# Overview

Energex Regulatory Proposal for 2025-30

January 2024





Part of Energy Queensland



Energex acknowledges the Traditional Custodians of the land on which our distribution network is located, and we recognise their continuing connection to land, waters, and community.

We pay our respects to Elders past and present for they hold the memories, the traditions, the culture and hopes of Aboriginal and Torres Strait Islander peoples in Queensland. We extend that respect to all Aboriginal and Torres Strait Islander people today.

Energex is committed to continuing to work in partnership with First Nations people to ensure we deliver clean, reliable and smart energy supply to communities in South East Queensland in the most affordable way.

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### A message from our Chair and CEO

"In developing expenditure plans that are reflective of customer preferences both now and into the future, we have sought to strike the right balance between investing in the network to provide clean, reliable and smart electricity and efficiently delivering electricity services in the most affordable way."

This is a time of immense change in the global energy landscape: customers' needs and expectations are evolving rapidly, and our sector is undergoing profound transformation to meet them. With the transition to a clean energy future and the reshaping of Australia's energy market, how we manage the network is changing, as are the ways customers use and interact with our network. We must provide an intelligent, integrated and dynamic network to meet these needs; supported by innovation, technology, and policy reform.

We are acutely mindful of the economic and environmental challenges and opportunities. While the energy transformation is expected to drive investment in Queensland, customers are grappling with economic pressures. This proposal has been shaped through conversations with customers and other stakeholders. Not surprisingly, they have told us that affordability is their primary concern. This is why we have focused on spending only what is prudent and efficient, so that our customers pay no more than is necessary for their electricity supply, as well as creating opportunities for customers to reduce the price they pay through network tariff reforms.

Customers have made it clear they also expect us to uphold reliability, resilience, service and safety. These priorities are reflected in our proposed five-year investment plans; aimed at supporting a higher penetration of renewables and meeting the increased electricity demand that will flow from economic, jobs and population growth.

Our plans also focus on ensuring the lights stay on during the Brisbane 2032 Olympic and Paralympic Games, and we're supporting the shift to renewable energy across the State, playing our part in the electrification of homes and businesses.

We've sought to strike the right balance between investing in the network to provide clean, reliable and smart electricity; and efficiently delivering electricity services in the most affordable way, and we've used every lever at our disposal to limit the increase in distribution network charges for households to an average of \$35 or 5 per cent each year for the 2025-30 regulatory control period.

We truly value the feedback we have received from our customers to date and invite you to have your say about the future of Energex and the energy needs of South East Queenslanders through the regulatory determination consultation process.





**Sarah Zeljko** Chair Energy Queensland Board

Peter Scott Chief Executive Officer Energy Queensland

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# **Purpose of this Overview**

To ensure Energex manages the electricity distribution network in South East Queensland efficiently, we are regulated under the National Electricity Rules by a national regulator, the Australian Energy Regulator (AER).

Every five years, Energex is required to submit a Regulatory Proposal to the AER setting out the amount of funding required to build, operate and maintain the network. The AER will assess our Regulatory Proposal and supporting documents, and make a decision regarding the maximum revenue we can collect from our customers over the five-year period, known as a 'regulatory control period'. We set our distribution network tariffs to recover this revenue each year. Retailers then incorporate our distribution charges into customers' retail electricity bills. Energex's next regulatory control period commences on 1 July 2025 and ends on 30 June 2030.

Our Regulatory Proposal has been informed by the views and preferences of our customers and stakeholders obtained from business-as-usual and targeted customer engagement activities. This includes feedback in response to our Draft Plan published in September 2023, which outlined our initial insights from customer and stakeholder engagement and our proposed investment plans for 2025-30.

This Overview provides a summary of our Regulatory Proposal for 2025-30 and includes:

- information about Energex's network
- key elements of our Regulatory Proposal
- the context for our Regulatory Proposal and the changing energy landscape

- how we engaged with our customers and stakeholders in developing our Regulatory Proposal, what we heard and how we are responding to feedback
- a summary of our Regulatory Proposal, including our proposed capital and operating expenditure and network tariff structures
- the key risks and benefits for customers of our Regulatory Proposal, and
- next steps for our Regulatory Proposal and how you can provide comments.

#### **Key elements of our Proposal**

Our Regulatory Proposal for 2025-30 is comprised of several interrelated elements, including:

- A plain language Overview (this document)
- Our Regulatory Proposal, which sets out the forecast capital and operating expenditure we require to build, operate and maintain our distribution network and the revenue we intend to collect from our customers through network charges
- Our Tariff Structure Statement, which explains the tariffs we will apply to customers in the next five year period to recover the total allowed revenue, and
- Our Connection Policy, which sets out the nature of services offered to customers connecting to our network, when connection charges may be payable and how those charges are calculated.

These documents, which are accompanied by a range of supporting information, including detailed attachments, external reports and models, are available on the <u>AER's website</u>.



### **Our 5 Year Proposal at a glance**



4 investment priorities that aim to strike the right balance between investing in the network to provide safe, reliable and clean electricity and efficiently delivering electricity services in the most affordable way.



### \$140m affordability

commitment to customers, or 2% of revenue, achieved by:

applying a 1% productivity factor to capitalised overheads and operating expenditure, and
excluding the difference between the AER forecast and our information and communications technology (ICT) capital expenditure for the last five years.



**22%** increase in capital expenditure from \$2,798 million over 2020-25 to \$3,422 million over 2025-30 to renew, reinforce and build the network and other infrastructure to supply power and connect new customers.



**15%** increase in the value of our network assets (owned by the people of Queensland) from \$15.6 billion in 2025 to \$18 billion in 2030 (including forecast inflation).

**6.8%** decrease in operating expenditure from \$2,451 million over 2020-25 to \$2,285 million over 2025-30 to operate and maintain the network safely and reliably, including managing vegetation and responding to severe weather and other disruptive events.



**18%** increase in the total amount we intend to collect from our customers through distribution charges from \$6,929 million over 2020-25 to \$8,151 million over 2025-30.

**5** key changes to network tariffs to make them more efficient and provide customers with additional options to lower their network bill. These include: strengthening the peak price signal, updating time of use pricing windows, transitioning to two-way pricing to support renewables, updating controlled load tariffs, and streamlining existing tariffs.



**\$35** average annual increase in network charges for residential customers from 2025, which is equivalent to a 5% increase.



\$133 average annual increase in network charges for small to medium businesses from 2025, which is equivalent to a 6.2% increase.



**\$389m** of forecast costs to provide metering services to customers with basic meters will be spread across all customers to reduce the burden on those who will be the last to receive a smart meter, including vulnerable customers.



**100%** replacement of existing conventional public lights with LED lights by 2030, resulting in lower emissions and energy savings for customers.



**\$1,936** average annual increase in network charges for large businesses connected on the low voltage network, which is equivalent to a 6.6% increase.

All dollars are in 2024-25 dollars, unless specified otherwise. All price impacts include forecast inflation (i.e. nominal dollars).

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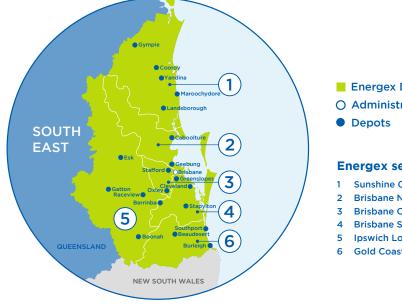
### Who we are

#### Energex is the electricity distribution network service provider for South East Queensland.

We own, operate, and maintain the 'poles and wires' that deliver power to close to 1.6 million homes and businesses from the New South Wales border in the south to Gympie in the north and west to the base of the Great Dividing Range.

Energex is committed to energising South East Queensland communities by working together towards empowering an 'Electric Life' for our customers, and to transforming the energy system to meet future needs.

We are a subsidiary of Energy Queensland, which is a Government Owned Corporation.

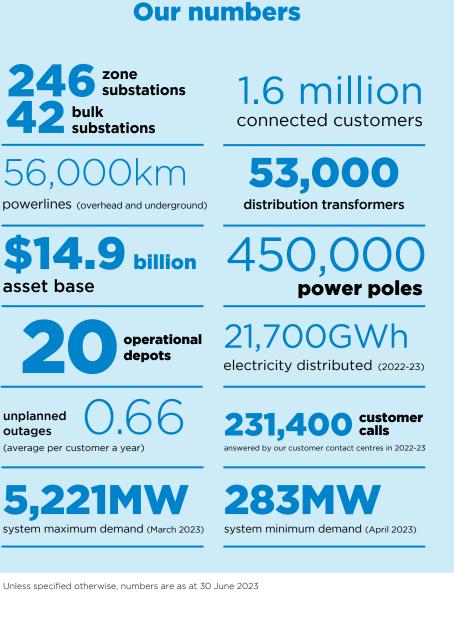


#### Energex Distribution Network

O Administration Centre

#### **Energex service areas**

- Sunshine Coast
- 2 Brisbane North
- **Brisbane Central**
- **Brisbane South**
- Ipswich Lockyer
- Gold Coast



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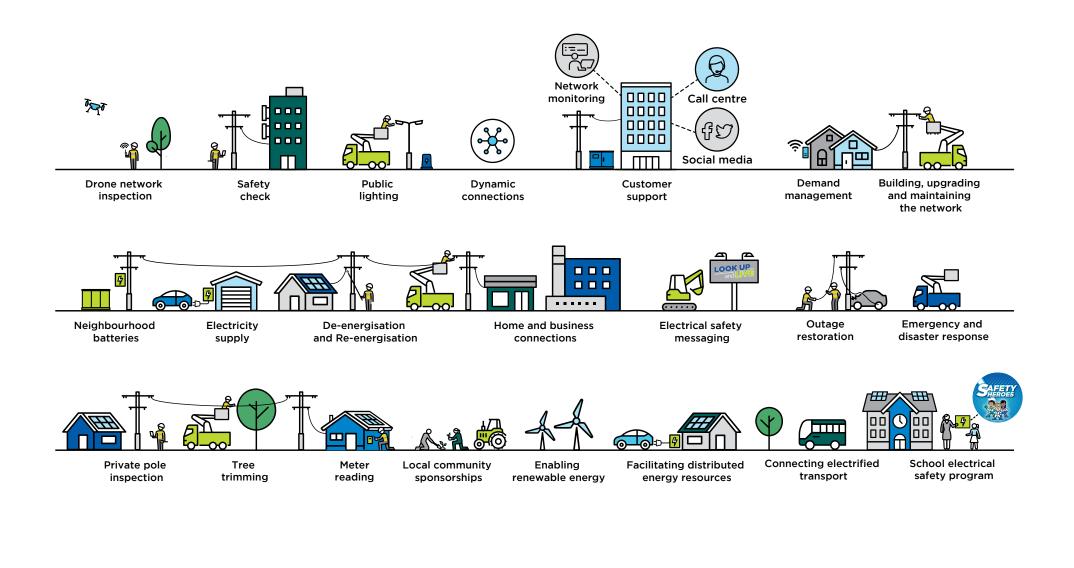
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# What we do

#### Energex builds, operates and maintains the electricity distribution network for South East Queensland.

We provide a range of distribution services to our customers and communities. These services include connecting customers to our network, maintaining a safe, secure and reliable supply of electricity for all customers, reading and testing meters and providing public lighting.

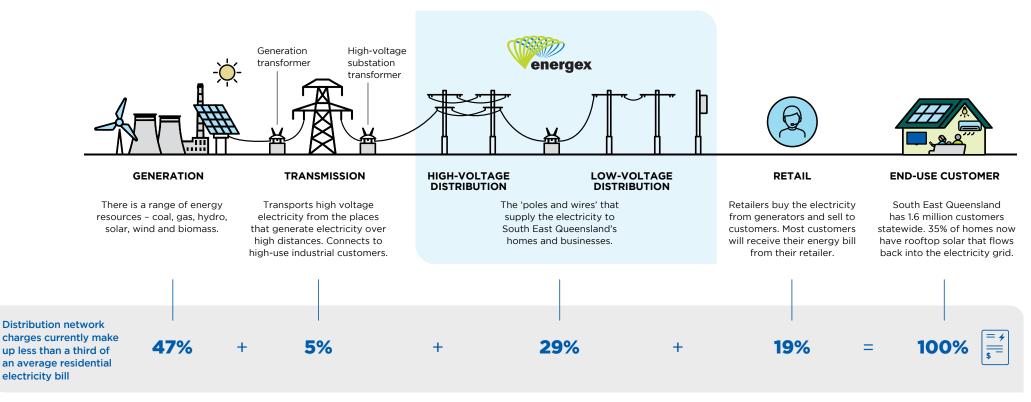


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# **Our role in the electricity system**

Energex's distribution network of 'poles and wires' are at the centre of the supply chain connecting homes and businesses. Electricity is provided across Queensland through different organisations that generate energy, transmit the energy, distribute energy and provide energy related retail services to end-use customers, some of whom also self-generate additional energy through solar panels.

Retailers choose how they bundle the costs of each of these components into one electricity tariff for customers. Distribution network charges currently make up less than a third of an average residential electricity bill in South East Queensland.



Percentages are based on the AER's Final Default Market Offer Price 2023-24 for residential flat rate tariffs in the Energex distribution area.



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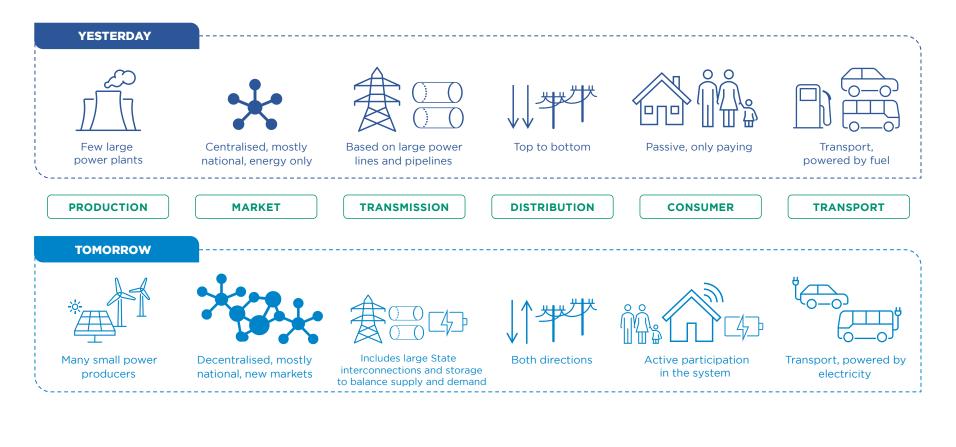
# **Our changing energy landscape**

The energy transition to more renewables is driving a once-in-ageneration change that requires a whole-of-system transformation.

With increased customer uptake of renewables and other technologies, people are rapidly changing both how they use and what they expect of the electricity network. This requires a rethink about the best way to plan and charge for electricity in a way that is fair for everyone and meets different customer expectations.

The way we live is changing and our customers are facing rising cost of living pressures. Therefore, we need to be prudent, and only invest what is necessary. However, we do not want to be in a position in the future where we place the burden to pay on the next generation of customers because we have not acted today.





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# **Key challenges and opportunities**

Energex is operating in a time of change and uncertainty. We have prepared our expenditure plans at a time when the challenges and opportunities have never been greater or more complex. Set out below are some of the challenges we face that have influenced our priorities and the development of our expenditure, revenue and tariff plans.



**ENERGY AFFORDABILITY** A core concern for customers is the increased cost of living and cost of business pressures, driven by elevated inflation and interest rates.



DECREASING DAYTIME MINIMUM DEMAND

The current trend towards high penetration of renewable, decentralised generation has the potential to cause network reliability and security issues and require additional investment to address them.



#### QUEENSLAND'S GROWING ECONOMY

We are expecting industry, population and jobs growth in South East Queensland to result in an average growth in new connections to the network of 2.3% per year, and concerns over labour and skills shortages and supply chain issues.



**ELECTRIFICATION OF EVERYTHING** New loads entering the network are contributing to our forecast average growth in system peak demand of 0.4% per year during 2025-30.



GROWTH IN THE UPTAKE OF DISTRIBUTED ENERGY RESOURCES

The potential for rooftop solar to grow by up to 8% annually will provide challenges in managing demand on the network, although managed charging of batteries, including electric vehicles, can offer opportunities for customers and the network.



#### CLIMATE CHANGE AND THE ENVIRONMENT

Increasing frequency and intensity of weather and climate-related events impacts on the life of our assets and infrastructure, and highlights the importance of having a resilient network and strong disaster response capability.



BRISBANE 2032 OLYMPIC AND PARALYMPIC GAMES

Brisbane 2032 is likely to stimulate significant infrastructure and economic growth.



### INCREASED DIGITALISATION OF ELECTRICITY

Increased digitalisation (e.g. smart meters and smart energy management devices) will provide more information about our network and enable demand response, but we must also ensure the security of our critical infrastructure.



ONGOING REGULATORY AND POLICY CHANGE

As the energy transformation gathers pace there are new rules and changes to the way we operate and manage our network to enable greater integration of distributed energy resources (e.g. rooftop solar), flexible demand and customer choice.

#### OUR FOUR INVESTMENT PRIORITIES FOR 2025-30:



Deliver electricity services in the most efficient and affordable way

### #2

Provide a resilient electricity network to support a growing population and clean energy future

### #3

Facilitate customer opportunities in the transition to renewable energies

### #4

Deliver the electricity infrastructure required for the Brisbane 2032 Olympic and Paralympic Games



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Our investment

priorities have

been developed to

address a range of

challenges, while

taking advantage

of emerging

opportunities

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# **Our investment priorities**

Our customers have made it clear that affordability of electricity is their paramount concern. However, our customers have also made it clear that they expect us to uphold reliability, resilience, service and safety. These priorities are reflected in our proposed five-year investment plans, which are aimed at supporting a higher penetration of renewables and meeting the increased demand that will flow from economic, jobs and population growth. The key priorities that will drive Energex's investment plans for 2025-30 are set out below.



Deliver electricity services in the most efficient and affordable way

In delivering our investment plans, we will aim to spend only what is necessary to meet the energy needs of South East Queensland, and in so doing minimise price increases for our customers. To that end, we will aim to strike the right balance between investing into the network to provide clean, reliable and smart electricity and addressing our customers' affordability concerns.

In addition to only spending what is required to meet customer needs, we will also self-fund additional ICT capital expenditure above the AER forecast for the last five years, and apply a 1% productivity factor to both operating expenditure and capitalised overheads to account for expected efficiency improvements and cost savings in how we deliver electricity to our customers.



### #2

Provide a resilient electricity network to support a growing population and clean energy future

In line with the transition to a clean energy future and the expected growth in South East Queensland's economy and population, our distribution network will need to provide the electricity infrastructure to support more household and business connections, including renewable energy sources such as wind and solar.

We will therefore invest in upgrading the network to meet forecast demand and improve its resilience to the impacts of climate change and increased exposure to cyber and physical infrastructure security risks. We will also transform the network into a more intelligent and dynamic grid to manage and enable more distributed energy resources to be connected at lower cost.



#### #3

Facilitate customer opportunities in the transition to renewable energies

The transition to a net zero emissions future and increasing solar generation during daylight hours has meant that Energex must develop strategies to manage the challenge of low energy demand during the day, which can cause power quality issues that can be harmful to customer appliances and the network.

We are proposing to deliver integrated solutions that will help make the best use of generation and deliver benefits and opportunities for both our customers and our network. Solutions include changing network tariffs to encourage greater energy use during periods of high solar export, expanding our demand management program, and dynamic operation of the network to manage distributed energy resources more efficiently and limit the need for network investment.



### #4

Deliver the electricity infrastructure required for the Brisbane 2032 Olympic and Paralympic Games

Brisbane will host the Olympic and Paralympic Games in 2032 and Energex will play an important role in ensuring the lights stay on while the eyes of the world are focused on South East Queensland.

In preparing for this major event, Energex must invest in the network to support the connection of new and upgraded venues and other infrastructure projects and cater for increased demand on our network. Importantly, as most of these works have already been planned, they will provide reliability benefits to residents and businesses in those communities sooner.

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### **Our engagement process**

Our customers are at the centre of everything we do. In formulating our Regulatory Proposal for 2025-30, we have placed a strong emphasis on a customer-centric approach, ensuring our customers are at the forefront of our operations and future planning.

Building on our proven, effective, and collaborative business-as-usual customer and stakeholder engagement program, we engaged in a co-design process with the full support of our Board and Leadership Team. Development of our Customer and Stakeholder Engagement Strategy and Plan has been guided significantly by insights and assistance from our Reset Reference Group and Customer and Community Council, and enriched by comprehensive collaboration and insights from our customers and other stakeholders.

These collaborations have been crucial in shaping our approach. Together, we identified key themes to guide our engagement based on the energy challenges and issues important to our customers and stakeholders. This process has influenced the topics we have explored with our diverse customer and stakeholder cohorts, as well as the resources we have developed to enhance understanding and enrich engagement.

What we have heard is that 'cost of living' and 'cost of doing business' is a concern for many of our customers, and that electricity plays a key role as an essential service. With that in mind, our focus has been on addressing affordability, service enhancement, and network resilience, especially amidst the energy industry's transformation. Our engagement, grounded in best practice principles, has been instrumental in refining our plans, ensuring they resonate with the needs and expectations of our customers and adapt to the evolving energy landscape.

Our customers and communities have high expectations of us. They want to be actively involved in developing sustainable solutions and ensuring mutual value in the rapidly evolving energy landscape. Despite challenges like inflation and the rising cost of living, our unwavering commitment is to provide an affordable, reliable, and resilient electricity supply. This is reflected in our Regulatory Proposal, which seeks to balance developing the smart, integrated network of the future with managing costs efficiently. We emphasise affordability, ensuring our customers only pay what is necessary for electricity distribution services and providing more options to better manage their energy costs through network tariff reform.

#### **Our engagement themes**





### **Engagement roadmap**

Our engagement roadmap outlines the distinct phases of engagement that have occurred over the development of our Regulatory Proposal.



\*Note. As per our Customer and Stakeholder Engagement Plan, Phases 5 and 6 are yet to occur and will occur throughout 2024 and 2025.

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# **Shaping our Proposal**

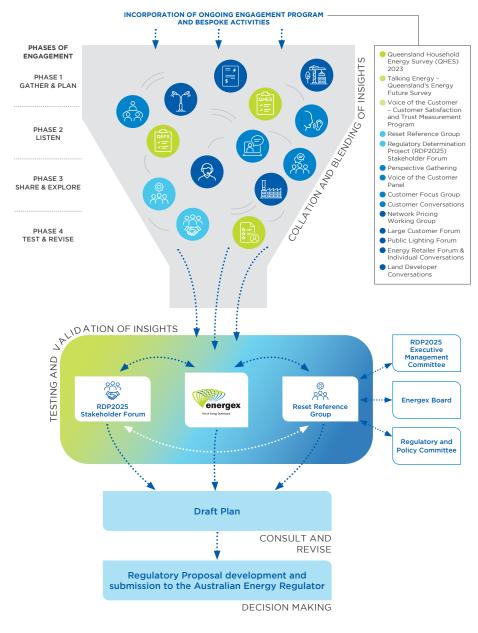
Based on insights provided by our customers and stakeholders, we have employed a variety of engagement methods and techniques with our different cohorts' needs in mind. This has ensured that our program addressed the most important thoughts, needs, and concerns of our customers and stakeholders. For more details, our Engagement Summary Report is available on the <u>Talking Energy website</u>.

We have adopted a flexible approach in developing our engagement program, always ready to integrate new approaches and insights. Feedback from our customers and stakeholders has proven invaluable; it has not merely been heard, it has actively shaped our decisions. Each piece of feedback is a critical component, helping us construct more effective engagements. We have ensured that all feedback has directly influenced our decision-making process. Recognising that no single opinion provides the whole picture, we have blended all feedback received to form a comprehensive view. This holistic approach has guided us in putting forward what we believe is a Regulatory Proposal that balances the varying needs and expectations of our customers and communities.

Our engagement plan demonstrates how we have blended insights from our engagement activities to provide a comprehensive view of what's important to our customers and stakeholders for consideration in our Regulatory Proposal.



How our engagement insights have helped to shape and inform our Regulatory Proposal:



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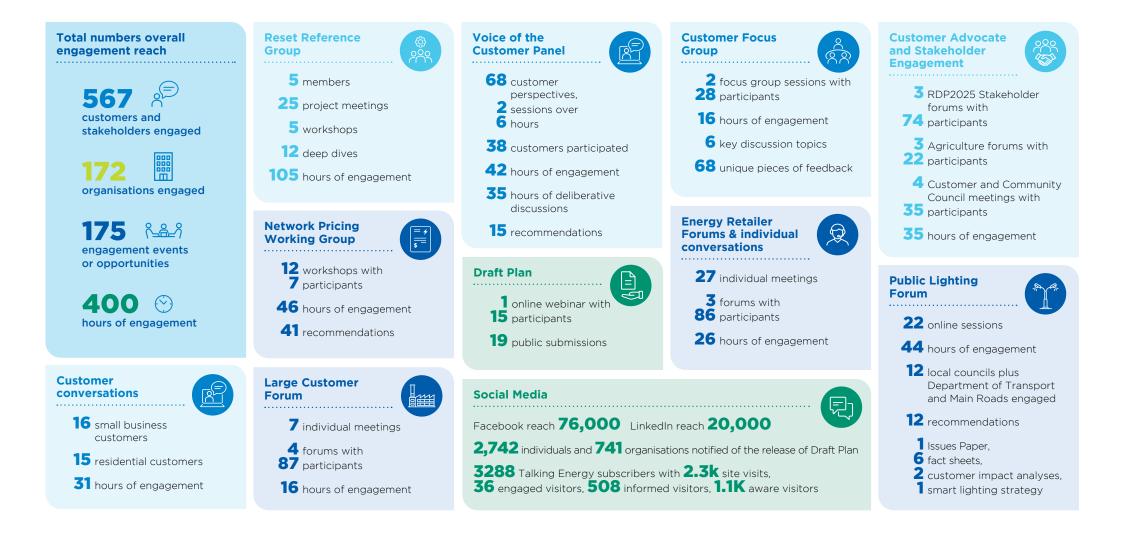
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### **Engagement by numbers**



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# What we've heard from our customers and how we're responding

Below is a summary of how we are responding to the main themes, topics and issues identified by our customers and stakeholders as future energy challenges from their perspective, and of relevance to the issues we engaged them on. They have shared their views on the energy challenges they face personally, as customers, and in their communities, providing insights that have informed our Regulatory Proposal.

Energy challenge or opportunity	What customers have told us	How we are responding
Energy affordability	Affordability of electricity is of paramount concern to customers from both a cost of living and cost of business perspective. The energy transition impacts on customers differently depending on their	Affordability has been a key factor in setting our investment plans and is our foremost investment priority. We are focused on spending only what is prudent and efficient so that our customers pay no more than is necessary for their electricity supply.
	circumstances (e.g. 'haves' versus 'have nots'). Customers are interested in having greater choice and ways to reduce their energy consumption and therefore their energy costs.	Our proposal responds to customer concerns on affordability by driving down controllable aspects of our expenditure program without compromising the safety or reliability of the network.
	Electricity prices impact on the cost of doing business and can flow through into higher prices for goods and services provided by small and large businesses.	We will reduce our revenue by applying a 1% productivity factor to operating expenditure and capitalised overheads, and self-funding the capital spend above forecast for ICT for the last five years.
		We will continue to reform our network tariffs to provide opportunities to customers to benefit from low cost electricity in the middle of the day so all customers can benefit from the transition to renewable energy.
		We will provide new network tariff options for business customers with reduced time periods for peak pricing.
		We are committed to exploring network tariff and energy efficiency information campaigns and support mechanisms for customers into the future through collaboration with customers, stakeholders and industry partners.
Transition to smart meters	Customers have told us they expect the industry as a whole to deliver simplicity, savings, value and choice, that rewards them for their role in the energy transition. Access to smart meter data can help provide energy usage information to customers to assist in making informed energy choices and managing their energy	The transition to smart meters provides an opportunity for more efficient pricing structures. We will send more targeted and cost-reflective signals to customers so that the recovery of network investment is allocated to customers who use the network more in these peak periods (rather than those who do not).
	costs.	In line with feedback provided, we propose to share the costs of legacy metering services across all customers. This reduces the disproportionate cost burden on customers who will be the last to receive a smart meter, including vulnerable customers.
	by their retailer. Customers generally support the roll-out of smart meters by the end of 2030. However, the costs to maintain legacy 'basic' meters and associated services should be shared across all customers.	We also propose to accelerate the recovery of legacy basic meter depreciation to achieve full recovery by the end of 2025-30.
Increased risk of disruptions to our network due to natural disasters or	The increasing frequency of major disruptive weather events and natural disasters is front of mind for customers. Customers are interested in our plans to ensure network resilience into the future.	Our network has long been required to deal with storm, flood and bushfire events. In recognising that our climate is changing, we propose a moderate increase in expenditure on our bushfire, flood and storm resilience programs.
cyber attack		We will continue to mature our cyber security capability to reduce the risks of external threats to our network and data.

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Energy challenge or opportunity	What customers have told us	How we're responding
Uptake of new technologies and increasing export of electricity back into	Distributed Energy Resources (DER), such as rooftop solar, batteries and electric vehicles, are seen as potential cost-saving and energy resilience building initiatives if utilised appropriately.	We have chosen a moderate pace of investment for integrating DER into our network to balance the desire of customers to take-up new technologies to export electricity with the needs of those customers who are unable to invest into new technologies.
the grid	Customers believe that the integration of DER into the network requires network pricing / tariff and other solutions to ensure customers can realise and maximise value from their DER investments. While investment in DER integration is expected and desired, customers who are unable to invest in and take advantage of DER should not be financially disadvantaged from energy costs associated with DER integration into the network.	We will continue to reform our network tariffs to spread the benefits of renewable ener across our customer base with low or no network charges during the middle of the day We expect that our dynamic connection offers will be widely available by July 2028, providing more options to customers around the volume of their exports from rooftop solar and battery storage.
	Availability and accessibility of energy and associated technologies is inequitable and there is concern around vulnerable customers not having access to innovative technologies or being able to benefit from the growth in renewable energy.	
Customer service excellence	Customers expect good customer service to be a 'given' and do not believe schemes such as the AER's Customer Service Incentive Scheme (CSIS) should be required to ensure good service is delivered. Customers want ease of interaction with us through their preferred communication channels and would like to see greater channel choice and flexibility. Timely and accurate information on a range of topics such as power outage	We support the feedback from customers and propose that the CSIS should not apply for 2025-30. Given our customers' strong views that we should not be rewarded for good customer service, we also propose that the customer service component (telephone answering) of the Service Target Performance Incentive Scheme should not apply. We will invest in our contact centre and online channels to provide information to
	<ul> <li>information (planned and unplanned), and information on a range of issues, such as connecting DER, is expected.</li> <li>Customers want greater transparency in customer service performance measures and such results to be made publicly available by means of holding us to account for the services we deliver.</li> <li>Where services do not meet minimum standards or expectations, service</li> </ul>	customers on DER and energy efficiency. We have committed to review our customer service performance measures and metrics with input from our Customer & Community Council and publish these to improve
Renewable and sustainable investments	improvement plans should be made publicly available and progress regularly reported. Customers care about current and future environmental impacts and how investments to support the transition to net zero emissions may impact customers' network prices.	In consideration of customer concerns around the cost of electric vehicles and availability of electric vehicle charging infrastructure, and noting customers' affordability concerns, we will not proceed with transitioning a small portion of our fleet to electric vehicles.
	Investment in electric vehicles as part of our fleet should be done in a moderate or 'build up pace' approach due to concerns over the current lack of electric vehicle charging infrastructure and concerns this could lead to service response disruption with electric vehicles out of operation. There is also a belief that current electric vehicle technology would not meet the requirements of our fleet and/or be too costly at this point in time.	
Energy efficiency in public lighting	Customers supported the full deployment of LED lights by 2030 due to the financial and environmental benefits, including a 43% reduction in both energy usage and carbon emissions over the 2025-30 regulatory control period.	Our co-designed Public Lighting Strategy provides for a transition to 100% LED public lighting by 2030.

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# **Overview of our expenditure plans for 2025-30**

Our Regulatory Proposal for 2025-30 is based on our assessment of the costs we will incur to provide our customers with an affordable, safe, reliable and smart supply of electricity. In assessing the type and level of investments required, we considered feedback from our customers and stakeholders, our operating environment and investment priorities, and our legislative and compliance obligations.

This process determines the amount of funding we require to build, operate and maintain the electricity distribution network in South East Queensland and the amount we intend to collect from our customers through network charges.

Distribution network charges currently make up less than a third of residential electricity bills in South East Queensland.

#### Impacts for customer network charges

We estimate that the annual distribution network charge component of customers' electricity bills will increase by an average of:





\$35 or 5%

annually for residential customers

Includes forecast inflation



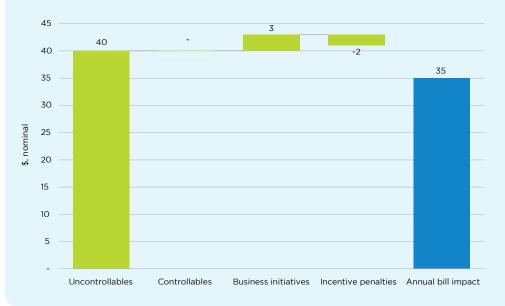


customers



\$1,936 or 6.6% annually for a large business connected on the low voltage network As a distribution business we are capital-intensive which means that a large part of our forecast revenue is driven by uncontrollable factors, such as interest rates and inflation. However, we have some control over our forward programs of work and how much we invest during 2025-30.

Average residential network charge impact for 2025-30





### **Our forecast revenue**

We have heard from our customers how important it is that we balance the need to invest in our network to provide safe and reliable supply with efficiently delivering electricity services in the most affordable way. This is a difficult challenge as our costs are increasing as we, like many of our customers, feel the impact of inflation on the costs of materials and other inputs.

We are also a regulated business and have a set process to follow for how the amount that we can recover from customers is determined. The AER uses a 'building block' approach to set our revenue (the amount we intend to collect from customers through distribution charges), which involves calculating a total revenue requirement for the five-year period by adding the different types of costs involved with supplying electricity to our customers.



The costs of financing the assets (akin to the interest payments on a home loan). Calculated as the rate of return multiplied by the regulatory asset base. The regulator sets the benchmark rate of return.

#### **Regulatory depreciation**

Payback of the money used to fund the assets (akin to payback of the principal on a home loan).

#### **Revenue adjustments**

Penalties or rewards received from regulatory incentive schemes.

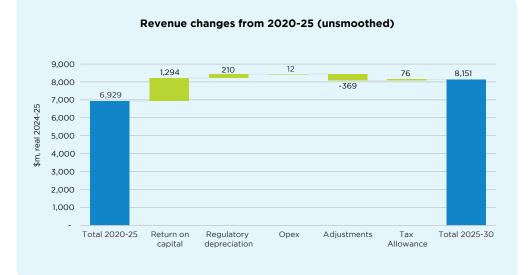
#### Corporate income tax

The costs of corporate income tax faced by a benchmark firm operating our business.

#### **Operating expenditure**

The ongoing costs of operating and managing the assets.

Our proposed total revenue for the 2025-30 regulatory control period to enable us to continue to build and maintain a safe and reliable network is \$8,151 million. This is 18% higher than our revenue of \$6,929 million for 2020-25.



Our revenue requirement is driven by:

- a significant increase in our forecast return on capital (or financing costs) mainly due to:
   o interest rates rising sharply in recent years
  - o higher than forecast inflation
  - o an increase in the regulatory asset base because of higher capital expenditure
- an increase in regulatory depreciation due to a higher regulatory asset base value, and
- · an increase in our tax allowances.

The revenue increases are offset by material negative revenue adjustments because of the penalties we forecast to incur under the AER's capital and operating expenditure incentive schemes.

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### **Our forecast capital expenditure**

Our customers and communities expect Energex to maintain the reliability, resilience and safety of our network, while meeting the needs of a growing economy and population and facilitating opportunities in the renewable energies transition.

To meet our customers' expectations, we must invest in our distribution network to ensure there is enough capacity to supply every household and business on the days when electricity demand is at its maximum, no matter where they are located across our distribution area. We need to have enough capacity to accept the growing distributed solar energy that our customers export each day and continue to invest in the safety and performance of our network so that we are ready to respond to emergencies and major weather events. We also need to invest in the business systems and infrastructure required to ensure that our daily operations run smoothly and efficiently. At the same time, in response to customer concerns about affordability, we are focused on driving down the controllable aspects of our capital expenditure program without compromising the safety or reliability of the network.

Capital expenditure relates to the investment we need to make to build and maintain our network assets, such as poles, wires, and transformers, and connect new customers. We also need to invest in assets that support the network, including vehicles, depots and ICT. We recover our initial investment from customers over the expected life of the asset.

#### network capital expenditure -

the capital investment required to renew, reinforce, and build the network and other infrastructure to supply power across our distribution area, including

replacement expenditure the expenditure needed to replace or refurbish network assets that are ageing and/or in poor condition



augmentation distributed expenditure the investment associated with building new network or upgrading the capacity of the existing network to resources cater for growth in

2. Context

energy resources expenditure capital expenditure reauired for the integration of distributed energy





overheads -

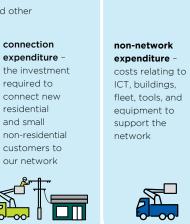
the costs that we

incur to support

the delivery of

our network

services



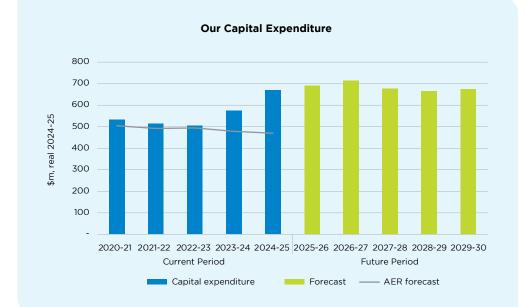
network demand

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For the 2025-30 regulatory control period we are forecasting capital expenditure of \$3,422 million, an increase of 22 per cent from our current regulatory control period.



Key drivers of our capital expenditure for 2025-30 include:

- strong population growth driving new connections and increased electricity demand
- security, performance, and reliability needs of customers
- maintaining assets to ensure they are operating safely and efficiently over their lifetimes
- transitioning to an intelligent grid capable of meeting future customer needs
- ensuring the safety and reliability of the network during major international events such as the Brisbane 2032 Olympic and Paralympic Games, and
- ICT, property, fleet and equipment costs to support our growing network program.

#### **Connecting customers to our network**

A driver of our capital expenditure is establishing new connections to the network or changing existing connections. With South East Queensland's economic and population growth predicted to remain strong, we are expecting customer connections to increase by an average of 2.3% annually in 2025-30.

The costs associated with providing the assets used to connect a new large commercial or industrial premises, generator or real estate development to the network are paid for by the customer requesting the service, whereas the costs for assets used to connect a new house or small business are recovered through network charges paid by all customers.

In order to provide connection services, Energex may also need to extend the network (e.g. by building more power lines) or increase its capacity to distribute electricity (e.g. by installing a larger transformer). Depending on the circumstances, a customer may be required to pay for, or contribute towards, the works required to provide their connection service.

The costs Energex expects to incur to connect residential and small business customers and undertake network upgrade works that will be shared across all customers are included in our connection capital expenditure forecast.

Our 2025-30 Connection Policy (available on the <u>AER's website</u>) provides more information on the connection services we provide and associated charges.



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Our forecast capital expenditure is made up of the following:



#### \$914 million

\$362 million

to replace or refurbish network assets that are ageing and/or in poor condition

for connecting new customers or

(after taking into account capital

upgrading existing connections

contributions from customers)



#### **\$610 million** to reinforce areas of the network experiencing growth, reliability or power quality issues



**\$56 million** to integrate DER into the network



#### \$642 million

on costs related to ICT (\$266 million), property (\$138 million), fleet (\$199 million), tools and equipment (\$25 million), and capitalised leases (\$14 million)



#### \$838 million

on support costs to deliver our investment programs

To assist in addressing customers' affordability concerns, we have applied a 1% productivity factor to our forecast capitalised overheads (which are business support costs that we incur in delivering network services to customers) to take account of productivity improvements that will arise from technical change, efficiency and economies of scale.

#### **Distributed Energy Resources** or DER is a new category of expenditure for the 2025-30 regulatory control period, with expenditure of this nature being historically captured in augmentation.

The term 'DER' can mean different things to different stakeholders. In this context, DER is technology that exports energy into the distribution network, such as rooftop solar, batteries or electric vehicles.

DER capital expenditure relates to investing in our network to resolve constraints associated with incorporating DER into the distribution network.

We estimate that the capital spend relating to DER will be approximately \$37 million during 2020-25. This will increase to \$56 million for 2025-30. One factor driving this increase is the increasing level of energy exports from homes and businesses and more twoway flows of energy. Therefore, we need to upgrade our protection systems to isolate our network when there is a fault in this new dynamic.





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# **Our forecast operating expenditure**

Operating expenditure relates to the day-to-day costs required to operate and maintain our network assets and includes activities such as inspection, maintenance, and repair of network assets, control of vegetation growth, fault and emergency repairs and supply restoration, and customer service and corporate support activities.



vegetation management planned programs and maintenance activities to manage vegetation to provide a safe and reliable network



maintenance -

objectives

emergency inspection programs response to detect potential works undertaken defects requiring after failure of a remedial work and network asset or maintenance plans to repair damaged to ensure delivery equipment to of supply, reliability, restore supply security, and safety following an event, including weatherrelated repairs



non-network expenditure related to ICT, buildings, fleet, tools, and equipment to support the network



network

overheads -

(e.g. network

corporate overheads expenditure related expenditure related to network support to corporate support (e.g. legal, control, billing, and human resources customer services) and finance)

Our customers have told us that, although affordability of electricity supply is their primary concern, they expect us to keep our network safe, reliable and secure and to keep the lights on for their homes and businesses. They rely on Energex to be vigilant with respect to the safety of our network and value how we respond to severe weather events and natural disasters to ensure power supply is restored to communities as quickly as possible. Energex's operating expenditure is therefore focused on ensuring that we continue to operate and maintain our network to meet the everyday performance and service expectations of our customers and communities, in the most affordable way.

Energex's operating environment, which influences the expenditure required, is characterised by a mix of high-density urban areas and less densely populated suburban neighbourhoods and rural regions across South East Queensland. We also operate in high rainfall areas with risk of flooding, storm surges and lightning activity, and experience periods of high temperatures and humidity. These environmental factors have an impact on the life of our network assets, vehicles, tools and equipment and the safety and reliability of the network.



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The key drivers of our operating expenditure for 2025-30 include:

- meeting the security, performance and reliability needs of customers
- inspecting and maintaining assets to ensure they are operating safely and efficiently over their lifetimes
- meeting legislative requirements
- responding to storm and other severe weather events to restore supply
- meeting growth in our network as measured by the number of connected customers, line length and the increased maximum demand of our customers
- · actively managing vegetation near our assets, and
- addressing ageing infrastructure and asset-related safety hazards.

To meet our customers' expectations, we have forecast that our operating expenditure will be \$2,285 million for 2025-30. This represents a decrease of almost 7% on our current actual operating expenditure for 2020-25 (\$2,451 million) and is close to the AER's forecast (\$2,273 million).

As part of our forecast operating expenditure requirements for the five-year period, we have included costs of sourcing power quality data from smart meters. This data will allow us to monitor our low voltage network for faults and assist in restoring customers' supply faster, as well as providing greater ability to identify safety issues.

To assist in addressing customers' affordability concerns, we have applied a 1% productivity factor to our forecast operating expenditure to take account of productivity improvements that will arise from technical change, efficiency and economies of scale.



#### Our operating expenditure since 2015



### Impacts for network performance

The move towards 'electrification of everything' will result in greater demand for and reliance on electricity to power our households and businesses. Therefore, the reliability of our network is critical to ensuring that our customers' energy needs are met.

Feedback has shown that the majority of our customers consider we have the existing balance between cost and reliability about right. Consistent with this view, our investment plans for 2025-30 are intended to maintain the current reliability performance of our network while meeting the future needs of South East Queensland customers and communities. To do this, we will invest in:

- replacing or refurbishing assets that are ageing or in poor condition
- upgrading our electricity infrastructure to support the connection of more households and businesses and respond to growth in electricity demand
- improving the resilience of our network to minimise the impact of future disruptive events, such as storms, bushfires and floods, on the continuity of electricity supply, and
- increasing access to more information about our network to improve our ability to identify and respond to outages faster.

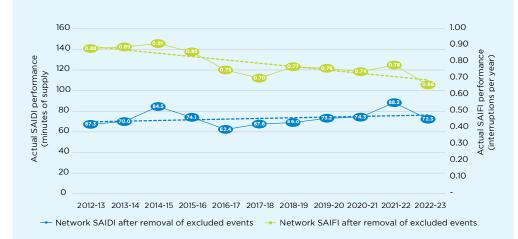
We will also target investments in historically poor performing distribution feeders or feeders with a forecast worsening reliability. This particularly benefits customers who have experienced a high volume of outages or severe outages with a long duration.

Energex delivers our electricity supply services to meet target levels of electricity reliability set by the AER. These targets - relating to the frequency and duration of unplanned supply outages - incentivise us to maintain our reliability performance (or improve our performance where customers are willing to pay). We can either earn financial rewards or pay penalties based on our performance relative to average historical levels.

Energex's network reliability performance is measured by:

- the average length of time customers are without power due to an unplanned outage -System Average Interruption Duration Index (SAIDI), and
- the average number of times customers are without power due to an unplanned outage -System Average Interruption Frequency Index (SAIFI).

As shown below, while the duration of unplanned outages has remained steady, the frequency of outages has decreased over the last 10 years.



#### Our normalised reliability performance since 2012-13

For 2025-30 we are proposing that the AER's reliability incentive scheme will continue to apply and that the new targets should be based on our average performance over the past five years. As intended, this scheme will incentivise us to maintain our existing levels of service for customers.



In response to the 2023 Queensland Household Energy Survey, **73% of participants agreed they were provided** with a reliable energy supply, and **75% considered the existing balance between cost and reliability is about right.** 

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### How we have considered micro embedded generators and other new market entrants

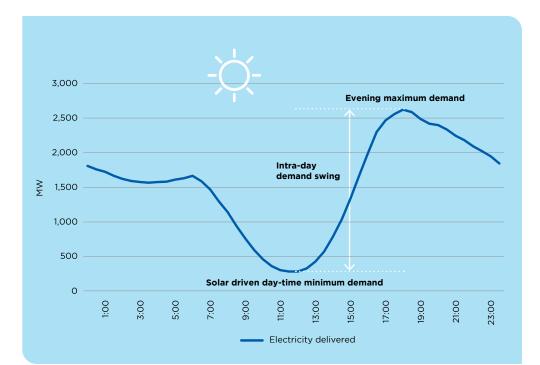
The growth in the uptake of micro embedded generators and other technologies has transformed the energy system from a one-way flow of electricity to customers from large generators to a two-way flow of electricity between homes and businesses and the network.

Micro embedded generators include rooftop solar and other small generators. For example, you are a micro embedded generator if you generate power from solar panels on your roof or from energy stored in a battery that feeds into the grid.

This transformation of the energy system is changing how customers use, and what they expect of, our electricity network. More and more customers are looking for ways to maximise the benefits from their investments and save money by generating energy and managing their consumption.

While we seek to integrate the connection of more micro embedded generators, we must also manage the impacts of these systems on our network. The rapid growth in generation from house rooftops during daylight hours is resulting in the need to manage the challenge of minimum demand, which is when generation from rooftop solar and batteries matches or exceeds demand on the network.

Minimum demand can impact local power quality and can be harmful to customers' appliances and the network. We must therefore deploy solutions that will keep the lights on for our customers and communities and limit the need for costly network investment, while at the same time enabling greater volumes of generation.



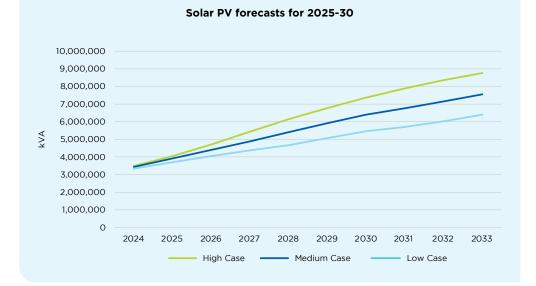


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Forecasting is a critical element of our network planning. We are forecasting that for 2025-30 solar uptake is likely to remain strong and could grow by up to 8% annually. The increasing penetration of rooftop solar is expected to cause minimum demand to fall by an average of 400MW annually.



In addition, we are forecasting that:

- battery storage systems will potentially increase by 27.8% annually as they become cheaper, and
- the number of electric vehicles on South East Queensland roads could increase by almost a million by 2030, as there is greater choice and cost parity with conventional vehicles.

Batteries (including batteries in electric vehicles) can assist in managing minimum demand by charging during sunlight hours, when solar generation is high, and discharging into the network during peak times.

In identifying demand for, and providing distribution services for, supply into the network from micro-embedded generators, we considered the use of other entities' forecasts, including those published by the Australian Energy Market Operator. However, to assess the extent of impact on our network and any subsequent tariff or investment options, we require detailed forecasts, ideally at the suburb and street level. As other entities' forecasts are typically for the entire State and do not provide the level of certainty of impacts we require, we have used our own, more detailed demand forecasts.

Our investment priorities have taken into consideration the need to cater for the forecast growth in the uptake of micro embedded generators by South East Queensland homes and businesses and enable customer opportunities.

Solutions we will be implementing in 2025-30 include:

- providing new network tariff structures that encourage greater electricity consumption during the day while the sun is shining to 'soak up' the energy generated by micro embedded generators, and
- offering dynamic connection agreements that will set the limits that a customer can export to the network (which will vary over time depending on the capacity of the local network) and allow us to manage two-way flows of electricity more efficiently.

These measures are intended to maximise the use of our existing assets and allow more customers to install rooftop solar and batteries.

However, as it will not always be possible to avoid the need for network investment, we have forecast that we will need to spend \$56 million to upgrade the network in certain areas to handle the high volume of energy that is expected to be exported into the grid and allow customers to benefit from their investments.

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# **Our metering services**

Our residential and small business customers who do not yet have a smart meter installed continue to receive metering services from Energex. Our metering services include meter reading, meter maintenance and meter data services for our basic accumulation meters (or 'legacy meters').

Prior to energy market reforms in 2017, Energex was responsible for the provision of metering services for all residential and small business customers. However, following those reforms, our role in the provision of metering services changed. We are now only responsible for managing and maintaining our existing fleet of legacy meters as they are gradually phased out and replaced by smart meters (which are the responsibility of energy retailers and metering service providers).

The costs of providing metering services associated with legacy meters have historically been recovered from those customers receiving the service (i.e. user-pays). However, given that the number of legacy meters will decrease rapidly over the 2025-30 period as more smart meters are installed, the AER has provided guidance that the costs of providing metering services for remaining legacy meters should more appropriately be recovered from all customers through our network charges. This will reduce the burden on customers who have yet to receive a smart meter and ensure the transition to smart metering is fair and equitable.

We sought customer feedback on the potential change to the charging arrangements for legacy metering services. Feedback provided by customers and stakeholders was that the costs to read and maintain legacy meters and provide associated services (forecast to be \$389 million in 2025-30) should be shared across all customers.

While this proposal will result in a modest contribution from all low voltage connected customers to the recovery of legacy metering charges, it will reduce the disproportionate cost burden on customers who will be among the last to receive a smart meter and are likely to be financially vulnerable.

#### Accelerated roll out of smart meters

The Australian Energy Market Commission has recommended the speeding up of the roll out of smart meters to 100% of households and small businesses by 2030. This is consistent with the Queensland Government's target and will enable consumers to access the benefits of smart meters sooner.



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# **Our public lighting services**

Energex owns, operates and maintains nearly 350,000 public lights and keeps billing records for another 49,100 public lights owned and maintained by 12 councils and the Department of Transport and Main Roads. The provision of public lighting is a critical service that plays an important role in road safety and enhancing security in public areas.

Our aim is to convert all of our conventional public lights to LED technology. In response to customer expectations and environmental concerns about mercury products, we have adopted a staged approach to LED conversion, starting with the replacement of our legacy mercury vapour luminaires. By 30 June 2025, we will have replaced 40% of our conventional lights with LED lights.

Due to the specific nature of public lighting and public lighting customers, we have had a stand-alone, discrete engagement process for public lighting over the past 14 months. With the support of our customers, our priority for 2025-30 is to convert all remaining conventional public lights to LED technology by 30 June 2030. This will achieve energy savings of approximately 43% for customers and support the transition to a net zero emissions future with a corresponding reduction in carbon emissions. LED lights are also cheaper to maintain than conventional lights.

In response to customer expectations, we are also proposing to offer, as a new service, access to smart cells from 1 July 2026. Used with LED technology, smart cells can provide a range of additional environmental benefits, such as the ability to dim the light during off-peak periods in accordance with ambient light conditions.

The proposed forecast revenue to be recovered from our public lighting tariffs in 2025-30 is estimated to be \$257 million. This represents a 8.1% increase on the total expected revenue to be recovered in the current 2020-25 period.

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To manage customer impact, we will extend the recovery of the remaining value of the conventional public lighting assets beyond 2030. This approach was communicated to our customers as part of our engagement and was unanimously supported.



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# **Our tariff reform journey**

We are transitioning to a new phase in electricity pricing facilitated by the rollout of smart meters throughout our communities. The transition to 100% uptake of smart meters by 2030 removes a key barrier that has slowed the pace of network tariff reforms needed to keep up with customer and energy market driven changes.

Smart meters allow our customers to receive and respond to more efficient pricing structures. By having more information around how much electricity customers are using at one time (referred to as 'demand') and when they are demanding this electricity, we can set our network prices to reward those customers who are using electricity when there is low demand and charge higher rates at times when demand on the network is high.

In 2020 we commenced tariff reforms for customers with smart meters, and this has resulted in more efficient network prices being sent to retailers for around 40% of our customers. From 2025, we aim to build on the work done to date by improving our pricing signals for peak (high demand) and off-peak (low demand) times of energy use.

The widespread rollout of smart technology has come at an important time. Along with other technology advances and efficient investment strategies, our new pricing arrangements will not only help customers to save money but will provide us with more options in how we operate, manage and invest in the network.

Comprehensive information about the tariffs we propose will apply to customers in the next five-year period is provided in our Tariff Structure Statement and Tariff Structure Explanatory Statement which can be found on the <u>AER's website</u>.

The factors that have influenced our tariff changes are highlighted on the following page.





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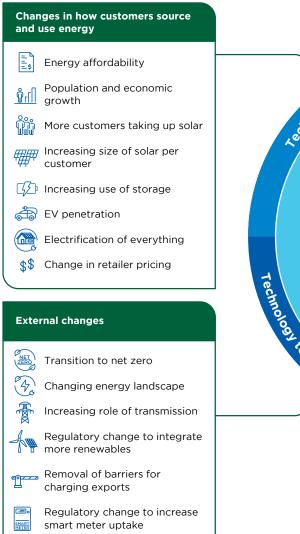
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### **DRIVERS OF CHANGE**





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**BETTER OUTCOMES** 



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Ability to respond to efficient price signals

Fairer pricing outcomes

More tariff choices



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# The role of tariffs in navigating change

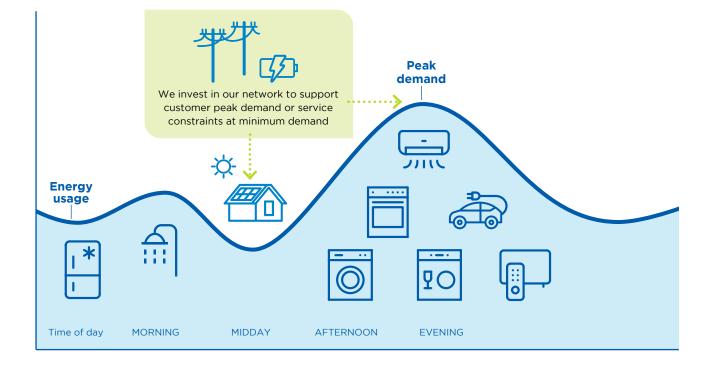
Our strategy for setting network tariffs is aimed at supporting our customers to navigate the change to a smarter, renewables-enabled grid, while driving cost-effective outcomes and efficient and fair prices for our customers.

More efficient tariff designs ensure that the costs of future investment are allocated more to those customers who use the network at peak times. As more customers respond to these high network charges by using less energy at peak times to save money, the need for network investment will be deferred. This will keep network costs lower for all customers.

A flow-on benefit for customers is that because our revenues are capped, we can only recover a set amount of revenue each year. Therefore, higher prices to recover more revenue in peak periods must be offset by lower prices in other periods, thus customers save even more by moving their energy use outside of peak periods. The need to invest in network infrastructure arises when customers' electricity demand approaches the existing capacity of the network, resulting in a need to upgrade our network to meet the increased demand. Most networks use 'time windows' to indicate those periods of high use that are most likely to create future service constraints that will require investment. We therefore want to make our prices more efficient to ensure the costs of future investment caused by demand peaks are signalled to customers who want to use energy in those time windows.

The rapid growth of solar generation from house rooftops and solar farms during daylight hours is resulting in the need to manage a new challenge of minimum demand on the network. Minimum demand can best be described as the lowest energy demand across an electricity network at a point in time. Significant drops in minimum demand cause issues around local power quality that can be harmful to customer appliances as well as the network. On some days, in some parts of our network, solar exports are greater than demand from the grid, which creates reverse power flows. This requires investment in infrastructure to manage the energy being exported to the grid and ensure the lights stay on.

Efficient pricing will encourage more use of energy in the middle of the day to allow more solar to be connected without impacting future costs.





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# **Exploring change with customers**

Before deciding on the proposed changes to our tariffs, we sought feedback from customers on their preferences and concerns around the pace of change and potential impacts. Input from customers and other stakeholders on a wide range of engagement topics has been invaluable in shaping not only our current business decisions and planning but also our plans for 2025-30. In developing our pricing structures, we considered key customer priorities, like addressing affordability and value, providing a well-integrated, smart and resilient electricity network to enable the energy transition, providing good customer service, and implementing network tariff reforms.

We commenced our tariff engagement in 2021, to develop the initial approaches towards refining network tariffs, our customer impact framework and customer education. We have built on these initial works to develop a firm basis of knowledge to deliver an extensive engagement program across a range of customer segments and customer and industry representatives. With this foundation platform developed, we expanded into dedicated engagement streams spanning our residential and business customers and retailer stakeholders.

The table to the right provides an overview of the phases of our engagement, together with the different forums used for tariff engagement and the deliverables or outcomes of the engagement.



PHASE	TIME FRAME	ENGAGEMENT	TOPICS	Ουτρυτ
PHASE 1	By end- 2022	<ul> <li>Tariff Reform Working Group (TRWG) Workshops</li> <li>Public Lighting Forum</li> <li>1:1 Customer conversations - residential</li> </ul>	<ul> <li>Public lighting tariffs</li> <li>Tariffs, price signals, and incentives for modifying how and when electricity is used.</li> </ul>	
PHASE 2	Feb - Jun 2023	<ul> <li>TRWG Workshops</li> <li>Queensland Household Energy Survey</li> <li>Energy Retailer - Individual conversations</li> </ul>		
PHASE 3 AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	Jun - Aug 2023	<ul> <li>Voice of the Customer (VoC) Panel</li> <li>Energy Retailer Forum</li> <li>Large Customer Forum</li> <li>Network Pricing Working Group (NPWG)</li> <li>Stakeholder Forum</li> <li>Customer Focus Group</li> <li>Talking Energy – Queensland's Energy Future Survey</li> <li>1:1 Small Business Customer conversations</li> </ul>	<ul> <li>Network tariff structure engagement themes and tariff options</li> <li>Proposed tariff changes</li> <li>Proposed new tariffs</li> <li>Pricing windows</li> <li>Load control</li> </ul>	<ul> <li>Engagement Reports - Large Low Voltage Customer, Major Customer, Stakeholder and Retailer Forums, the VoC, NPWG and Customer Focus Groups</li> <li>Small Business Research Report</li> </ul>
PHASE 4	Sep 2023 - Jan 2024	<ul> <li>Draft Plan Webinars</li> <li>Large / Major Customer Forum</li> <li>VoC Panel</li> <li>Retailer Forum</li> <li>Customer Focus Groups</li> <li>NPWG</li> <li>Industry Group Meetings</li> <li>1:1 Conversations</li> </ul>	<ul> <li>Overview of Draft Plan Priorities, Revenue and Tariffs</li> <li>Customer Impact Analysis</li> <li>Proposed new tariffs</li> <li>Network tariff structures</li> <li>Public lighting tariffs</li> <li>Storage tariffs</li> <li>Tariff assignment</li> <li>Review of draft Tariff Structure Statement (TSS)</li> </ul>	<ul> <li>Draft Plan</li> <li>Draft Plan Feedback</li> <li>Engagement Reports         <ul> <li>Large Low Voltage Customer, Major</li> <li>Customer, Stakeholder and Retailer Forums, the VoC, NPWG and Customer Focus Groups</li> </ul> </li> <li>Regulatory Proposal and TSS</li> </ul>
PHASE 5	Apr - Sep 2024	<ul> <li>Large / Major Customer Forum</li> <li>Retailer Forum</li> <li>NPWG</li> <li>Industry Group Meetings</li> <li>1:1 Conversations</li> <li>Customer Focus Groups</li> </ul>	<ul> <li>Evaluate customer and stakeholder feedback to the AER Issues Paper</li> <li>Review of tariffs</li> <li>Customer Impact Analysis</li> </ul>	Revised Regulatory Proposal and TSS
PHASE 6	Apr 2025	<ul><li>Retailer Forum</li><li>NPWG</li></ul>	• To be determined	• To be determined

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### **Engaging on change:** the five themes

Our 'share and explore' phase of engagement with customers centred on the significant shift in the way customers are using energy as well as changes resulting from the transition to renewable energies. These factors have strongly influenced our proposed network tariff arrangements. We engaged customers on the pace of change according to five broad themes:



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## **Outcomes of engagement – our tariff structure**

Our proposed tariffs reflect customers' preferences and feedback on a range of issues. The table below summarises the proposed changes to our network tariffs for 2025-30. Our Tariff Structure Statement 2025-30 is available on the <u>AER's website</u>.

Assumptions	Description			
Strengthening of peak price signal	As we continue our progression towards cost-reflective tariffs, we have revised our approach to the long run marginal cost underpinning our peak prices. Under this revised approach, customers will have greater incentives to move energy use from peak periods to off-peak periods.			
	Responding to these signals will benefit the customer and also reduce the pressure on investment to support import and export services over time (benefiting all customers in the long-term).			
Time of use	Our time of use windows will change from 1 July 2025.			
windows	For residential customers we are targeting zero distribution charges for energy used between 11am-4pm daily. A peak rate will continue to apply to the 4pm-9pm peak window. Charges for energy used will apply at other times.			
	For our small business customers, we are targeting a zero distribution charge for energy used between 11am-1pm daily. A peak rate will apply to a new window of 5pm-8pm weekdays, with shoulder rates applying at other times.			
	Large businesses on the low voltage network will move to a default tariff structure that aligns with the same windows as small business customers. Most high voltage customers will also have the option to move to network tariffs with these windows from 1 July 2025.			
Two-way tariffs	From 1 July 2026 we will introduce two-way tariffs for new customers with exports below 30kW capacity (optional for existing customers). From 1 July 2028, all customers with exports below 30kW capacity will be assigned to these tariffs.			
	Customers with a dynamic connection may choose not to have a two-way tariff apply. Dynamic connections set the limits within which a customer can export to the network above a basic export level (i.e. the level to which customers can export without charge). These limits will vary over time and allow higher exports when there is capacity available on the local network.			
Load control	Load control tariffs provide customers with choice when responding to the impacts of cost-reflective tariffs. For our business, load control provides us the flexibility to manage system-wide and localised issues in a way that defers or avoids traditional network investment.			
	We will expand options for our customers to access load control tariffs. Flexible load tariffs will be introduced from 1 July 2025, allowing customers to access cheaper rates for controlled appliances, while also maximising the benefit of using their appliances on a primary tariff with behind-the-meter solar PV and storage technologies.			
Tariff streamlining	We will withdraw several tariffs that have either been closed for some time, have few customers assigned to them, or no longer feature in our future network tariff direction.			



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## How new time of use windows may impact different customers

Tariff changes will impact customers differently. To help our customers better understand how time of use windows will work, we have provided examples below showing how the proposed options could impact different customers based on four personas, with different income and household composition. We have also estimated the potential for customers to reduce their network bill by changing their energy consumption patterns in response to the price signals of our new tariffs. The price impacts include forecast inflation (i.e. are nominal dollars).

	CUSTOMERS	2025-26 Network distribution charge per annum	Move from flat/anytime tariff	Shift usage from evening and night to 11am-4pm
John	<ul> <li>Family of four</li> <li>Majority of energy usage outside school hours and weekends</li> <li>5,200kWh/year</li> <li>With solar</li> </ul>	\$635	N/A*	-\$46 ▼
Zahara	<ul> <li>Family of three</li> <li>Majority of energy usage in the evening when electricity demand is high</li> <li>3,800kWh/year</li> <li>With solar and electric vehicle</li> </ul>	\$625	N/A*	-\$45
Arush	<ul> <li>Retired couple</li> <li>Majority of energy usage through the day to make use of solar</li> <li>2,300kWh/year</li> <li>With solar</li> </ul>	\$369	N/A*	-\$19
Azami	<ul> <li>Single parent, family of five</li> <li>Works from home. Energy usage spread over the day</li> <li>&gt;8.000kWh/year</li> <li>Without solar</li> </ul>	\$784	-\$52	-\$61

\*customer is already assigned to the default smart meter tariff



## Two-way tariffs and our export transition strategy

To minimise the potential for customers who do not have rooftop solar subsidising infrastructure investment for export, our pricing structures are changing to encourage exports at times that are most likely to benefit the network. Two-way tariffs (reflecting both a charge and a reward component) represent one aspect of these incentives.

Two-way tariffs provide rewards for customers who export energy at times of high demand on the network. This could apply not only to exports from rooftop solar but also from batteries (including batteries in electric vehicles). Charges only apply to exports above a basic export level, and are aimed at ensuring that future network investment required to manage exports in the middle of the day is paid for by those customers causing that investment.

The key focus of our engagement on this topic related to informing customers about the regulatory changes that have brought about the need to transition towards two-way tariffs and the reasons why these changes will benefit all customers in the long-term. We sought feedback on and provided customers with the additional information they needed to understand and be comfortable with the changes, as well as their preferences around the 'pace of change' for the introduction of charges and rewards.

Our proposed approach to transitioning to two-way tariffs is outlined below.

<b>Transition Period</b>	Approach			
1 July 2025 to 30 June 2026	No proposal to introduce two-way tariffs			
1 July 2026 to	Optional for existing customers			
30 June 2028	Mandatory for new customers			
	<ul> <li>New customers entering into a dynamic connection agreement may opt-out of the two-way tariff</li> </ul>			
1 July 2028	Once dynamic connection offers are widely available to customers (anticipated for 1 July 2028):			
	Mandatory for all customers			
	<ul> <li>Customers entering into a dynamic connection agreement may opt-out of the two-way tariff</li> </ul>			

Customers' level of comfort with transitioning to two-way tariffs was not as strong as for changing time of use windows. We heard from customers that they need options and time to adjust to two-way tariffs, which is reflected in our approach. Customers were also interested in the ability to avoid export charges, prompting our introduction of dynamic connection offers as an opt-out option. Additional education material will be provided to assist customers in the lead up to 1 July 2028.



### Dynamic connection offers will allow households and businesses to access new and emerging energy technologies as they become available.

Dynamic connections set the limits within which a customer can export to the network above a basic export level (i.e. the level to which customers can export without charge). These limits will vary over time and allow higher exports when there is capacity available on the local network. They seek to give customers choice about connecting the energy resources they want, while minimising impacts to the grid by communicating varying import and export limits to the customer's energy resources. Dynamic connections will allow more households to install rooftop solar and batteries and take advantage of the associated cost benefits, while improving outcomes for everyone.

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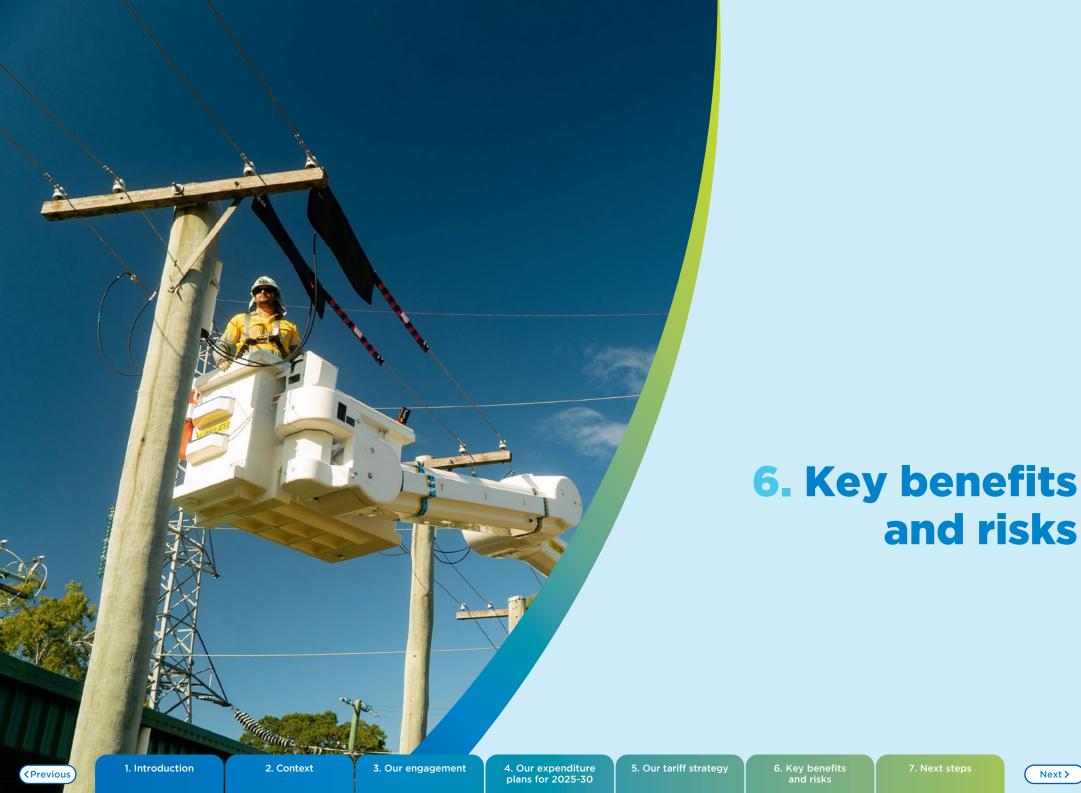
## How two-way tariffs impact different customers

The impact of our proposed two-way tariffs on different customer types is summarised below. For illustrative purposes we have assumed all personas opted into the two-way tariff from 1 July 2027 (noting that the proposed two-way tariff will not be mandatory for existing customers until 1 July 2028). The price impacts include forecast inflation (i.e. are nominal dollars).

CUSTOMERS		2025-26 Energex distribution charge per annum	Move from flat/ anytime tariff	Shift usage from evening peak to daytime	Opt-in to two-way tariff	Shift export timing & increase self-consumption	Potential distribution charge reduction
John	<ul> <li>Family of four</li> <li>Majority of energy usage outside school hours and weekends</li> <li>5,200kWh/year</li> <li>With solar</li> </ul>	\$635	_*	-\$46	\$5	-\$3	-\$48
Zahara	<ul> <li>Family of three</li> <li>Majority of energy usage in the evening when electricity demand is high</li> <li>3,800kWh/year</li> <li>With solar and electric vehicle</li> </ul>	\$625	-*	-\$45	\$16	-\$10	-\$39
Arush	Retired couple         Majority of energy usage through the day to make use of solar         2,300kWh/year         With solar	\$369	_*	-\$19 ▼	\$14	-\$2	-\$7
Azami	Single parent, family of fiveSingle parent, family of fiveSingle parent, family of fiveSynthetic parentSynthetic parentSynthetic parentSynthetic parentSingle parent, family of fiveSingle parent, family of fiveSynthetic parentSynthetic parentSynthetSy	\$784	-\$52	-\$61	-	-	-\$113

\*customer is already assigned to the default smart meter tariff

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# **Key benefits for our customers**

We are committed to providing cost-effective and efficient services that allow us to keep pace with the energy transition and deliver affordable electricity supply to our customers. Outlined below are the key benefits for our customers from our proposed investment plans for the 2025-30 period.

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**Rewarding customers** for their role in the energy transition by identifying opportunities to save money through changing our network tariff structures

#### This includes:

- strengthening the peak price signals for residential customers and small businesses to provide choices around emerging technology
- updating our time of use charging windows to enable customers to reduce their energy bills
- transitioning to two-way export pricing for low voltage customers to facilitate greater customer participation in energy management
- updating our controlled load tariffs to ensure they remain relevant and offer a variety of options to achieve a lower network bill, and
- streamlining our existing tariff offerings to make them easier for customers to understand.

More efficient prices encourage more efficient use of the network, which can help reduce the need for additional investment over time. As all customers ultimately pay for network upgrades, improving pricing arrangements that encourage more efficient use of the network can lead to lower network costs for all customers.



### **Keeping the lights on** for our customers and responding to power outages

**\$2,285m** will be spent on operating and maintaining our network for the benefit of all customers, including fault and emergency repairs and customer service delivery.



Enabling customer uptake of new technology such as electric vehicles, batteries and rooftop solar **\$56m** will be spent on integrating distributed energy resources, including:

- continuing to implement dynamic connections to maximise the utilisation of existing network assets, while increasing the capability of our customers to export, and
- improving access to low voltage network data to enable us to manage these resources more efficiently and limit the need for network investment.



### Meeting community reliability and safety expectations

by replacing and refurbishing existing assets that are ageing or in poor condition

Our **\$914m** program of work includes:

- replacing 18,015 poles, 1,500 kms of conductor, and 40,000 customer service wires
- refurbishing substations, and
- bringing forward replacement works to provide a reliable and resilient network for the Brisbane 2032 Olympic and Paralympic Games.

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**Supporting growing communities** in South East Queensland by reinforcing areas of the network experiencing strong population and household growth, reliability or power quality issues

Our **\$610m** augmentation program includes:

- building new substations at Bells Creek, Morayfield East, Jimboomba West and Ripley North, as well as a new 110kV feeder to Caboolture bulk supply substation to support high growth in these areas
- establishing a new 110kV feeder from Ann Street zone substation to McLachlan Street zone substation and a new 33kV feeder from Nudgee bulk supply to Nundah zone substations to support the Brisbane 2032 Olympic and Paralympic Games,
- increasing our bushfire, flood and storm resilience programs to improve reliability of our network and our response capability, and
- building on our cyber security foundations to address security risks to better protect our assets, customers and data.



**Connecting new customers** to the network and upgrading existing connections We have forecast that we will spend **\$362m** on connections. In line with the expected growth in South East Queensland's economy and population, our distribution network will provide the electricity infrastructure to support more household and business connections, including renewable energy resources such as wind and solar.



**Modernising customers'** experience by investing in our digital capability to keep pace with the energy transition

Our investment of **\$266m** in ICT will include initiatives to improve customer self-service options, and enhancing and automating customer connection applications and service delivery.

**Equipping our workforce** to deliver customers' energy requirements

**\$376m** will be invested in the property, fleet, tools and equipment necessary to enable our workforce to complete our work programs and provide electricity supply services to customers.

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**Greening public** 

longer-term

lighting to reduce

emissions and costs

for consumers in the

We will target **100%** conversion of public lights to LED by 2030.

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## **Key risks for our Proposal**

Set out below are the key risks associated with our Regulatory Proposal for 2025-30.



## Increased expenditure cost pressures

Supply disruptions and shortages have led to a sharp increase in the costs of procuring materials and equipment required to build and maintain our network and deliver network services. Labour shortages have also resulted in an upward effect on costs. It is not currently clear when these cost pressures will ease and the extent to which they may impact our expenditure in the 2025-30 regulatory control period.



### External environment uncertainty

Australia's energy market is undergoing a period of significant transformation at a time when the economic outlook remains unclear. Ongoing economic uncertainty and energy policy and regulatory changes may impact our forecast capital and operating expenditure for the five-year period, and potentially result in additional costs to our business.



### **Demand risk**

As economic and population growth are key drivers of forecast electricity demand, there is a risk that demand will be lower or higher than forecast. If demand is lower than forecast, network charges may need to increase to enable us to recover the allowed network revenue needed to deliver services to customers. If electricity demand is higher than forecast, additional capital expenditure on the network may be required to cater for the higher demand.



There is a risk that the rate at which customers take up rooftop solar, electric vehicles and battery energy storage systems will be higher than forecast, which may result in the need for additional investment to improve the hosting capacity of our network or the need to curtail customer exports more than anticipated. While we utilise best practice forecasting methods and the best available information, there remains a degree of uncertainty, particularly around the level of growth in electric vehicle uptake.

### Impacts of costreflective tariffs are lower than forecast

We have aimed to design costreflective network tariffs so that customers can use and source energy in response to prices that are more closely aligned to the impact of their decisions on our future network costs. However, there is a risk that energy retailers will not pass through our tariff structures to customers, resulting in less efficient use of the network and the potential need for investment to be brought forward or for additional investment.



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## How to have your say

This Overview provides a summary of Energex's Regulatory Proposal, setting out our investment plans and the revenue required to operate our network for the 2025-30 period. A copy of our full Regulatory Proposal, submitted to the AER on 31 January 2024, is available on the <u>AER's website</u>.

The AER will assess our Regulatory Proposal and consult with interested parties before setting the maximum revenue we are allowed to recover from customers for their use of the network. This revenue will form the distribution network component of customers' retail electricity bills. We encourage our communities and customers to make submissions to the AER as part of its consultation on our Regulatory Proposal. The AER will publish its draft decision in September 2024 and a further opportunity will be provided for customers and stakeholders to comment.



In the meantime, we will continue to engage with our customers and other stakeholders, including through our online engagement hub, Talking Energy, <u>www.talkingenergy.com.au</u>.

Questions can also be directed to us by emailing **<u>RDP2025Connect@energyq.com.au</u>**.



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