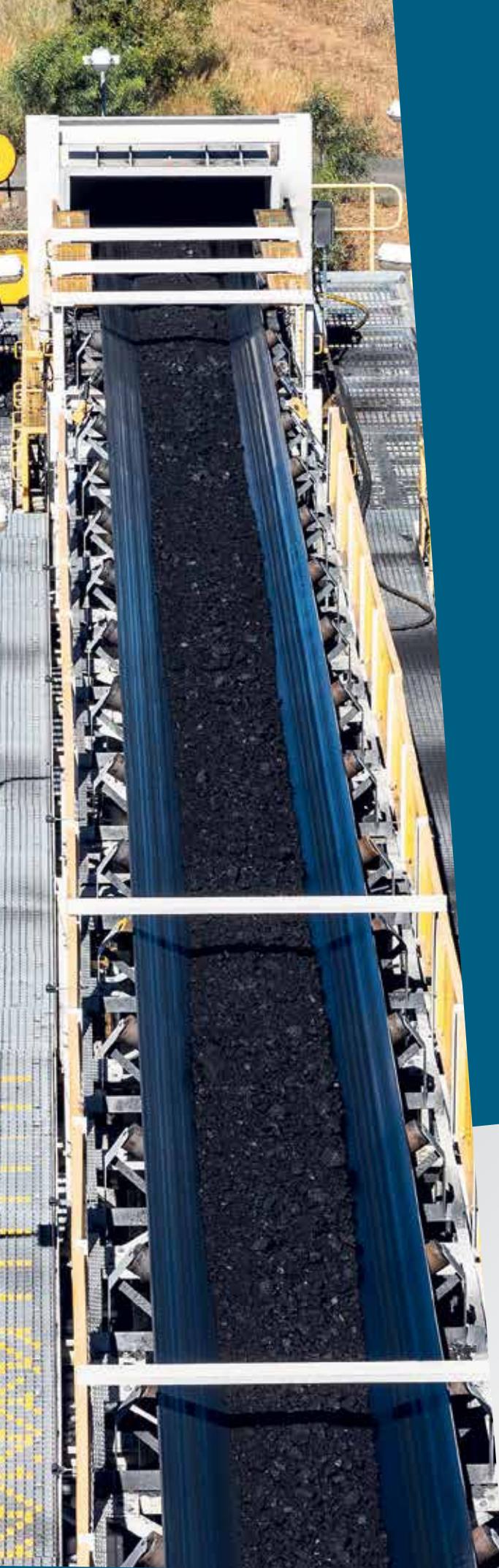




CENTRAL HIGHLANDS MINING AND ENERGY CAPABILITY STATEMENT





The Central Highlands is one of Australia’s most significant resources and energy regions, underpinned by a diverse mix of coal, natural gas, renewable energy, and mining services capabilities. Located within the world-class Bowen Basin, the region supports long-established operations alongside an active pipeline of new developments and emerging energy technologies.

Coal remains a cornerstone of the regional economy, with 10 operating open cut and underground mines producing more than 50 million tonnes annually – around a quarter of Queensland’s total output. Approximately 60 percent of production is metallurgical coal, supplying global steelmaking markets, with the balance being high-quality thermal coal for domestic and export power generation. The sector is supported by a strong development pipeline, including multiple brownfield extensions and greenfield projects at various stages of assessment.

Complementing coal, the Central Highlands has a growing natural gas sector, producing both coal seam gas and conventional gas for domestic supply and liquified natural gas export. The region is also emerging as an important renewable energy location, with large-scale solar generation, battery storage projects, and future wind and bioenergy opportunities contributing to Queensland’s evolving energy mix.

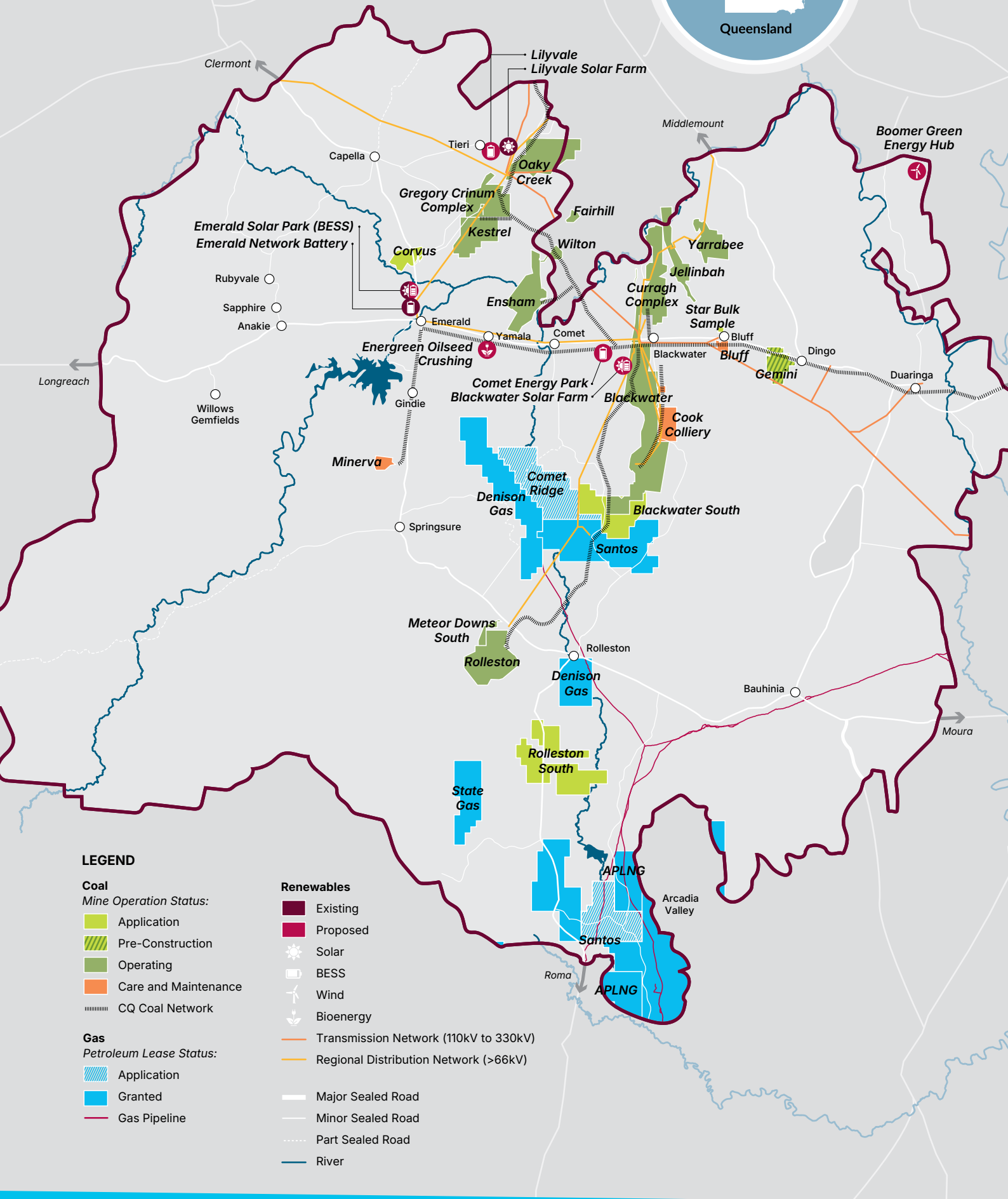
The region’s mining and resources industries generate approximately \$16 billion in annual output and directly employ more than 6,700 people, with a broader workforce exceeding 11,000 when contractors, including project and shutdown labour, are included. This is supported by a highly skilled labour force and a strong local mining equipment, technology and services sector.

Strategic rail, road, pipeline, and transmission infrastructure underpins the region’s competitiveness, enabling reliable access to domestic and international markets.

With these strengths, the Central Highlands is positioned as a region of scale and capability, well-equipped with the infrastructure, workforce and services to support continued growth across resources and emerging energy sectors.

Contents

Coal	4	Renewables	20
Current Operations	6	Solar & Battery Storage	21
Care and Maintenance.....	12	Wind.....	22
Future Projects	13	Bioenergy	22
Innovation.....	14	METS	23
Gas	15	Rehabilitation.....	25
Current Operations	17	Bibliography	26
Exploration.....	19	Glossary of Terms.....	26
Innovation.....	19	About CHDC.....	27



LEGEND

Coal

- Mine Operation Status:*
- Application
 - Pre-Construction
 - Operating
 - Care and Maintenance
 - CQ Coal Network

Gas

- Petroleum Lease Status:*
- Application
 - Granted
 - Gas Pipeline

Renewables

- Existing
- Proposed
- ☀️ Solar
- 🔋 BESS
- 🌬️ Wind
- 🌱 Bioenergy
- Transmission Network (110kV to 330kV)
- Regional Distribution Network (>66kV)
- Major Sealed Road
- Minor Sealed Road
- Part Sealed Road
- River

COAL



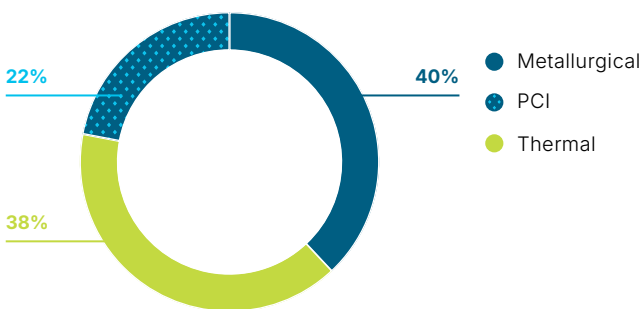
The Central Highlands is one of Australia's key producers of high-quality metallurgical and thermal coal, supported by 10 operating mines and an active development pipeline.

The mining sector is a major contributor to the region's economy, generating approximately \$16 billion annually and accounting for almost three quarters of total output.

PRODUCT

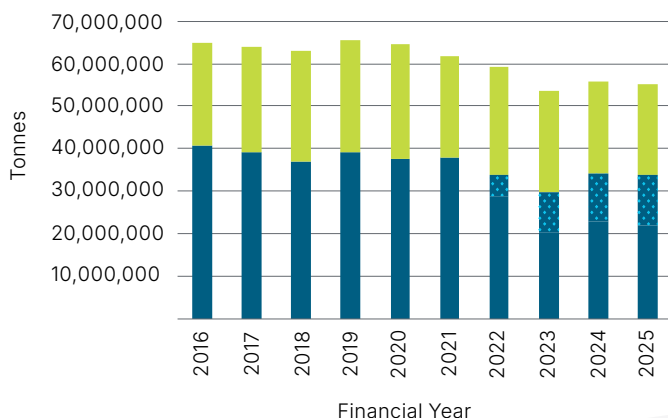
More than 60 percent of the extracted coal is metallurgical, including coking coal and pulverised coal for injection (PCI). Metallurgical coal is high in carbon, low in moisture, and a critical ingredient in steelmaking. Demand is expected to remain stronger and more stable than demand for thermal coal, highlighting the strategic value of the Central Highlands' reserves.

The remaining coal is thermal, used for generating steam and electricity. Thermal coal from the region is valued for its high energy yield and relatively low moisture and sulphur content.



PRODUCTION

Coal production in the Central Highlands has remained consistently strong over the past decade, averaging 60 million tonnes per annum (Mtpa). Output peaked in the 2019 financial year before easing in response to global market shifts, operational challenges, and adverse weather events. Production has stabilised at approximately 55 million tonnes annually in recent years.



● Metallurgical ● PCI ● Thermal

WORKFORCE

Mining is the largest employer in the Central Highlands. At the 2021 Census, the direct mining workforce exceeded 6,700 people, representing around 35 percent of the region's total workforce.

The Queensland Government Statistician's Office (QGSO) provides a broader estimate of the resource industry workforce, capturing both employees and contractors engaged at resource operations, including project and shutdown labour and outsourced maintenance activities. In June 2024, QGSO estimated the Central Highlands resource industry workforce at 11,240 workers, with approximately 60 percent contractors and 40 percent employees.

Non-resident workers form a significant part of this workforce. In 2024, there were 5,555 non-resident workers in the region, an eight percent increase from 2023 and the fourth consecutive year of growth. The majority drive-in, drive-out (DIDO) from Rockhampton and Gladstone (35%) or fly-in, fly-out (FIFO) from South East Queensland (34%).

The Central Highlands has a strong base of trade-qualified and technically skilled workers, with 38.9 percent of the workforce holding certificate qualifications, compared with 26.6 percent across Queensland.

INFRASTRUCTURE & LOGISTICS

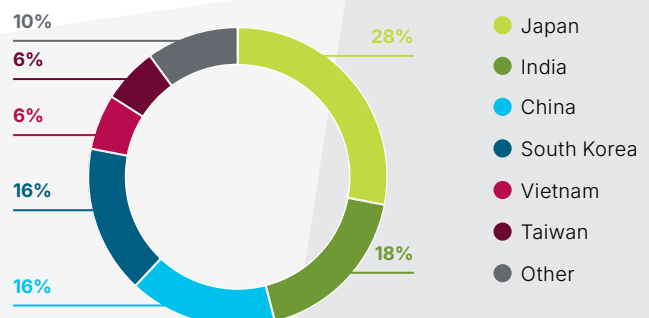
Aurizon operates and manages the Central Queensland Coal Network, which comprises four major coal systems. The Blackwater System services Central Highlands mines, transporting coal to Stanwell Power Station, Gladstone Power Station, and the Port of Gladstone via the North Coast Line.

The Port of Gladstone is the fifth-largest multi-commodity port in Australia and has eight wharf precincts, including the RG Tanna and Wiggins Island coal terminals. Around 670 vessels carrying approximately 64 million tonnes of coal passed through the port in the 2025 financial year.

Oaky Creek is also serviced by the Goonyella System, which carries product to the Port of Hay Point, comprising the Dalrymple Bay and Hay Point coal terminals.

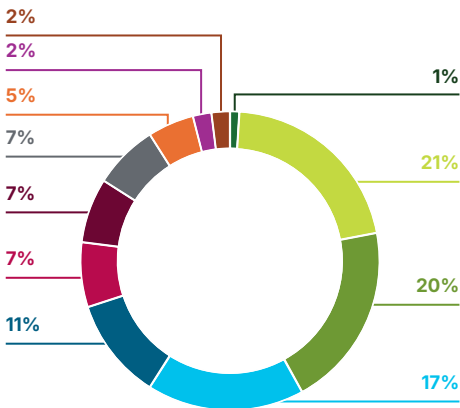
MARKETS

The Central Highlands is known for its high-quality coal and reliable long-term supply, serving major international markets including Japan, India, and China. Japan imports both metallurgical and thermal coal, India relies on hard coking coal for steelmaking, and China sources thermal coal for power generation.



CURRENT OPERATIONS

Rolleston, Blackwater, Curragh, and Jellinbah mines are the region's largest producers, collectively accounting for approximately 70 percent of total output.



- Rolleston
- Blackwater
- Curragh Complex
- Jellinbah
- Kestrel
- Ensham
- Oaky Creek
- Yarabee
- Meteor Downs South
- Gregory Crinum Complex
- Cook Colliery

Ownership and investment structures are diverse. Approximately one-third of operating mines are Australian-owned, one-third operate as joint ventures with partial foreign ownership, and the remainder are held by international companies with South African, Japanese, Chinese, and Swiss interests. This mix underpins a resilient and adaptable sector supported by established producers as well as increasing investment from small- to mid-tier operators.

The region has a strong pipeline of future activity, with five brownfield extension projects currently under assessment to expand existing footprints or access additional reserves. Many hold long life-of-mine (LOM) approvals extending into the 2030s, 2040s, and 2050s.

LOCAL PROCUREMENT

The Central Highlands mining industry spends more than \$1.04 billion annually on local goods and services. Mining companies have procurement strategies in place to optimise opportunities for local businesses.

COMMUNITY SUPPORT

Beyond their role as major employers, mining companies invest in partnerships, sponsorships and funding programs that strengthen the communities in which they operate. Most programs are targeted at community and not-for-profit groups and have specific criteria and application deadlines.

Further information on local procurement and community support programs is available on the CHDC website.





BLACKWATER



CURRAGH COMPLEX

Owner

Blackwater Joint Venture
Whitehaven (70%), Nippon Steel (20%),
JFE Steel (10%)

Coronado Global Resources

Operator

Whitehaven Coal

Coronado Global Resources

Location

24 km southwest of Blackwater

14 km north of Blackwater

Method

Open cut

Open cut and underground

Product

Metallurgical

Metallurgical, thermal and PCI

Production capacity

Up to 14 Mtpa

Up to 12 Mtpa

Workforce

2,000

2,500

Reserve

372 Mt

290 Mt

Approved LOM

In excess of 50 years

In excess of 20 years

Overview & Future Projects

Blackwater began operations in 1967 under Utah Development Company. It was acquired by BHP Mitsubishi Alliance (BMA) in 2001 and later purchased by Whitehaven Coal in April 2024.

Curragh commenced operations in 1983 under a consortium led by Arco Australia and was acquired by Wesfarmers in 2000. Coronado Global Resources purchased the mine in 2018.

A heavyweight of Queensland's coal industry, it is the second-largest open cut metallurgical mine in the Bowen Basin, with more than 50 years LOM. The operation stretches across an 80-kilometre strike length and operates the largest dragline fleet (seven units) in the Southern Hemisphere.

Queensland's sixth-largest mine by net output, the Curragh Complex comprises two open cut operations, Curragh South and Curragh North, and operates four draglines. The complex also includes the Mammoth Underground, which began production in December 2024.

Blackwater North Extension Project

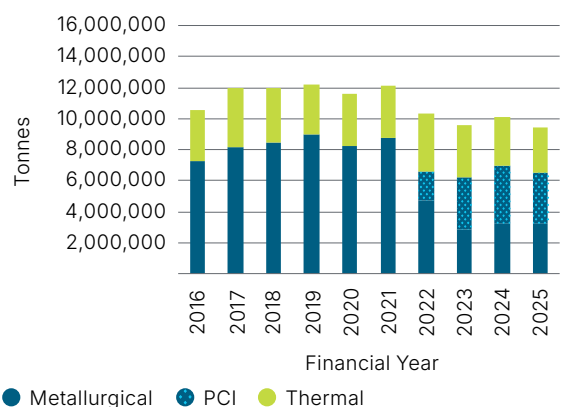
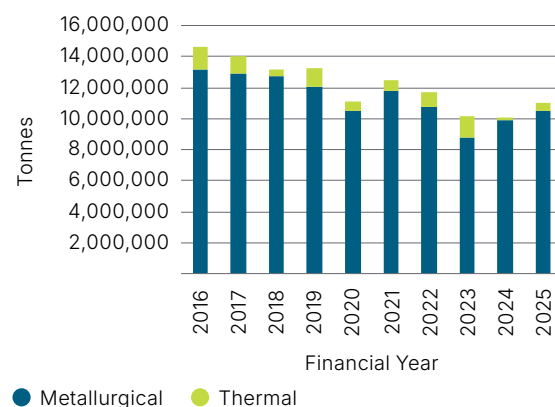
A continuation within the current mining lease, this development seeks to lift production above 17 Mtpa and is progressing through Commonwealth assessment processes.

While the metallurgical coal is exported, the thermal coal supplies the Stanwell Power Station near Rockhampton.

Blackwater South Coking Coal Project

A proposed new open cut mine adjacent to the existing operation (see page 13).

2016-2025 Saleable product





ENSHAM



GREGORY CRINUM COMPLEX

Owner	Thungela Resources
Operator	Ensham Resources
Location	40 km northeast of Emerald
Method	Underground
Product	Thermal
Production capacity	Up to 7 Mtpa
Workforce	700
Reserve	720 Mt
Approved LOM	2037

Owner	Sojitz
Operator	Sojitz Blue
Location	53 km northeast of Emerald
Method	Open cut and underground
Product	Metallurgical
Production capacity	Up to 2 Mtpa
Workforce	450
Reserve	130 Mt
Approved LOM	2042

Overview & Future Projects Ensham began open cut operations in 1993 under Idemitsu, eventually expanding to six pits along the Nogoia River. Underground mining started in 2011 to access deeper seams, gradually replacing open cut operations.

The Sungela consortium purchased the mine in 2023, with Thungela Resources assuming full ownership in December 2024. Ensham produces coal for both export and domestic markets, including supply to the Gladstone Power Station.

Life of Mine Project

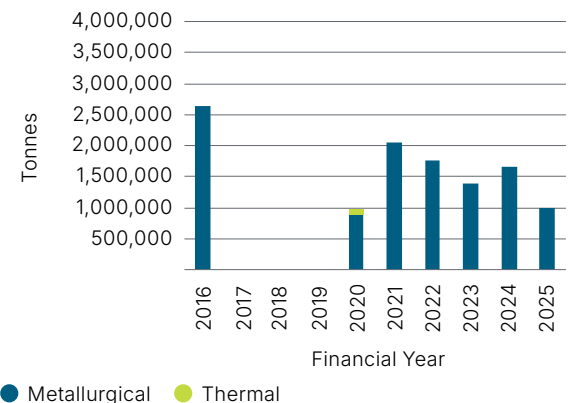
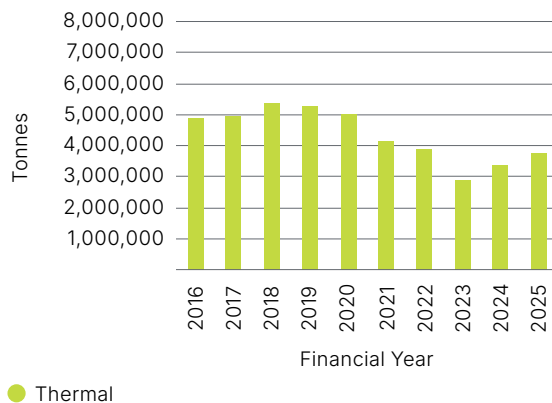
Approval has been granted for the Life of Mine extension project, extending operations through to around 2037 and reinforcing long-term job security in the region.

Utah Development Company commenced open cut mining at Gregory in 1979, with the Crinum underground mine starting in 1997. BMA owned and operated the mine from 2001 until it was placed into care and maintenance in 2016. Sojitz acquired the mine in 2019 and reopened it in 2020, with open cut production commencing that year.

Underground operations resumed in 2023, bringing previously sealed BMA workings back into operation.

Open cut operations have continued at M Block, located east of the existing mining area. Open cut mining in this area is expected to take approximately three years before transitioning to underground.

2016-2025 Saleable product





JELLINBAH



KESTREL

Owner	Jellinbah East Joint Venture Jellinbah Group (70%), Marubeni Coal (15%) and Sojitz (15%)
Operator	Jellinbah Group
Location	30 km north of Blackwater
Method	Open cut
Product	PCI
Production capacity	Up to 6 Mtpa
Workforce	500
Reserve	165 Mt
Approved LOM	2055

Overview & Future Projects Jellinbah East Joint Venture has owned and operated Jellinbah since production began in 1989. The operation comprises three areas: Jellinbah Central, Central North, and Mackenzie North.

Coal is washed and prepared onsite before being trucked approximately 25 kilometres to the Boonal rail siding for transport to the Port of Gladstone.

Owner	Kestrel Coal Resources EMR Capital and Adaro Energy JV (80%) and Mitsui Coal (20%)
Operator	Kestrel Coal Resources
Location	40 km north of Emerald
Method	Underground
Product	Metallurgical
Production capacity	Up to 7.25 Mtpa
Workforce	1,000
Reserve	217 Mt
Approved LOM	2033

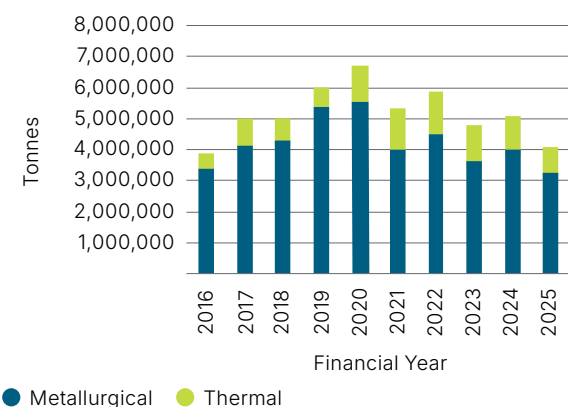
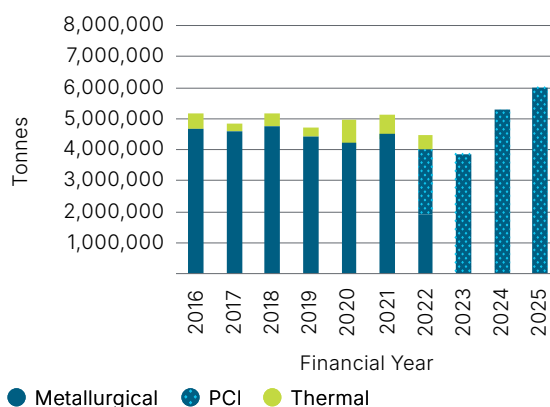
Kestrel, originally known as Gordonstone, began operations in 1992. It was successively owned by an ARCO-led joint venture, Rio Tinto, and, since 2018, Kestrel Coal Resources.

Kestrel was named Australian Mine of the Year at the 2022 Australian Mining Prospect Awards.

Kestrel West Mine Extension Project

The project will extend underground mining westward to maintain production continuity and extend the life of mine to 2050. The draft Environmental Impact Statement (EIS) was submitted in July 2025 and outlines the project's environmental studies, mitigation measures, and social commitments. Kestrel continues to work closely with regulators, stakeholders, and the community to ensure the project meets environmental and social requirements.

2016-2025 Saleable product





METEOR DOWNS SOUTH



OAKY CREEK

Owner	Endocoal (50%) and Sojitz (50%)
Operator	Sojitz Blue
Location	25 km northwest of Rolleston
Method	Open cut
Product	Thermal
Production capacity	Up to 1.5 Mtpa
Workforce	85
Reserve	13.5 Mt
Approved LOM	2028

Owner	Glencore (55%), Sumisho Coal Australia (25%), Itochu Coal Resources Australia (10%) and ICRA OC (10%)
Operator	Glencore
Location	16 km southeast from Tieri
Method	Underground
Product	Metallurgical
Production capacity	Up to 15.9 Mtpa
Workforce	800
Reserve	288 Mt
Approved LOM	2029

Overview & Future Projects Meteor Downs South entered production in 2018. The coal produced has relatively low ash content, eliminating the need for processing through a coal wash plant.

The main coal seam ranges from 11 to 108 metres deep, with an average thickness of 6.9 metres.

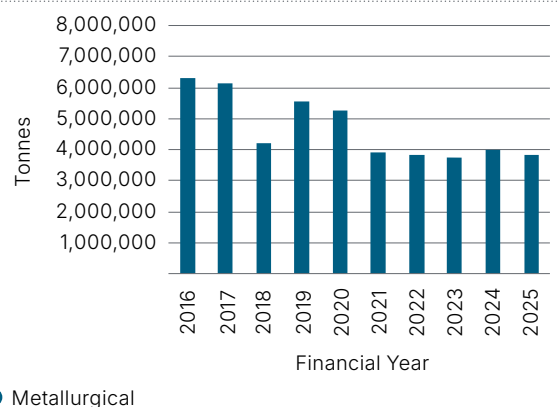
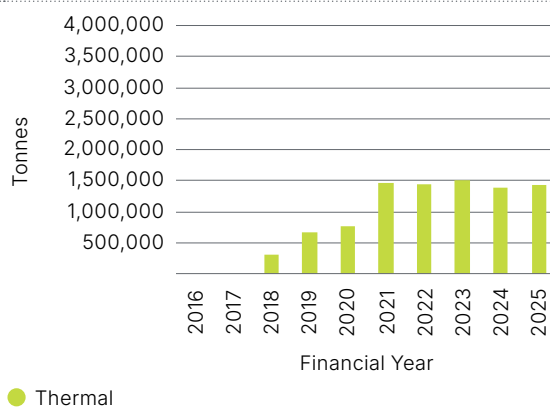
Operations at Oaky Creek commenced with open cut mining in 1982, followed by underground mining in 1989. Oaky North, which opened in 1999, is now the site's active longwall operation. Open cut mining ceased in 2006.

The mine has a strong mines rescue record, including national championship wins.

Mine Closure

Oaky Creek is expected to wind down over the next five years, with closure planning underway in line with statutory requirements. Progressive rehabilitation has been ongoing since the late 1980s, with approximately 2,900 hectares of land certified as rehabilitated.

2016-2025 Saleable product





ROLLESTON



YARRABEE

Owner	Glencore	Yancoal
Operator	Glencore	Yancoal
Location	16 km west of Rolleston	40 km northeast of Blackwater
Method	Open cut	Open cut
Product	Thermal	PCI
Production capacity	Up to 19 Mtpa	Up to 4 Mtpa
Workforce	850	500
Reserve	175 Mt	81 Mt
Approved LOM	2045	2060

Overview & Future Projects Rolleston began production in 2005 and is Queensland's third-largest producing mine by net output.

Originally owned by Mount Isa Mines, the operation was acquired by Xstrata in 2003 and later became part of Glencore following the 2013 merger. In 2021, Glencore consolidated full ownership after purchasing remaining interests from Winfield Energy and Sumitomo.

The open cut site is operated using two large electric walking draglines.

Spring Creek North Continuation Project

The project seeks to extend the existing Spring Creek Pit, using current facilities and infrastructure. It will not increase production rates or extend the life of the project. The proposal is currently undergoing Queensland State and Commonwealth assessment processes.

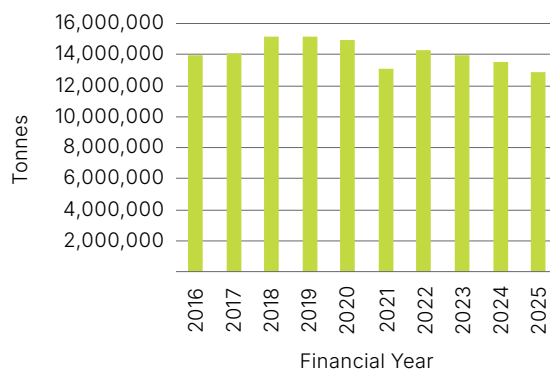
Yarrabee commenced operations in 1994 under Felix Resources and was acquired by Yancoal in 2009.

Coal is transported by road train to the Boonal rail siding for loading and dispatch.

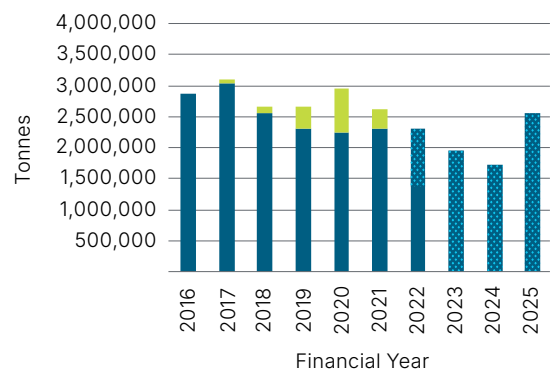
Yarrabee Continuation Project

The continuation project proposes an expanded footprint within the existing mining leases, maintaining production at 4 Mtpa while utilising existing infrastructure and supporting the ongoing workforce.

2016-2025 Saleable product



● Thermal



● Metallurgical ● PCI ● Thermal



WILTON FAIRHILL

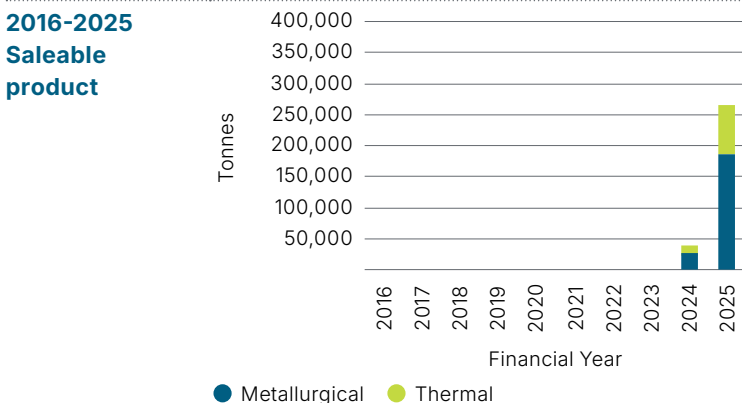
Although Wilton Fairhill sits beyond the local government boundary, its operational office and workforce are based in the Central Highlands, underpinning local skills, supply chains and economic activity.

Owner	Futura Resources
Operator	Futura Mining Services
Location	80 km northeast of Emerald
Method	Open cut
Product	Metallurgical and thermal
Production capacity	Up to 2.6 Mtpa
Workforce	100
Reserve	200 Mt
Approved LOM	2032

Overview & Future Projects Futura Resources is developing the Wilton and Fairhill coal mines, representing the most recent additions to coal production northeast of Emerald. Wilton was commissioned in November 2023, with first coal produced in March 2024. Fairhill commenced production in late 2024, achieving first coal in March 2025.

The projects target deep-to-outcropping Fort Cooper Coal Measures as a standalone coal sequence, requiring selective mining. Coal occurs at depths of approximately 10 to 15 metres and is transported to the Gregory Crinum coal handling and preparation plant (CHPP) for processing.

Both mines have an initial 10-year mine life, with potential extension of up to 20 years subject to ongoing exploration.



CARE AND MAINTENANCE

The following projects have entered care and maintenance or been retired.

BLUFF

Bluff is an open cut operation located 20 kilometres east of Blackwater. Originally owned by MACA, it began production in 2019 but was placed into care and maintenance in December 2020.

Bowen Coking Coal acquired the mine in late 2021, with first coal shipped in June 2022. Following operational challenges and falling PCI coal prices, the mine returned to care and maintenance in November 2023.

COOK COLLIERY

Cook Colliery is an underground metallurgical coal operation located 27 kilometres south of Blackwater.

Mining commenced in 1970 under Mt Isa Mines, with the operation subsequently owned by Xstrata, Caledon Resources, Bounty Mining and, most recently, QCoal, which acquired the mine in 2020.

Production recommenced in early 2022 before the mine was placed into care and maintenance in November 2025 due to high operating costs and softer coal prices.

MINERVA

Minerva opened in 2004 as a joint venture between Sojitz and Catherine Hill Resources, with Sojitz taking majority ownership in 2010.

Located 45 kilometres south of Emerald, the open cut operation produced high-grade thermal coal from 2005 until late 2021. Most staff have since transitioned to the Gregory Crinum Complex or Meteor Downs South, and the site is undergoing active rehabilitation.

FUTURE PROJECTS

The Central Highlands has an active pipeline of coal projects at various stages, from those nearing commencement to longer-term proposals still under assessment. Collectively, they reflect continued investment interest and the region's ongoing role in Queensland's resources sector.

Short to Medium Term

Projects expected to proceed within the next one to two years.

GEMINI

The greenfield open cut metallurgical and PCI coal project is located six kilometres west of Dingo and is being developed by Magnetic South. The operation has a projected 25-year lifespan and aims to produce up to 1.9 Mtpa. Early development works have commenced, with full-scale mining anticipated to begin in 2027.

- > **State/ Federal** All required State and Federal approvals have been received.

STAR BULK SAMPLE

Operated by Constellation Mining, this small-scale open cut bulk sampling project is located six kilometres from Bluff. The operation will extract up to 1.5 million tonnes of raw coal to assess PCI and hard coking coal quality and inform potential full-scale development. The project is estimated to create up to 100 jobs.

- > **State** An Environmental Authority was issued in April 2023; awaiting final Department of Resources approval to commence mining.
- > **Federal** Determined not to be a controlled action under the EPBC Act, so a full environmental assessment is not required.

Medium to Long Term

Projects under investor consideration and at various stages of regulatory review.

BLACKWATER SOUTH

Whitehaven Coal's proposed greenfield open cut mine is located 50 kilometres southwest of Blackwater. Primarily producing metallurgical coal, the project will target an annual output of 8 Mtpa over a 90-year mine life. It is expected to support 500–750 construction jobs and 1,200 operational jobs.

- > **State** Declared a Coordinated Project by the Queensland Government. The Draft Environmental Impact Statement (EIS) is currently being prepared.
- > **Federal** Declared a controlled action under the EPBC Act, requiring full environmental assessment.

CORVUS

Corvus Resources is assessing an underground metallurgical coal mine 17 kilometres north of Emerald, designed to produce up to 10.5 Mtpa over a 25-year life. The project would support 284 construction and 500 operational jobs. Coal will be transported via overland conveyor to a new CHPP at Gregory Crinum Complex.

- > **State** Application submitted for Coordinated Project status.
- > **Federal** Declared a controlled action under the EPBC Act, requiring full environmental assessment.

ROLLESTON SOUTH

This exploration project, owned by Yari Minerals, targets a 190Mt JORC (Joint Ore Reserves Committee) inferred resource of high-quality thermal coal, with testing in progress to assess metallurgical potential. Located near Glencore's Rolleston mine, the project benefits from existing infrastructure and rail access to the Port of Gladstone. The current focus is on upgrading the resource classification to inform future development.

- > **State / Federal** Drilling underway, with regulatory and landholder approvals secured.

Inactive Projects

Projects on hold or discontinued due to market factors, economic viability, or strategic decisions.

- > Belview, Stanmore Resources
- > Blackrock, Cook Resource Mining
- > Comet Ridge, Bowen Coking Coal
- > Cooroora Coking Coal, Bowen Coking Coal
- > Lilyvale, Stanmore Resources
- > Mackenzie, Stanmore Resources
- > Minyango, Constellation Mining
- > Springsure Creek, Springsure Creek Coal
- > Springsure (Fernlee), TerraCom
- > Taroborah, Shenhua Group
- > Togara North, Glencore
- > Valeria, Glencore
- > Washpool, Aquila Resources

INNOVATION

The Central Highlands coal industry is undergoing a transformation driven by innovation. From advanced automation and digital systems to low-emission energy projects and cultural heritage protection, operators are adopting new approaches that enhance safety, reduce environmental impact, and improve operational performance. This commitment to innovation ensures the sector remains competitive and sustainable for decades to come.

UNDERGROUND AUTOMATION

Automation has transformed underground operations at Oaky Creek, where Glencore became the first coal mine in Australia to fully automate a longwall system.

Using ExScan 3D laser-scanning technology developed by CSIRO, operators can remotely control longwall equipment from an above-ground control centre rather than directly at the coal face (pictured). The system provides real-time visibility of underground conditions.

By reducing the need for workers to be positioned near heavy machinery, this approach limits exposure to high-risk environments while supporting more consistent cutting performance and reliable underground operations.

WASTE GAS TO ENERGY

Kestrel Coal Resources is developing a coal mine waste gas-to-electricity project, supported by the Queensland Government's Low Emissions Investment Partnerships (LEIP) program.

The 30-megawatt power station will capture and convert fugitive coal mine gas into electricity, generating enough electricity each year to power the equivalent of up to 40,000 homes and reducing emissions by more than one million tonnes of CO₂-e over eight years.

The project expands Kestrel's underground gas drainage system to prevent methane release and fast-tracks the mine's decarbonisation efforts.

Expected to be fully operational in 2027, the development is creating around 160 additional jobs, adding to the mine's 1,000-strong workforce.

CULTURAL HERITAGE PROTECTION

To address site constraints and protect culturally significant areas, Whitehaven Coal used aerial drone stringing at Blackwater to install powerlines without disturbing the ground.

This approach enabled critical infrastructure works to proceed while maintaining exclusion zones.

By eliminating the need for vehicles and personnel on-site, the method reduced environmental impact and improved safety.

It was only the second use of drone stringing technology in Queensland's coal industry, showcasing how innovative construction techniques can deliver respectful, low-impact outcomes.

WORKER HEALTH & SAFETY MONITORING

Improving workforce health and safety has driven innovation at the Curragh Complex, where Coronado Global Resources introduced a Whole Body Vibration (WBV) monitoring program.

Using app-based vibration sensors combined with GPS tracking, the system identifies high-vibration locations and operating conditions across site.

This data supports targeted road maintenance, improved driving practices, and equipment management to reduce vibration exposure. By addressing the root causes of WBV rather than symptoms alone, the program helps reduce fatigue and musculoskeletal injury risk while also delivering smoother haulage conditions and operational efficiencies.



GAS



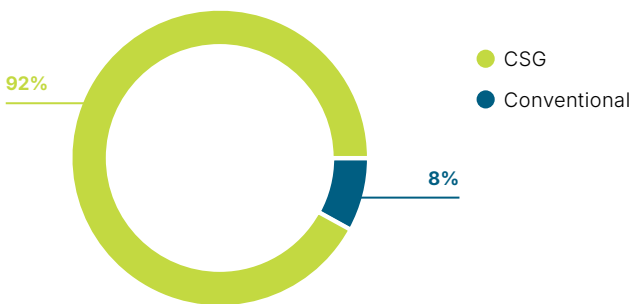
Natural gas production is an established and growing part of the Central Highlands' resources sector, contributing an estimated \$155 million in annual output.

The region currently has 21 production licences, predominantly located around Springsure, Rolleston, and the Arcadia Valley.

RESOURCE

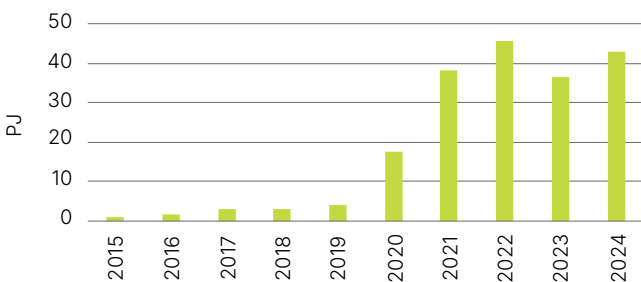
Just over 90 percent of the region's gas output is coal seam gas (CSG), with the remainder sourced from conventional reservoirs. While the extraction methods differ, both produce the same natural gas product, suitable for electricity generation, industrial use, and pipeline supply.

CSG is typically extracted from coal measures at shallower depths, whereas conventional gas is produced from deeper sandstone formations.



PRODUCTION

Gas production has grown significantly over the past decade, increasing from less than 1 petajoule (PJ) in 2015 to 42.8 PJ in 2024. Output rose sharply from 2020 as new fields and wells came online. In context, 1 PJ is enough to power approximately 37,000 homes for a year.



WORKFORCE

The workforce is largely drawn from the major gas operations around Roma, with workers travelling into the Central Highlands as needed. Census data records 34 people employed in the sector in 2021.

INFRASTRUCTURE & LOGISTICS

Natural gas from the Central Highlands is transported through established pipeline networks.

The region is currently serviced by:

- > Jemena Queensland Gas Pipeline (QGP) - receipt point at Rolleston, connecting to industrial gas users in Gladstone and Rockhampton.
- > GLNG Gas Transmission Pipeline - transports gas to the Gladstone liquified national gas (LNG) facility on Curtis Island.

Some operators maintain dedicated spur lines to connect gas into the network, such as Denison Gas' Rolleston Spur Line. State Gas is assessing potential spur line connections to support future gas developments, while Jemena is undertaking Front End Engineering Design (FEED) investigations for a potential connection to the Mahalo Gas Hub area.

A 2023 Queensland Government report examined the potential for a Bowen Basin gas pipeline and recommended an initial connection in the Mahalo region. The Blackwater area has been identified as a longer-term opportunity due to less proven reserves and greater distance from existing infrastructure.

Downstream, LNG export facilities at Port Curtis (Gladstone) convert processed gas into liquid for shipment to global markets. Facilities include:

- > Queensland Curtis LNG (QCLNG)
- > Gladstone LNG (GLNG)
- > Australia Pacific LNG (APLNG)

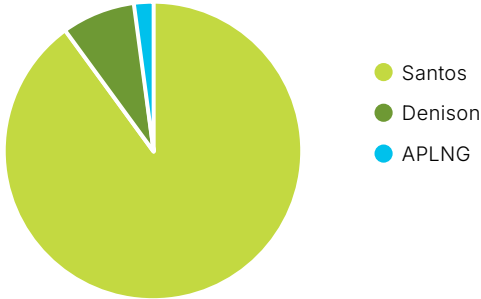
MARKETS

A majority of Queensland gas (88%) is exported as LNG from the Port of Gladstone to customers in China, Japan, and South Korea.

The remainder is used for electricity generation, industrial use, and commercial and residential use.

CURRENT OPERATIONS

In 2024, Santos produced around 90% of the region's gas, followed by Denison (8%) and APLNG (2%). Other operators with live wells include State Gas and Comet Ridge.



The following profiles highlight gas operator activity within the Central Highlands local government area. While some operators maintain assets and operations across multiple local government areas, the information below is specific to their regional presence.



SANTOS

Project Partners

Santos acts as the operator for the GLNG. Joint Venture (30% interest) and is also party to joint ventures with State Gas, Comet Ridge and Australia Pacific LNG.

Project Status

Production

Regional Footprint

Operations are centred at the Arcadia and Fairview hubs.

Resource

CSG

Infrastructure

An extensive network of wells and processing plants feeds the GLNG pipeline.

Market Focus

LNG export and domestic supply



DENISON GAS

100% owner and operator.

Production

Denison North includes six legacy gas fields that were successfully recommissioned from 2020 onwards.

Conventional, with emerging CSG exploration and development.

Gas is processed at the Rolleston Gas Plant and transported through a dedicated 160 km pipeline (PPL 10) to the QGP.

Domestic supply



AUSTRALIA PACIFIC LNG



STATE GAS

Project Partners

ConocoPhillips (47.5%), Origin (27.5%) and Sinopec (25%).

Origin manages the upstream fields and pipeline, while ConocoPhillips operates the LNG export facility at Curtis Island.

100% owner and operator of its core projects and an exploration partner (35%) with Santos.

Project Status

Production

Pilot Production

Regional Footprint

APLNG maintains active fields near Rolleston and Springsure, with its major Gas Supply Security Project expanding the company's footprint in the Central Highlands.

Operations are centred south of Rolleston at the Reid's Dome and Rolleston West project areas.

Resource

CSG

Conventional (Reid's Dome) and CSG (Rolleston West)

Infrastructure

Large-scale gathering networks and compression stations are connected to the APLNG pipeline.

The High-Density Natural Gas (HDNG) plant uses a virtual pipeline (trucking model) to deliver compressed gas from pilot testing to local mines, with a future connection to the QGP under evaluation.

Market Focus

LNG export and domestic supply

Domestic supply, including diesel displacement



COMET RIDGE

Project Partners

100% owner and operator

Project Status

Development Planning (FEED)

Regional Footprint

Across the Mahalo North, Mahalo East and Mahalo Far East permits, Comet Ridge holds an operated footprint of approximately 1,850 km².

Resource

CSG

Infrastructure

Pilot wells are in place across the Mahalo area, with project FEED progressing, including field development and a new pipeline connection from the Mahalo Gas Hub to the QGP.

Market Focus

Domestic supply

EXPLORATION

Exploration and appraisal activity is currently underway across all active operators in the Central Highlands, with activity ranging from pilot drilling and reserve certification to infrastructure planning. While established operators like Santos and APLNG continue to explore within their existing tenures to maintain long-term supply, much of the region's frontier activity is being driven by emerging players.

The Bowen Basin is a critical component of Australia's future energy security, estimated to be one of the nation's largest remaining undeveloped natural gas resources. Within this landscape, the Central Highlands is experiencing a significant surge in activity, with approximately 962 PJ of identified gas reserves currently being appraised for future development across 18 active permits.

To unlock these resources, the Queensland Government continues to release new land for exploration, including two areas in the Central Highlands prioritised in the most recent release schedule. This forward-looking approach allows companies to resolve land access and native title requirements well in advance, ensuring projects are development ready.

The Frontier Gas Exploration Grants Program is a key pillar of this strategy, providing funding to accelerate the

conversion of untapped resources into commercially viable reserves. Notably, three of the four projects funded under this statewide program are located within the Central Highlands, led by Denison Gas, State Gas, and Comet Ridge, with current exploration activity outlined below.

DENISON GAS

Denison Gas is drilling a dual horizontal pilot well near Rolleston to transition local resources into commercial reserves. The company has also secured two additional exploration permits and has conducted seismic surveys using low-impact Vibroseis equipment.

STATE GAS

State Gas successfully certified a maiden 2P gas reserve of 30.2 PJ in November 2025, confirming the commercial viability of the Rolleston West Project. This milestone provides a bankable foundation for the company to advance gas sales and infrastructure negotiations.

COMET RIDGE

At Mahalo East, Comet Ridge successfully completed pilot testing of the vertical and lateral wells. The successful program resulted in an independently certified 2P reserve booking of 51.8 PJ in July 2025.

INNOVATION

Gas operators in the Central Highlands are applying innovative technologies to extend asset life, improve flexibility, and support a more reliable and lower-emissions energy system.

COMPRESS AIR ENERGY STORAGE

Compressed Air Energy Storage (CAES) is an emerging long-duration energy storage technology that supports grid stability and renewable energy integration.

In the Central Highlands, CAES presents an opportunity to leverage existing subsurface expertise, established infrastructure corridors, and a skilled energy workforce developed through the region's gas and mining industries.

A case study is currently being developed to explore the potential application of CAES in the region.

CAES systems use surplus electricity to compress air and store it underground in suitable geological formations, such as depleted gas reservoirs or engineered caverns, releasing it later to generate power. The process does not involve hydrocarbon extraction, focusing instead on pressure management and containment.

As electricity systems transition toward higher levels of renewable generation, long-duration storage technologies like CAES are increasingly recognised as critical infrastructure, supporting reliability while enabling the strategic reuse of legacy assets.

FLEXIBLE GAS SUPPLY

State Gas has developed Australia's first CSG to HDNG facility, converting CSG (produced during production testing) into a compressed, transportable form supported by virtual pipeline truck technology. Gas is compressed into high-pressure containers and delivered by truck to customers without pipeline access.

Supplied from the Rolleston West Project, the HDNG facility can supply up to 1.5 TJ per day of pipeline-quality gas, providing an alternative supply option for off-grid industrial users.

By capturing gas that would otherwise be released during testing and enabling diesel displacement for industrial operations, the project provides a flexible, lower-emissions energy solution for regional industries, particularly mining, seeking to accelerate decarbonisation efforts.

RENEWABLES



The Central Highlands sits within the Queensland Government's Central Queensland Regional Energy Hub and is home to large-scale solar and emerging battery storage projects. A growing pipeline of new developments, including solar, battery storage, wind, and bioenergy, is set to further diversify and strengthen the region's renewable energy profile over the coming years.

SOLAR & BATTERY STORAGE

The region offers ideal conditions for large-scale solar development, supported by high irradiation levels, flat land, and strong transmission access to the National Electricity Market (NEM). Two solar farms currently generate a combined 170 MW. Battery Energy Storage Systems (BESS) are emerging alongside this capacity. One network-connected battery is operational and several others are in development, improving grid stability by storing excess solar generation for release during peak demand.

Current Operations



EMERALD SOLAR PARK

Owner	Lighthouse Infrastructure
Operator	RES Renewables
Location	5 km east of Emerald
Asset type	Solar
Capacity	72 MWAC (89MWDC)
Operational	2019

Overview This was RES' first solar project in the country and the first project nationally to adopt a corporate Power Purchase Agreement (PPA) model, established with Telstra. This structure enables electricity to be sold directly to a large corporate offtaker, bypassing state-owned retailers.

Emerald BESS

A proposed BESS is planned to be co-located with Emerald Solar Park (see page 22).



LILYVALE SOLAR FARM

Owner	Fotowatio Renewable Ventures (FRV)
Operator	FRV Services Australia
Location	50 km northeast of Emerald
Asset type	Solar
Capacity	100 MWAC (120MWDC)
Operational	2019

Overview The project is one of FRV's large-scale solar installations in Queensland, supported by a PPA with Ergon Energy Retail. It uses single-axis tracking technology to maximise its annual output of 283,000 MWh (enough for 45,000 homes).

EMERALD NETWORK BATTERY

Owner	Energy Queensland
Operator	Ergon Energy
Location	Emerald
Asset type	BESS
Capacity	4 MW/ 8 MWh
Operational	2025

Overview Part of Queensland's network battery program, the system stores local rooftop solar generation and supplies up to 500 homes during evening peak periods.

Future Projects

Projects under investor consideration, subject to commercial and technical assessment.

BLACKWATER SOLAR FARM

This proposed 270 MW solar facility near Tolmies Road in Blackwater includes up to 200 MW/800 MWh of battery storage. Developed by TotalEnergies Australia, the project has received development approval and is expected to generate approximately 250 jobs at peak construction and approximately 10 to 15 jobs during operations.

COMET ENERGY PARK

Comet Energy is proposing a large-scale BESS west of Blackwater, with an indicative storage capacity of 960 MWh. The project has received development approval. Construction of Stage 1 is anticipated to commence in early 2026, with a peak construction workforce of up to 140. The project is expected to have an operational life of approximately 45 years.

EMERALD SOLAR PARK BESS

Lighthouse Infrastructure is progressing development of a proposed 60MW / 240MWh AC-coupled BESS co-located with the existing Emerald Solar Park in Queensland. The BESS will utilise grid-forming inverters to provide system strength services and enable up to four hours of dispatchable storage into the NEM. Planning approval has been granted, and the project forms a key component of the broader co-located storage strategy.

LILYVALE BESS

The Lilyvale BESS, proposed by Atmos Renewables, is a stand-alone battery storage facility near Tieri, occupying approximately 10 hectares, with additional land for access and transmission. The project is expected to deliver around 1,600 MWh of storage, using modular battery, inverter and transformer systems connected to the grid via the Lilyvale Substation.

RENEWABLES-READY INDUSTRIAL DEVELOPMENT

CQ Inland Port includes development approval for embedded renewable energy systems, allowing each lot to incorporate solar (up to 30 kW per lot) and battery storage as it is developed. These behind-the-meter systems support future tenants and reflect a growing shift toward renewable-ready industrial design.

WIND

Opportunities for wind generation exist on the region's eastern boundary, particularly along the ranges where favourable elevation and transmission access align.

Future Projects

Projects under investor consideration, subject to commercial and technical assessment.

BOOMER GREEN ENERGY HUB

A proposed \$3 billion wind project by Ark Energy spanning the Central Highlands and Livingstone local government areas. Early studies are underway, with a current design of up to 146 turbines generating around 1,000 MW. Construction is targeted for 2028.

BIOENERGY

With a substantial agricultural base producing oilseeds, cotton by-products, and other biomass streams, the Central Highlands holds strong potential for future bioenergy investment.

Future Projects

Projects under investor consideration, subject to commercial and technical assessment.

ENERGREEN NUTRITION MULTI-SEED OIL CRUSHING PLANT

Energreen Nutrition Australia is progressing plans for a major oilseed-crushing facility near Emerald to supply edible oils and biofuel feedstocks to Asia-Pacific markets. The \$25 million project includes long-term plans to advance Pongamia oil as a Queensland biofuel source, supported by Australia's first commercial-scale Pongamia plantation. At full operation, the plant would process around 200 tonnes of oilseeds per day and would be Queensland's only large-scale crush facility.

METS



The Central Highlands is home to a robust Mining Equipment, Technology and Services (METS) sector, with businesses operating across Emerald, Blackwater, Capella, Tieri, Springsure and Rolleston. This strong local network supports coal, gas and renewable energy operators through a full range of services, backed by nearby hubs in Mackay and Rockhampton.

The Central Highlands METS sector benefits from:

- > Proximity to operators, enabling efficient site access, and reducing delays, downtime and logistical costs.
- > A highly skilled, trade-qualified workforce, with a notably higher proportion of certificate-level qualifications than the Queensland average.
- > Operationally driven innovation, developed through direct collaboration between operators and service providers.
- > Transferable capabilities that support mining, gas, renewables, bioenergy and post-mining land uses.

The sector includes a diverse range of specialist capabilities, such as:

- > mechanical and fabrication workshops
- > electrical contractors
- > civil construction and earthmoving services
- > engineering and design consultancies
- > mining technology and automation specialists
- > environmental and rehabilitation consultants
- > safety and compliance services
- > labour hire and workforce solutions
- > training and skills providers
- > transport and logistics operators
- > drilling and exploration services
- > emergency response and mines rescue support

Providers range from small specialist workshops to national firms with regional branches, giving operators access to both niche expertise and large-scale service capability.

MINES RESCUE

The Central Highlands hosts a major mines rescue training and response facility operated by Queensland Mines Rescue Service (QMRS). Located at Boonal, approximately 8 kilometres outside Blackwater, the Boonal Mines Rescue Training and Response Station opened in April 2022 and is the first new mines rescue station constructed in Queensland in more than 40 years.

The purpose-built facility includes a simulated underground mine environment and advanced training infrastructure to support complex emergency response scenarios. QMRS, the state's accredited provider of mines rescue training since 1909, plays a critical role in workforce safety. Legislation requires five percent of a mine site's workforce to be trained through QMRS, making the Boonal station a key component of emergency preparedness for mining operations across the Central Highlands and surrounding regions.

The station supports more than 500 volunteer underground rescue and mine inertisation team members, delivering training in realistic, high-risk environments aligned with Queensland's mine safety requirements. Its scale and ongoing use have contributed to QMRS progressing an additional training facility in Moranbah, further strengthening rescue capability across the Bowen Basin.

WORKFORCE ACCOMMODATION VILLAGES

According to QGSO, more than 4,600 non-resident workers are housed in dedicated Workforce Accommodation Villages (WAVs), with a further 900 staying in hotels, motels and caravan parks. These purpose-built villages provide a mix of rooms, dining and recreation facilities. Large-scale camps operate in Emerald, Blackwater and Tieri, with additional onsite WAVs at Ensham and Rolleston mines.

WAVs play a critical role in supporting the ongoing DIDO and FIFO workforce, as well as enabling operators to scale during shutdowns, construction phases and peak operational periods. This approach reduces pressure on local housing markets while maintaining operational flexibility. WAVs also contribute to the regional economy through procurement and service partnerships with local businesses, creating flow-on benefits for hospitality, retail and transport sectors.

REHABILITATION

Rehabilitation is a core component of modern resource development in the Central Highlands, embedded across the lifecycle of coal, gas and renewable energy projects. Contemporary regulatory frameworks require planning from project inception, with progressive works undertaken during operations to return land to safe, stable and sustainable use.

Rehabilitation focuses on creating stable landforms, effective water management and re-establishing vegetation suited to local conditions. This approach minimises the disturbance footprint, reduces environmental risk, and provides greater certainty for landholders and regulators. Outcomes are independently certified by government authorities against stringent criteria for stability, diversity, and erosion control.

To date, more than 6,600 hectares of mined land in the Central Highlands has achieved government certification, reflecting both the scale of activity across the region and the capability of the local workforce and supply chain.

At Oaky Creek, rehabilitation has focused on the progressive backfilling of former open cut areas and revegetation with native species following the closure of open cut operations in 2006. Operated by Glencore, the site demonstrates how certified rehabilitation outcomes can be delivered well in advance of mine closure. As at March 2025, more than 2,900 hectares, equivalent to around 4,000 football fields, had been rehabilitated.

Gas developments typically have a smaller surface footprint. Well pads and associated infrastructure are progressively rehabilitated and returned to native vegetation or agreed agricultural uses, predominantly grazing.

POST-MINING LAND USE

Post-mining land use is aligned with the region's landscape and land capability. Most rehabilitated areas are returned to native vegetation or grazing, supporting long-term land stability and agricultural productivity.

At Kestrel, previously mined land became the first in Queensland to achieve certified rehabilitation status. The land is now utilised for cropping (pictured), demonstrating that high-value agricultural outcomes can be achieved alongside resource development.

Collaboration with enviroMETS Qld and other industry partners is shaping future land-use opportunities. In addition to traditional outcomes, the region is exploring higher-value options such as large-scale solar generation, recreational areas and industrial hubs, as well as emerging crops like Pongamia to support the transition to a bioeconomy.



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GLOSSARY OF TERMS

BESS	Battery Energy Storage System	A large-scale battery installation that stores electricity for release during periods of high demand or low generation.
CHPP	Coal Handling and Preparation Plant	A facility that washes and processes raw coal to remove impurities and prepare it for transport.
CSG	Coal Seam Gas	A form of natural gas (mostly methane) found in underground coal seams.
DIDO	Drive in, Drive out	A workforce model where employees commute to the region by vehicle for their rostered shifts.
EIS	Environmental Impact Statement	A formal document assessing the potential social, environmental, and economic impacts of a proposed project.
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999	Australia's primary federal legislation for environmental and heritage protection.
FIFO	Fly in, Fly out	A workforce model where employees are transported to the site via plane from major centres.
LNG	Liquefied Natural Gas	Natural gas cooled to liquid form for storage or export.
LOM	Life of Mine	The expected duration a mine is planned to operate, based on approved reserves, production rates, and regulatory approvals.
Mtpa	Million tonnes per annum	A unit of measurement for the annual production capacity or output of a mine.
MW / MWh	Megawatt / Megawatt-hour	Units used to measure electricity generation capacity (MW) and energy produced or stored over time (MWh).
NEM	National Electricity Market	Australia's interconnected electricity grid covering Queensland, New South Wales, the ACT, Victoria, South Australia and Tasmania.
PCI	Pulverised Coal for Injection	High-quality coal used in the steelmaking process to increase blast furnace efficiency.
PJ	Petajoule	A standard unit of energy used to measure natural gas volumes (1 petajoule = 1 quadrillion joules).
PPA	Power Purchase Agreement	A long-term contract under which a buyer agrees to purchase electricity from a generator at an agreed price.

ABOUT CHDC

CHDC is the lead economic and tourism development agency for the Central Highlands in Queensland, Australia.

As a not-for-profit organisation, CHDC advocates for a sustainable region and economic growth by:

- > Enhancing the region's workforce
- > Promoting the Central Highlands as a region of choice
- > Supporting our region's businesses

For more than 25 years, CHDC has partnered with industry, business, government and communities to drive growth and empower businesses. Our rich understanding of the local economic landscape has allowed us to deliver insights and strategic action plans for the region. In turn, this has contributed to building strong, capable businesses and industries that are supply-chain ready and optimised for expansion.

In mining, CHDC has hosted events such as the Resources and Innovation Forum and the Regional Transformation Working Lunch, creating platforms for collaboration and knowledge sharing. We also work closely with leading industry bodies and initiatives, including:

CENTRAL HIGHLANDS RESOURCES ROUNDTABLE

CHDC facilitates this collaborative alliance with the Central Highlands Regional Council and local mining companies. The Roundtable addresses shared regional and industry challenges, most recently supporting the roll out of the Central Highlands Workforce Development and Accommodation Strategy.

QUEENSLAND LOCAL CONTENT LEADERS NETWORK (QLCLN)

CHDC is a founding member of QLCLN, an alliance of industry, business groups, and local governments working to maximise local economic benefits from resource projects. The network promotes best-practice procurement through its Keeping it in the Regions model and advocates for stronger local content outcomes across Queensland's resource basins.

COOPERATIVE RESEARCH CENTRE FOR TRANSFORMATIONS IN MINING ECONOMIES (CRC-TIME)

CHDC is among 75 partners of CRC-TIME, a national initiative focused on research and collaboration to support sustainable post-mining futures. Our involvement ensures the Central Highlands benefits from strategies that support economic diversification, workforce transition and long-term community resilience.

QUEENSLAND RESOURCES COUNCIL (QRC)

CHDC has a long-standing partnership with QRC, built on a shared commitment to regional engagement and sustainable industry development. The partnership supports collaboration and information sharing, including QRC participation as speakers at CHDC forums and events.

Photo Credit

Images courtesy of Jesse Lindemann, Kestrel Coal Resources, Australia Pacific LNG, Coronado Global Resources, Denison Gas, Ensham Resources, FRV Services Australia, Futura Resources, Glencore, Jellinbah Group, Lighthouse Infrastructure, Sojitz Blue, and Whitehaven Coal.

Acknowledgement of Country

Central Highlands Development Corporation respectfully acknowledges the Traditional Custodians of the Lands across the Central Highlands and pays its respect to their Elders past and present.

Our registered office is located on the Lands of the Western Kangoulu Peoples.



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