

QUEENSLAND ENERGY AND JOBS PLAN

Power for generations

70%
Renewable Energy
by 2032



Cleaner
Affordable
Energy
For Everyone



100,000 jobs



In the spirit of reconciliation, the Queensland Government acknowledges the Traditional Custodians of country throughout Queensland and their connection to land, sea and sky.

We pay our respects to their Elders past, present and emerging and extend that respect to all Aboriginal and Torres Strait Islander people today.

The Queensland Government acknowledges the continuous living culture of First Nations Queenslanders – their diverse languages, customs and traditions, knowledge and systems.

The Queensland Government acknowledges the role that First Nations people had in the delivery of Queensland's current energy system and is committed to ensuring they benefit from the new energy system. As we work together to deliver a clean, reliable and affordable energy system for Queensland, the Queensland Government is committed to genuine partnerships and meaningful engagement with Queensland's First Nations people.





Premier's message

I believe that there is no other place in the world as well positioned as Queensland to lead the clean energy revolution.

That is why Queensland is already at the forefront of becoming a renewables, hydrogen and clean energy manufacturing superpower.

In 2015, I committed my government to reaching 50 per cent renewable energy by 2030.

Since then, we have facilitated around \$11 billion of investment delivering 50 new Queensland projects and over 7900 construction jobs across the state. We are well on our way, now powering over 20 per cent of our electricity needs with renewable energy.

We are delivering on more investment and more jobs, with world class infrastructure and our highly skilled workforce to meet the growing demand for cleaner energy both here at home and across the globe.

We will showcase our clean energy credentials to the world as we prepare to deliver a climate positive Olympic and Paralympic Games in 2032.

To accelerate our progress, my government is setting new targets for our clean energy system of 70 per cent renewable energy by 2032 and 80 per cent by 2035.

Queensland's Energy and Jobs Plan builds on our investment to date and positions Queensland to have a thriving clean energy economy. It is a Plan that works. Delivering more jobs and creating clean, reliable and affordable energy to provide power for generations.

Annastacia Palaszczuk MP

Premier of Queensland and Minister for the Olympics



Foreword

Queensland is a state blessed with incredible natural resources and whilst we're known as the Sunshine State, it's our people – Queenslanders themselves, that are our greatest asset.

The Queensland Energy and Jobs Plan will harness the skills, ambition and energy of Queenslanders to deliver nation building infrastructure and drive more investment in renewable energy, create more jobs, and meet our 50 per cent renewable energy target by 2030.

We will build Australia's largest energy SuperGrid, delivering clean, reliable and affordable energy to power Queensland homes and industry. The Queensland SuperGrid will create around 100,000 jobs by 2040, with 95 per cent of investment in regional Queensland.

It's important that workers and communities benefit from our energy transformation. We will invest in our publicly owned power stations by converting them into clean energy hubs – keeping our electricity system secure and reliable.

A landmark agreement with energy unions for a new Job Security Guarantee will give energy workers certainty about their future, as well as choices and opportunities for them and their communities.

Because we have kept our energy assets in public hands, Queensland has the power like no other State to ensure a secure transition to renewable energy and to guarantee good jobs for our energy workers.

Importantly, we will retain public ownership of our energy system, with 100 per cent ownership of transmission, 100 per cent ownership of deep storage, and majority ownership of generation.

Cleaner energy will deliver exciting new industries like renewable hydrogen with the potential to create thousands of decent, secure jobs in regional Queensland.

At the core of our Plan are the people of Queensland. Our initiatives will deliver lower electricity prices for Queensland households, more secure jobs for Queenslanders and a cleaner energy future.



Steven Miles MP

Queensland Deputy Premier and Minister for State Development, Infrastructure, Local Government and Planning



Cameron Dick MP

Queensland Treasurer and Minister for Trade and Investment



Mick de Brenni MP

Minister for Energy, Renewables and Hydrogen and Minister for Public Works and Procurement



Vision

Clean, reliable and
affordable energy
providing power
for generations.

Our Energy and Jobs Plan

Queensland's electricity system in 2035

At least 25 GW new and existing renewable energy

Gladstone grid reinforcement to support heavy industry to switch to renewable energy and decarbonise their operations

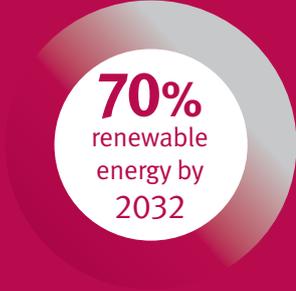
All publicly owned coal-fired power stations operating as clean energy hubs by 2035, supported by a legislated Job Security Guarantee for energy workers

Two new world-class pumped hydro projects that together could deliver up to 7 GW of long duration storage

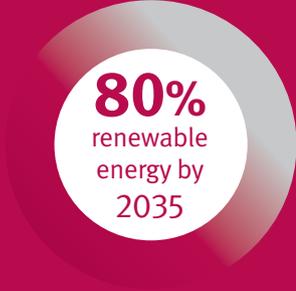
Around 1500km of new high voltage backbone transmission to move more power around the state

Up to 3 GW of low to zero emissions gas generation for periods of peak demand and backup security

A smarter grid to support over 11 GW of rooftop solar and around 6 GW of batteries in homes and businesses



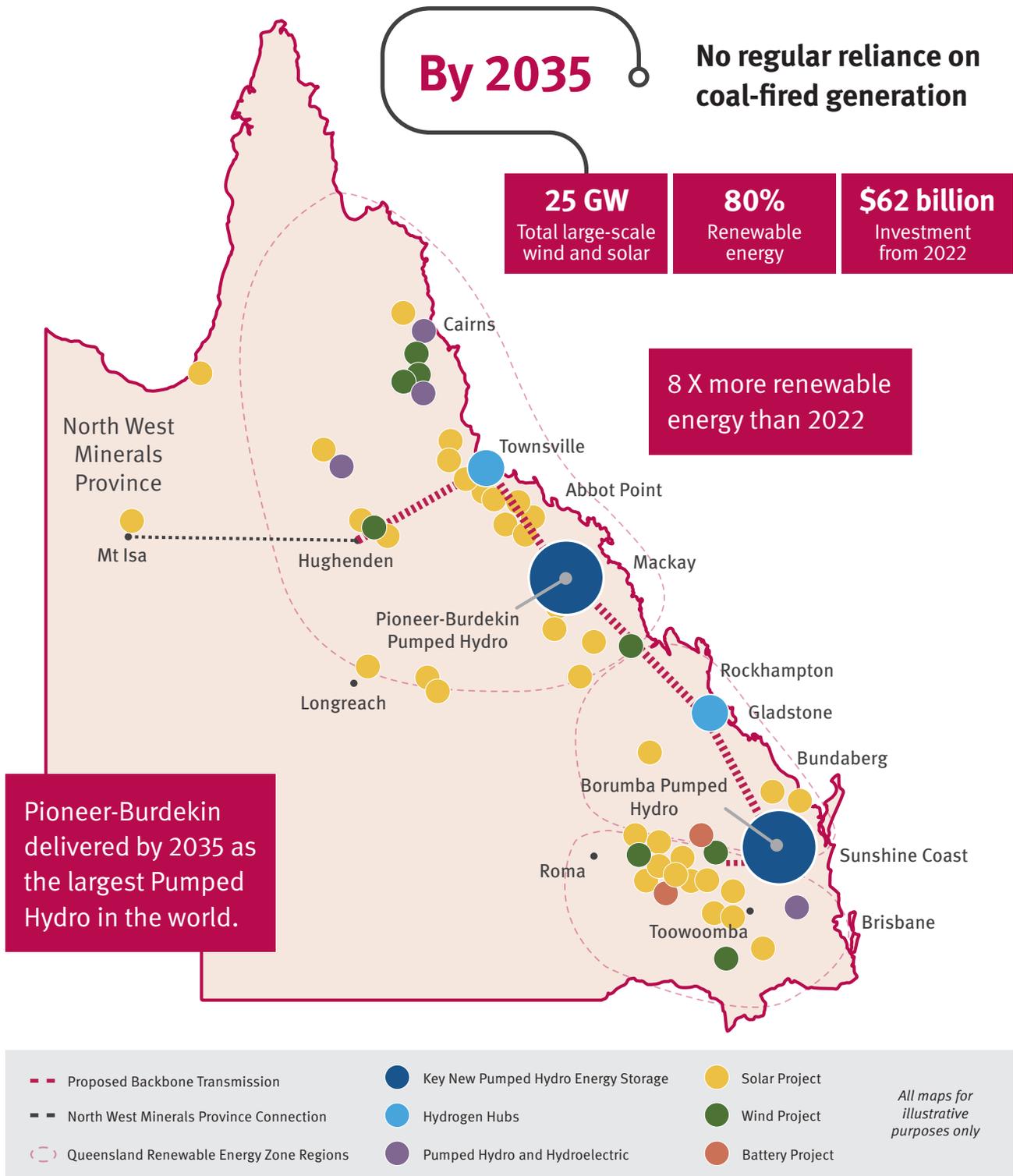
70%
renewable
energy by
2032



80%
renewable
energy by
2035

What is the Queensland SuperGrid?

The SuperGrid is all of the elements in the electricity system, including the poles, wires, solar, wind and storage that will provide Queenslanders with clean, reliable and affordable power for generations.



The Queensland Government has outlined the optimal infrastructure pathway in the *Queensland SuperGrid Infrastructure Blueprint*.

Projections informed by independent modelling and internal analysis

Jobs and economy

The Queensland Government engaged independent expert modelling to support the development of the Queensland Energy and Jobs Plan and understand the benefits for Queensland.

Energy Workers' Charter

A tripartite Queensland Energy Workers' Charter (the Charter) has been agreed by the Queensland Government, energy sector unions and employers.

The Charter sets out an enduring framework to support and provide confidence for workers through the energy transformation.



More Jobs – building clean energy infrastructure and powering growth

Modelling estimates the Plan will deliver more jobs in the energy sector and across the Queensland economy including:

- **64,000 jobs** in clean energy infrastructure including new skilled direct jobs to build the SuperGrid in construction of transmission and renewable energy projects, jobs in manufacturing and ongoing operations, and indirect jobs in the services industry that supports the energy sector
- **36,000 more jobs** in green growth opportunities including direct and indirect jobs, than without a Plan, across key sectors like renewable hydrogen, battery manufacturing, resource mining and metal refining.

Larger economy generating green growth

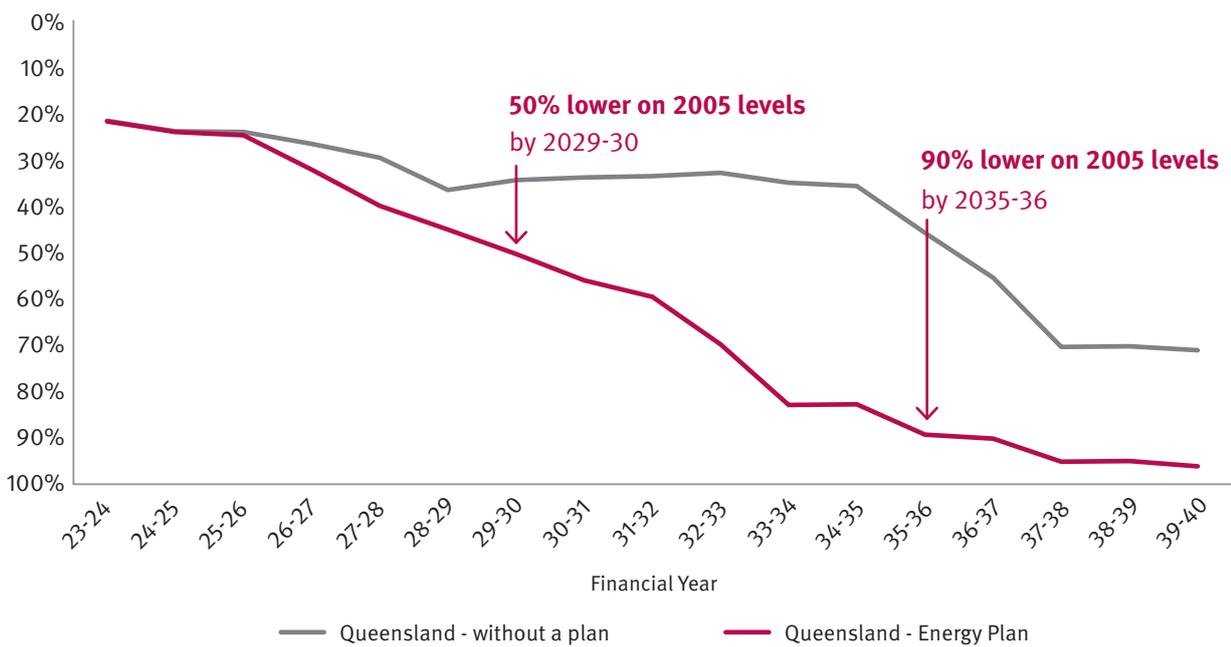
Modelling estimates that the state economy will experience up to **\$25.7 billion more growth by 2040** than without a Plan. Key sectors like renewable hydrogen, battery manufacturing, resource mining and metal refining will be growing at a faster rate, with Queensland a globally competitive investment destination.



Electricity emissions reductions

Lower electricity emissions – **90 per cent lower** by 2035-36

Electricity emissions (reduction on 2005 levels)



This will support Queensland delivering a climate positive Olympic and Paralympic Games in 2032.



Based on independent modelling



Lowering bills and more energy independence

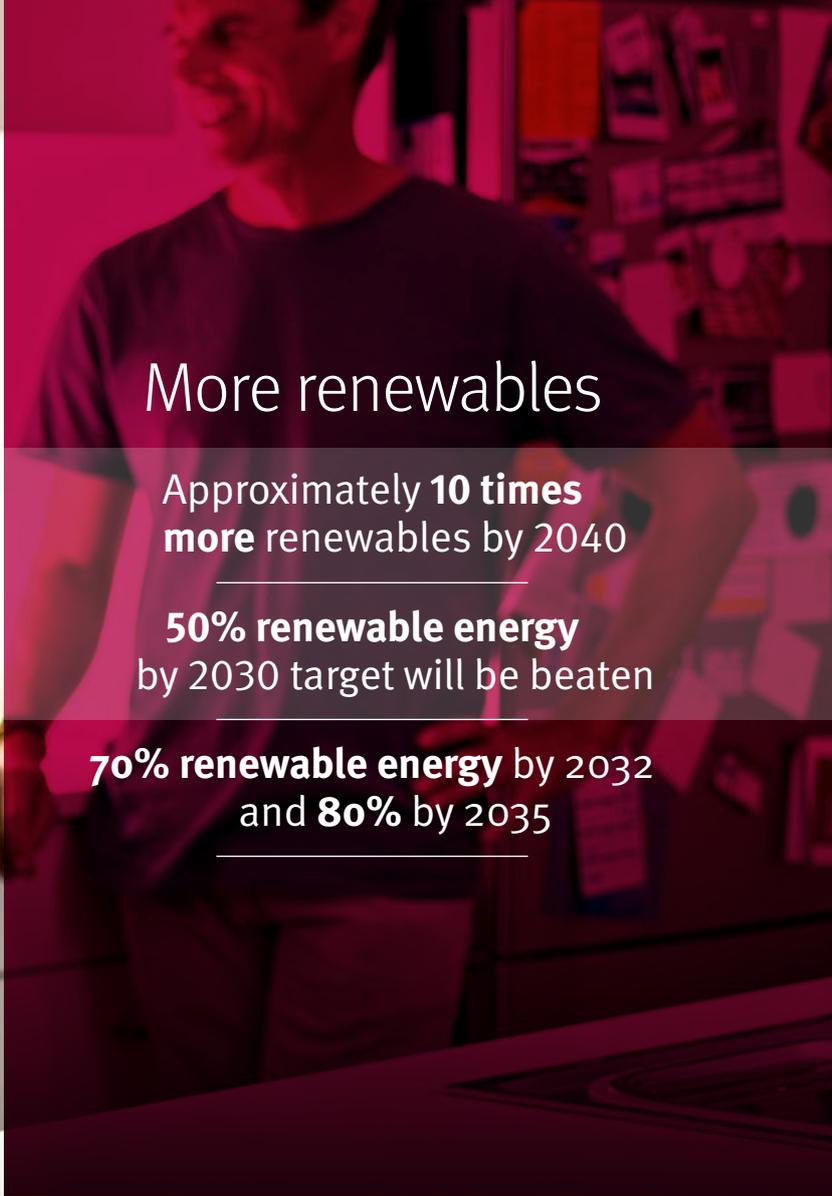
Lower prices – **\$150 lower** retail bills in 2032 for households and **\$1,495 lower** for small business

The Plan will put downward pressure on wholesale electricity prices in the longer-term, with more investment into cheap renewable energy and storage. Independent modelling indicates that under the Plan, lower wholesale electricity prices will flow through to lower retail bills, with the average annual bill for a household projected to be \$150 lower in 2032 and \$1,495 lower for a small business, than without a Plan.

In mid 2022, electricity prices across Australia rose due to the impacts of volatile global markets and instability. Under this Plan, more renewable energy and more storage in Queensland will help to protect Queenslanders from these globally driven price shocks.

Modelling suggests wholesale prices, on average, will be 15 per cent lower to 2040 than without a Plan. The Plan increases Queensland energy independence and reduces exposure to future high prices. This will drive savings for Queensland households and businesses.

Queensland's public ownership position also supports lower electricity bills, with previous asset ownership dividends from publicly owned energy businesses going to Queensland customers to lower their bills.



More renewables

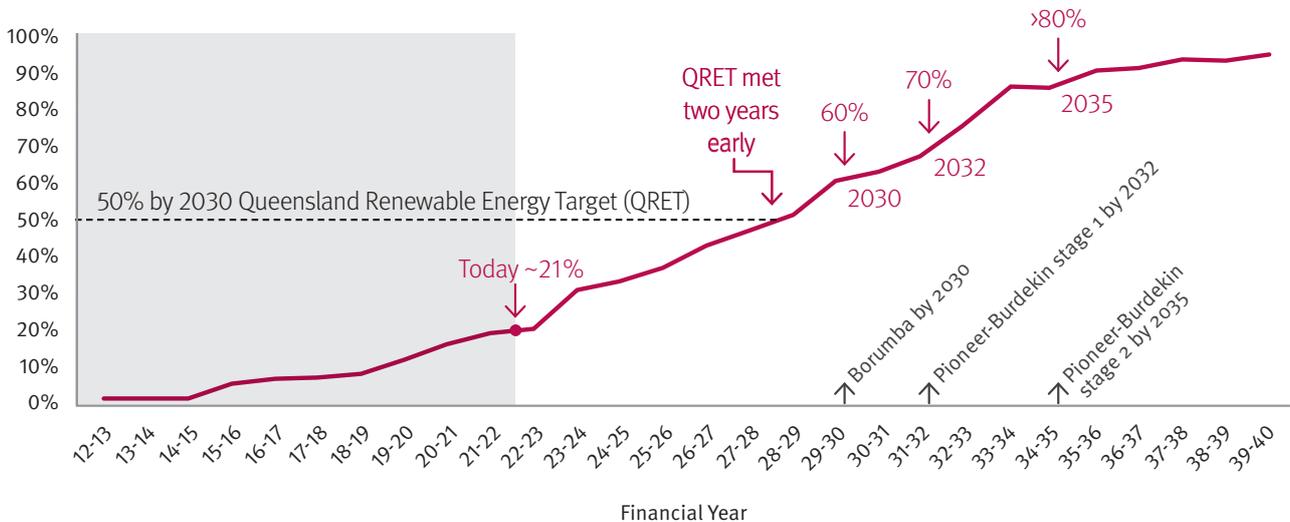
Approximately **10 times more** renewables by 2040

50% renewable energy by 2030 target will be beaten

70% renewable energy by 2032 and **80%** by 2035

Beat our renewable energy target

Renewable energy percentage under the Queensland Energy and Jobs Plan

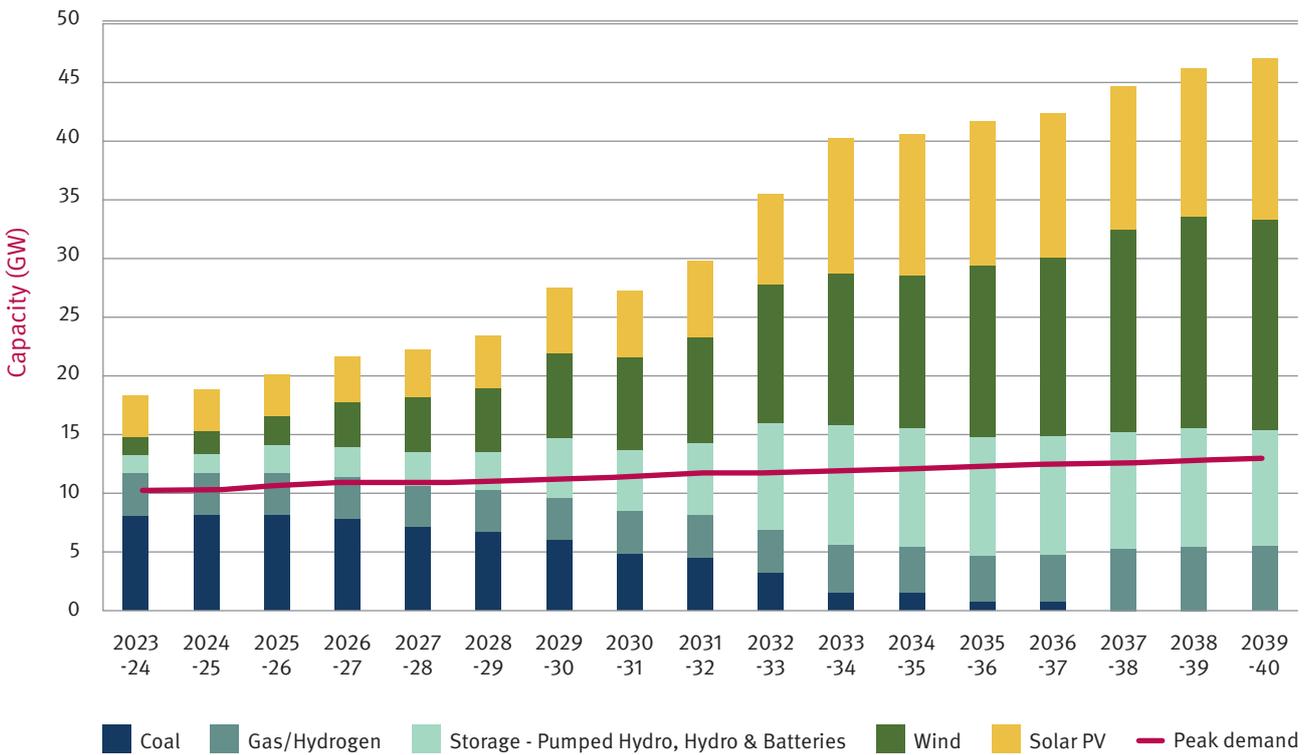


Based on independent modelling

A clear plan to transition to renewables

Queensland Energy and Jobs Plan capacity mix (GW)

Queensland's generation mix will transform over time to include more wind, solar, and storage to ensure we always have enough energy to meet Queensland's energy demand including at peak times.



Based on independent modelling



Investing in the future of our power stations

Queensland's publicly owned coal-fired power stations will continue to play an important role in our future energy system as clean energy hubs. We will not shut the gate on these power stations, their workers, or communities who will play a leading role in the energy transformation.

These power stations are located in strong parts of the Queensland network with strategic advantages like grid connection, a highly skilled workforce, established community relationships, and land. The Government will work with publicly owned energy businesses to develop proposals to reserve, repurpose and reinvest to modernise coal-fired power stations into future clean energy hubs. The Government will work directly with publicly owned energy businesses to develop proposals for clean energy hub investment backed by the boosted \$4.5 billion Queensland Renewable Energy and Hydrogen Jobs Fund.



Reserve:

The Government will reserve capacity, including seasonal operation (during periods of sustained low electricity demand on the network). These changes will be phased to ensure Queensland always has enough energy to meet demand.



Repurpose:

The Government will gradually repurpose generating units over time, including conversions to synchronous condensers, ensuring system security and reliability.



Reinvest:

The Government will reinvest in these coal-fired power stations with new renewable energy, renewable hydrogen, storage and system strength infrastructure leveraging the strategic advantages of each site.

This process will occur in accordance with the Infrastructure Blueprint.



Benefits for Queensland



Keeping **majority public ownership** of Queensland's energy system



Wholesale electricity prices will be 15% cheaper on average to 2040 and average household bills will be \$150 lower in 2032 than without a plan



New programs to reduce electricity bills



\$42 million to integrate zero emissions vehicles

64,000 jobs to build the SuperGrid and 36,000 more jobs across key sectors of the economy by 2040, most in regional Queensland



Invest **\$500 million** for grid and community batteries



Renewable energy projects can connect in the Queensland Renewable Energy Zones more easily and **partner with Queensland's public energy businesses**



Growing Queensland's renewable hydrogen industry by investing \$20 million to supercharge renewable hydrogen hubs and build awareness for the industry



A **\$2.5 billion** boost to the Queensland Renewable Energy and Hydrogen Jobs Fund to deliver on publicly owned renewables, storage and network investments



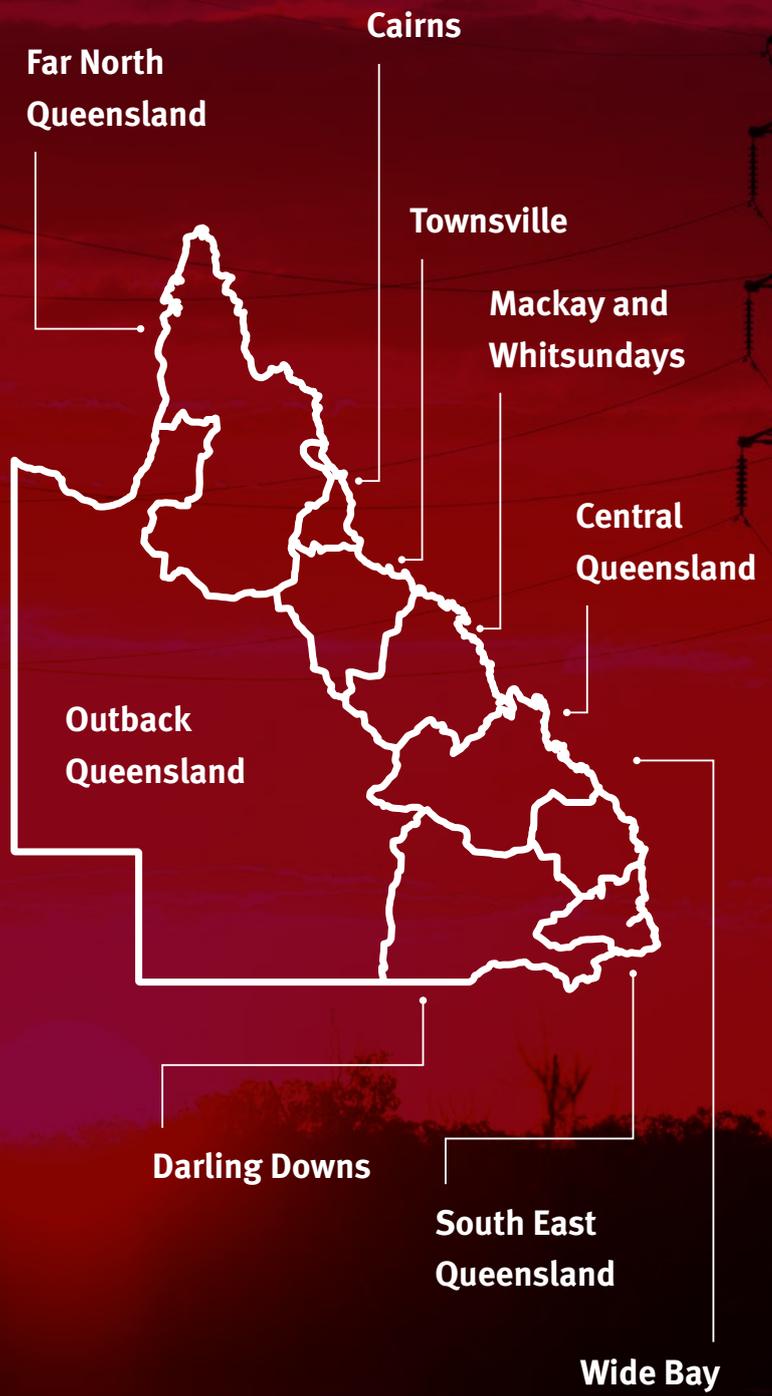
Apprentices will access **two new training hubs** in regional Queensland



A new **\$200 million** Regional Economic Futures Fund



Workers at Queensland's publicly owned coal-fired power stations will have a **Job Security Guarantee** and more choice



Regional opportunities

Far North Queensland and Cairns

- Since 2015, around \$900 million investment in around 400 MW of large-scale renewable energy, creating approximately 600 construction jobs (operational and in the pipeline)
- Estimated additional \$6.6 billion investment in electricity infrastructure by 2040

Townsville

- Since 2015, around \$800 million investment in over 400 MW of large-scale renewable energy, creating more than 900 construction jobs (operational)
- Estimated additional \$1.4 billion investment in electricity infrastructure by 2040
- In addition, the connection to Mount Isa represents a unique opportunity to support a clean energy industrial ecosystem from the North West Minerals Province to Townsville, growing opportunities for jobs in the clean energy economy

Mackay and Whitsundays

- Since 2015, around \$1.5 billion investment in around 1 GW of large-scale renewable energy, creating around 1400 construction jobs (operational and in the pipeline)
- Estimated additional \$7.8 billion investment in electricity infrastructure by 2040

Central Queensland

- Since 2015, more than \$800 million investment in around 500 MW of large-scale renewable energy, creating around 900 construction jobs (operational and in the pipeline)
- Estimated additional \$9.2 billion investment in electricity infrastructure by 2040

Outback Queensland

- Since 2015, around \$300 million investment in more than 100 MW of large-scale renewable energy, creating approximately 300 construction jobs (operational)
- Estimated additional \$1.1 billion investment in electricity infrastructure by 2040

Wide Bay

- Since 2015, there has been around \$1.1 billion in investment in around 600 MW of large-scale renewable energy, creating approximately 1000 construction jobs (operational and in the pipeline)
- Estimated additional \$3 billion investment in electricity infrastructure by 2040

Darling Downs

- Since 2015, around \$5 billion in investment in more than 2800 MW of large-scale renewable energy, creating more than 2600 construction jobs (operational and in the pipeline)
- Estimated additional \$9.9 billion investment in electricity infrastructure by 2040

South East Queensland and Toowoomba

- Since 2015, there has been almost \$500 million in investment in more than 200 MW of large-scale renewable energy, creating around 500 construction jobs (operational)
- Estimated additional \$1.6 billion investment in electricity infrastructure by 2040

The estimated additional investment in electricity infrastructure for each region to 2040 has been drawn from independent modelling, commissioned to support development of the Plan.

FOCUS areas

This Plan sets out **actions** across **three focus areas** to **transform** the Queensland energy system.



1. Clean energy economy

Build a clean and competitive energy system for the **Queensland economy and industries** as a platform for accelerating growth.

Actions

- **1.1:** Begin building the SuperGrid
- **1.2:** Develop two world-class pumped hydros
- **1.3:** Invest in more batteries and storage
- **1.4:** Build more renewable energy and connect an additional 22 GW by 2035
- **1.5:** Ensure reliability with low to no emissions gas
- **1.6:** Grow the future renewable hydrogen industry
- **1.7:** Deliver sustainable liquid fuels
- **1.8:** Switch to renewable energy with new targets
- **1.9:** Advance Queensland's bioenergy future
- **1.10:** Establish a new technical board for expert advice



2. Empowered households and businesses

Deliver **affordable energy for households and businesses**, and support more rooftop solar and batteries

Actions

- **2.1:** Deliver a smarter grid that benefits all Queenslanders
- **2.2:** Deliver a new household program
- **2.3:** Support to reduce household bills
- **2.4:** Drive savings for small businesses
- **2.5:** Integrate Queensland's zero emissions vehicles
- **2.6:** Enable savings for commercial buildings with Environmental Upgrade Agreements
- **2.7:** Ensure affordable electricity in regional and south east Queensland



3. Secure jobs and communities

Drive better outcomes for **workers and communities** as partners in the energy transformation.

Actions

- **3.1:** Invest to modernise Queensland's publicly owned coal-fired power stations for the future
- **3.2:** Support workers with a Job Security Guarantee
- **3.3:** Prepare Queensland's workforce and regions for growth
- **3.4:** Grow the renewable energy supply chain in Queensland
- **3.5:** Clean energy for remote and First Nations communities
- **3.6:** Partner with industries and communities to maximise benefits from the energy transformation and drive regional economic opportunities





1. Clean energy economy

Build a clean and competitive energy system for the Queensland economy and industries as a platform for accelerating growth.



Focus area 1: Clean energy economy

Queensland will deliver clean, reliable, and affordable energy that grows the economy, boosts employment and attracts investment to the state.

The Queensland SuperGrid will be Queensland’s modern electricity system. It will consist of new foundational Pumped Hydro Energy Storage (PHES) assets, new backbone transmission, more renewables in Queensland Renewable Energy Zones (QREZ), more batteries, and low to zero emission gas. This infrastructure will allow us to reliably generate, store and transport cleaner electricity across the state with greater energy independence.

By 2040, under the Plan it is expected Queensland’s economy will be \$25.7 billion larger than without the Plan, and wholesale electricity prices 15 per cent lower on average. A cleaner energy system will be a platform for accelerating economic growth and unlocking opportunities renewable hydrogen, battery manufacturing, resource mining and metal refining. It will also allow Queensland to capitalise on global demand for green products.

Competitive clean energy will make **Queensland** an **investment destination of choice**

ACTION 1.1: Begin building the SuperGrid

Queensland’s publicly owned transmission network is the highway system for electricity, transporting vast amounts of power across long distances from the southern Queensland border up to Cairns and beyond.

New backbone transmission will be the foundation of the new SuperGrid, connecting energy storage and renewables to industry, businesses and consumers across the state.

The SuperGrid backbone transmission has four priority projects commencing from 2022:

- Connect Borumba PHES.
- Expand the connection of Southern Queensland to Central Queensland.
- Connect the Pioneer-Burdekin PHES into Central and Northern Queensland.
- Connect Hughenden and Townsville, unlocking more renewables – a critical step to connecting Mount Isa to the grid.

The government will **invest \$285 million to undertake early works on the first two stages of the backbone transmission.**

The Queensland Government is also working on developing a **Government-led model for the connection to Mount Isa and the North West Minerals Province.**

The Queensland Government will investigate opportunities to partner with the Australian Government on this infrastructure project.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Progress early design and planning for the SuperGrid backbone transmission	Powerlink	2022-24
b.	Investigate appropriate legislative models to support backbone transmission	EPW	2023



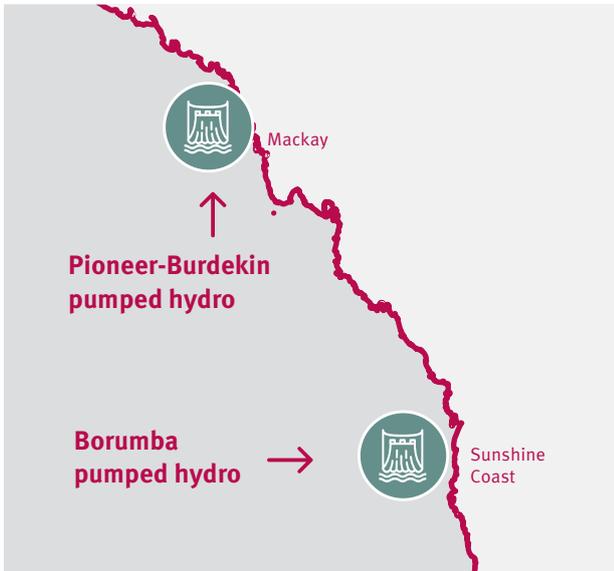
ACTION 1.2: Develop two world-class pumped hydros

To provide 24/7 reliable power, Queensland's SuperGrid will need a mix of energy storage. Excess renewable energy can be stored until it is needed so Queensland's industries, businesses and households always have secure and reliable electricity.

Long-duration storage, like PHES, is critical because it means Queensland can be confident in having reliable energy supply even during times when renewable energy generation from wind and solar is low.

PHES is a proven technology, and a foundational investment for Queensland's SuperGrid. The Queensland Government is investigating two sites:

- **Borumba pumped hydro:** Located near Imbil, this site has been undergoing detailed design and cost analysis, and consultation with the local community.
- **Pioneer-Burdekin pumped hydro:** Initial studies are underway for this site which has the potential to be the largest PHES in the world at 5 GW, with potential generation capacity 2.5 times that of Snowy 2.0.



The Government has set aside **\$273.5 million – including \$203.5 million new funding** – to advance consideration of the Borumba and Pioneer-Burdekin PHEs projects. This funding will support detailed engineering and environmental investigations, community engagement, and some early access works.

Environmental, including water, approvals are key for these projects. Engagement with community is vital and environmental, cultural, community and technical factors will all be considered before proceeding.

The Government will **establish a new publicly owned entity, ‘Queensland Hydro’**, to develop government PHEs assets. These foundational investments will be owned by Queensland and managed in the best interest of Queensland electricity consumers.

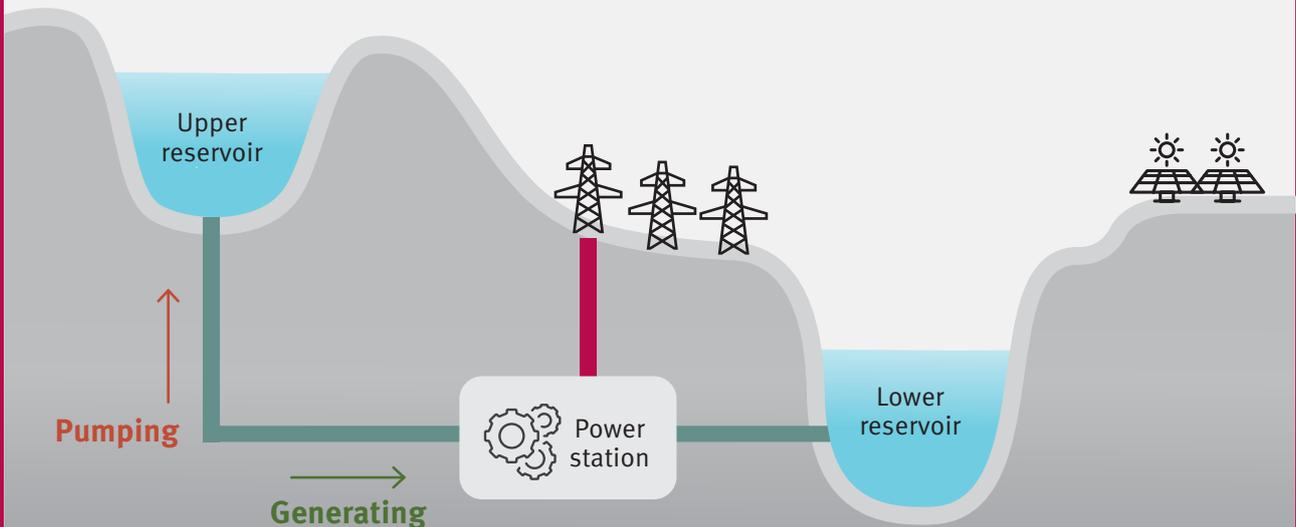
Implementation activities			
#	Description	Lead/s	Delivery
a.	Establish “Queensland Hydro” to deliver Queensland’s world-class large-scale PHEs assets	QT Powerlink	2022
b.	Progress assessment and some early works for Borumba PHEs	EPW QLD Hydro	2023
c.	Progress planning, analytical studies and community consultation for the Pioneer-Burdekin PHEs site	EPW QLD Hydro	2024-26

How does Pumped Hydro work?

Pumped hydro acts like a giant battery.

- it uses electricity from the grid or nearby renewables to pump water from a lower reservoir into an upper reservoir when energy prices are low
- when energy is needed, water is released from the upper reservoir into the lower reservoir, generating energy as it passes through a turbine
- hydroelectricity can be generated almost immediately and at any time, so power can be fed into the grid when it is needed.

- ✓ **Drives reliable power for a clean energy economy**
- ✓ **Stores renewable energy like solar and wind**
- ✓ **Provides on demand power when we need it**



Two sites in Queensland

- Borumba close to both central and southern Queensland
- Pioneer-Burdekin the battery of the north – the largest in the world

ACTION 1.3: Invest in more batteries and storage

As Queensland progresses toward its renewable energy target, batteries, firming and other storage options will become increasingly important for a reliable system.

The Queensland Government will **develop an Energy Storage Strategy for release in 2024**. This will outline Queensland’s storage and firming infrastructure needs, and encourage private sector investment in storage and firming, to maintain a reliable and resilient electricity system through the energy transformation. This strategy will focus on how much storage the energy system needs.

Battery storage also represents an opportunity to build manufacturing capacity in Queensland, and support more secure and local skilled jobs.

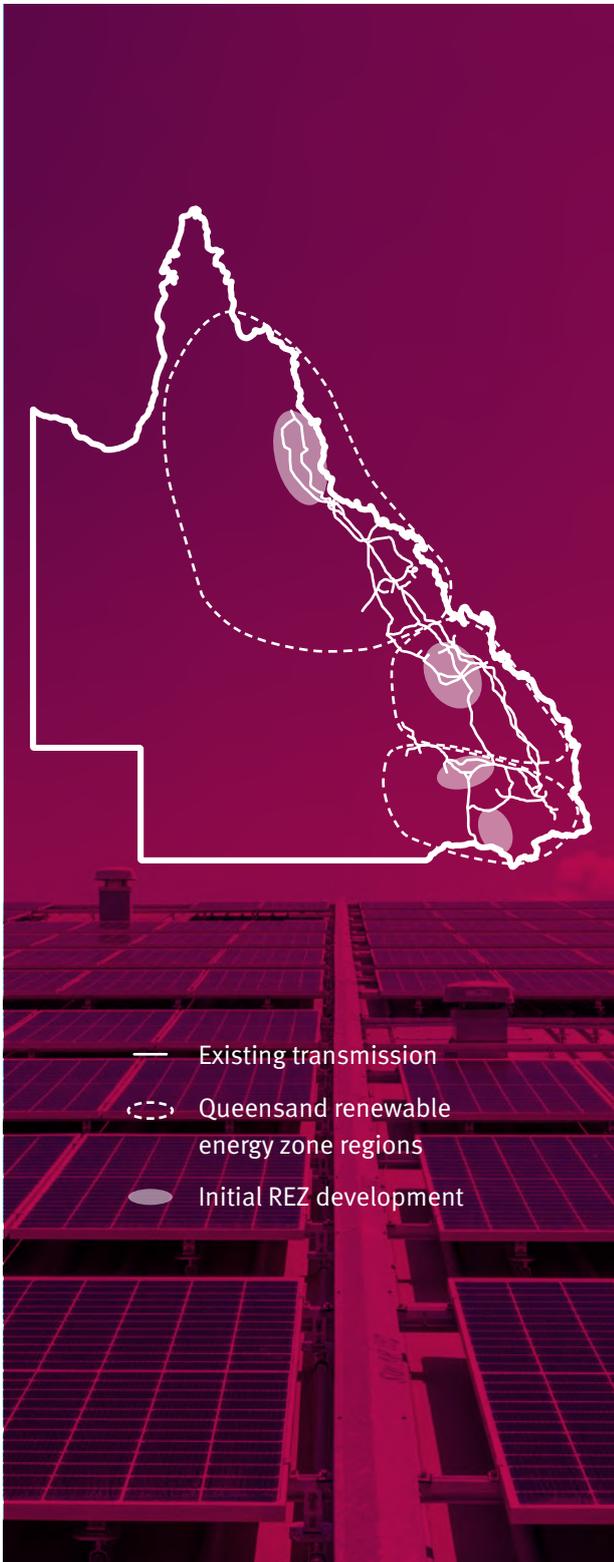
The Queensland Government is developing a new **Queensland Battery Industry Strategy**. The strategy will help grow Queensland’s local industry for battery minerals, chemicals and advanced manufacturing. This strategy is focused on growing Queensland’s role in the battery supply chain.

To start delivering the storage required now, the Queensland Government will **invest \$500 million for more large-scale and community batteries**. This new funding will be available through the Queensland Renewable Energy and Hydrogen Jobs Fund (QREHJF) for Queensland’s publicly owned energy businesses to invest in battery projects across the state that maximise local content.

This will support deployment of network batteries of different scales to provide additional energy storage to store excess rooftop solar and improve network resilience. This means that more Queenslanders will benefit from the abundant solar energy in the system and there will be more opportunities for local manufacturing.

This new \$500 million investment builds on the \$200 million already being invested by Energy Queensland for distribution scale batteries, including network and pole-mounted batteries, helping to provide reliable electricity supply.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Deliver \$500 million from the boosted QREHJF for investment in batteries by publicly owned energy businesses	QT EPW Energy GOCs	2022-26
b.	Release the Queensland Battery Industry Strategy	DSDILGP	2023
c.	Release the Energy Storage Strategy	EPW	2024



ACTION 1.4: Build more renewable energy and connect an additional 22 GW by 2035

To transform the energy system, modelling indicates that Queensland will need 25 GW of renewable energy by 2035. This means **connecting an additional 22 GW wind and solar** on top of the existing 3 GW currently operational in the Queensland system.

The Queensland Government has established three regions for developing Queensland Renewable Energy Zones (QREZ) in Northern, Central and Southern Queensland. These areas have high quality renewable resources, like strong wind and solar, which can be developed in a coordinated way to achieve Queensland's targets.

In these regions, the Queensland Government will work with communities to identify targeted areas that are the most prospective for renewable development, balancing other land uses and strategic objectives.

These smaller areas will be a declared REZ within each region. **A new framework, that is intended to be legislated, will enable Powerlink to develop declared REZ** with coordinated transmission infrastructure to connect more renewable energy.

There are three phases for developing the three QREZ regions:

- **Phase 1:** Building on strong foundations (2022–2024).
- **Phase 2:** Scaling and expanding opportunities (2024–2028).
- **Phase 3:** Preparing for net zero (post 2028).

As part of Phase 1, the Queensland Government has worked closely with Powerlink to make initial strategic investments through the \$145 million QREZ commitment made in 2020. Investments through the existing QREHJF have also been targeted in QREZ regions.

To further support renewable development, Powerlink will invest in the Central QREZ region with **\$365 million for the Gladstone Grid Reinforcement**. This investment is essential for supporting heavy industries in the region to decarbonise and ensuring more renewable energy can flow into Gladstone.

Gladstone is a critical location for future clean industrial growth and the renewable hydrogen industry. This investment will form the foundation for further growth and connection of more renewable energy.

\$2.5 billion boost to QREHJF for more publicly owned renewables

To deliver more publicly owned renewable energy, the Government is boosting the QREHJF to \$4.5 billion, with a \$2.5 billion injection from coal royalties. This funding will ensure publicly owned energy businesses can continue to invest in renewable energy, storage and hydrogen projects in the QREZ regions.

This additional funding will help deliver on the long-term targets for these regions to reach at least 25 GW of total renewable energy (3 GW operational and 22 GW additional).

6 GW in Northern Queensland:

- **Phase 1** - Initial investment into upgrades between Cairns and Townsville is delivering 500 MW capacity in the Far North Queensland REZ supporting the 157 MW Kaban Wind Farm representing \$370 million in investment.

8 GW in Central Queensland:

- **Phase 1** - The foundational Gladstone Grid Reinforcement will help establish the Banana Range REZ and Fitzroy REZ. The Government will also back Central Queensland wind farms as part of QREHJF.

11 GW in Southern Queensland:

- **Phase 1** - Initial investment to deliver 1,500 MW new capacity in the Southern Downs REZ with the connection of the MacIntyre Precinct which includes the MacIntyre and Karara Wind Farms worth \$2 billion in investment and 1026 MW.
- Through the QREHJF, the Government is also backing new wind farms for the Darling Downs worth almost \$1 billion (including Tarong West and the Wambo Wind Farm).

Working with Powerlink, the Queensland Government will develop a longer-term 'QREZ Roadmap' in consultation with communities during 2022 and 2023.

This Roadmap will chart future development including strategic land use analysis to identify the best locations for renewable development, and provide details on the phased approach for QREZ regions for renewable investors and the community. Regional Reference Groups will be established for each QREZ to provide input.

This work will inform and complement Regional Infrastructure Plans and Regional Plans.



Implementation activities

#	Description	Lead/s	Delivery
a.	Prepare legislation on the framework for QREZ development	EPW	2023
b.	Establish Powerlink as the Designated Planning Body for transmission in QREZ regions (subject to legislation)	EPW Powerlink	2023
c.	Undertake stakeholder consultation on QREZ Roadmap	EPW Powerlink	2023
d.	Deliver the Central Queensland Gladstone Grid reinforcement	Powerlink	By 2026

ACTION 1.5: Ensure reliability with low to no emissions gas

Gas is a vital energy source for Queensland’s industrial and mining sectors. Into the future, the SuperGrid will require around 3 GW of low to no emission gas to generate electricity at peak times, and to provide storage, firming and dispatchable capacity (as detailed in the Infrastructure Blueprint). Blending hydrogen with natural gas in the short term will provide lower emissions gas. In the long term, the objective is to shift towards renewable hydrogen (a zero emissions gas) to provide dispatchable power.

This is an important insurance policy for the state to make sure Queensland can meet electricity demand during peak times. It also creates a domestic demand source for a growing renewable hydrogen industry.

The Queensland Government will invest in a **new 200 MW hydrogen-ready gas peaking power station at Kogan Creek** from the QREHJF to be developed by CS Energy in partnership with Iberdrola.

This asset will complement CS Energy’s existing renewable hydrogen demonstration plant and 100 MW/200 megawatt hours battery at the Kogan Creek clean energy hub, diversifying the assets at this power station site for the future.

This investment into Kogan Creek is an example of how the Government will work with publicly owned energy businesses to modernise coal-fired power stations for the future.

It will be critical that Queensland’s gas supply can be relied on over the short to medium term. To maintain a reliable and affordable gas supply, the Queensland Government is working with industry and the Australian Government to explore options for secure gas to meet Queensland’s electricity needs (storage and firming) and investigate the role of renewable hydrogen in gas-fired power stations.



Artist impression of CS Energy Renewable Hydrogen Demonstration Plant

Implementation activities

#	Description	Lead/s	Delivery
a.	A joint venture to build, own and operate a new 200 MW hydrogen-ready gas peaking power station at Kogan Creek	CS Energy	2026
b.	Work collaboratively with industry and national bodies to help address gas supply shortfalls	EPW DoR	Ongoing
c.	Work with industry to investigate options for connecting the Bowen Basin to the East Coast Gas market and options to secure additional gas storage for electricity needs	DoR	Ongoing

ACTION 1.6: Grow the future renewable hydrogen industry

The Queensland Government has a long-standing commitment to the development of an economically sustainable and competitive renewable hydrogen industry to create new jobs and diversify Queensland's economy.

A renewable hydrogen industry has the potential to grow demand for renewable energy, assist in domestic supply for decarbonisation, and create the opportunity to export Queensland's renewable resources to the world. The **Queensland Hydrogen Industry Strategy 2019-2024** has a range of actions to increase Queensland's global competitiveness as a trusted supplier of renewable hydrogen.

To help realise the huge potential of the renewable hydrogen industry in the state, the Queensland Government will:

- commit up to **\$15 million to supercharge, coordinate and further plan for renewable hydrogen hubs** in key locations across the state.
- review the *Hydrogen Development – Guidance for Local Government*
- review the Queensland Hydrogen Industry Strategy and release a revised strategy to support the sector's growth
- invest up to **\$5 million to rollout a renewable hydrogen awareness program, including community hubs, over three years** to inform communities about the uses and benefits of hydrogen
- investigate the potential for a renewable hydrogen gas target, in consultation with industry.

Implementation activities

#	Description	Lead/s	Delivery
a.	Review the Hydrogen Development – Guidance for Local Government	DSDILGP	2022
b.	Complete technical and economic studies to supercharge domestic renewable hydrogen hubs	EPW DSDILGP	2023-2025
c.	Roll out a Renewable Hydrogen Awareness Program to share information with the community and build awareness	EPW DSDILGP	2022-2025
d.	Prepare legislation to support effective regulation of hydrogen development and use	EPW	2023
e.	Release an update of the Hydrogen Industry Development Strategy to cover 2024-2028	DSDILGP EPW	2023

ACTION 1.7: Deliver sustainable liquid fuels

Queensland is already leading the way and seizing opportunities in sustainable liquid fuels, boosting the E10 and the biodiesel supply chains with biofuels mandates. Sustainable liquid fuels will play an important role as both a transition fuel while alternatives such as hydrogen and electrification mature, and as a key

ongoing energy source for hard-to-abate sectors.

To unlock this opportunity, the Queensland Government will collaborate with industry, the Australian Government, customers, and other key stakeholders to accelerate the uptake of sustainable liquid fuels which will support industry development.

The Queensland Government will also develop a Fuels Strategy that sets out the vision for developing and using sustainable liquid fuels.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Collaborate with industry, Australian Government and customers to support development of sustainable liquid fuels	EPW	Ongoing
b.	Deliver a Fuels Strategy to accelerate the uptake of sustainable liquid fuels on the pathway towards net zero and beyond	EPW	2024

ACTION 1.8: Switch to renewable energy with new targets

As Queensland's energy system transforms, the Government can demonstrate leadership and move faster to drive more renewable energy into the system.

The Queensland Government has a long-standing commitment of 50 per cent renewable energy by 2030. This Plan will ensure Queensland not only achieves this target, but also continues to support higher levels of renewable energy in the system.

To make the Queensland Government ambition clear, the Government will prepare legislation to enshrine the **existing 50 per cent renewable energy target by 2030 in law, and two new renewable energy targets — 70 per cent by 2032 and 80 per cent by 2035.**

The Queensland Government is also committing to work towards **100 per cent renewable electricity for large government sites by 2030.** This includes Queensland's hospitals, schools, police stations, museums and libraries throughout the state.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Prepare legislation for the Queensland Government's renewable energy targets	EPW	2023
b.	Source 100 per cent renewable energy for all large government sites by 2030	All Departments	2030

ACTION 1.9: Advance Queensland's bioenergy future

Energy from biomass and organic waste has played an important role in Queensland's energy supply for many decades, with current installed capacity of around 500 MW in the state.

A diverse energy mix, supplemented with bioenergy, will help to deliver the clean, reliable and affordable energy system needed to both meet Queensland's

renewable energy targets and enable new industry growth, particularly in regional Queensland.

This supports industries (such as the sugarcane industry) to modernise bioenergy generation and use waste products for bioenergy.

The Queensland Government is **investing \$4 million to work with industry** to investigate options and pathways **to expand generation from under utilised biomass waste streams and support technology innovation.**

Implementation activities

#	Description	Lead/s	Delivery
a.	Register of Interest for feasibility and technical studies	DSDILGP	2023
b.	Finalise feasibility and technical studies to identify options and pathways to expand bioenergy generation and support technology innovation in the bioenergy sector	DSDILGP	2023-26

ACTION 1.10: Establish a new technical board for expert advice

The Queensland Government will establish new governance arrangements to ensure a smooth energy transformation, support delivery of the *Queensland SuperGrid Infrastructure Blueprint* and to meet the new renewable energy targets.

A new Queensland Energy System Advisory Board (QESAB) will be established to provide expert technical advice to Government on the energy transformation including updates to the Infrastructure Blueprint every two years from 2025 and an annual market snapshot.

Legislation will be prepared to support the establishment and operation of the QESAB. Refer to the implementation, accountability and transparency section for more information.

Implementation activities

#	Description	Lead/s	Delivery
a.	Prepare legislation to establish the Queensland Energy System Advisory Board	EPW QT	2023
b.	Prepare first annual market snapshot	QESAB	2023-24
c.	Prepare first <i>Queensland SuperGrid Infrastructure Blueprint</i> update	EPW QT QESAB	2025





2. Empowered households and businesses

Deliver affordable energy for households and businesses, and support more rooftop solar and batteries.



Focus area 2: Empowered households and businesses

Access to affordable electricity is essential to ease cost-of-living pressures for Queensland households and businesses.

Queenslanders have embraced rooftop solar and demonstrated to the world the benefits of a more decentralised energy system – one where the decisions of individuals shape real change.

Collectively, the energy produced by Queensland rooftops is already the largest renewable generator in the state.

Rooftop solar, battery storage and new devices like electric vehicles can all play a role in keeping electricity affordable and improving outcomes in the energy system for everyone.

ACTION 2.1: Deliver a smarter grid that benefits all Queenslanders

More Queenslanders are now investing in new smart technologies and generating electricity on their rooftops, storing this electricity in home batteries and using it to power their electric vehicles.

To enable more households to optimise their energy use, Queensland will need a smarter grid. Creating a smarter, integrated electricity system will require innovation, new technologies, regulatory reform, new data requirements and markets. It will be important to expand access to the benefits of these technologies to more Queenslanders in the process.

The effective integration of rooftop solar, home batteries and electric vehicles, which are (collectively referred to as Customer Energy Resources (CER),) means businesses and households can get the most out of their investments.

To accelerate the effective integration of CER for all customers, the Queensland Government will:

- target **100 per cent penetration of smart meters by 2030**
- encourage the **inclusion of electric vehicle charging infrastructure** in buildings
- increase the rollout of **dynamic connection arrangements** for customers
- increase network access and enable orchestration of CER
- **review the regulatory framework** for retail supply to remove barriers to delivering innovative products and services

Dynamic Connection Agreements are the future of energy connections in Queensland

More and more Queensland households and businesses own and use CER such as rooftop solar, household batteries, and electric vehicles. These technologies play a significant role in Queensland's energy ecosystem.

A dynamic connection agreement will allow households and businesses to access new and emerging market opportunities (via a retailer or aggregator) such as energy trading or Virtual Power Plants as they become available. Dynamic connections will allow more households to install rooftop solar and batteries while improving outcomes for everyone.

Dynamic connections will provide our network operators with data they can use to manage the 'two-way flow' of energy in 'real time'. This will help them ensure the safe and reliable supply of electricity to all customers.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Target 100 per cent penetration of smart meter devices with appropriate data sharing arrangements by 2030 by leveraging reforms by the Australian Energy Market Commission and other jurisdictional levers	EPW EQL	2030
b.	Develop and evolve a smart connections framework to streamline households and businesses connecting technologies to the network	EPW EQL	Ongoing
c.	Define the roles and responsibilities of Queensland's Distribution System Operator (DSO) in advance of the appointment of Energy Queensland as DSO to better coordinate energy use and supply to customers	EPW	2023-24
d.	Encourage the inclusion of electric vehicle charging infrastructure in buildings	EPW	Ongoing
e.	Increase rollout of dynamic connection arrangements for customers	EQL	Ongoing
f.	Increase network access and enable orchestration of CER	EPW EQL	Ongoing
g.	Review regulatory framework for retail supply to remove barriers to delivering innovative products and services	EPW	2023-25
h.	Publish updated technical and connection standards	EQL	Ongoing

ACTION 2.2: Deliver a new household program

The Queensland Government has a strong record of delivering affordable energy for Queenslanders. The state's public ownership position has meant that the dividends of Queensland's energy businesses can be passed through to Queenslanders as the owners of these businesses.

This year, the Queensland Government announced a \$175 cost of living rebate for Queenslanders, with this applied to bills from September 2022. This is the sixth household energy rebate that the Queensland Government has delivered since 2018, and brings the total electricity bill relief to more than \$1 billion.

The Queensland Government recognises that electricity costs are a key pressure for Queenslanders, and is committed to doing more to help households manage their energy use and bills. The Queensland SuperGrid will deliver clean, reliable and affordable power for generations. Independent modelling estimates, that with the Plan, typical household retail bills will be \$150 lower in 2032 than without a Plan.

The Queensland Government will also develop a new household program, including support for batteries, to further support Queenslanders manage their electricity use and bills.

ACTION 2.3: Support to reduce household bills

The Queensland Government will invest **\$10 million** to help households save on their electricity bills.

Funding will support non government organisations to improve access to energy efficiency advice and devices for hard to reach customer cohorts, to help them manage their energy use and reduce electricity bills.

Queenslander's experiencing vulnerability and those who have historically had limited engagement with the energy system (e.g. renters) will be prioritised.

This will help bring down the cost of electricity for customers who would benefit from additional assistance.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Applications from eligible non-government organisations open	EPW	2023
b.	Deliver energy efficiency advice, assessments, and install smart and efficient equipment to reduce customer bills	Awarded non-government organisations	2023-26

ACTION 2.4: Drive savings for small businesses

The Queensland Government will deliver a program to save businesses money on their electricity bills with the **\$35 million Queensland Business Energy Saving and Transformation (QBEST)** program targeting small to medium sized businesses.

The QBEST program will deliver support for businesses to purchase energy efficient equipment, smart technology (e.g. fans, pumps, HVAC) and to implement energy management systems.

This investment will help business to reduce their energy bills so they can spend money on other important aspects of their business, and expand to employ more people in rural and regional Queensland.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Applications open for QBEST	EPW	2023-25
b.	Successful applicants awarded and QBEST delivered	EPW	2023-25

ACTION 2.5: Integrate Queensland's zero emissions vehicles

The Queensland *Zero Emission Vehicle Strategy and Action Plan 2022–2030* will help to drive the uptake of electric vehicles across Queensland.

The Queensland Government will invest **\$12 million for charging infrastructure** and trials to support efficient integration of electric vehicles into the electricity system and **\$30 million to make government buildings ZEV ready**.

This \$42 million commitment is on top of already significant commitments, including \$45 million for rebates towards new electric vehicle purchases and \$10 million to support more public charging options.

This action will also support the replacement of government fleet vehicles (to seed the second-hand electric vehicle market) and updates to regulations and tariffs.



Implementation activities

#	Description	Lead/s	Delivery
a.	Replace all eligible government fleet vehicles with electric vehicles as leases expire, and where a suitable alternative is available and appropriate for business needs	QFleet	2026
b.	Establish a customer portal to provide information and advice to households and businesses on optimal electric vehicle charging timings and tariffs	EPW	2023
c.	Electric vehicle charging infrastructure delivered in public places at congested areas of the network and explore innovative “smart” integration and management of electric vehicle charging	EQL EPW	2023-26
d.	Deliver ZEV ready government buildings	EPW	2023-26



ACTION 2.6: Enable savings for commercial buildings with Environmental Upgrade Agreements

Energy savings for commercial building owners and tenants in Queensland can be supported with the adoption of **Environmental Upgrade Agreements (EUAs)**, which will ultimately also help them save on their electricity bills.

EUAs can contribute to Queensland’s emissions reduction targets by upgrading existing commercial buildings with energy-efficiency features. Local governments have an important role to play in supporting EUAs.

An EUA is a legal agreement between a commercial property owner, the local government and a finance provider. EUAs are usually long-term loans offered by a financier to the property owners with fixed interest and secured via a local government charge on land.

The loan is progressively paid back by the property owner via the council rates system. This initiative will be established and implemented following public consultation and consideration of amendments in the legislation.

Implementation activities

#	Description	Lead/s	Delivery
a.	Finalise the EUA framework through public consultation	EPW	2023
b.	Prepare legislative amendments to the Local Government Act 2009 and the City of Brisbane Act 2010 to enable the operation of EUAs	DSDILGP EPW	2024



ACTION 2.7: Ensure affordable electricity in regional and south east Queensland

Regional Queensland covers most of the state’s land mass but is home to only around one third of Queensland’s population. This can present challenges to ensuring regional Queenslanders can access affordable energy.

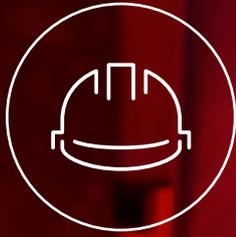
This is why the Queensland Government continues to implement its **Uniform Tariff Policy to ensure all Queenslanders pay a similar price for electricity no matter where they live.**

To continue delivering the longstanding Uniform Tariff Policy, the Government is providing combined support of **\$638.5 million in the 2022–23 State Budget**, comprised of \$635.2 million in Community Service Obligation payments for Ergon Energy Retail customers and \$3.3 million in tariff rebates for Origin Energy customers in the Goondiwindi area.

The Queensland Government is also working to keep prices affordable in south east Queensland, with a review of the regulatory market, new initiatives to help Queenslanders reduce their electricity bills and supporting more rooftop solar, supporting overall downward pressure on prices.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Continue current Uniform Tariff Policy arrangements	EPW QT	Ongoing
b.	Annual revision of Community Service Obligation Deed	EPW QT	Ongoing





3. Secure jobs and communities

Drive better outcomes for workers and communities as partners in the energy transformation.



Focus area 3: Secure jobs and communities

The energy transformation will drive investment and new opportunities into regional areas with 70 per cent of future clean energy jobs expected to be in regional Queensland. As the generation mix changes, the Queensland Government will support communities and workers to be partners in the energy transformation, to capture new opportunities to diversify local economies and create secure, ongoing, good jobs.

ACTION 3.1: Invest to modernise Queensland's publicly owned coal-fired power stations for the future

Queensland's publicly owned coal-fired power stations are the bedrock of the state's energy system and will play an important role in the future energy system. These power stations are in strong parts of the network with excellent grid connections, a highly skilled workforce, established community relationships, and land and other qualities providing strategic advantages.

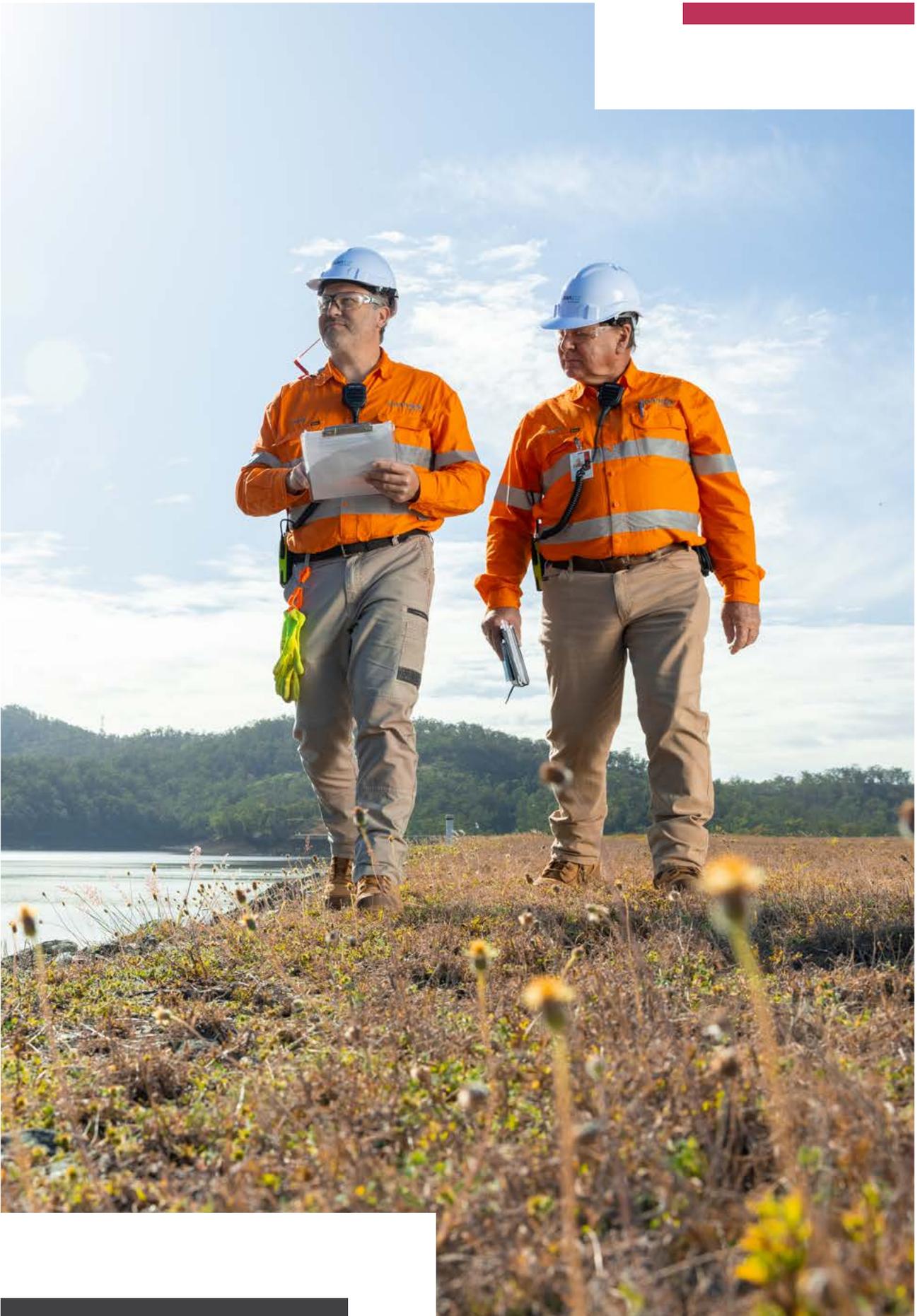
The Queensland Government will progressively **convert all publicly owned coal-fired power stations into clean energy hubs by 2035**. Clean energy hubs will provide critical system services to the electricity grid, which may include new generation, storage and firming, or renewable hydrogen assets. This will be done by **reserving** back-up capacity so Queensland has the power it needs as the system transforms, **repurposing** existing infrastructure and **reinvesting** into new clean energy infrastructure backed by the boosted \$4.5 billion QREHJF.

These changes will occur gradually from 2027 to ensure Queensland always has enough energy to meet demand. The Government will work directly with publicly owned energy businesses to develop proposals for clean energy hub investment.

Because the Queensland Government has kept its energy assets in public hands, Queensland has unprecedented control over its destiny. The Government will guide the transformation of the energy system and listen to the advice of experts to ensure that the system always remains secure and reliable.

Implementation activities

#	Description	Lead/s	Delivery
a.	CS Energy and Stanwell to invest in clean energy hubs	Energy GOCs	2035



ACTION 3.2: Support workers with a Job Security Guarantee

The Queensland Government will ensure workers in Queensland's publicly owned coal-fired power stations have a secure future, choices, and clear employment pathways and opportunities.

To do this, the Government will implement a new **\$150 million Job Security Guarantee**. This will support all workers in publicly owned coal-fired power stations and ensure no worker will be out of a job. The Guarantee will be backed by a fund and a new tripartite **Energy Workers' Charter** between unions, government and employers.

These workers will have guaranteed opportunities to continue their careers within publicly owned energy businesses or pursue other career pathways. The Government will do this by supporting workers to:

- undertake additional training or skills development to secure opportunities in the future energy sector or emerging industries
- transfer between publicly owned energy corporations to secure new, ongoing employment opportunities
- extend their career, where eligible, to support Queensland's safe, reliable, and secure energy system
- seek advice on career options with dedicated future pathway managers within Queensland's publicly owned energy businesses.

A Job Security Guarantee is an investment in Queensland's energy talent and will help to deliver Queensland's clean energy future.

The Government intends to prepare legislation for this Guarantee to create an enduring framework and certainty for workers.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Implement the Queensland Energy Workers' Charter and the Job Security Guarantee Fund	EPW	2023
b.	Prepare legislation to support implementation of the Job Security Guarantee	EPW	2023
c.	Establish dedicated future pathway managers to assist workers to develop their career pathway	Energy GOCs	2023
d.	Leverage existing workforce programs and training programs to support delivery of the Job Security Guarantee	Energy GOCs	Ongoing



ACTION 3.3: Prepare Queensland's workforce and regions for growth

Queensland will need the right skills to build new clean energy infrastructure and industries. To successfully position Queensland workers and regional communities to capitalise on the pipeline of clean energy investment, the Queensland Government will:

- establish a new **Energy Industry Council** to provide advice to Government on new opportunities and pathways for workers and their communities.
- appoint a new **Queensland Renewable Energy Jobs Advocate** to provide advice to Government and champion future secure jobs in the renewable energy sector
- develop a **Future Energy Workforce Roadmap** which will outline steps to build and develop workforce capacity and capability, while making sure the right training is available in the right locations
- working with Powerlink, invest \$90 million to establish two new regional transmission and training hubs for critical skills that will be needed in the energy transformation.

Implementation activities

#	Description	Lead/s	Delivery
a.	Establish two new regional transmission and training hubs for critical skills development, including employment of apprentices	Powerlink	2023-26
b.	Deliver the Future Energy Workforce Roadmap	DESBT	2023
c.	Appoint a Queensland Renewable Energy Jobs Advocate	EPW	2023-24
d.	Establish the Energy Industry Council to provide advice to government	EPW	2023-24

ACTION 3.4: Grow the renewable energy supply chain in Queensland

The clean energy infrastructure outlined in this Plan to build the SuperGrid will create a pipeline of investment to help expand Queensland's share of the renewable energy supply chain and increase the use of local content on projects.

By 2035, approximately 12 GW of new large-scale wind and 10 GW of new large-scale solar is set to be developed in the QREZ regions. This represents around 2,000 to 3,000 potential turbines and 36 million solar panels.

New household, community and utility scale batteries will also be deployed across the state, and could be manufactured in Queensland guided by the Queensland Battery Industry Strategy and leveraging Queensland's competitive advantages in recycling and processing of critical minerals.

To maximise opportunities for more local manufacturing and jobs from renewable investment, the Queensland Government is committed to 'Buy Local' to provide local businesses with access to the government market and stimulate regional economies.

Building Queensland's SuperGrid will support onshore manufacturing of components for renewable energy, storage and transmission infrastructure to create more jobs in regional communities. Procurement by energy government owned corporations will be in accordance with the Government's *Buy Queensland* Policy.

The Government will also commit **\$11.6 million to help build capacity in the manufacturing sector and encourage local content** in Queensland to supply future projects. This commitment will include undertaking detailed local supply chain studies across priority renewable technologies and QREZ regions.

Funding will also help investigate end-of-life recycling and manufacturing of renewable energy components. This will complement the Advanced Manufacturing 10-Year Roadmap and Action Plan 2022–26 to support manufacturers to grow with more local content on renewable energy projects.

Of the \$11.6 million, **\$7.1 million will be invested to deliver a grant program for up to 400 Queensland manufacturing small and medium enterprises** to increase their competitiveness in a low carbon future. Grants are for energy efficiency measures that reduce energy costs and operational emissions.

Implementation activities			
#	Description	Lead/s	Delivery
a.	Release local content targets to develop renewable energy supply chains and outline relevant policy mechanisms to improve investment certainty	EPW	2023-24
b.	Deliver detailed studies for priority technologies (e.g., wind)	EPW	2023-24
c.	Build capacity in the manufacturing sector including end-of-life and recycling opportunities	DSDILGP	2024
d.	Build capacity to manufacture components for priority technologies (e.g., wind, batteries, electrolyser)	DRDMW and DSDILGP	2023
e.	Publish guidelines and open the \$7.1 million grant program for energy efficiency grants to manufacturers	DRDMW	2023
f.	Award successful applicants for grant program	DRDMW	2024

ACTION 3.5: Clean energy for remote and First Nations communities

Ensuring that regional and remote communities, including First Nations communities, can share the benefits of clean, reliable and affordable energy into the future is a critical part of an inclusive SuperGrid. In June 2022, the Queensland Government committed **\$10 million to deliver a Queensland Microgrid Pilot Fund** to improve network resilience of these communities.

The Government is committed to zero net electricity emissions across Energy Queensland's isolated power stations. To achieve this commitment, an inclusive **Remote and First Nations clean energy strategy will be co-designed** by remote First Nations communities and the Queensland and Australian governments. Energy Queensland will be directed to update its *Isolated Networks Strategy 2030* taking into account the Australian Government initiatives to chart a pathway to net zero.



Implementation activities

#	Description	Lead/s	Delivery
a.	Implement national reforms on third party owned microgrids and standalone power systems adapted to the Queensland context as necessary	EPW	2024
b.	Queensland Microgrid Pilot Fund guidelines released	EPW	2022
c.	Energy Queensland to update their Isolated Networks Strategy 2030 and complete feasibility studies to decarbonise isolated power stations in each community.	EPW	2023-2025
d.	Scope, consult and co-design on Remote and First Nations Clean Energy Strategy	EPW	2023-25
e.	Remote and First Nations Clean Energy Strategy released	EPW	2026

ACTION 3.6: Partner with industries and communities to maximise benefits from the energy transformation and drive regional economic opportunities

At the heart of the energy transformation is Queensland's communities. The Queensland Government is committed to partnering with communities to maximise benefits and regional opportunities.

The Queensland Government is establishing a **new \$200 million Regional Economic Futures Fund (REFF) to support economic and community development initiatives**. This fund will target areas like Central Queensland. The Government will work with communities during 2023 to outline the approach for delivering this fund.

The Queensland Government is also publishing a **Regional Energy Transformation Partnerships Framework** to maximise the local benefits from clean energy driven by this Plan. Through the Partnerships Framework, communities, industry, and local and state government will work together on priority actions to support the energy transformation in regional Queensland. The Partnerships Framework is being released in draft to provide Queenslanders with an opportunity to further shape our clean energy future.

Community consultation from late 2022 will help to identify further actions as well as inform the design of the REFF.

To underpin initial actions within the Partnerships Framework, **\$35 million** from the Queensland Government's \$145 million commitment to develop the QREZ will be allocated to deliver on improving strategic planning for QREZ, new functions under proposed legislation, and community support for renewable development.

Initial actions developed to deliver on the key principles for the energy transformation include:

- commencing a review of the planning framework for renewable energy development
- developing policies for offshore wind, end-of-life and recycling of renewable components
- preparing a range of guidance materials to promote best practice
- enhancing co-existence outcomes for renewable energy development including opportunities for development at unused mine sites
- establishing an ongoing community survey to provide robust evidence to Government
- investigating initiatives to enhance benefits from QREZ development including opportunities for enhanced services (e.g. internet connectivity)
- working directly with communities to support locally led planning and resilience
- delivering on other initiatives in this Plan that support local benefits and better community outcomes.

Principles for the energy transformation are:

- **Principle 1: Drive genuine and ongoing engagement**

Demonstrate an inclusive approach to engaging and working with communities as partners in the energy transformation.

- **Principle 2: Share benefits with communities**

Deliver on opportunities to share the financial and other benefits of energy development with local communities.

- **Principle 3: Buy local, build local**

Expand local procurement, manufacturing, and supply chain opportunities from energy development, and work with local businesses to enable greater participation.

- **Principle 4: Increase local jobs and secure work**

Prioritise the employment of local people wherever possible including the development of training opportunities, promoting greater workforce diversity, and embedding improved standards for secure work.

- **Principle 5: Preserve Queensland's environment**

Ensure the development of clean energy maximises opportunities for positive co-existence, preserves the local environment and promotes greater biodiversity.

- **Principle 6: Empower First Nations peoples**

Empower First Nations peoples as part of the energy transformation, underpinned by inclusive engagement to enhance opportunities for employment and business participation.

- **Principle 7: Build local capacity**

Build the capacity of local communities to realise the benefits from clean energy development, and positively manage changes associated with the energy transformation.

The Partnership Framework will empower local voices and local choices, and position communities to see real and lasting benefits from increased economic development in their regions. The Queensland Government will consult on the Framework and partner with communities to shape it and identify additional actions for maximising benefits from the energy transformation.

Implementation activities

#	Description	Lead/s	Delivery
a.	Develop and publish funding guidelines for the Regional Economic Futures Fund	DSDILGP	2023
b.	Consult on the draft Regional Energy Transformation Partnerships Framework	EPW	2022-23
c.	Deliver initial actions as part of the Regional Energy Transformation Partnerships Framework	EPW	2023-26
d.	Outline additional actions for the Regional Energy Transformation Partnerships Framework identified through community consultation	EPW	2023-26

Implementation, accountability and transparency

The **Queensland Government** will work across agencies to **deliver** and **monitor progress** against the **Plan**.

This will include the release of a biennial updates to the Infrastructure Blueprint from 2025 and annual progress reports. To ensure Queensland stays on track to meet the targets and respond to changing market conditions and technology innovations, the Queensland Government will establish new energy transformation governance frameworks.

This framework includes a new:



Renewable **Transformation Bill**

To be prepared in 2023 to legislate the new renewable energy targets, governance framework, the Job Security Guarantee and key enabling mechanisms like the Queensland Renewable Energy Zones framework.



Queensland Energy System **Advisory Board**

To provide technical advice to Government on updates to the Infrastructure Blueprint every two years starting from 2025, including on how to accelerate the transformation, and for an annual market snapshot to ensure Queensland continues to achieve the National Electricity Objectives.



Energy Industry **Council**

To provide advice to Government on a smooth transformation for workers and their communities. This Council will also provide input to key actions under the Plan including the Future Energy Workforce Roadmap and the Job Security Guarantee.



Take part

The Queensland Government will consult with communities during late 2022 and 2023 on key implementation activities in the Plan including:

- a **QREZ Roadmap** on the long-term development of QREZ regions to deliver at least 22 GW of new renewable energy
- the draft **Regional Energy Transformation Partnerships Framework** to deliver real and lasting benefits in communities from the energy transformation.
- a **Future Energy Workforce Roadmap** to provide the training and skills needed for the future energy system
- an **Energy Storage Strategy** to incentivise more investment in batteries, storage and firming technologies

To learn more about consultation activities near you and have your say, visit the Queensland Energy and Jobs Plan website at qld.gov.au/energyandjobsplan





September 2022

**Queensland Energy and Jobs Plan released.
Queensland SuperGrid Infrastructure
Blueprint released.**

From late 2022

Community consultation

- Cairns
- Thursday Island
- Townsville
- Mount Isa
- Mackay
- Emerald
- Kingaroy
- Rockhampton
- Gladstone
- Biloela
- Gympie
- Toowoomba
- Brisbane
- Gold Coast

From 2023

Publish key implementation documents

- QREZ Roadmap
- Additional actions identified from community consultation under the Regional Energy Transformation Partnerships Framework
- Future Energy Workforce Roadmap
- Energy Storage Strategy





Globally competitive
clean energy will make
Queensland
an **investment**
destination of choice

Queensland is building a SuperGrid – this is the new generation, storage and transmission needed to deliver clean, reliable and affordable power to Queenslanders.



Megawatt (MW) and Gigawatt (GW):
A measure of output from a generator (1000 MW = 1 GW this is enough to power around 300,000 homes)



Dispatchable generation: Sources of electricity that can be switched on and off and ramp their power output up and down based on market needs.



Demand: The amount of power consumed at any time.



Peaking plants: Generators that run when demand is high. For example, gas-fired generators that can respond quickly.



Electricity grid: Often referred to as 'the grid', this includes the transmission and distribution networks that carry electricity from generators to energy users.



Renewable energy: Energy that comes from renewable sources, such as sun and wind.



Baseload power: Generating units that typically produce power continuously and provide most of the power used by consumers.



Hydrogen: A clean, renewable fuel that can be used in transport, power supply and a range of industrial processes.

QUEENSLAND ENERGY AND JOBS PLAN

Power for **generations**



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