



Queensland Renewable Energy Zone Roadmap

Energising our regions and industries

March 2024

Queensland Renewable Energy Zone Roadmap

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Interpreter



The Queensland Government is committed to providing accessible services to Queenslanders from all culturally and linguistically diverse backgrounds. If you have difficulty in understanding this document, you can contact us within Australia on 13 QGOV (13 74 68) and we will arrange an interpreter to effectively communicate the report to you.

Acknowledgement of Country

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 and present 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 have in the delivery of Queensland's energy system and is committed to ensuring they benefit from the development of a new, clean energy system. As we work together to deliver a clean, reliable and affordable energy system, the Queensland Government is committed to genuine partnerships and meaningful engagement with Queensland's First Nations people.



The work was commissioned as part of our commitment to strong engagement with Aboriginal and Torres Strait Islander communities, staff and stakeholders. The Department of Energy and Climate works with and in communities to build a sustainable and prosperous future for all Queenslanders. Building communities strengthens connections and creates a sense of belonging. Local First Nations graphic design artist Casey Coolwell-Fisher created the design. Casey is a Quandamooka, Nunukal woman of Minjerribah (North Stradbroke Island). With her husband, Roy (a Wakka man from Cherbourg), they created their company CHABOO as a way to share their stories through their artwork.



“ Renewable energy zones will ensure communities and the environment benefit from the biggest economic transformation project that Queensland has ever embarked upon”

Hon Mick de Brenni MP, Minister for Energy and Clean Economy Jobs

Kidston solar farm.
Picture: Genex Power



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This document is for information purposes only and does not constitute investment advice.



Our Renewable Energy Zone Vision

To foster thriving communities and a clean energy economy through the development of Renewable Energy Zones which lower costs, create job opportunities and achieve Queensland's renewable energy targets through coordinated planning and investment.



Minister's Foreword

It is an exciting time for Queensland as we accelerate towards a renewable energy powered future. We are on track to deliver our renewable energy targets of 50 per cent renewables by 2030, 70 per cent by 2032 and 80 per cent by 2035.

Renewable energy is transforming our economy, bringing new investments and opportunities for generations to come.

Queensland has developed a unique Renewable Energy Zone (REZ) framework that ensures communities are partners in the development of our state. This builds on our work to improve local outcomes from the energy transformation through the \$9.25 million Local Energy Partnerships framework released in October 2023 and the \$200 million Regional Economic Futures Fund.

The Renewable Energy Zone Roadmap lays out a framework that will strategically connect around 22 gigawatts (GW) of new grid-scale renewable energy in 12 potential locations across Queensland.

Supported by proposed new laws, Renewable Energy Zones will enable proactive planning, meaningful engagement and careful coordination

of the energy transformation for the benefit of our regional communities. It will help deliver on the estimated 100,000 new jobs from the energy transformation by 2040.

As part of delivering this roadmap, the Queensland Government is committing to:

- \$6 million for kicking off the Central Queensland Strategic REZ Readiness Assessment in the first half of 2024, and the Strategic REZ Readiness Assessments for North, Far North and Southern Queensland in late 2024.
- Initial focus on the first phase of REZ development including Callide.
- Allocating \$20 million from the Regional Economic Futures Fund to action outputs from REZ Readiness Assessments.
- Undertaking a review into how the Queensland Government can better manage community feedback about large-scale energy infrastructure development.

I thank all those who provided input into the draft roadmap across the state. This has been a collaborative effort between communities, local councils, industry experts and the Queensland Government.

Connecting the right renewable technologies at the right time and in the right locations will deliver tangible and long lasting benefits to our communities and economy.

I look forward to working further with stakeholders and communities across the state as we continue on our path to net zero emissions by 2050.

Mick de Brenni MP

Minister for Energy and Clean Economy Jobs



Renewable Energy Zones explained

A Renewable Energy Zone or ‘REZ’ is an area that is strategically planned to connect multiple clean energy generators and deliver better outcomes for Queensland communities and industries.

A REZ connects electricity generators, like wind and solar projects, in a coordinated way to optimise renewable development and network infrastructure. REZs consider factors like natural resource availability, existing grid infrastructure, and environmental, community and economic implications.

A REZ uses shared infrastructure to reduce costs and take advantage of economies of scale. REZ development includes comprehensive planning for associated ports, roads, bridges, waste management, water, workforce, housing and other elements that are fundamental to the coordinated development of grid-scale renewable energy.

New laws are being established for Queensland’s REZ framework to ensure better coordination of energy infrastructure while delivering long-term benefits.

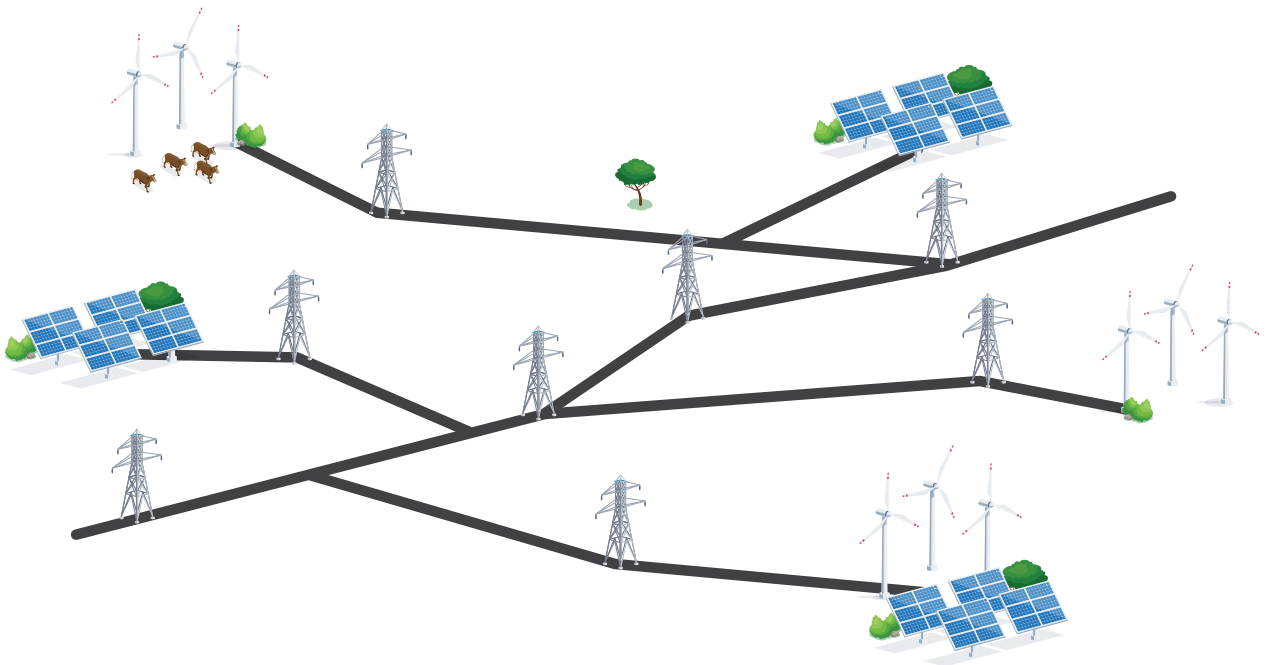
The Queensland Government is also supporting REZ planning in Regional Plans to ensure a coordinated approach to energy transformation and better coexistence outcomes.

Currently, 12 locations across Queensland have been identified as potential locations for REZs. These locations will be further refined and progressively planned and developed over time in partnership with communities.

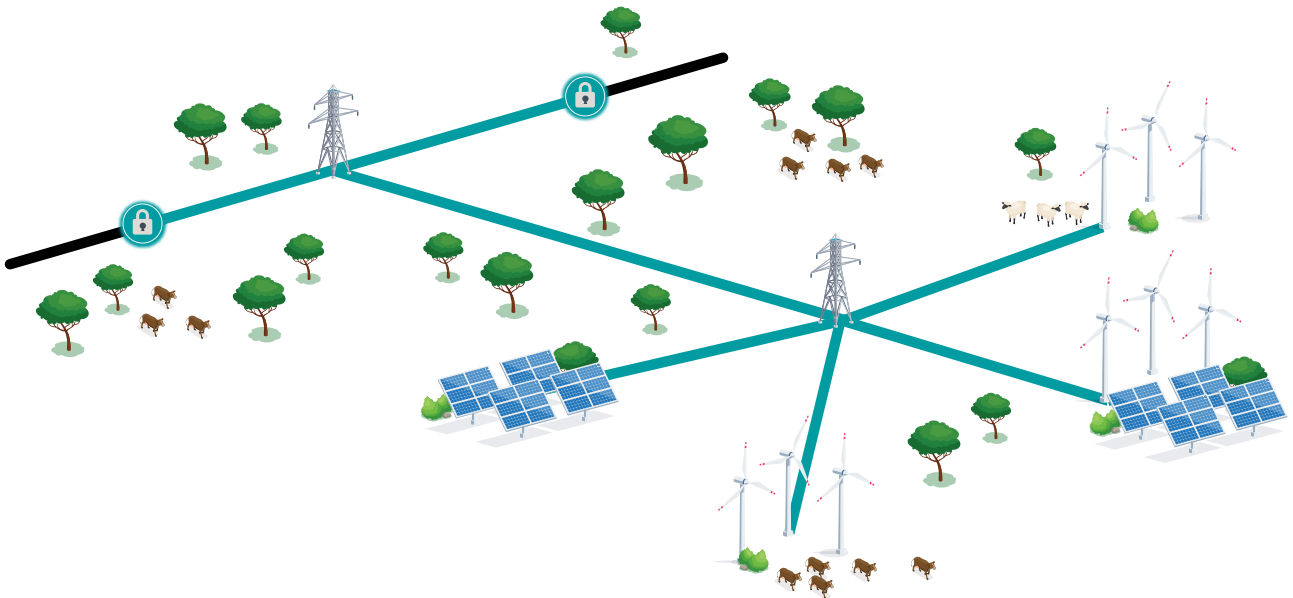
In years to come, the Queensland SuperGrid Infrastructure Blueprint and the REZ Roadmap may identify potential additional REZs, in line with investor interest, Queensland household energy needs and future industries.




The Queensland REZ Roadmap provides the ability to better plan for and coordinate the development of renewable energy projects, network connections and associated local infrastructure like roads and bridges. This framework minimizes the overall footprint of development to improve local outcomes — moving from uncoordinated development to coordinated REZ development.

Uncoordinated development



Coordinated REZ development



	Transmission network		REZ optimised connections
	Coordinated REZ transmission network		

The importance of REZs

As a key component of the government's Queensland Energy and Jobs Plan (QEJP), REZs will be instrumental for connecting the renewable energy needed for a clean, competitive economy, as well as achieving Queensland's targets for 50 per cent renewable energy by 2030, 70 per cent by 2032 and 80 per cent by 2035.

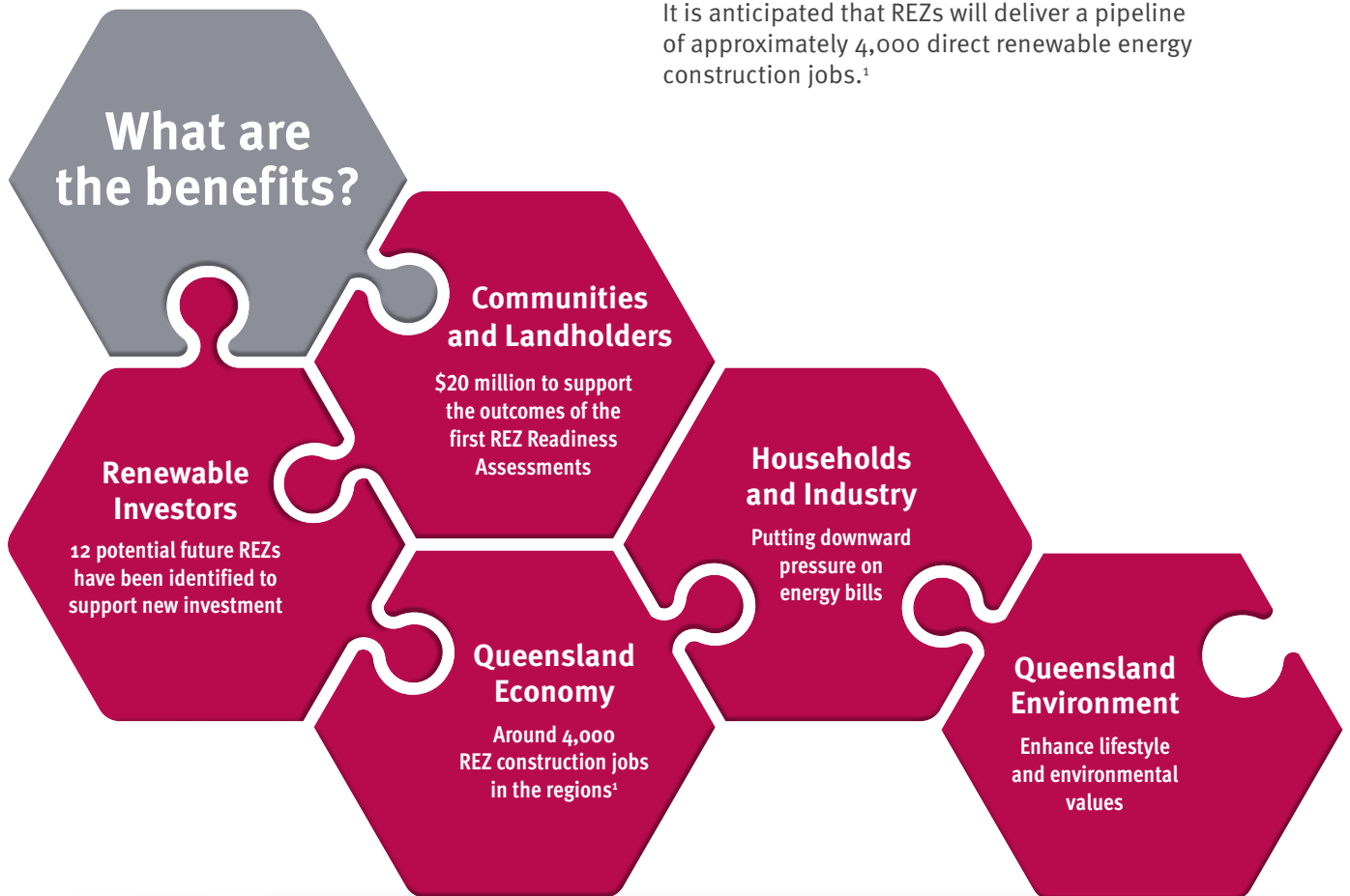
To achieve these targets, the Queensland energy system needs around six times more large-scale wind and solar generation by 2035 than is currently operating in the state. To meet net zero emissions by 2050, even more renewables will be needed to support broader industry decarbonisation efforts and the growing renewable hydrogen industry.

There is already a strong pipeline of renewable projects in Queensland. The approach to REZs in Queensland provides a framework for improved coordination in connecting these projects, while managing impacts holistically and growing local opportunities.

REZs are critical to ensuring Queenslanders have access to stable, affordable energy in the long-term. While each REZ will be unique, it is estimated that efficiency savings through coordinated REZ development could lower Queenslanders' household electricity bills. These cost savings will be realised through forward planning and economies of scale in connection infrastructure.

Coordinating network connections in a REZ allows for better outcomes for communities, environment, and industry in the region. Early planning through REZ Readiness Assessments will identify regional opportunities as part of REZ development, local infrastructure needs, as well as ways to manage potential local impacts.

It is anticipated that REZs will deliver a pipeline of approximately 4,000 direct renewable energy construction jobs.¹



¹ All REZ job estimates throughout this roadmap are average renewable energy project construction jobs over the course of REZ development. These figures are based on the University of Technology Sydney best practice estimates.



Existing engagement mechanisms

Local Economic Opportunities Network, stakeholder advisory committees and other existing groups for engagement to capture regional perspectives.



REZ Local Reference Groups

Focused groups to support diverse local input on specific REZs throughout development.



Community Leader Councils

As part of the expanded role for the Gasfields Commission Queensland, these groups will be established and provide input on coexistence.

Communities as partners in REZ development

Communities are at the heart of Queensland's future clean energy system.

The Queensland Government will continue to use existing mechanisms such as the Local Economic Opportunities Network, established by the Department of State Development and Infrastructure, which assists regional councils and communities with decarbonisation and the economic opportunities associated with a decarbonised economy. This will streamline consultation and ensure coordinated engagement on energy and broader issues facing communities.

As part of the expanded role for the GasFields Commission Queensland, independent Community Leader Councils will be established to provide input on coexistence challenges for energy and support coordinated energy planning.

For each specific REZ community, a local reference group will be established with members including local stakeholders across community, local businesses, landowners, and cultural representatives to capture local diverse voices.

These will be established over time, aligned to the timing of REZ development in that region.

Through the Energy (Renewable Transformation and Jobs) Bill 2023, the Queensland Government is enshrining key commitments from the QEJP in law,

including putting in place a Renewable Energy Jobs Advocate to work with communities to maximise job and training opportunities in the energy industry.

In October 2023, the Queensland Government released the Local Energy Partnerships (LEP) framework aimed at amplifying local voices, local choices and local benefits as part of the energy transformation. The Queensland Government will continue to roll out initiatives under this framework to improve local outcomes, including:

- Expanding the role of the GasFields Commission Queensland to renewables.
- Promoting the coexistence of renewable energy, agriculture and other industries in communities.
- Enhancing stakeholder engagement and better equipping communities through the energy transformation.
- Partnering with local councils to support engagement with the energy transformation.
- Working with the Office of the Coordinator General to facilitate renewable energy development.
- Reviewing planning frameworks for renewable energy to ensure efficient assessment pathways and growing acceptance of projects by the community.

In response to stakeholder feedback, the Queensland Government will review how it could better manage community concerns and complaints about large-scale energy infrastructure development.

Proactive and careful assessments

Supporting communities is not only about the benefits of renewable energy development, but also about understanding the broader community priorities and leveraging the incoming investment to enhance liveability and local infrastructure.

The Queensland Government has allocated up to \$6 million to undertake initial REZ Readiness Assessments to better understand the potential suitability of areas for REZ development and \$20 million from the Regional Economic Futures Fund (REFF) to support the outcomes of the first REZ Readiness Assessments.

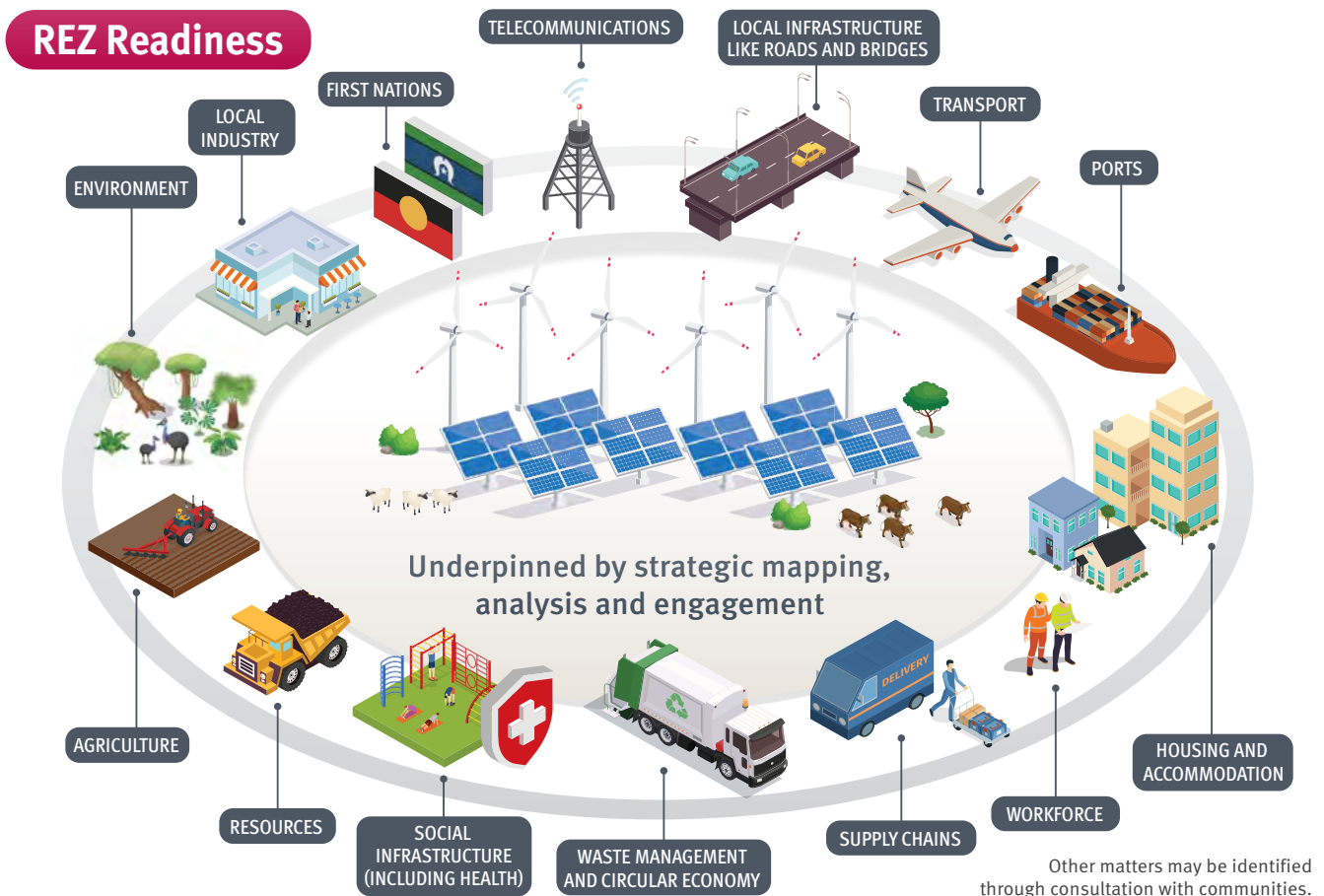
REZ Readiness Assessments will identify strategies for maximising the opportunities associated with REZs, as well as ways to manage potential local impacts. REZ Readiness Assessments will occur at a strategic regional level and a detailed local level for each of the potential REZ locations where needed. These will help to identify local infrastructure needs and opportunities based on a holistic view of the REZ and pipeline of projects in the area.

Readiness assessments will aim to identify environmental issues and opportunities upfront alongside economic and social considerations. These assessments will investigate a range of matters including infrastructure, transport, housing and

accommodation, workforce, supply chains, waste management, environment, other land uses and social infrastructure, as well as local industry and First Nations considerations, and other issues.

The Queensland Government will work closely with local communities to ensure local input underpins the assessments and the development of recommendations.

Outcomes from the assessments will inform work across government, and include strategic mapping and analysis. The Queensland Government will also be engaging with the Australian Government through the process on opportunities for alignment. Measures for mitigating local impacts will be delivered in partnership with Powerlink and the Office of the Coordinator-General, resulting in increased coordination, facilitation and potential programs of work. Strategies for maximising the opportunities and delivering benefits from renewable energy development will be identified and prioritised based on specific community priorities.



REZ Readiness Assessments are set to kick-off in 2024, with an initial focus on Central Queensland for a Strategic Assessment and the first phase of REZs including Callide. Engagement with communities will commence in the first half of 2024. Strategic REZ Readiness Assessments for North and Far North Queensland as well as Southern Queensland will commence later in 2024.



Planning our regions

The emerging Queensland Government Regional Growth Framework (RGF) provides a framework to align agency efforts to support regions to grow and prosper by gathering and analysing regional economic, social and environmental data to inform placed based strategic priorities. Updated statutory regional plans are a component of the RGF and help manage land use conflicts arising between land use priorities, including renewable energy, resources, and agriculture.

Regional planning processes can help to prioritise key energy infrastructure needed for REZs and manage conflicts and priorities that may arise between land uses, including renewable energy, resources, and agriculture. REZ Readiness Assessments will support regional planning by understanding the impacts, opportunities and benefits for each REZ community. Generation and transmission infrastructure within REZs will still need to undergo planning and assessment processes required by all levels of government. The \$200 million REFF was established in 2022 to support communities in seizing industry development opportunities arising from global decarbonisation efforts, as part of the Queensland New-Industry Development Strategy and QEJP. Specific outcomes of the first REZ Readiness Assessments will be supported with \$20 million from the REFF.

REZ development stages

There are four stages to developing a REZ. Communities, landholders, First Nations peoples and key industry stakeholders will help shape the REZ roll out, and each REZ will move through these stages at different speeds, starting at different times, in line with Queensland's energy needs and investor interest.

Early development

Before an area is identified as a potential REZ, there may be early development activities in some communities by renewable energy project developers exploring potential sites. Developers are often surveying locations for prospective renewable projects many years before these projects are committed. This may include activities like engaging with landholders, measuring wind speeds and undertaking early financial analysis.

Not all areas where a renewable project has been identified will be a REZ. Instead, REZs will focus on the areas that are most prospective for development, with the aim of coordinating the connection of multiple generators in an efficient way.

The Queensland Government is working with the renewable energy industry to improve practices and ensure developers are listening to local voices and partnering with communities to drive local benefits.

STAGE 1: Planning REZs with Communities

This stage involves long-term planning for potential REZ locations and early work to inform the future development of REZ Management Plans. It involves engagement with communities and the renewable energy sector to understand the suitability of an area for REZ development. Potential REZ locations are guided by a range of factors including investor interest, alignment with broader system transformation and compatibility with other land uses. These potential locations are identified in the REZ Roadmap and will be incorporated into the SuperGrid Infrastructure Blueprint which is updated every two years.

During this stage communities can expect to see:

- The Queensland Government undertaking Strategic REZ Readiness Assessments through engagement with communities to understand whether potential locations for REZ development are suitable and how best to support the social, environmental and economic needs of regions and communities hosting future REZs.
- Renewable energy developers advancing their projects, engaging with landholders and surrounding community, assessing financial viability, and conducting planning and environmental assessments.
- Powerlink, as the REZ Delivery Body, working with renewable energy developers to gather information about projects located around potential REZs. This information will help inform the development of a proposed REZ Management Plan.

STAGE 2: Consultation and Declaring a REZ

This stage involves formal consultation with communities on a draft REZ Management Plan for a specific REZ, providing opportunities to shape the plan for REZ development. As part of this process, the Queensland Government may also commission a Detailed REZ Readiness Assessment to understand and plan for the immediate local needs of the host community. Following extensive consultation, the REZ will be formally declared to commence development.

During this stage communities can expect to see:

- The Queensland Government working with local stakeholders, including establishing local reference groups, and engaging on Detailed REZ Readiness Assessments to guide REZ development and understand local, social, environmental, and economic needs and priorities.
- Powerlink consulting on a draft REZ Management Plan, including the eligibility criteria that will be used to select participating renewable projects in the REZ.
- Renewable energy developers continuing to engage with community to progress project development assessments, while providing feedback on the draft REZ Management Plan. If projects are assessed as eligible per the REZ Management Plan they can continue to negotiate connection agreements with Powerlink to connect into the REZ.



STAGE 3:

Construction and Operation

This stage involves the physical construction and operation of the REZ including the required network infrastructure upgrades and renewable projects. Connecting renewable projects may be committed and built at different times. Local infrastructure will be upgraded to support REZ development and plans implemented to manage the impacts of construction on communities. New jobs, investment and social and economic opportunities will flow to communities with open and continuous dialogue through the REZ local reference group.

During this stage communities can expect to see:

- The Queensland Government continuing to implement REZ Readiness initiatives to support REZ host communities and engaging through the local reference groups.
- Powerlink engaging with REZ host communities and the local reference groups to progress final network design as well as the construction, connection, commissioning and operation of the REZ.
- Renewable energy developers (who have been approved to connect to the REZ) finalising their projects. This includes engaging with landholders and the community, securing financing, finishing planning and environmental assessments, and completing construction.
- Local reference groups engaging on local priorities through construction and operation.

STAGE 4:

Commissioned

This stage involves the REZ being fully operational with all connecting projects completed. The REZ framework will operate for at least 15 years, however some of the assets and projects may have a longer asset life. Opportunities for recycling throughout REZ development are being investigated including ongoing economic opportunities. Communities will continue to shape priorities for investment through the operational life of the REZ and provide input on end-of-life considerations.

During this stage communities can expect to see:

- The Queensland Government supporting communities throughout the REZ lifecycle and continuing to engage with local reference groups including ongoing opportunities.
- Powerlink operating the REZ in line with the lifecycle of different network and connecting assets.
- Renewable energy projects in the REZ operating and considering decommissioning or reinvestment in line with the REZ Management Plan and project approvals. Some projects may extend their operating life through reinvestment, while others may decide to decommission as guided by statutory conditions and market conditions.







The REZ Roadmap

Potential REZs in Queensland have been identified across phases to facilitate 22GW of additional renewable energy by 2035, needed to reach Queensland's renewable energy targets. The ultimate size, location and timing of REZs may evolve based on analysis of available network capacity, renewable resources, project pipeline, investor interest, land use and optimal network expansion, among other reasons. Additional REZs may be identified in the future to support Queensland energy needs through updates to the SuperGrid Infrastructure Blueprint and REZ Roadmap.

What is the SuperGrid Infrastructure Blueprint?

The SuperGrid Infrastructure Blueprint is designed to implement the foundational infrastructure to enable Queensland to decarbonise the electricity system. Updated every two years, the Blueprint outlines the optimal infrastructure pathway to transform Queensland's electricity system and achieve Queensland's renewable energy targets.

		MW of expected installed generation	 IN-FLIGHT	 PHASE 1 EARLY-MID 2020s	 PHASE 2 MID-LATE 2020s	 PHASE 3 EARLY 2030s
Southern Queensland	Southern Downs REZ	2,000-2,600	✓			
	Western Downs REZ	2,000-2,600	✓			
	Woolooga REZ	1,800-2,400			✓	
	Darling Downs REZ	1,600-2,000			✓	
	Tarong REZ	2,000-2,600				✓
Central Queensland	Callide REZ	2,000-2,600		✓		
	Calliope REZ	1,500-2,000		✓		
	Isaac REZ	1,400-1,800			✓	
	Capricorn REZ	1,400-1,800			✓	
North and Far North Queensland	Far North Queensland REZ	500-700	✓			
	Collinsville REZ	1,600-2,000			✓	
	Flinders REZ	2,000-2,400			✓	

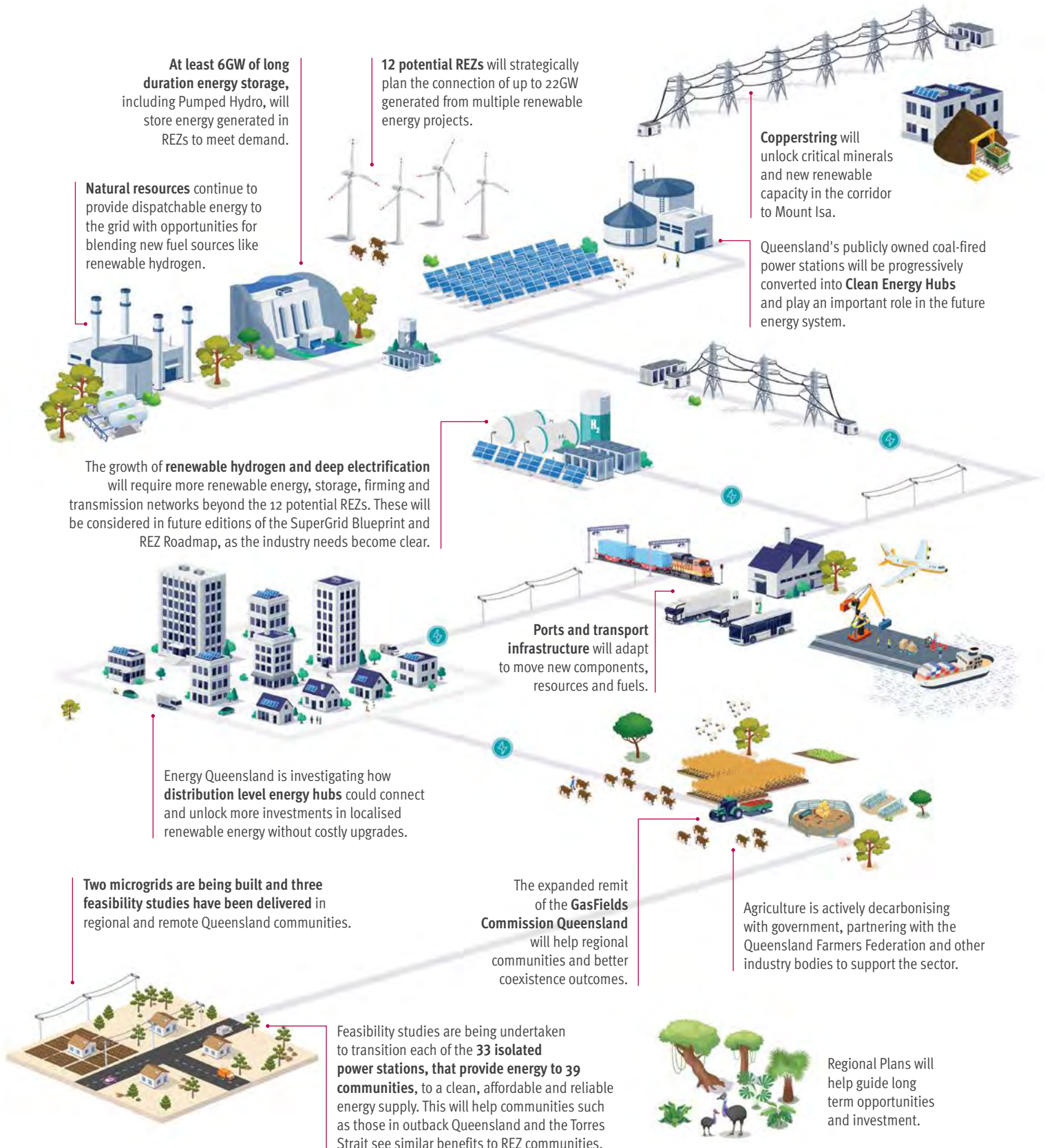


In-flight REZs

The In-flight REZs identified in the REZ Roadmap are already progressing under the existing National Electricity Rules with a foundation project in development. An In-flight REZ may be converted to a declared REZ at a later date.

Holistic energy transformation in Queensland

Regardless of location, Queenslanders should be able to benefit from and actively participate in the energy transformation. Guided by the QEJP, the Queensland Government is working with industry partners on a range of clean energy initiatives. Each initiative plays a role in our broader energy ecosystem.



At least 6GW of long duration energy storage, including Pumped Hydro, will store energy generated in REZs to meet demand.

12 potential REZs will strategically plan the connection of up to 22GW generated from multiple renewable energy projects.

Copperstring will unlock critical minerals and new renewable capacity in the corridor to Mount Isa.

Natural resources continue to provide dispatchable energy to the grid with opportunities for blending new fuel sources like renewable hydrogen.

Queensland's publicly owned coal-fired power stations will be progressively converted into **Clean Energy Hubs** and play an important role in the future energy system.

The growth of **renewable hydrogen and deep electrification** will require more renewable energy, storage, firming and transmission networks beyond the 12 potential REZs. These will be considered in future editions of the SuperGrid Blueprint and REZ Roadmap, as the industry needs become clear.

Ports and transport infrastructure will adapt to move new components, resources and fuels.

Energy Queensland is investigating how **distribution level energy hubs** could connect and unlock more investments in localised renewable energy without costly upgrades.

Two microgrids are being built and three feasibility studies have been delivered in regional and remote Queensland communities.

The expanded remit of the **GasFields Commission Queensland** will help regional communities and better coexistence outcomes.

Agriculture is actively decarbonising with government, partnering with the Queensland Farmers Federation and other industry bodies to support the sector.

Feasibility studies are being undertaken to transition each of the **33 isolated power stations, that provide energy to 39 communities**, to a clean, affordable and reliable energy supply. This will help communities such as those in outback Queensland and the Torres Strait see similar benefits to REZ communities.

Regional Plans will help guide long term opportunities and investment.

REZs are one part of a broad ecosystem of initiatives designed to foster a holistic energy transformation throughout Queensland.



REZs in North and Far North Queensland

Boasting abundant renewable energy resources, and vital for reducing the state's emissions whilst preserving our natural environment, the north of our state is expected to be home to at least three REZs.



- Potential North and Far North Queensland Renewable Energy Zones
- Existing transmission lines
- Proposed Backbone Transmission
- Queensland Microgrid Pilot Fund - Build projects
- Queensland Microgrid Pilot Fund - Feasibility studies
- Significant Pumped Hydro Energy Storage projects in development
- Isolated and remote power stations in focus for the Remote and First Nations Clean Energy Strategy (in development)

	MW of expected installed generation	IN-FLIGHT	PHASE 1 EARLY-MID 2020s	PHASE 2 MID-LATE 2020s	PHASE 3 EARLY 2030s
Far North Queensland REZ	500-700	✓			
Collinsville REZ	1,600-2,000			✓	
Flinders REZ	2,000-2,400			✓	

As new opportunities emerge over time and in line with changing market conditions, additional REZs may be identified in the future and capacities may change. These potential REZs identified are in the Far North Queensland, North Queensland and Mackay, Isaac and Whitsunday regions.

**Up to 5,100 MW
of expected new
renewable generation
installed in REZs**

**Creating up to 900
renewable energy
construction jobs
throughout development**

3 potential REZs



North and Far North Queensland have unique advantages in the energy transformation.

An In-flight REZ and two potential future REZs in North and Far North Queensland are expected to generate up to 900 direct renewable energy construction jobs throughout REZ development.

The area has experience operating 14 wind and solar farms, with a further 26 renewable energy projects in the pipeline.

A growing clean energy workforce is being trained at Powerlink's Transmission and Training Hub in Townsville, with further skilling opportunities to be delivered at an Electric Vehicle and Energy Training Centre currently under construction in Mackay.

The CopperString project is set to transform renewable development in Hughenden and will connect the North West Minerals Province to the grid through a new 840km transmission line from south of Townsville to Mount Isa, supporting the critical minerals industry.

Near Mackay, the planned development of the Pioneer Burdekin Pumped Hydro Project will unlock more renewable capacity in the region and help ensure a

reliable energy system. This will be supported by the Kidston Pumped Storage Project, which will create an additional 900 construction jobs.

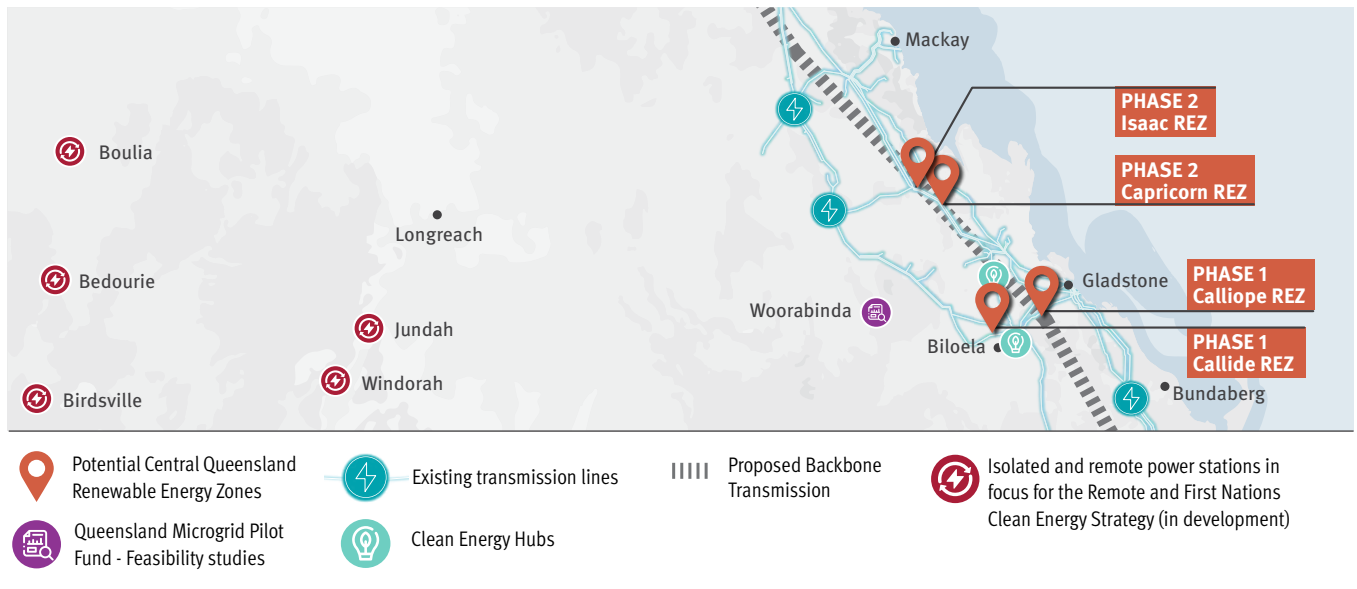
The area's publicly owned transport and logistics hubs are already attracting strong interest from investors due to their capacity to import and export renewable energy parts through world-class ports.

North and Far North Queensland remain strongly positioned for hydrogen production with both the Australian Government's announcement of the Townsville Regional Hydrogen Hub and the State Government's Abbot Point Activation Initiative. Further renewable energy resources will be required to unlock this potential.

A Strategic REZ Readiness Assessment for the region, proposed to commence in 2024, will investigate ways to preserve the unique beauty of this area while identifying new employment and regional economic growth opportunities. The collaborative bioregional planning underway with the Australian Government will be essential for preserving biodiversity in areas like the Wet Tropics, providing clear signals for investors in clean energy technologies.

REZs in Central Queensland

With its diverse and expanding economy, Central Queensland is strategically positioned to benefit from the energy transformation.



	MW of expected installed generation	IN-FLIGHT	PHASE 1 EARLY-MID 2020s	PHASE 2 MID-LATE 2020s	PHASE 3 EARLY 2030s
Callide REZ	2,000-2,600		✓		
Calliope REZ	1,500-2,000		✓		
Isaac REZ	1,400-1,800			✓	
Capricorn REZ	1,400-1,800			✓	

As new opportunities emerge over time and in line with changing market conditions, additional REZs may be identified in the future and capacities may change. These potential REZs identified in Central Queensland are in Mackay, Isaac and Whitsunday and Central Queensland regions.

Central Queensland has some key advantages and opportunities for REZ development.

There are four potential future REZs in the region, generating an estimated 1,400 direct construction jobs during development and attracting further investment into the region.

The area has experience operating nine solar farms, with one wind farm under construction and 48 renewable projects in the pipeline to maximise the strong wind and solar resources along the Great Dividing Range.

These projects will help meet the rising renewable energy demand in the area, such as from heavy industry in Gladstone which represents a significant proportion of the state's energy demand. Publicly owned coal-fired power stations in the region will also be critical to the future energy system as they are transformed into clean energy hubs.

To support Central Queensland's growing clean energy workforce, Powerlink has established the interim Gladstone SuperGrid Training Centre and Transmission Hub.

**Up to 8,200 MW
of expected new
renewable generation
installed in REZs**

**Creating up to 1,400
renewable energy
construction jobs
throughout development**

4 potential REZs



The centre accommodates various roles, including community and cultural relations, project management, field staff, health and safety officers, training personnel, engineers, support services and tradespeople. Since opening in May 2023, the hub has been instrumental in developing the critical skills required for the ongoing transformation.

The area's world class ports, including the publicly owned Port of Gladstone, make Central Queensland a critical location for future industrial decarbonisation activities and the development of a renewable hydrogen industry. This includes the CQ-H2 project, Queensland's largest renewable hydrogen project.

In recognition of this, and to support heavy industry development, the Queensland Government, through

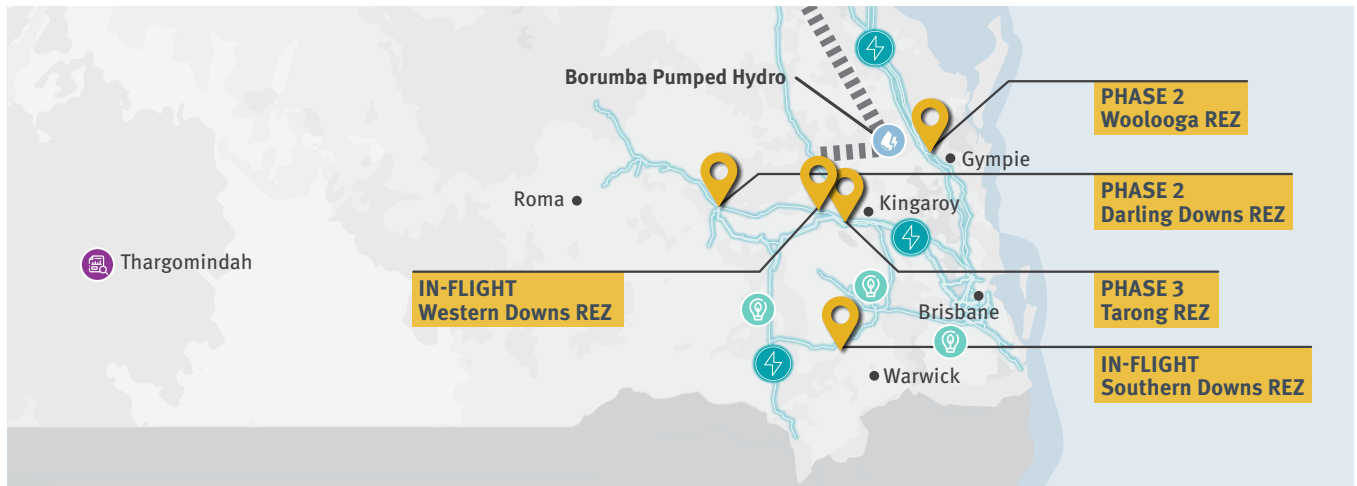
Powerlink, is delivering \$365 million for the Central Queensland Grid Reinforcement project. This will form the foundation for flow-on benefits for the entire region and cements the region as a future renewable hydrogen powerhouse.







As part of the Strategic REZ Readiness Assessment starting in 2024, opportunities for fostering growth and decarbonisation in key local industries such as agriculture, construction, minerals processing and manufacturing, as well as supporting emerging industries like the renewable hydrogen sector, will be considered alongside other important matters.

Detailed REZ Readiness Assessments will also focus on REZs in the first phase of development in this region including Callide.

REZs in Southern Queensland

Southern Queensland is renowned for its extensive farming and agricultural sector and abundant resources.



-  Potential Southern Queensland Renewable Energy Zones
-  Queensland Microgrid Pilot Fund - Feasibility studies
-  Existing transmission lines
-  Clean Energy Hubs
-  Significant Pumped Hydro Energy Storage projects in development
-  Proposed Backbone Transmission

	MW of expected installed generation	IN-FLIGHT	PHASE 1 EARLY-MID 2020s	PHASE 2 MID-LATE 2020s	PHASE 3 EARLY 2030s
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Woolooga REZ	1,800-2,400			✓	
Darling Downs REZ	1,600-2,000			✓	
Tarong REZ	2,000-2,600				✓

As new opportunities emerge over time and in line with changing market conditions, additional REZs may be identified in the future and capacities may change. These potential REZs identified in the south of Queensland are in the Wide Bay Burnett and Darling Downs regions.

**Up to 12,200 MW
of expected new
renewable generation
installed in REZs**

**Creating up to 2,200
renewable energy
construction jobs
throughout development**

5 potential REZs



Queensland's south, including the Darling Downs and Wide Bay Burnett regions have unique advantages and opportunities for REZ development. There are two In-flight REZs already underway and a further three potential future REZs in Southern Queensland. REZ development in this area is predicted to create approximately 2,200 renewable energy construction jobs throughout REZ development and bolster existing renewable investment in the area.

The area has experience in delivering 17 operating wind and solar farms, with a further five renewable projects under construction and 31 renewable projects in the pipeline.

Kogan Creek Power Station, Tarong Power Station and Swanbank Power Station are being transformed into future clean energy hubs. Boosting economic opportunities, these hubs will generate clean energy jobs and support Southern Queensland's emerging hydrogen sector.

The planned development of the Borumba Pumped Hydro Project will support energy reliability and security, providing opportunities for Southern Queensland's large agribusiness sector to decarbonise.

With a history of successful renewable projects taking advantage of strong wind and solar resources, a close proximity to the Queensland New South Wales Interconnector (QNI), and existing investments in wind and hydrogen, the area is well placed to deliver clean energy right across the nation.

Beginning in 2024, the Queensland Government will undertake a Strategic REZ Readiness Assessment for REZ development in Southern Queensland. Workforce, housing, infrastructure needs and other matters will be investigated to understand community needs.

Timeline of key activities



September 2022

QEJP and Supergrid Infrastructure Blueprint released outlining the pathway to achieve 80 per cent renewable energy by 2035.



June 2023

Exposure draft of the Energy (Renewable Transformation and Jobs) Bill outlining key commitments and frameworks in law released for consultation and stakeholder submissions.



July 2023

Draft REZ Roadmap outlining potential locations for REZ development and the REZ framework released for consultation and stakeholder submissions.

Consultation activities throughout 2023 on improving local outcomes from the energy transformation.

October 2023

Local Energy Partnerships framework outlining initiatives to support local voices, local choices and local benefits released in response to feedback from consultation.

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Mid 2024

The Energy (Renewable Transformation and Jobs) Bill expected to be debated and passed, locking in new targets, establishing new governance arrangements and infrastructure frameworks for the Queensland energy transformation.

Early 2024

REZ Roadmap released and commencement of REZ Readiness Assessments to further plan for REZ development in partnership with communities.

Stakeholder Insights Report published summarising themes from submissions and feedback throughout 2023 on the energy transformation.

2025

First update to the SuperGrid Blueprint under the new legislation, outlining the pathway to achieve Queensland's renewable energy targets, including updates to the REZ Roadmap.

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2024