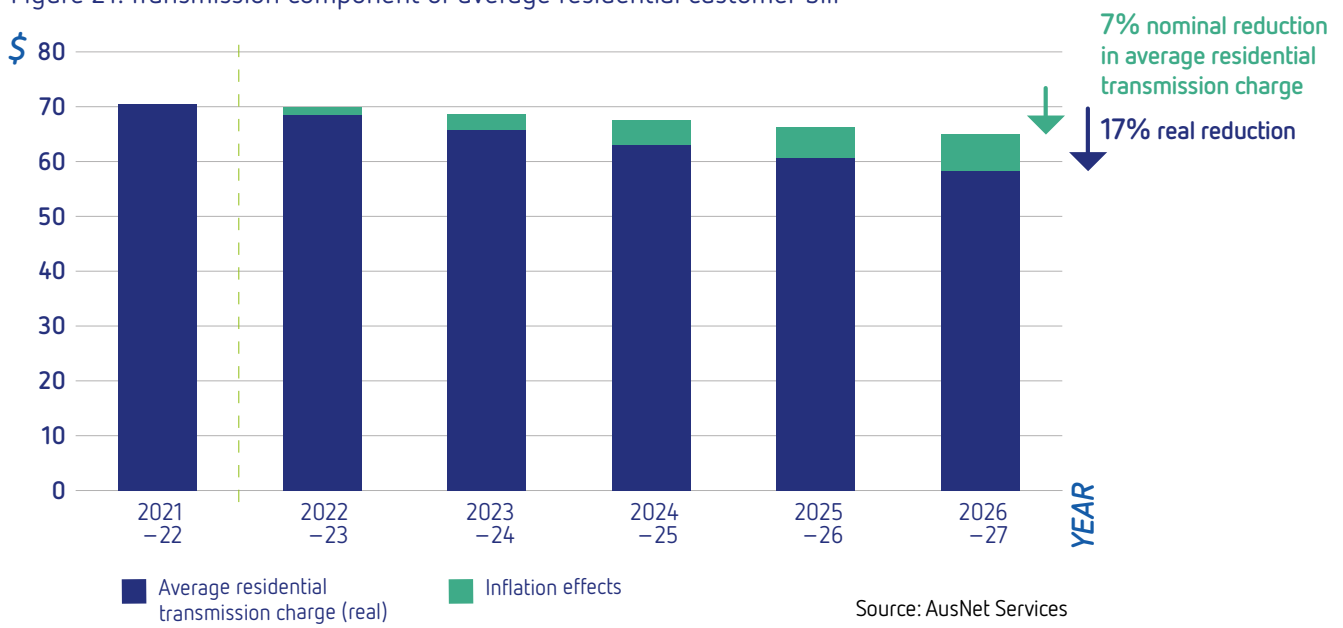
Benefits

By ensuring the existing Victorian transmission network continues to perform safely and reliably, our proposal helps ensure that customers benefit from the significant investment in new transmission capacity that will take place across Australia over the next decade as the energy sector transforms.

Through our engagement with customers we have ensured customer needs have formed a critical input into our asset management priorities and plans. Customer feedback generally supports our asset management approach where replacement of aged, deteriorating assets is made progressively, and only when the benefits outweigh the cost of the investment. This approach ensures efficient service provision for our customers.

We recognise that affordability is a high priority for customers, and our proposal focuses on efficiency improvement. This will continue to be reflected in the prices seen by customers. We have also made provision for a productivity improvement as well as absorbed several future cost increases, both requested by our Customer Advisory Panel.

Figure 21: Transmission component of average residential customer bill



Source: AusNet Services

Our proposal will deliver the continued high reliability performance required, whilst delivering continued cost reductions for customers. Excluding easement land tax and council rates increases, average revenue per end use customer is forecast to be 21% lower in the next regulatory period. Our proposed 11% reduction in RAB per customer will also reduce the cost burden on future electricity customers.

For residential customers, we estimate that our plans will provide a 7% reduction in the transmission component of the average bill, between 2021–22 and the end of the next regulatory period. Accounting for the effects of expected inflation, our plans provide for a 17% reduction in the transmission component of the average residential bill.

> “
>
> **Our proposal will deliver the continued high reliability performance required, whilst delivering continued cost reductions for customers.**

Risks and uncertainties

As our asset replacement decisions are efficiently determined, underpinned by cost benefit assessment, there remains a residual risk of plant failure which may impact our expenditure priorities in the period. In the event of an unexpected failure, this would potentially place higher risk on services whilst remedial action is undertaken. The inputs for economic analysis reflect the value customers place on network reliability.

Our proposal has been prepared during a time of uncertainty, with electricity demand forecast data predating any impact of the COVID-19 pandemic. Updated forecasts from AEMO are expected by November 2020 and AusNet Services will review the implications for our plans when this information is available. There will be opportunity for further stakeholder engagement on these considerations during the AER's review.

There is also uncertainty about a number of other inputs into our Revenue Proposal that may lead to adjustment to the proposal, including other sensitivities to economic conditions, such as wages growth, interest rates, and incorporation of the outcomes of the AER's review of the treatment of inflation. There is also the potential for further growth in externally imposed costs such as taxes.

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