

# ECONOMIC DEVELOPMENT FRAMEWORK 2019-2024

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# OUR ECONOMIC DEVELOPMENT APPROACH

## ROLE OF LOCAL GOVERNMENT IN ECONOMIC DEVELOPMENT

Local Governments play a key role in facilitating economic prosperity. They are structured to respond to and service the local needs of the community and are attuned to regional constraints and opportunities.

Local governments have numerous levers to create an environment conducive to economic growth, investment and job creation. The diagram below highlights the core areas of Local Government influence:



**Advocate...** For good ideas, policy change and infrastructure investments from the Queensland and Australian governments.

**Facilitate...** Positive outcomes through relationships with key local service providers; partnerships with adjoining jurisdictions and organisations; interpretation and dispersal of important baseline data on key statistics, demographics, trends and other pertinent information; convening partners to identify pathways, resources and responsibilities for achieving priorities.

**Regulate...** Through a sound regulatory framework, and provide certainty for existing businesses, potential investors and the community.

**Plan...** Direct and facilitate future growth by working with the community and development industry.

**Provide Services...** Provide a range of important and valuable services for the local economy, including infrastructure, waste collection, place-making and multiple other services.

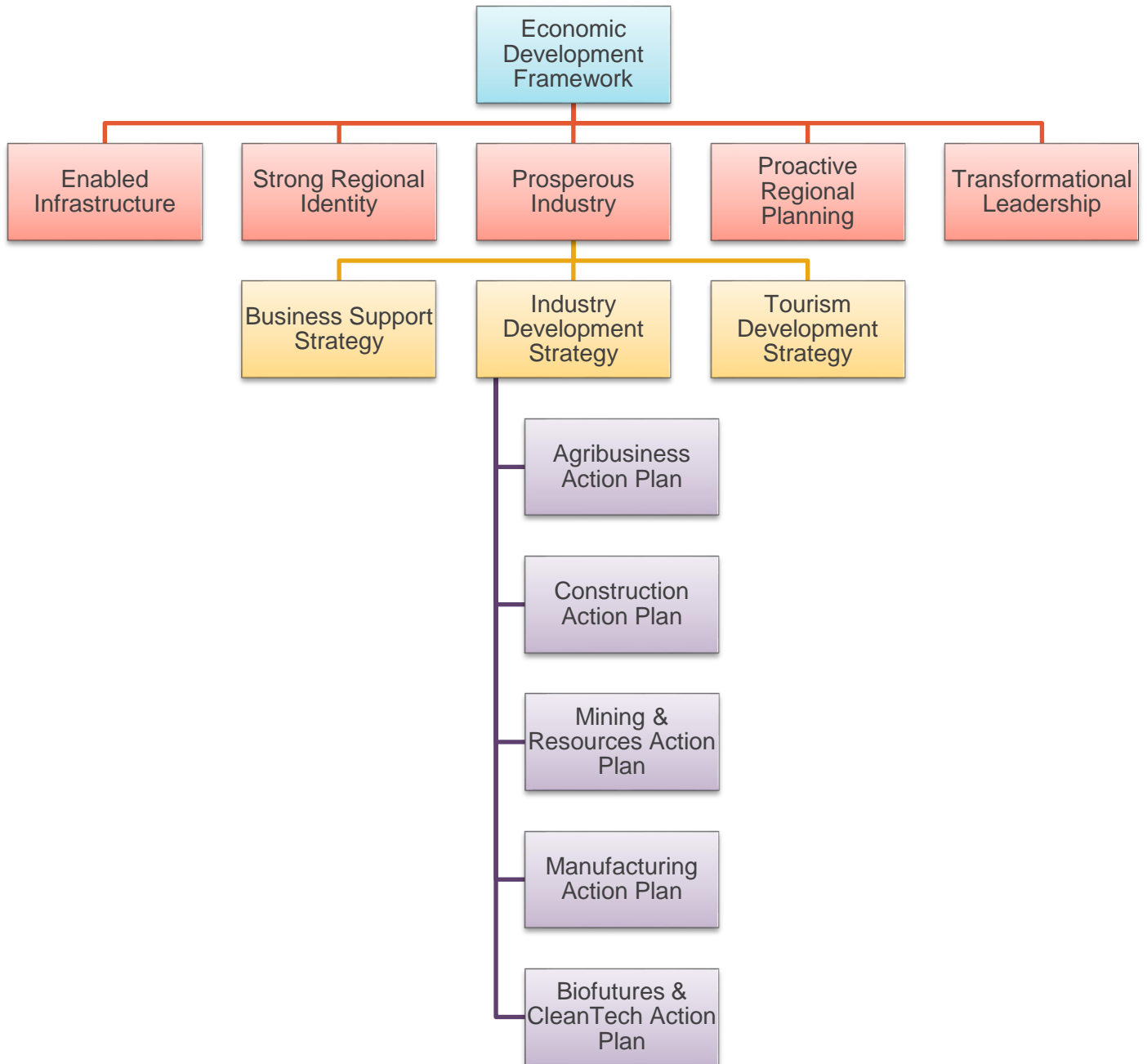
**Collaborate...** Public-private partnerships are an extremely effective means of delivering mutually beneficial initiatives that require the different capabilities of private and government sectors.

Local Government's work should be complementary to private sector efforts, not competitive or duplicative.

## ECONOMIC DEVELOPMENT APPROACH

	Description	Attributes	Implications for Isaac
<b>OPEN FOR BUSINESS</b>	Improve general business environment	Match policies of peers	Some capacity building, improving the general business environment, but a stronger return in Tending the Garden model
		Incentives war Long lists of policy improvements with limited progress	
<b>BIG GAME HUNTING</b>	Compete aggressively to attract new businesses and investments	Table Stakes	Happens anyway in the Resources Sector in Isaac (suppliers come), but not a strategic focus for Isaac in diversification of Isaac economy strategy
		Zero Sum	
		Winners Curse High cost, low return, unless filling a supply chain gap (weakness) Neglects existing business base	
<b>NEXT BIG THING</b>	Enter into new high tech/high growth industries	Many regions competing for same industries e.g. biotech, clean tech, film Very few regions have the assets to succeed (long term)	Relevant to Isaac if a biotech, renewables technology relevant to or grows out of an existing Isaac industry sector like mining revegetation, non-food, dry marginal, feedstock crops
<b>BUILD IT &amp; THEY WILL COME</b>	Invest in large infrastructure or industrial zone projects	Rely on underlying strong competitive advantage versus other regions Building generic infrastructure will not offset lack of skills or support industries	Private sector effort – if the market justifies it - not a focus for Isaac
<b>✓ TENDING THE GARDEN</b>	Nurture (businesses & industry supply chains) currently existing within Isaac Economy	Committed, engaged growth through natural clusters Focus on encouraging and developing entrepreneurial effort May not be high growth, but no real downside	Genuine scope for this to work in Isaac, particularly in areas of higher engagement and creative diversification of existing strengths

# STRATEGIC FRAMEWORK



## ECONOMIC DEVELOPMENT VALUES

Natural Resources	Natural resources includes the land, flora, fauna, soils, water, minerals, oil, gas, waterways, fisheries, coastal areas, and Isaac’s knowledge about these things. These resources are integral to Isaac’s economic growth and underpin priority industries, in particular agriculture, energy, mining and tourism.
People	People have a two-fold impact on the economy – they are the consumers of goods and services and are the workforce that supplies labour and knowledge. For our economy to grow, we must increase our population and find ways to engage the future workforce. Helping people reskill, upskill and reinvent their jobs will be essential.
Capital	Capital refers to different types of funding for businesses to invest in required technology, education, plant and equipment that support future growth. Capital also includes investment in the infrastructure that helps the economy function – road, rail, air transport, pipelines, poles and wires, energy, water, buildings and telecommunications networks.
Connectivity	Better connectivity is critical to ongoing economic growth to strengthen our supply chains to improve the movement of people, goods and information, as well as connect with people who may exchange information, buy our products and services, or help us build relationships and partnerships to develop and reach markets.
Enterprise & Innovation	Enterprise and innovation occurs when entrepreneurs, university and governments strive to improve the products and services they deliver. Innovative structures and management strategies can help unlock the latent economic potential of our economy.
Liveability	A constant focus on improving liveability is important to promote Isaac as an attractive place to live, work, study, visit, research and raise families. Unless we can convince other people of this, we will find it difficult to sustain a workforce that can support business growth and grow our population. A small population limits the range of choices available to Isaac residents and affects the cost of living and the cost of doing business.

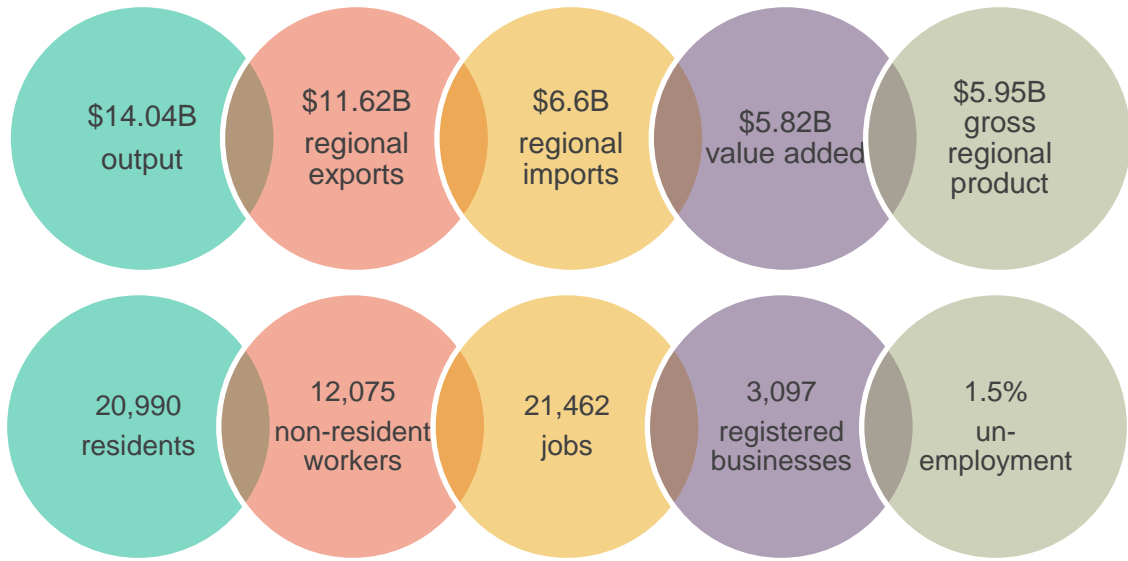




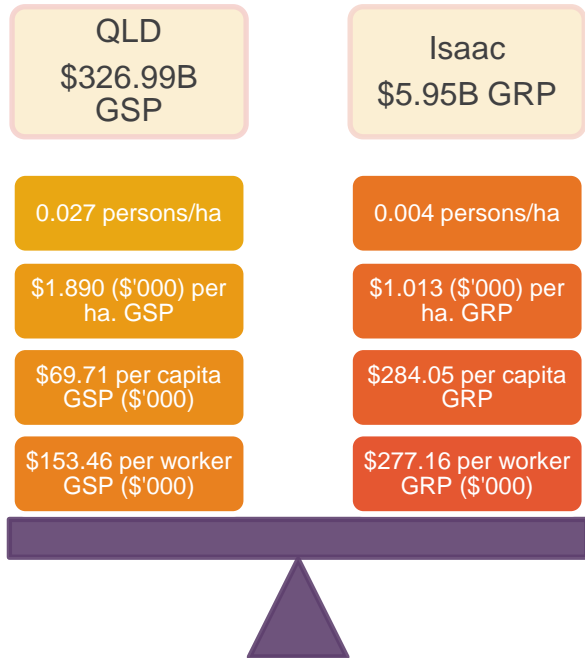
# OUR ECONOMIC PROFILE

# ECONOMIC PROFILE

## SUMMARY

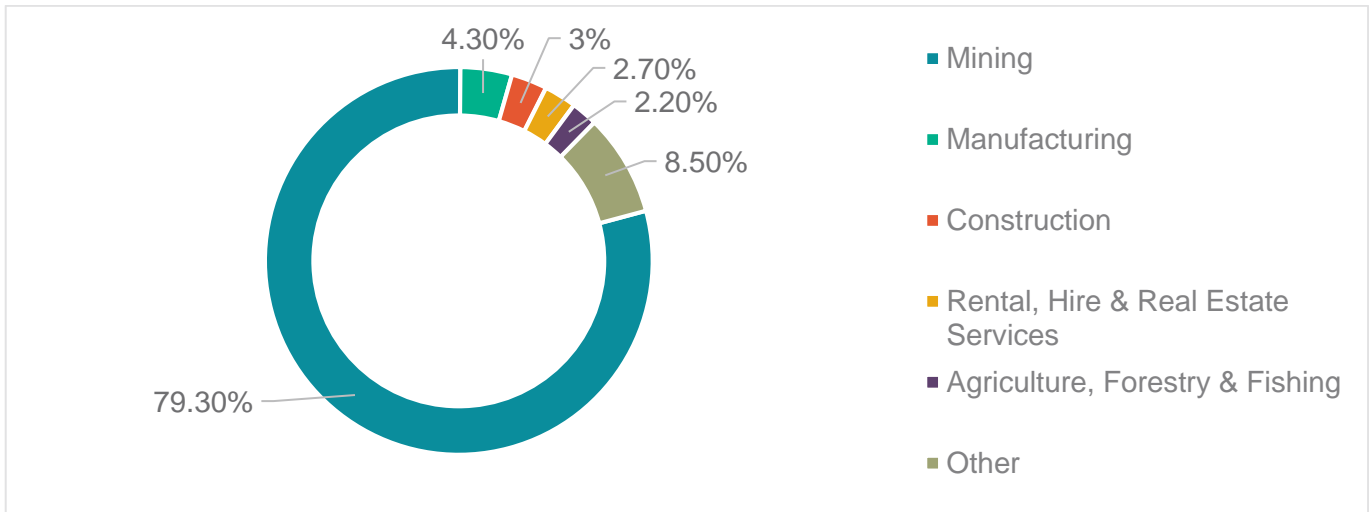


## GSP/GRP COMPARISON

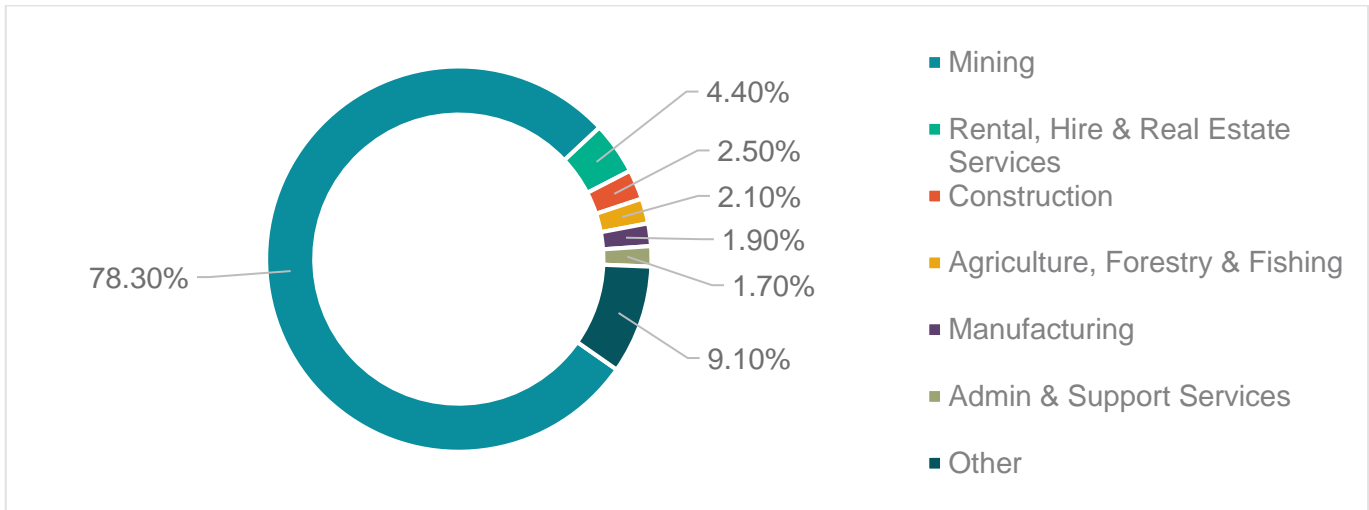


1. Isaac has six times (6x) less people per hectare than the Queensland average.
2. Isaac produces 1.8x less GRP than the Queensland average per hectare.
3. Isaac's per capita GRP is four times (4x) the Queensland average.
4. Isaac's per worker GRP is 1.8 times the Queensland average.

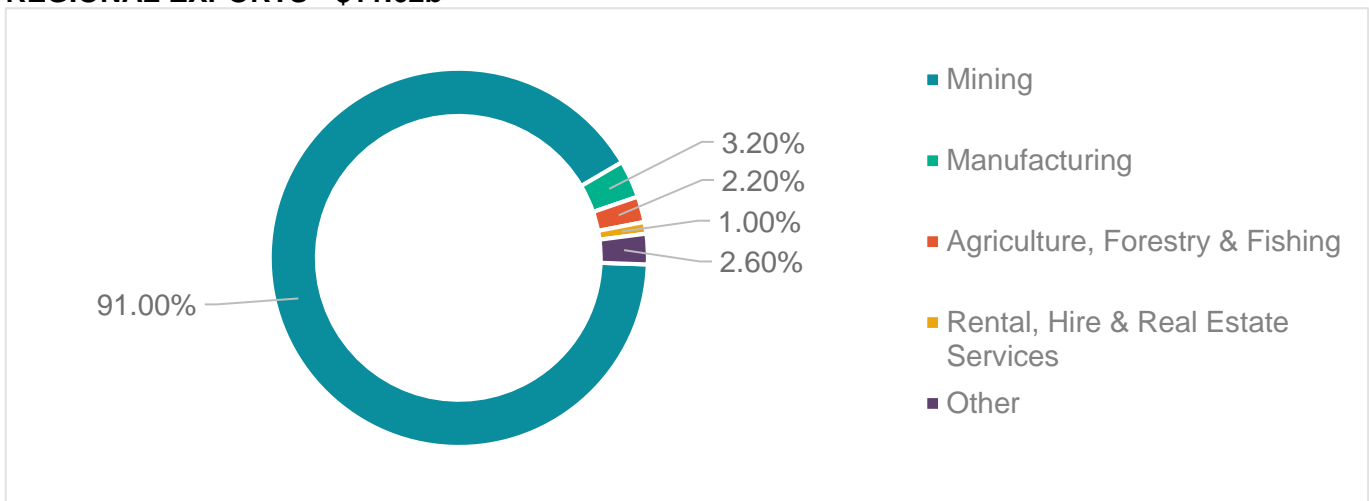
**OUTPUT - \$14.04B<sup>1</sup>**



**VALUE ADD - \$5.82B<sup>2</sup>**

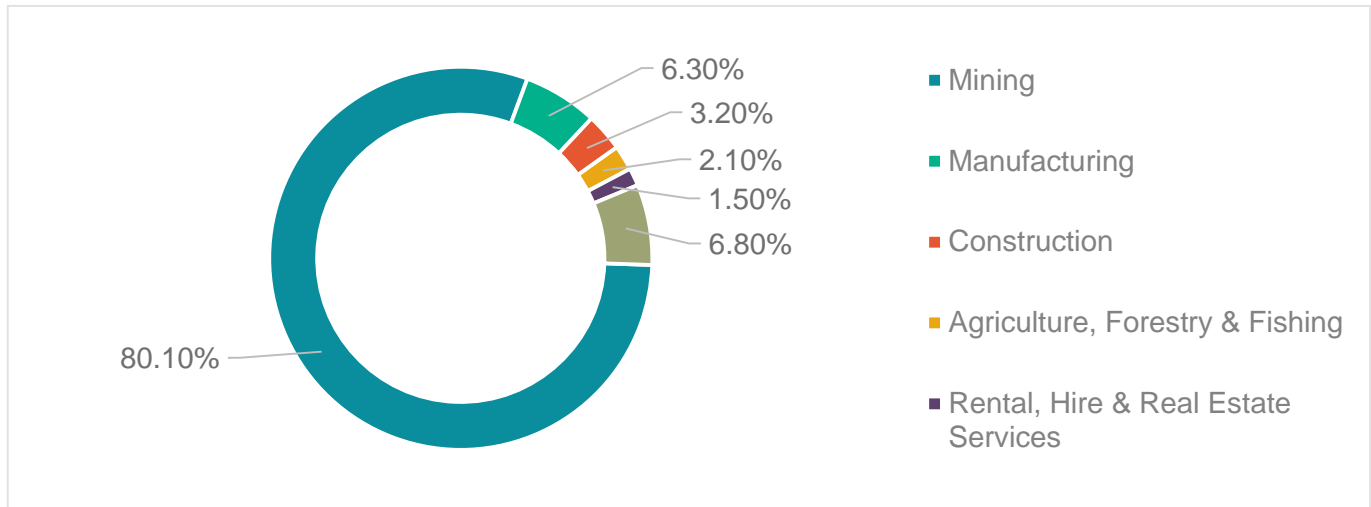


**REGIONAL EXPORTS - \$11.62b<sup>3</sup>**

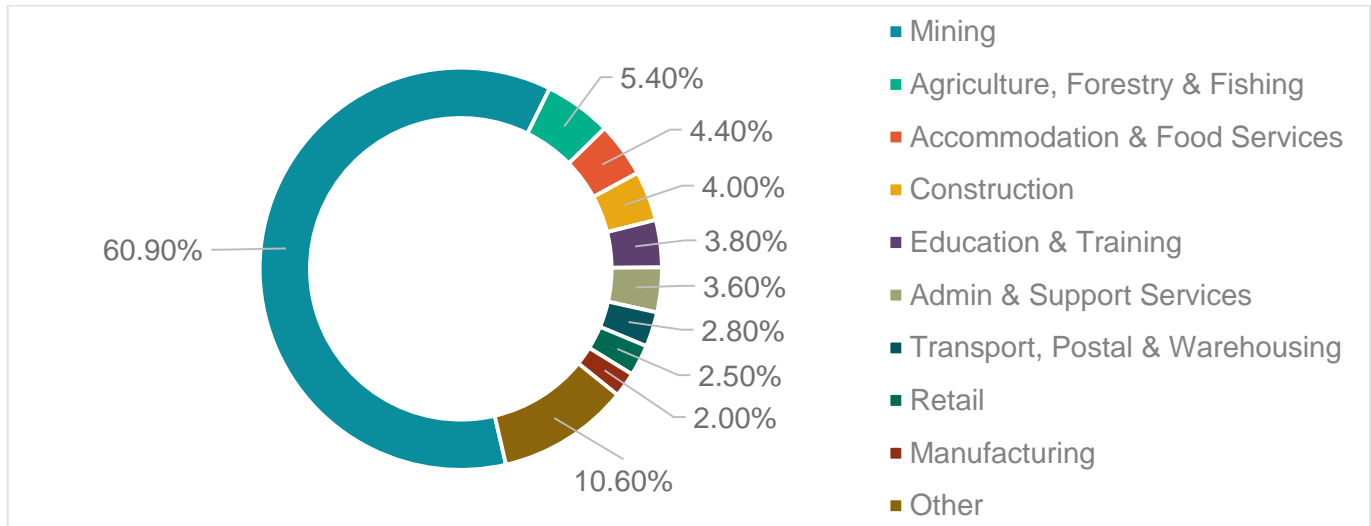


<sup>1</sup> REMPLAN Economy  
<sup>2</sup> REMPLAN Economy  
<sup>3</sup> REMPLAN Economy

## REGIONAL IMPORTS - \$6.6B<sup>4</sup>



## JOBS<sup>5</sup>



<sup>4</sup> REMPLAN Economy

<sup>5</sup> REMPLAN Economy



# OUR ECONOMIC DRIVERS

# ISAAC'S ECONOMIC DRIVERS

## KEY PROPULSIVE SECTORS REPORT

Key Propulsive Sectors Report identifies the industry sectors which are the key drivers of the region's local economy. It measures industry's contribution to four key indicators being regional exports, employment, value-added and local expenditure on goods and services (backwards linkages). These indicators are defined below:

**Value-Added** - represents the marginal economic value that is added by each industry sector in a defined region. Value-Added is calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector. Value-Added by industry sector is the major element in the calculation of Gross Regional Product.

**Employment** - the key social outcome of economy development; employment data represents the number of people employed by businesses / organisations in each of the industry sectors in the Isaac (R) Region.

**Regional Exports** - represents the value of goods and services exported outside of the Isaac (R) Region that have been generated by local businesses / organisations. Another way of defining exports is as an inflow of money into the region, i.e. Motels have an inflow of money from people who live outside the region's boundaries thus they are earning export equivalent dollars.

**Backward Linkages** - details the industry sectors which spend the most on locally sourced intermediate goods and services per dollar of output. These industry sectors may not necessarily make the largest contributions to the Region's economy at present however due to well-developed local supply chains these sectors have a significant capacity to deliver broad based economic benefits for the region.

For the purposes of this strategy two key propulsive sectors reports (analysing top six performers at a 19 industry level and top twelve performers at a 114 industry level) have been produced and can be found in appendix 1:

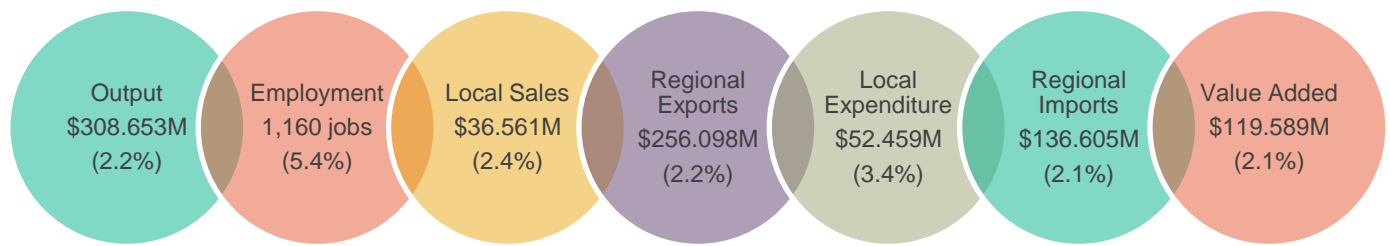
In total, four key industry sectors were identified as key propulsive sectors and current drivers for the Isaac region. These are:

1. **Agribusiness**, specifically broadacre cropping and cattle.
2. **Construction**
3. **Manufacturing**
4. **Mining**, specifically coal mining and mining, exploration and support services

There are 21,462 jobs in Isaac, of which 15,511 (72.3%) are supported by these key sectors. Understanding where there are gaps in the supply chains of these sectors, provides the opportunity to support import replacement with local production and jobs, and potential population growth.

## AGRIBUSINESS

### ECONOMIC OVERVIEW<sup>6</sup>



The Agribusiness sector contributes \$308.653 million (and accounts for 2.2%) of the region's total output. The sector is the region's second highest industry employer supporting 1,160 jobs (5.4%). The agribusiness industry sector sells \$36.561 million to local industry sectors as intermediate inputs into production and for further value-adding.

The total value of local sales for an industry sector relative to exports provides insights into the degree to which the industry is dependent on local demand versus demand from outside the region. Agriculture, Forestry and Fishing is the region's third largest regional exporter (\$256.098 million versus \$36.56 million in local sales) and as such, Isaac's agribusiness sector is highly dependent on external demand.

Local Expenditure data represents the value of intermediate goods and services purchased by local industry sectors within the region. A high level of local expenditure on intermediate goods and services proportionate to total output is indicative of a well-developed local supply chain. In this instance, Isaac's Agribusiness sector supply chain is quite well developed, so any expansion in this sector would typically deliver broad based benefits for the region's economy.

With this said, there is still \$134.46 million of regional economic leakage occurring in the Agribusiness supply chain. The breakdown of the sector's five largest supply chain gaps are:

1. \$14.8 million (11%) for wholesale trade.
2. \$14.41 million (10.7%) for Agriculture, Forestry and Fishing Support Services
3. \$13.2 million (9.8%) for Petroleum & Coal Product Manufacturing, presumably fuel.
4. \$8.73 million (6.5%) for Professional, Scientific and Technical Services
5. \$8.64 million (6.4%) for Other Agriculture

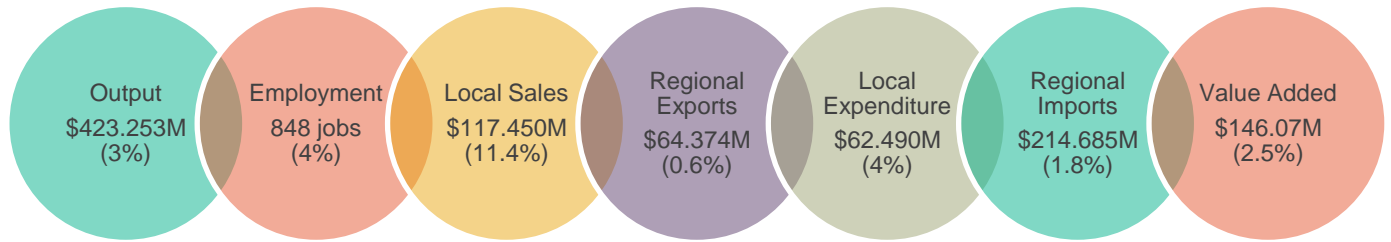
Export driven industry is critical, as it generates demand for goods and services from outside the region rather than being driven by local demand driven population growth. Export dollars equals income from outside the region.

A detailed industry profile can be found in appendix 2.

<sup>6</sup> REMPLAN Economy 2018

# CONSTRUCTION

## ECONOMIC OVERVIEW<sup>7</sup>



Construction services refer to businesses and organisations engaged in site preparation, trades, landscaping and the hire of construction machinery. The construction services sector contributes \$423.253 million accounting for 3% of the region's total output and supporting 848 local jobs.

The sector accounts for a significant share of the region's local sales with \$117.45 million (11.4%). Local expenditure \$62.49 million. Local sales relative to exports (\$117.45M to \$64.37M) reflects an industry sector which is highly dependent on local demand compared to demand from outside of the region.

The Construction sector in Isaac domestically imports a total of \$214.34 million in goods and services from outside the region's boundaries as inputs into the sector's production process. The breakdown in the five largest gaps in the Isaac region are:

1. \$63.23 million (29.5%) for construction services. This consists mostly of land/site preparation services and trade services.
2. \$26.4 million (12.3%) for Professional, Scientific and Technical Services such as accounting, architecture, engineering, legal, mapping, surveying, and scientific research services.
3. \$10.15 million (4.7%) for Structural Metal Product Manufacturing such as structural steel fabricating, prefabricated metal building manufacturing, roof and guttering manufacturing and architectural aluminium product manufacturing.
4. \$9.28 million (4.3%) for Residential Building Construction
5. \$8.34 million for Wholesale trade.

Construction has been driven primarily by industry and population growth associated with the mining industry. However, the industry is subject to economic fluctuations and the continued availability of a skilled workforce. Future growth will be reliant on stimulus from government for infrastructure and construction development as well as steady resident population growth. Sequencing of land supply for development will need to be well serviced by infrastructure and well located to accommodate future population and employment growth.

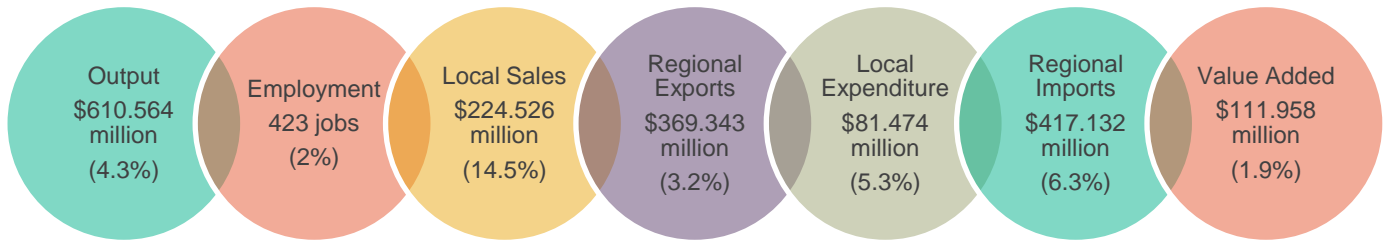
A detailed industry profile can be found in appendix 3.

<sup>7</sup> REMPLAN Economy 2018



# MANUFACTURING

## ECONOMIC OVERVIEW<sup>8</sup>



The manufacturing sector contributes \$610.564 million to total regional output, accounting for 4.3% of the region's total output and supporting 423 jobs (2% of the region's total employment). This industry sector is selling \$224.526 million of goods and services to local industry for inputs into their production process which is a significant share of the region's local sales (14.5%). The manufacturing sector is also the second highest exporting industry sector in the region with regional exports of \$369.343 million (3.2% of total regional exports).

The *Manufacturing* sector in Isaac imports a total of \$417.132 million in goods and services from outside the region's boundaries as inputs to the sector's production process. Many of the goods and services imported from overseas are priced at a level making substitution with the local supply unlikely and in instances, unfeasible. Imports from the rest of Australia (domestic imports) however, indicate opportunities for import replacement, increased value adding and supply chain development. Supply of these goods and services is currently feasible in the Australian context and provide a guide to realistic, high value strategic opportunities to further develop the economy. Domestic imports by the local manufacturing sector totals \$152.28 million. The breakdown of the largest domestic imports in this sector are:

1. \$21.6 million (14.2%) for Wholesale Trade
2. \$14.84 million (9.7%) for Petroleum & Coal Product Manufacturing
3. \$9.67 million (6.4%) for Professional, Scientific and Technical Services including scientific research services, surveying and mapping, engineering design and engineering consulting, scientific testing and analysis services, legal, accounting and corporate head office management services.
4. \$7.8 million (5.1%) for Gas Supply
5. \$5.87 million (3.9%) for Oil & Gas Extraction

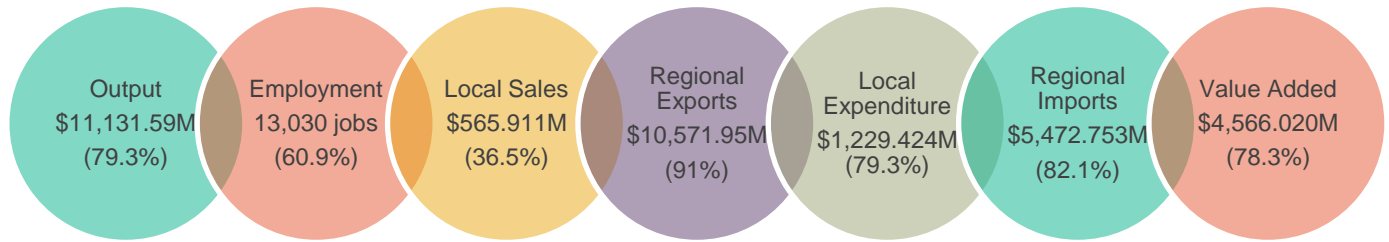
Export driven industry is critical, as it generates demand for goods and services from outside the region rather than being driven by local demand driven population growth. Export dollars equals income from outside the region.

A detailed industry profile can be found in appendix 4.

<sup>8</sup> REMPLAN Economy 2018

# MINING

## ECONOMIC OVERVIEW<sup>9</sup>



The Isaac is a resource rich region spanning a large portion of the Bowen and Galilee Basins. It's home to 26 active coal mines, with further significant mining projects under development and gas exploration in the early stages. Isaac region produces more than half (54%) of Queensland's saleable coal, with the majority being world-class metallurgical coal. Isaac's mining sector also contributes \$1.5 billion of Queensland's royalties out of a total \$3.8 billion (39.5%).

The Isaac economy is largely driven by the resources sector, which contributes \$11.131 billion (or 79.3%) to the region's total output. The sector is the highest performer across output, employment, local sales, regional exports, regional expenditure, and value added. The sector also imports the most of all industries. Many of the goods and services imported from overseas are priced at a level making substitution with the local supply unlikely and in instances, unfeasible. Imports from the rest of Australia (domestic imports) however, indicate opportunities for import replacement, increased value adding and supply chain development. Supply of these goods and services is currently feasible in the Australian context and provide a guide to realistic, high value strategic opportunities to further develop the economy. A total of \$5.181 billion in domestic goods and services are imported from outside the region's boundaries as inputs to the sector's production process. This is significant economic leakage that could be retained within the region through an improved supply chain. The breakdown in the five largest gaps in the Isaac region's mining sector are:

1. \$1 billion (or 19.4%) for Exploration & Mining Support Services including petroleum and mineral exploration and other mining support services.
2. \$473 million (or 9.1%) for Professional, Scientific and Technical Services including scientific research services, surveying and mapping, engineering design and engineering consulting, scientific testing and analysis services, legal, accounting and corporate head office management services.
3. \$343.84 million (6.6%) for Specialised Machinery and Equipment Manufacturing including mining and construction machinery manufacturing, fixed space heating, cooling and ventilation equipment manufacturing, pump and compressor manufacturing, machine tool and parts manufacturing and lifting and material handling equipment manufacturing.
4. \$311.2 million (6%) Petroleum and Coal Product Manufacturing
5. \$237.14 million (4.6%) for Wholesale Trade

Other significant gaps in the supply chain are Construction Services (\$202.4 million), Finance (\$185.44 million), Transport Support Services and Storage (\$218.87 million), Structural Metal Product Manufacturing (\$158.5 million) and Repair and Maintenance (\$163.7 million).

<sup>9</sup> REMPLAN Economy 2018

A detailed industry profile can be found in appendix 5.

## **FUTURE INDUSTRY POTENTIAL**

### **ISAAC'S CLEANTECH & BIOFUTURES POTENTIAL**

Isaac boasts a burgeoning renewables industry. The region has many of the natural assets, and potentially the infrastructure, required for the realisation of cleantech potential. There are currently (2018) two (2) solar farms under construction with a further seven (7) approved and range in capacity from 50-400 megawatts.

Approval has also been granted for one of Australia's largest wind farms at Clarke Creek. The project comprises of 195 turbines and has the capacity to generate 2,000 gigawatt-hours of renewable electricity p.a. This is equivalent to 3% of Queensland's energy demand.

Isaac's climate is suitable for other biofuture opportunities. Bagasse and other by-products of sugar cane processing can be used for energy generation and production of bio-plastics. Many of the oilseeds used for biofuels can be grown successfully in the region. The coastal strip may prove suitable for tidal power technologies and if planned infrastructure developments such as the Connor's River Dam come to fruition hydro-power generation may be possible. Many research organisations, including the CSIRO and Central Queensland University are already undertaking research in the area across a number of fields.

The resource sector, as the current key driver of the local economy, represents a geographically proximate market for cleantech outputs, at least while the cluster is in its infancy.



# OUR STRATEGIC DIRECTION

## 1.0 TRANSFORMATIONAL LEADERSHIP

Leadership is important to maintain focus on long-term goals and to generate positive and meaningful outcomes. Council has a direct and important role in economic development and is a natural fit to lead economic development in the region.

ACTION	PRIORITY
1.1 Facilitate strategic leadership for the region	H
1.2 Continue to lead, drive and publicly advocate Isaac's agenda	H
1.3 Establish and maintain regional industry networks to coordinate, inform and promote programs and resources to strengthen local businesses.	H
1.4 Foster and promote secular and cross industry partnerships and collaborations	M
1.5 Collaborate with government and industry to deliver mutually beneficial outcomes in areas of shared interest	H
1.6 Facilitate industry information sharing opportunities	M
1.7 Acquire, collate and disseminate economic information to improve understanding of business and industry performance, trends and opportunities in Isaac.	M
1.8 Create an Economic Development Advisory Board to advise the implementation and monitor progress of the Economic Development Framework and associated strategies/action plans.*	M
1.9 Create a mutually beneficial relationship with the region's finance sector and in particular bank managers to inform local business intelligence and assess business confidence.	M

### *\* Economic Development Advisory Board*

*The success of the Economic Development Framework will depend heavily on the relationship between Council, government, key industry sectors and the local business community.*

*The Economic Development Advisory Board (EDAB) will oversee the implementation of the Economic Development Framework, including action plans. It is recommended this board act only in an advisory capacity. The EDAB should be made up of experienced individuals with considerable industry knowledge and strategic thinking ability and will be bound by a strict Terms of Reference.*

## 2.0 PROSPEROUS INDUSTRY

Encouraging local industries to expand and attracting new businesses will add jobs, investment and overall economic activity to the region.

ACTION	PRIORITY
2.1 Undertake an assessment of Isaac's key industries to map local capability, innovation, potential new markets and regional, national and international competitiveness.	H
2.2 Develop and promote whole-of-industry-based capability statements to inform import replacement opportunities	M
2.3 Map each of the key industries supply chain to identify barriers, gaps and impediments to industry growth and development.	H
2.4 Promote industry opportunities for increased value adding, investment and business development.	M
2.5 Partner with industry to elevate local industry sector profiles to the broader domestic and international market	M
2.6 Develop comprehensive industry development strategies for each of Isaac's key industries.	H
2.7 Establish and maintain regional industry databases and industry networks to coordinate, inform and promote programs and resources to strengthen local industry.	H
2.8 Work with industry, research and educational institutions and the business community to encourage, drive and adopt innovation.	M
2.9 Implement the Isaac Business Support Strategy to support stronger business practices, build capability and drive business innovation.	H

### 3.0 ENABLED INFRASTRUCTURE

Catalytic or enabling infrastructure can ‘unlock’ new economic opportunities and become a spark for building new industry clusters and attracting investment and employment. These projects can often build on existing competitive advantages or provide access for new opportunities. A region with an identified priority infrastructure list, built on a solid business and economic base as well as broad stakeholder buy in, is more likely to gain government investment support.

ACTION	PRIORITY
3.1 Create and maintain a regional priority infrastructure plan (PIP) which identifies infrastructure needs within the following areas: <ul style="list-style-type: none"> <li>- Water</li> <li>- Gas</li> <li>- Transport and logistics including road, rail, air and port.</li> <li>- Telecommunications including mobile phone coverage and high speed internet (NBN)</li> <li>- Energy</li> <li>- Industry enabling infrastructure</li> </ul>	H
3.2 Identify opportunities to attract co-investment in regional infrastructure projects from Queensland and Commonwealth governments and the private sector.	H
3.3 Use the PIP to advocate government and stakeholders for infrastructure investment in the region.	H
3.4 Ensure infrastructure and utilities within Isaac have the capacity to accommodate future rapid population fluctuations.	H
3.5 Submit grant applications for priority community, business and infrastructure projects	H
3.6 Create and maintain a social infrastructure plan	H

## 4.0 STRONG REGIONAL IDENTITY

Having a strong regional identity will help to build business confidence, assist in marketing and promotion as well as provide a platform for uniting the region, providing a compelling basis for collaboration and cooperation.

ACTION	PRIORITY
4.1 Develop and deliver a sub-brand and marketing strategy to promote Isaac as a place to live, work, invest and do business.	M
4.2 Develop a suite of marketing materials to promote Isaac as an attractive place for people to <i>live, work</i> and <i>play</i> and for business to establish and grow.	M
4.3 Draft an Investment Attraction Policy, and Investment Facilitation Guideline.	M
4.4 Develop a coordinated investment enquiry protocol that delivers best outcomes for proponents to maximise conversion opportunities.	M
4.5 Develop and maintain easily accessible industry-based investment prospectus'	M
4.6 Proactively engage with potential investors regarding opportunities to invest in the region.	M



## 5.0 PROACTIVE REGIONAL PLANNING

Planning is a critical function of local government and strategic and statutory planning can be the local government's most effective tool for economic development. Ensuring planning instruments and controls encourage growth, investment and economic development are important to achieving results on the ground.

Providing a regulatory framework that is conducive to business will be important to move towards the new economic future. Considering innovative ways to deliver the regulatory function of local government can often become a competitive advantage for encouraging investment and business. The planning scheme, as the local regulatory tool, will be important to this process. However, often beyond the planning scheme, the development controls and guidelines as well as the manner in which development applications are assessed can have a more significant impact.

Economic conditions will change in the future and new opportunities will emerge. Only regular review of the economic development strategy can ensure that it remains relevant to current circumstance and contributes to the future economic growth of the region.

ACTION	PRIORITY
5.1 Provide a supportive regulatory framework	H
5.2 Promote planning scheme concessions conducive to investment and economic and industry development, to businesses and investors.	M
5.3 Make it easier to do business in Isaac by reducing unnecessary red tape and regulatory burden.	M
5.4 Effective and efficient assessment of Development Applications	H
5.5 Regularly review the Economic Development Framework to maintain currency and relevance.	M



# APPENDICES

## APPENDIX 1

### ISAAC'S ECONOMIC DRIVERS

#### KEY PROPULSIVE SECTORS REPORT

Key Propulsive Sectors Report identifies the industry sectors which are the key drivers of the region's local economy. It measures industry's contribution to four key indicators being regional exports, employment, value-added and local expenditure on goods and services (backwards linkages). These indicators are defined below:

**Value-Added** - represents the marginal economic value that is added by each industry sector in a defined region. Value-Added is calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector. Value-Added by industry sector is the major element in the calculation of Gross Regional Product.

**Employment** - the key social outcome of economy development; employment data represents the number of people employed by businesses / organisations in each of the industry sectors in the Isaac (R) Region.

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**Backward Linkages** - details the industry sectors which spend the most on locally sourced intermediate goods and services per dollar of output. These industry sectors may not necessarily make the largest contributions to the Region's economy at present however due to well-developed local supply chains these sectors have a significant capacity to deliver broad based economic benefits for the region.

For the purposes of this strategy two key propulsive sectors reports have been produced:

1. Top 6 performers at a 19 Industry Sector level (Macro level analysis)
2. Top 12 performers at a 114 Industry Sector level (Micro level analysis)

## Top 6 of 19 Industry Sectors

The industry sectors below which correspond to a  in the table above are amongst the top 6 (of 19 sectors) contributors to economic activity in the Isaac (R) Region in relation to backward linkages, exports, employment, and value-added.

Industry Sectors	Backward Linkages	Exports	Employment	Value-Added	Total
Agriculture, Forestry Fishing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4
Construction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4
Mining		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
Manufacturing	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	3
Rental, Hiring Real Estate Services		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Administrative Support Services			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
Electricity, Gas, Water Waste Services	<input checked="" type="checkbox"/>				1
Accommodation Food Services			<input checked="" type="checkbox"/>		1
Transport, Postal Warehousing		<input checked="" type="checkbox"/>			1
Information Media Telecommunications	<input checked="" type="checkbox"/>				1
Education Training			<input checked="" type="checkbox"/>		1
Arts Recreation Services	<input checked="" type="checkbox"/>				1

Across these measures of economic activity the key propulsive drivers of the Isaac (R) Region's economy, in **descending order from most significant**, are:

6/19 Industry Sectors	Total
Agriculture, Forestry Fishing	4
Construction	4
Manufacturing	3
Mining	3
Administrative Support Services	2
Rental, Hiring Real Estate Services	2
Arts Recreation Services	1
Information Media Telecommunications	1
Electricity, Gas, Water Waste Services	1
Accommodation Food Services	1
Education Training	1
Transport, Postal Warehousing	1
Health Care Social Assistance	0
Retail Trade	0
Wholesale Trade	0
Public Administration Safety	0
Professional, Scientific Technical Services	0
Other Services	0
Financial Insurance Services	0

The major key propulsive sectors in the Isaac (R) Region have been identified as:

1. Agriculture, Forestry Fishing
2. Construction
3. Manufacturing
4. Mining

## Top 12 of 114 Industry Sectors

The industry sectors above which correspond to a  in the table above are amongst the top 12 (of 114 sectors) contributors to economic activity in the Isaac (R) Region in relation to backward linkages, exports, employment, and value-added.

Industry Sectors	Backward Linkages	Exports	Employment	Value-Added	Total
Sheep, Grains, Beef Dairy Cattle	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	4
Coal Mining		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
Exploration Mining Support Services		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
Construction Services	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
Employment, Travel Agency and Other Administrative Services		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3
Oil Gas Extraction		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Heavy Civil Engineering Construction		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Basic Chemical Manufacturing		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Accommodation		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		2
Rail Transport		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Ownership of Dwellings		<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	2
Building Cleaning, Pest Control and Other Support Services	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>		2
Public Administration Regulatory Services			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
Pre-School, Primary, Secondary Special Education			<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2
Agriculture, Forestry Fishing Support Services	<input checked="" type="checkbox"/>				1
Iron Ore Mining		<input checked="" type="checkbox"/>			1
Non Ferrous Metal Ore Mining		<input checked="" type="checkbox"/>			1
Meat & Meat Product Manufacturing	<input checked="" type="checkbox"/>				1
Beer Manufacturing	<input checked="" type="checkbox"/>				1
Polymer Product Manufacturing	<input checked="" type="checkbox"/>				1
Cement, Lime Ready-Mixed Concrete Manufacturing	<input checked="" type="checkbox"/>				1
Basic Non-Ferrous Metal Manufacturing	<input checked="" type="checkbox"/>				1
Electricity Generation	<input checked="" type="checkbox"/>				1
Residential Building Construction	<input checked="" type="checkbox"/>				1
Non-Residential Building Construction	<input checked="" type="checkbox"/>				1
Retail Trade			<input checked="" type="checkbox"/>		1
Food Beverage Services			<input checked="" type="checkbox"/>		1
Health Care Services			<input checked="" type="checkbox"/>		1

Across these measures of economic activity the key propulsive drivers of the Isaac (R) Region's economy, in **descending order from most significant**, are:

12/114 Industry Sectors	Total
Sheep, Grains, Beef Dairy Cattle	4
Employment, Travel Agency and Other Administrative Services	3
Exploration Mining Support Services	3
Construction Services	3
Coal Mining	3

Building Cleaning, Pest Control and Other Support Services	2
Ownership of dwellings	2
Pre-school, primary, secondary, special education	2
Heavy Civil Engineering Construction	2
Basic Chemical Manufacturing	2
Oil Gas Extraction	2
Accommodation	2
Rail Transport	2
Public Administration Regulatory Services	2
Iron Ore Mining	1
Health Care Services	1
Retail Trade	1
Food Beverage Services	1
Basic Non-Ferrous Metal Manufacturing	1
Non Ferrous Metal Ore Mining	1
Meat & Meat Product Manufacturing	1
Cement, Lime Ready-Mixed Concrete Manufacturing	1
Electricity Generation	1
Residential Building Construction	1
Agriculture, Forestry Fishing Support Services	1
Beer Manufacturing	1
Polymer Product Manufacturing	1
Non-Residential Building Construction	1

The major key propulsive sectors in the Isaac (R) Region have been identified as:

1. Sheep, Grains, Beef Dairy Cattle
2. Employment, Travel Agency and Other Administrative Services
3. Exploration Mining Support Services
4. Construction Services
5. Coal Mining

## CURRENT PROPULSIVE SECTORS

In total, four key industry sectors were identified as key propulsive sectors and current drivers for the Isaac region. These are:

1. **Agribusiness, specifically broadacre cropping and cattle.**
2. **Construction**
3. **Manufacturing**
4. **Mining, specifically coal mining and mining, exploration and support services**

There are 21,462 jobs in Isaac, of which 15,511 (72.3%) are supported by these key sectors. Understanding where there are gaps in the supply chains of these sectors, provides the opportunity to support import replacement with local production and jobs, and potential population growth.

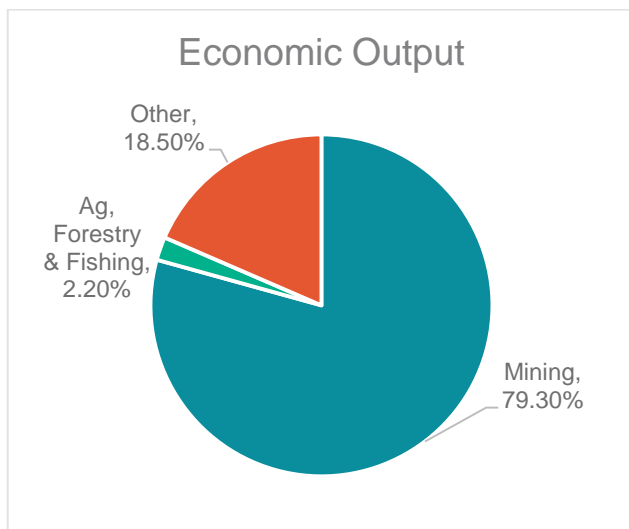
## APPENDIX 2

### AGRICULTURE SECTOR PROFILE

#### OUTPUT

Output data represents the gross revenue generated by businesses /organisations in each of the industry sectors in a defined region.

The output generated by the Isaac region economy is estimated at \$14.041 billion. The *Agriculture Forestry & Fishing* sector is the fifth (5<sup>th</sup>) highest contributor to output in the Isaac economy with \$308.653 million (2.2%). The *Mining* sector makes the highest contribution to output with \$11.131 billion (79.3%), followed by *Manufacturing* (\$610.564 million), *Construction* (\$423.253 million), *Rental, Hiring & Real Estate Services* (\$372.961 million).



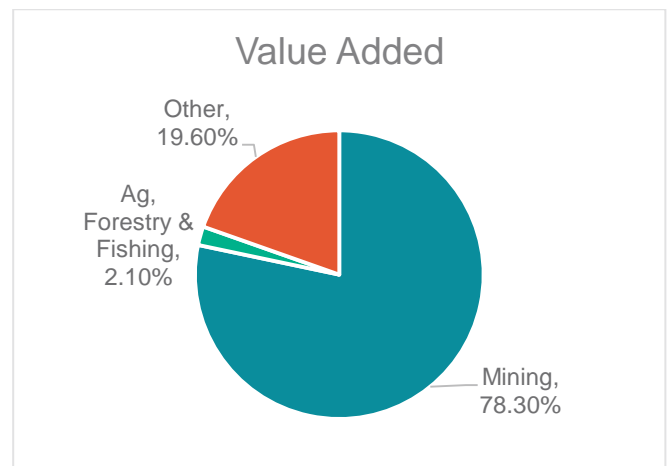
At the 114 industry sector level, the top *Agriculture, Forestry & Fishing* sub-sectors contributing to output are:

Industry Sector	\$M	%
Sheep, Grains, Beef & Dairy Cattle	\$261.567	1.9%
Other Agriculture	\$24.065	0.2%
Aquaculture	\$11.221	0.1%
Agriculture, Forestry & Fishing Support Services	\$9.816	0.1%
Fishing, Hunting & Trapping	\$1.984	0%
<b>Sub-Total</b>	<b>\$308.653</b>	<b>2.2%</b>

#### VALUE ADDED

Value-added data represents the marginal economic value that is added by each industry sector. Value-added can be calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector.

The total value-added by the Isaac region economy is estimated at \$5.827 billion. *Agriculture, Forestry and Fishing* is the fourth (4<sup>th</sup>) highest contributor to value-add with \$119.589 million (2.1%). *Mining* is the highest value-added industry sector contributing \$4.566 billion (78.3%). The second-highest value-added industry sector is *Rental, Hiring & Real Estate Services* contributing \$254.504 million (4.4%), followed by *Construction* with \$146.078 million (2.5%).



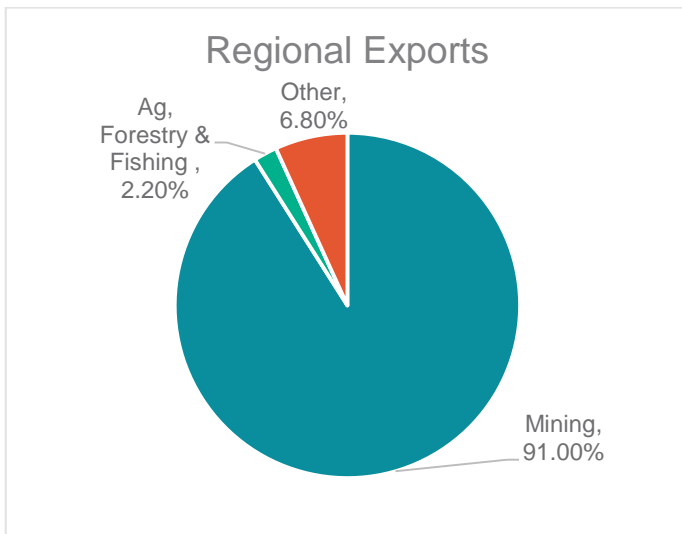
At the 114 industry sector level, the top value-added *Agriculture, Forestry & Fishing* sub-sectors are:

Industry Sector	\$M	%
Sheep, Grains, Beef & Dairy Cattle	\$97.374	1.7%
Other Agriculture	\$13.440	0.2%
Aquaculture	\$4.127	0.1%
Agriculture, Forestry & Fishing Support Services	\$3.662	0.1%
Fishing, Hunting & Trapping	\$0.987	0.0%
<b>Sub-Total</b>	<b>\$119.589</b>	<b>2.1%</b>

## REGIONAL EXPORTS

Regional exports data represents the value of goods and services exported by industry sectors within the region.

The total regional export estimate for the Isaac Region is \$11.618 billion. *Agriculture, Forestry & Fishing* is the third largest contributor to regional exports in Isaac with \$256.098 million (2.2%). The *Mining* sector has the highest level of regional exports of \$10.571 billion (91%). *Manufacturing* had the second highest level of regional export at \$369.343 million (3.2%).



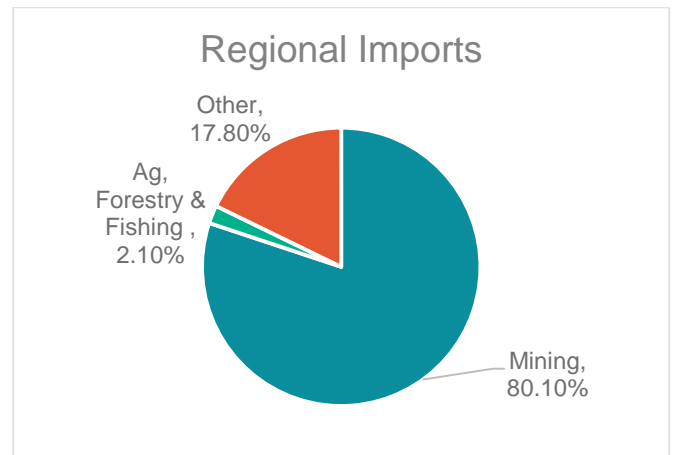
At the 114 industry sector level, the top *Agriculture, Forestry & Fishing* sub sectors contributing to exports are:

Industry Sector	\$M	%
Sheep, Grains, Beef & Dairy Cattle	\$97.374	1.7%
Other Agriculture	\$13.440	0.2%
Aquaculture	\$4.127	0.1%
Agriculture, Forestry & Fishing Support Services	\$3.662	0.1%
Fishing, Hunting & Trapping	\$0.987	0.0%
<b>Sub-Total</b>	<b>\$256.098</b>	<b>2.2%</b>

## REGIONAL IMPORTS

Regional imports data represents the value of goods and services imported into the region in each of the industry sectors.

The total regional import estimate for the Isaac region is \$6.662 billion. The *Agriculture, Forestry & Fishing* sector has the fourth (4<sup>th</sup>) highest level of regional imports at \$136.605 million (2.1%). The *Mining* sector has the highest level of regional imports with \$5.336 billion (80.1%). The *Manufacturing* sector had the second highest level of regional imports (\$417.132 million), followed by *Construction* (\$214.685 million).



At the 114 industry sector level, the top *Agriculture, Forestry & Fishing* sub-sectors contributing to imports are:

Industry Sector	\$M	%
Sheep, Grains, Beef & Dairy Cattle	\$117.069	1.8%
Other Agriculture	\$8.470	0.1%
Aquaculture	\$6.164	0.1%
Agriculture, Forestry & Fishing Support Services	\$3.986	0.1%
Fishing, Hunting & Trapping	\$0.916	0%
<b>Sub-Total</b>	<b>\$136.605</b>	<b>2.1%</b>



## AGRICULTURE OPPORTUNITIES - GAPS IN THE LOCAL SUPPLY CHAIN

Imports reflect demand for goods and services not supplied locally and therefore represent **gaps in the local supply chain**. A proportion of this escape expenditure may be captured locally, providing opportunities for import replacement, increased value-adding and supply chain development in the region.

The *Agriculture, Forestry & Fishing* sector imports \$134.460 million worth of goods and services per annum from the rest of Australia, with the *Manufacturing* sector supplying \$34.326 million (25.5%) in imports followed by the *Agriculture, Forestry & Fishing* sector with \$28.164 million (20.9%) and *Wholesale Trade* sector with \$14.80 million (11%).

External Supply Sectors (19 industry sector level)	\$M	%
Manufacturing	\$34.326	25.5%
Agriculture, Forestry & Fishing	\$28.164	20.9%
Wholesale Trade	\$14.800	11.0%
Financial & Insurance Services	\$14.789	11.0%
Transport, Postal & Warehousing	\$9.869	7.3%
Professional, Scientific & Technical Services	\$8.770	6.5%
Construction	\$8.236	6.1%
Rental, Hiring & Real Estate Services	\$4.177	3.1%
Electricity, Gas, Water & Waste Services	\$3.757	2.8%
Retail Trade	\$2.674	2.0%
Other Services	\$1.873	1.4%
Accommodation & Food Services	\$1.044	0.8%
Mining	\$0.728	0.5%
Administrative & Support Services	\$0.527	0.4%
Information Media & Telecommunications	\$0.457	0.3%
Public Administration & Safety	\$0.169	0.1%
Arts & Recreation Services	\$0.065	0.0%
Education & Training	\$0.030	0.0%
Health Care & Social Assistance	\$0.005	0.0%
<b>Total</b>	<b>\$134.460</b>	<b>100.0%</b>

At the 114 industry sector level, the top 30 external supply sectors supplying goods and services to the *Isaac Agriculture, Forestry & Fishing* industry are:

External Supply Sectors (114 industry sector level)	\$M	%
Wholesale Trade	14.80	11%
Agriculture, Forestry & Fishing Support Services	14.41	10.7%
Petroleum & Coal Product Manufacturing	13.20	9.8%
Professional, Scientific & Technical Services	8.73	6.5%
Other Agriculture	8.64	6.4%
Auxiliary Finance & Insurance Services	8.43	6.3%
Other Food Product Manufacturing	5.96	4.4%
Construction Services	5.58	4.1%
Veterinary Pharmaceutical Product Manufacturing	5.54	4.1%
Finance	5.52	4.1%
Transport Support Services & Storage	5.24	3.9%
Sheep, Grains, Beef & Dairy Cattle	3.93	2.9%
Road Transport	3.47	2.6%
Non-Residential Property Operators & Real Estate Serv.	2.87	2.1%
Retail Trade	2.67	2.0%
Specialised & Other Machinery & Equipment Manu.	2.32	1.7%
Water Supply, Sewerage & Drainage Services	2.21	1.6%
Other Repair & Maintenance	1.43	1.1%
Heavy & Civil Engineering Construction	1.40	1%
Rental & Hiring Services (except real estate)	1.31	1%
Meat & Meat Product Manufacturing	1.08	0.8%
Printing (including the reproduction of recorded media)	1.06	0.8%
Insurance & Superannuation Funds	0.84	0.6%
Residential Building Construction	0.79	0.6%
Electricity Distribution	0.78	0.6%
Poultry & Other Livestock	0.74	0.5%
Electricity Generation	0.72	0.5%
Food & Beverage Services	0.65	0.5%
Prof, Scientific, Computer & Electronic Equip. Manu.	0.62	0.5%
Air & Space Transport	0.48	0.4%

## EMPLOYMENT

Employment data represents the number of people employed in each of the industry sectors in a defined region. Employment data presented by REMPLAN is destination of work data.

The total employment estimate for Isaac Region is 21,462 jobs. The *Agriculture, Forestry & Fishing* sector has the second (2<sup>nd</sup>) highest number of employees (after the *Mining* sector) has the highest number of jobs with 1,160 jobs (5.4%).

At the 114 industry sector level, the top The *Agriculture, Forestry & Fishing* sub-sectors contributing to employment are:

Industry Sector	Jobs	%
Sheep, Grains, Beef & Dairy Cattle	1,022	4.8%
Other Agriculture	77	0.4%
Aquaculture	29	0.1%
Ag, Forestry & Fishing Support Services	28	0.1%
Fishing, Hunting & Trapping	4	0%
<b>Sub-Total</b>	<b>1,160</b>	<b>5.4%</b>

## OCCUPATION

*Managers* account for 61.3% of occupations within the Isaac region's *Agriculture, Forestry & Fishing* industry sector with 711 jobs.

*Labourers* represent the next highest occupation in the industry with 311 jobs (26.8%).

Occupation	Jobs	%
Managers	711	61.3%
Labourers	311	26.8%
Machinery Operators and Drivers	55	4.7%
Technicians & Trade Workers	36	3.1%
Clerical and Administrative Workers	33	2.8%
Community and Personal Service Workers	8	0.7%
Professionals	7	0.6%
<b>Total</b>	<b>1,160</b>	<b>100.0%</b>

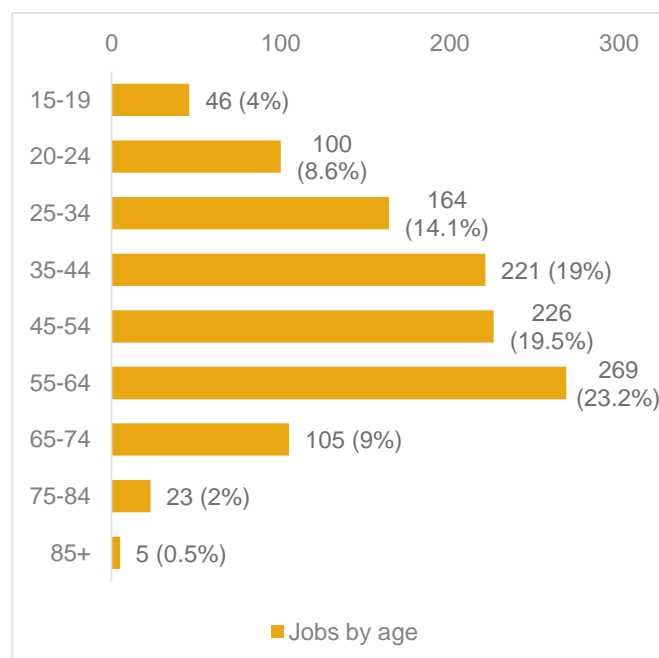
## QUALIFICATION / EDUCATION

The chart below shows the level of education for employed people in the *Agriculture, Forestry & Fishing* industry sector.

Level of Education	Jobs	%
Not applicable	769	66.3%
Certificate	239	20.6%
Bachelor Degree	62	5.4%
Advanced Diploma and Diploma	61	5.3%
Level of education not stated	25	2.2%
Postgraduate Degree	3	0.3%
Graduate Diploma and Graduate Certificate	0	0%
Level of education inadequately described	0	0%
<b>Total</b>	<b>1,160</b>	<b>100.0%</b>

## AGE

Of the 1,160 *Agriculture, Forestry and Fishing* jobs in the Isaac region, 61.7% of employees are aged 35-64. The 55-64 age group represented the largest cohort with 23.2% of jobs.



## BUSINESS NUMBERS

As at 8 October 2018, there were 3,230 businesses registered in the Isaac region (excluding self-managed superannuation and trust funds).

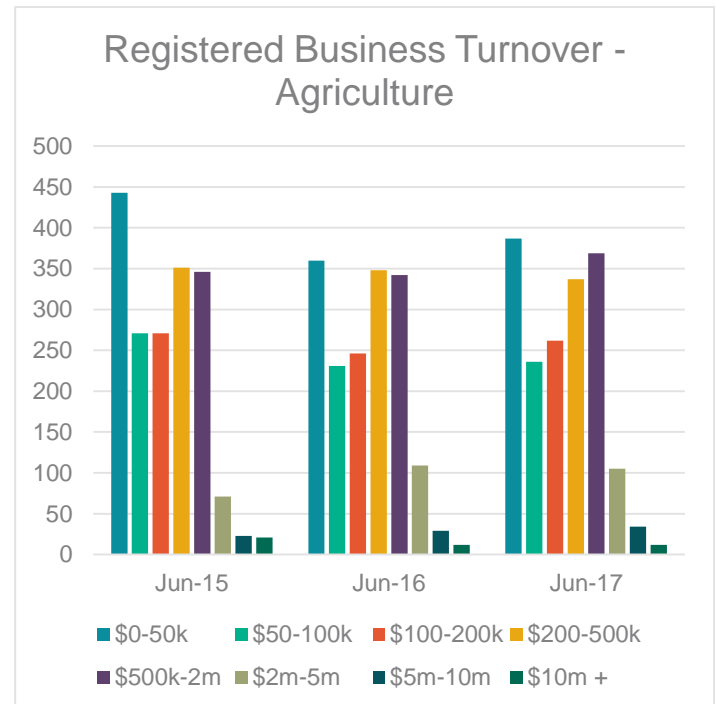
There were 442 businesses registered within the *Agriculture, Forestry and Fishing* sector, accounting for 13.68% of registered businesses within the region, second only after Construction.

The construction sector recorded 453 businesses (or 14.02%) of the total count.

Sector	Count	%
Construction	453	14.02%
<b>Agriculture, Forestry &amp; Fishing</b>	<b>442</b>	<b>13.68%</b>
Other Services	380	11.76%
Administrative & Support Services	303	9.38%
Retail Trade	236	7.31%
Professional, Scientific & Technical Serv.	233	7.21%
Rental, Hiring & Real Estate Services	199	6.16%
Health Care & Social Assistance	127	3.93%
Manufacturing	125	3.87%
Transport, Postal & Warehousing	124	3.84%
Education & Training	101	3.13%
Accommodation & Food Services	89	2.76%
Financial & Insurance Services	88	2.72%
Arts & Recreation Services	75	2.32%
Wholesale Trade	42	1.30%
Mining	35	1.08%
Information Media & Telecommunications	20	0.62%
Public Administration & Safety	15	0.46%
Electricity, Gas, Water & Waste Services	6	0.19%
Other	137	4.24%
<b>Total</b>	<b>3,230</b>	<b>100%</b>

## TURNOVER

The highest turnover range for Isaac's *Agriculture, Forestry and Fishing* sector was in the over \$10m range. From June 2015, on average the greatest proportion of turnover was the less than \$50,000 followed by \$500k-\$2m and then \$200-\$500k ranges.



## WORKFORCE SIZE

Within the Isaac region, the majority of businesses, including the *Agriculture, Forestry and Fishing* sector, do not employ staff (i.e. are business owners only).



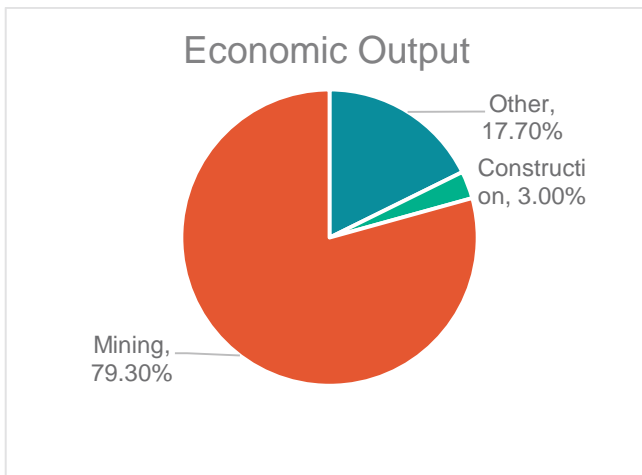
## APPENDIX 3

### CONSTRUCTION SECTOR PROFILE

#### OUTPUT

Output data represents the gross revenue generated by businesses /organisations in each of the industry sectors in a defined region.

The output generated by the Isaac region economy is estimated at \$14.041 billion. *Construction* is the third highest contributor to output with \$423.253 million. *Mining* is the highest contributor with \$11.131b (79.3%) while *Manufacturing* the second with \$610.564 million (4.3%). *Rental, Hiring & Real Estate Services* (\$372.961 million) and *Agriculture, Forestry & Fishing* (\$308.653 million) make up the difference to the top 5 contributing industries.



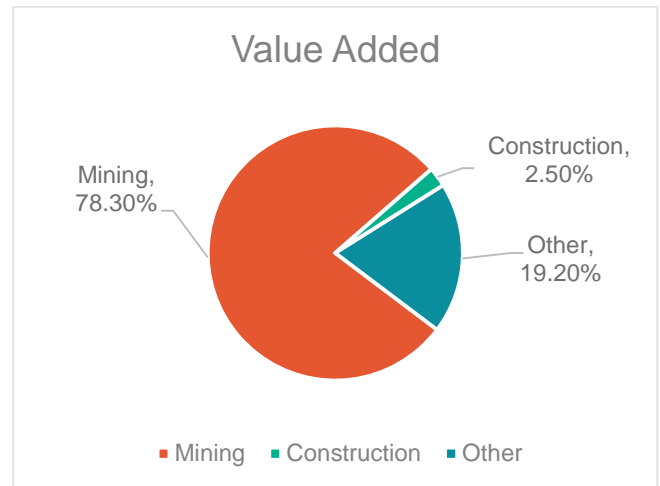
At the 111 industry sector level, the top *Construction* sub-sectors contributing to output are:

Industry Sector	\$M	%
Heavy & Civil Engineering Construction	\$194.248	1.4%
Construction Services	\$188.995	1.3%
Residential Building Construction	\$26.991	0.2%
Non-Residential Building Construction	\$13.019	0.1%
<b>Sub-Total</b>	<b>\$423.253</b>	<b>3.0%</b>

#### VALUE ADDED

Value-added data represents the marginal economic value that is added by each industry sector. Value-added can be calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector.

The total value-added by the Isaac region economy is estimated at \$5.827 billion. *Construction* is the 3rd highest contributor to value added with \$146.07 million (2.5%). *Mining* is the highest value-added industry with \$4.566 billion (78.3%) and *Rental, Hiring & Real Estate Services* is second with \$254.504 million (4.4%).



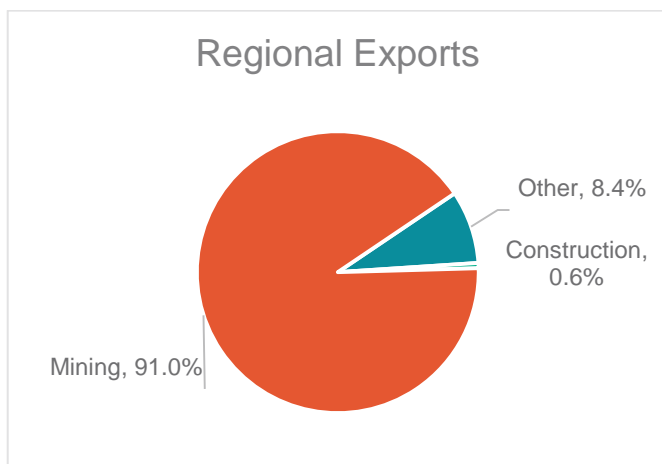
At the 111 industry sector level, the top *Manufacturing* sub-sectors contributing to value added are:

Industry Sector	\$M	%
Heavy & Civil Engineering Construction	\$73.133	1.3%
Construction Services	\$64.622	1.1%
Residential Building Construction	\$5.403	0.1%
Non-Residential Building Construction	\$2.919	0.1%
<b>Sub-Total</b>	<b>\$146.078</b>	<b>2.5%</b>

## REGIONAL EXPORTS

Regional exports data represents the value of goods and services exported by industry sectors within the region.

The total regional export estimate for the Isaac Region is \$11.618 billion. Construction is the sixth highest regional exporter with \$64.374 million (0.6%). The *Mining* sector has the highest level of regional exports of \$10.571 billion (91%). *Manufacturing* had the second highest level of regional export at \$369.343 million (3.2%) and *Agriculture, Forestry and Fishing* was third with \$256.098 (2.2%) of regional exports.



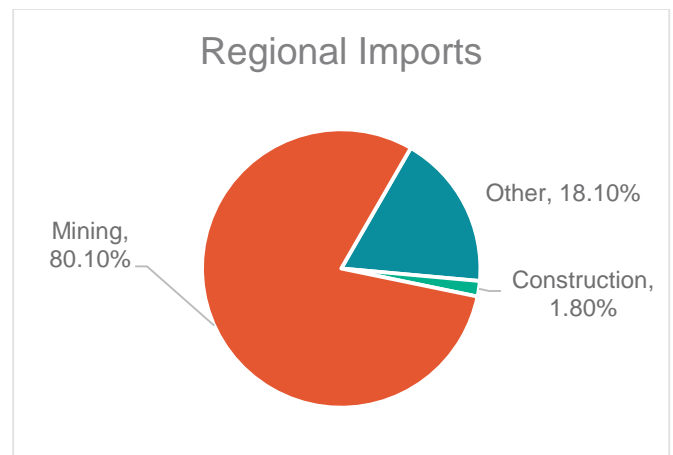
At the 111 industry sector level, the top *Construction* sub sectors contributing to exports are:

Industry Sector	\$M	%
Heavy & Civil Engineering Construction	\$57.748	0.5%
Non-Residential Building Construction	\$4.120	0.0%
Residential Building Construction	\$2.045	0.0%
Construction Services	\$0.462	0.0%
<b>Sub-Total</b>	<b>\$64.374</b>	<b>0.6%</b>

## REGIONAL IMPORTS

Regional imports data represents the value of goods and services imported into the region in each of the industry sectors.

The total regional import estimate for the Isaac region is \$6.662 billion. The *Mining* sector has the highest level of regional imports with \$5.336 billion (80.1%). The *Manufacturing* sector had the second highest level of regional imports (\$417.132 million), followed by *Construction* (\$214.685 million) and *Agriculture, Forestry and Fishing* (\$136.605 million).



At the 111 industry sector level, the top *Mining* sub-sectors contributing to imports are:

Industry Sector	\$M	%
Heavy & Civil Engineering Construction	\$95.380	1.4%
Construction Services	\$94.451	1.4%
Residential Building Construction	\$17.151	0.3%
Non-Residential Building Construction	\$7.702	0.1%
<b>Sub-Total</b>	<b>\$214.685</b>	<b>3.2%</b>

## CONSTRUCTION OPPORTUNITIES - GAPS IN THE LOCAL SUPPLY CHAIN

Imports reflect demand for goods and services not supplied locally and therefore represent **gaps in the local supply chain**. A proportion of this escape expenditure may be captured locally, providing opportunities for import replacement, increased value-adding and supply chain development in the region.

The *Construction* sector imports \$214.339 million worth of goods and services per annum from the rest of Australia, with the external *Construction* sector supplying \$80.319 million in imports followed by the *Manufacturing* sector with \$61.722 million and *Professional, Scientific & Technical Services* sector with \$26,609 million.

External Supply Sectors (19 industry sector level)	\$M	%
Construction	\$80.319	37.5%
Manufacturing	\$61.722	28.8%
Professional, Scientific & Technical Services	\$26.609	12.4%
Transport, Postal & Warehousing	\$8.362	3.9%
Wholesale Trade	\$8.343	3.9%
Financial & Insurance Services	\$6.271	2.9%
Rental, Hiring & Real Estate Services	\$6.020	2.8%
Retail Trade	\$2.833	1.3%
Accommodation & Food Services	\$2.394	1.1%
Other Services	\$2.358	1.1%
Information Media & Telecommunications	\$2.352	1.1%
Public Administration & Safety	\$1.938	0.9%
Mining	\$1.936	0.9%
Electricity, Gas, Water & Waste Services	\$1.131	0.5%
Administrative & Support Services	\$1.079	0.5%
Agriculture, Forestry & Fishing	\$0.363	0.2%
Education & Training	\$0.155	0.1%
Arts & Recreation Services	\$0.143	0.1%
Health Care & Social Assistance	\$0.012	0.0%
<b>Total</b>	<b>\$214.339</b>	<b>100.0%</b>

At the 114 industry sector level, the top 30 external supply sectors supplying goods and services to the Isaac *Construction* industry are:

External Supply Sectors (114 industry sector level)		\$M	%
1.	Construction Services	\$63.230	29.5%
2.	Professional, Scientific & Tech. Servi.	\$26.399	12.3%
3.	Structural Metal Product Manufacturing	\$10.151	4.7%
4.	Residential Building Construction	\$9.281	4.3%
5.	Wholesale Trade	\$8.343	3.9%
6.	Iron & Steel Manufacturing	\$5.244	2.4%
7.	Other Wood Product Manufacturing	\$5.084	2.4%
8.	Electrical Equipment Manufacturing	\$4.679	2.2%
9.	Polymer Product Manufacturing	\$4.680	2.2%
10.	Rental & Hiring Services (except real estate)	\$4.333	2.0%
11.	Non-Residential Building Construction	\$4.089	1.9%
12.	Other Fabricated Metal Product Manuf.	\$3.792	1.8%
13.	Petroleum & Coal Product Manuf.	\$3.904	1.8%
14.	Transport Support Services & Storage	\$3.734	1.7%
15.	Heavy & Civil Engineering Construction	\$3.720	1.7%
16.	Road Transport	\$3.198	1.5%
17.	Retail Trade	\$2.833	1.3%
18.	Plaster & Concrete Product Manuf.	\$2.764	1.3%
19.	Auxiliary Finance & Insurance Services	\$2.717	1.3%
20.	Finance	\$2.679	1.3%
21.	Cement, Lime & Ready-Mixed Concrete Manuf.	\$2.601	1.2%
22.	Prof, Scientific, Computer & Electronic Equip. Manu.	\$2.521	1.2%
23.	Sawmill Product Manufacturing	\$2.293	1.1%
24.	Specialised & Other Machinery & Equipment Manu.	\$1.752	0.8%
25.	Non-Residential Property Operators & Real Estate Serv.	\$1.686	0.8%
26.	Other Non-Metallic Mineral Product Manuf.	\$1.695	0.8%
27.	Ceramic Product Manufacturing	\$1.635	0.8%
28.	Glass & Glass Product Manufacturing	\$1.494	0.7%
29.	Telecommunication Services	\$1.527	0.7%
30.	Accommodation	\$1.413	0.7%

## EMPLOYMENT

Employment data represents the number of people employed in each of the industry sectors in a defined region. Employment data presented by REMPLAN is destination of work data.

The total employment estimate for Isaac Region is 21,462 jobs. The *Mining* sector has the highest number of jobs with 13,080 jobs (60.9%). The *Construction* sector contributes 848 jobs (or 4%) of total employment.

At the 111 industry sector level, the top *Construction* sub-sectors contributing to employment are:

Industry Sector	Jobs	%
Construction Services	556	2.6%
Heavy & Civil Engineering Construction	222	1.0%
Residential Building Construction	54	0.3%
Non-Residential Building Construction	16	0.1%
<b>Sub-Total</b>	<b>848</b>	<b>4.0%</b>

## OCCUPATION

*Technicians and Trade Workers* account for 43.7% of occupations within the Isaac region's *Construction* industry sector with 371 jobs.

*Machinery Operators and Drivers* represent the next highest occupation in the industry with 244 jobs (28.8%).

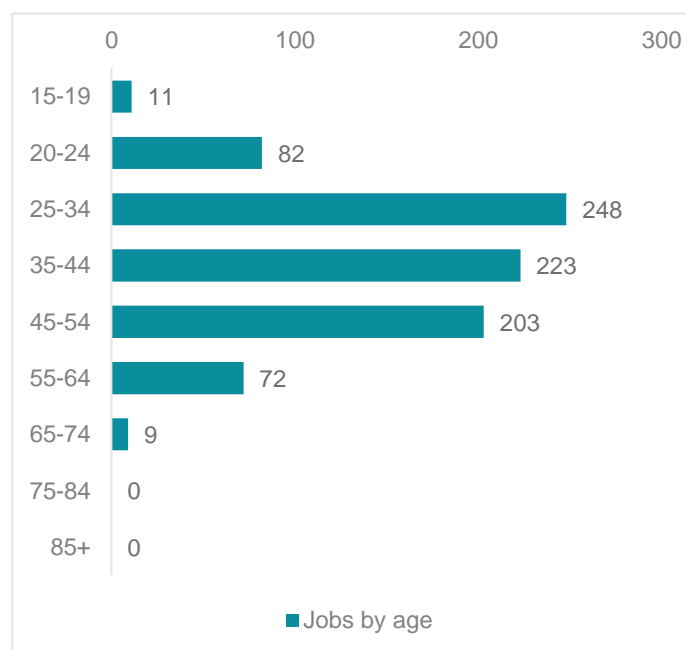
Occupation	Jobs	%
Technicians and Trades Workers	371	43.7%
Machinery Operators And Drivers	244	28.8%
Labourers	89	10.6%
Clerical and Administrative Workers	76	8.9%
Professionals	33	3.8%
Managers	21	2.5%
Not stated - Inadequately described	14	1.7%
<b>Total</b>	<b>848</b>	<b>100.0%</b>

## QUALIFICATION / EDUCATION

The chart below shows the level of education for employed people in the *Construction* industry sector.

Level of Education	Jobs	%
Certificate	442	52.1%
Not applicable	297	35%
Bachelor Degree	46	5.5%
Advanced Diploma and Diploma	33	3.9%
Postgraduate Degree	8	1%
Graduate Diploma and Graduate Cert.	4	0.5%
Level of education inadequately described	6	0.7%
Level of education not stated	11	1.3%
<b>Total</b>	<b>848</b>	<b>100%</b>

## JOBS BY AGE



## BUSINESS NUMBERS

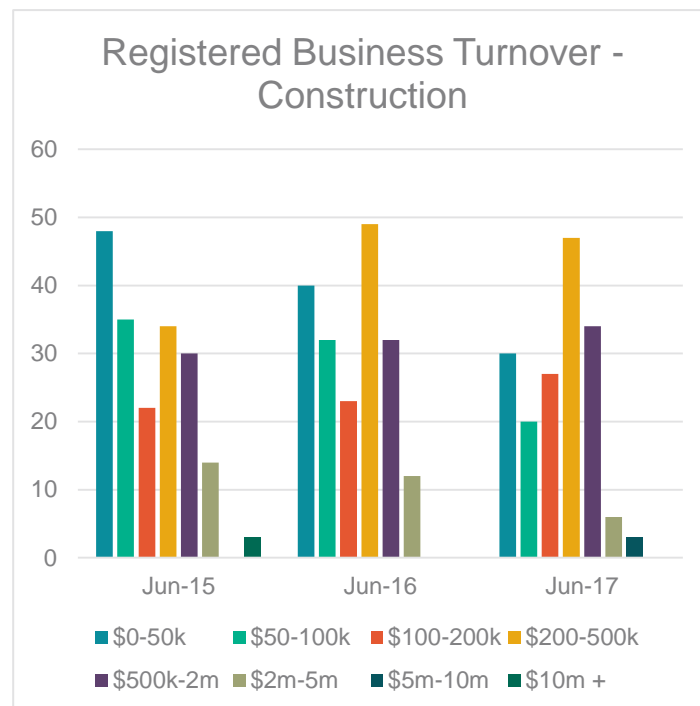
As at 8 October 2018, there were 3,230 businesses registered in the Isaac region (excluding self-managed superannuation and trust funds).

There were 453 businesses registered within the *Construction* sector, accounting for 14.02% of registered businesses within the region.

Sector	Count	%
<b>Construction</b>	<b>453</b>	<b>14.02%</b>
Agriculture, Forestry & Fishing	442	13.68%
Other Services	380	11.76%
Administrative & Support Services	303	9.38%
Retail Trade	236	7.31%
Professional, Scientific & Technical Serv.	233	7.21%
Rental, Hiring & Real Estate Services	199	6.16%
Health Care & Social Assistance	127	3.93%
Manufacturing	125	3.87%
Transport, Postal & Warehousing	124	3.84%
Education & Training	101	3.13%
Accommodation & Food Services	89	2.76%
Financial & Insurance Services	88	2.72%
Arts & Recreation Services	75	2.32%
Wholesale Trade	42	1.30%
Mining	35	1.08%
Information Media & Telecommunications	20	0.62%
Public Administration & Safety	15	0.46%
Electricity, Gas, Water & Waste Services	6	0.19%
Other	137	4.24%
<b>Total</b>	<b>3,230</b>	<b>100%</b>

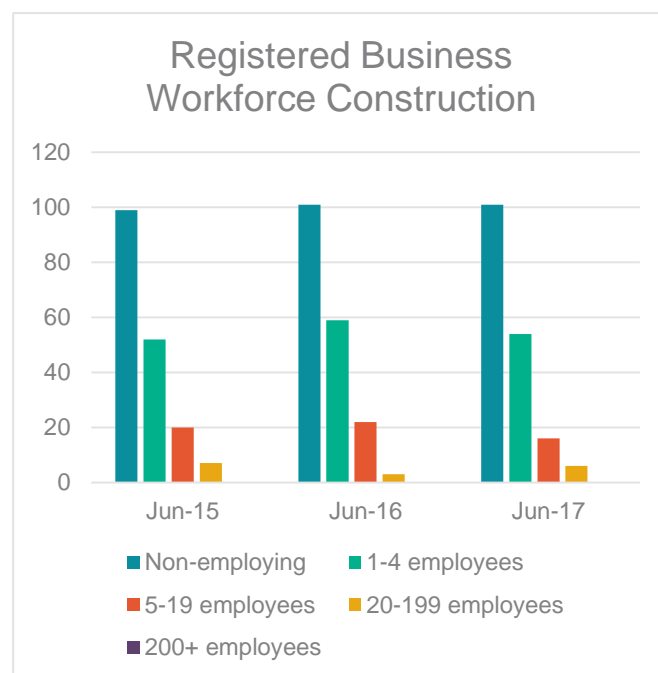
## TURNOVER

The highest turnover range for Isaac's *Manufacturing* sector was in the \$500,000 to less than \$2m range. The most number of *Construction* businesses also registered their turnover within this cohort.



## WORKFORCE SIZE

Within the Isaac region, the majority of businesses, including the *Construction* sector, do not employ staff (i.e. are business owners only).





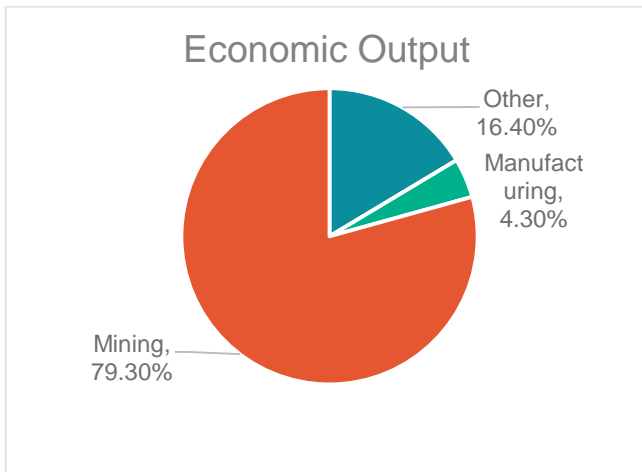
## APPENDIX 4

### MANUFACTURING SECTOR PROFILE

#### OUTPUT

Output data represents the gross revenue generated by businesses /organisations in each of the industry sectors in a defined region.

The output generated by the Isaac region economy is estimated at \$14.041 billion. Mining is the highest contributor to output with \$11.131b (79.3%). The *Manufacturing* sector contributes the second highest to output with \$610.564 million (4.3%) with *Construction* (\$423.253 million), *Rental, Hiring & Real Estate Services* (\$372.961 million) and *Agriculture, Forestry & Fishing* (\$308.653 million) making up the top 5 contributing industries.



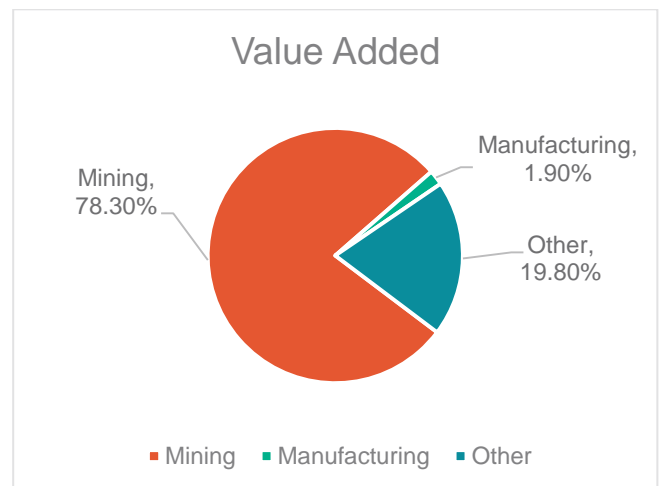
At the 45 industry sector level, the top *Manufacturing* sub-sectors contributing to output are:

Industry Sector	\$M	%
Chemical, Cleaning & Polymer Manuf.	\$515.882	3.7%
Technical Equip & Appliance Manuf.	\$27.979	0.2%
Metal & Metal Product Manufacturing	\$20.834	0.1%
Non-Metallic Mineral Product Manuf.	\$17.303	0.1%
Transport Equipment & Parts Manuf.	\$11.623	0.1%
Food Product Manufacturing	\$10.124	0.1%
Beverage Product Manufacturing	\$5.616	0.0%
Printing (incl. reprod'n of record media)	\$0.633	0.0%
Furniture Manufacturing	\$0.571	0.0%
<b>Sub-Total</b>	<b>\$610.564</b>	<b>4.3%</b>

#### VALUE ADDED

Value-added data represents the marginal economic value that is added by each industry sector. Value-added can be calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector.

The total value-added by the Isaac region economy is estimated at \$5.827 billion. *Mining* is the highest value-added industry sector contributing \$4.566 billion (78.3%). *Manufacturing* is the 5<sup>th</sup> highest contributor to value added after *Rental, Hiring & Real Estate Services* (\$254.504 million), *Construction* (\$146.078 million) and *Agriculture, Forestry & Fishing* with (\$119.589). *Manufacturing* contributes \$111.958 million or 1.9% of value added.



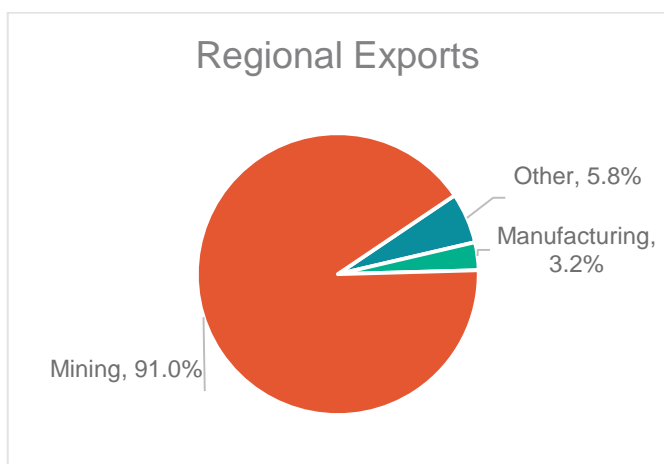
At the 45 industry sector level, the top *Manufacturing* sub-sectors contributing to value added are:

Industry Sector	\$M	%
Chemical, Cleaning & Polymer Manuf.	\$92.369	1.6%
Non-Metallic Mineral Product Manuf.	\$4.468	0.1%
Metal & Metal Product Manufacturing	\$4.242	0.1%
Technical Equip. & Appliance Manuf.	\$4.057	0.1%
Food Product Manufacturing	\$2.636	0.0%
Beverage Product Manufacturing	\$2.148	0.0%
Transport Equipment & Parts Manuf.	\$1.576	0.0%
Printing (incl. reprod'n of record media)	\$0.338	0.0%
Furniture Manufacturing	\$0.124	0.0%
<b>Sub-Total</b>	<b>\$111.958</b>	<b>1.9%</b>

## REGIONAL EXPORTS

Regional exports data represents the value of goods and services exported by industry sectors within the region.

The total regional export estimate for the Isaac Region is \$11.618 billion. The *Mining* sector has the highest level of regional exports of \$10.571 billion (91%). *Manufacturing* had the second highest level of regional export at \$369.343 million (3.2%) and *Agriculture, Forestry and Fishing* was third with \$256.098 (2.2%) of regional exports.



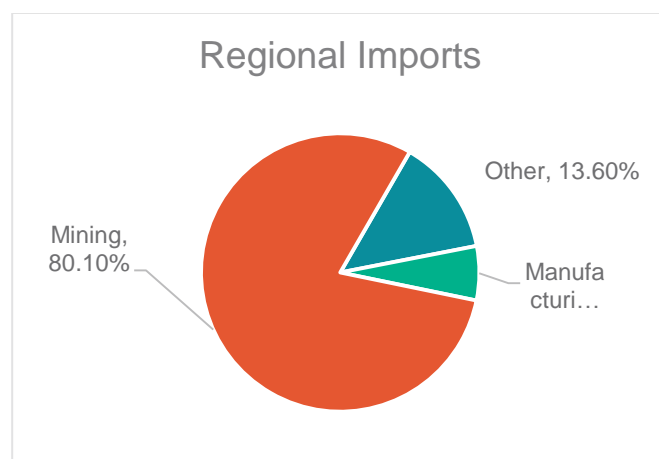
At the 45 industry sector level, the top *Manufacturing* sub sectors contributing to exports are:

Industry Sector	\$M	%
Basic Chemical, Cleaning & Polymer Manufacturing	\$353.284	3.0%
Metal & Metal Product Manufacturing	\$4.796	0.0%
Non-Metallic Mineral Product Manuf.	\$4.609	0.0%
Food Product Manufacturing	\$3.187	0.0%
Tech Equipment & Appliance Manuf.	\$1.388	0.0%
Transport Equipment & Parts Manuf.	\$1.243	0.0%
Other Manufacturing	\$0.837	0.0%
<b>Sub-Total</b>	<b>\$369.343</b>	<b>3.2%</b>

## REGIONAL IMPORTS

Regional imports data represents the value of goods and services imported into the region in each of the industry sectors.

The total regional import estimate for the Isaac region is \$6.662 billion. The *Mining* sector has the highest level of regional imports with \$5.336 billion (80.1%). The *Manufacturing* sector had the second highest level of regional imports (\$417.132 million), followed by *Construction* (\$214.685 million) and *Agriculture, Forestry and Fishing* (\$136.605 million).



At the 45 industry sector level, the top *Mining* sub-sectors contributing to imports are:

Industry Sector	\$M	%
Basic Chemical, Cleaning & Polymer Manufacturing	\$353.326	5.3%
Tech Equipment & Appliance Manuf.	\$23.220	0.3%
Metal & Metal Product Manufacturing	\$13.005	0.2%
Non-Metallic Mineral Product Manuf.	\$9.986	0.1%
Transport Equipment & Parts Manuf.	\$9.423	0.1%
Food Product Manufacturing	\$5.068	0.1%
Beverage Product Manufacturing	\$2.433	0%
Printing (incl. reprod'n of record media)	\$0.244	0%
<b>Sub-Total</b>		

## MANUFACTURING OPPORTUNITIES - GAPS IN THE LOCAL SUPPLY CHAIN

Imports reflect demand for goods and services not supplied locally and therefore represent **gaps in the local supply chain**. A proportion of this escape expenditure may be captured locally, providing opportunities for import replacement, increased value-adding and supply chain development in the region.

The *Manufacturing* sector imports \$152.278 million worth of goods and services per annum from the rest of Australia, with the external *Manufacturing* sector supplying \$49.834 million in imports followed by the *Wholesale Trade* sector with \$21.609 million and *Transport, Postal and Warehousing* sector with \$17.627 million.

External Supply Sectors (19 industry sector level)	\$M	%
Manufacturing	\$49.834	32.7%
Wholesale Trade	\$21.609	14.2%
Transport, Postal & Warehousing	\$17.627	11.6%
Professional, Scientific & Techn. Serv.	\$10.410	6.8%
Electricity, Gas, Water & Waste Services	\$10.251	6.7%
Mining	\$9.869	6.5%
Financial & Insurance Services	\$5.765	3.8%
Agriculture, Forestry & Fishing	\$4.659	3.1%
Retail Trade	\$4.644	3.0%
Public Administration & Safety	\$4.131	2.7%
Accommodation & Food Services	\$3.376	2.2%
Information Media & Telecomm.	\$2.969	1.9%
Rental, Hiring & Real Estate Services	\$2.060	1.4%
Other Services	\$1.565	1.0%
Health Care & Social Assistance	\$1.420	0.9%
Construction	\$1.200	0.8%

Administrative & Support Services	\$0.544	0.4%
Education & Training	\$0.284	0.2%
Arts & Recreation Services	\$0.063	0.0%
<b>Total</b>	<b>\$152.278</b>	<b>100.0%</b>

At the 114 industry sector level, the top 17 external supply sectors supplying goods and services to the Isaac *Manufacturing* industry are:

External Supply Sectors (114 industry sector level)	\$M	%
Basic Chemical Manufacturing	\$123.138	2.0%
Cement, Lime & Ready-Mixed Concrete Manufacturing	\$4.324	0.1%
Specialised & Other Machinery & Equipment Manu.	\$4.138	0.1%
Railway Rolling Stock Manufacturing	\$3.140	0.1%
Iron & Steel Manufacturing	\$2.740	0.0%
Polymer Product Manufacturing	\$2.426	0.0%
Meat & Meat Product Manufacturing	\$2.210	0.0%
Bakery Product Manufacturing	\$1.986	0.0%
Metal Containers & Other Sheet Metal Prod. Manu.	\$1.602	0.0%
Beer Manufacturing	\$1.524	0.0%
Basic Non-Ferrous Metal Manufacturing	\$1.209	0.0%
Electrical Equipment Manufacturing	\$1.054	0.0%
Natural Rubber Product Manufacturing	\$0.988	0.0%
Motor Vehicles & Parts; Other Transport Equip. Manu.	\$0.846	0.0%
Other Fabricated Metal Product Manuf.	\$0.555	0.0%
Printing (incl. reprod'n of recorded media)	\$0.238	0.0%
Furniture Manufacturing	\$0.160	0.0%
<b>Sub-Total</b>	<b>\$152.278</b>	<b>2.5%</b>
<b>Other</b>	<b>\$6,036.769</b>	<b>97.5%</b>
<b>Total</b>	<b>\$6,189.047</b>	<b>100.0%</b>

## EMPLOYMENT

Employment data represents the number of people employed in each of the industry sectors in a defined region. Employment data presented by REMPLAN is destination of work data.

The total employment estimate for Isaac Region is 21,462 jobs. The *Mining* sector has the highest number of jobs with 13,080 jobs (60.9%). The *Manufacturing* sector only contributes 423 jobs (or 2%) of total unemployment.

At the 45 industry sector level, the top *Manufacturing* sub-sectors contributing to employment are:

Industry Sector	Jobs	%
Basic Chemical, Cleaning & Polymer Manufacturing	269	1.3%
Food Product Manufacturing	43	0.2%
Technical Equipment & Appliance Manufacturing	39	0.2%
Metal & Metal Product Manufacturing	34	0.2%
Non-Metallic Mineral Product Manufacturing	13	0.1%
Transport Equipment & Parts Manufacturing	13	0.1%
Beverage Product Manufacturing	5	0.0%
Printing (including the reproduction of recorded media)	4	0.0%
Furniture Manufacturing	3	0.0%
<b>Sub-Total</b>	<b>423</b>	<b>2%</b>

## OCCUPATION

*Technicians and Trade Workers* account for 41.1% of occupations within the Isaac region's *Manufacturing* industry sector with 174 jobs.

*Machinery Operators and Drivers* represent the next highest occupation in the industry with 145 jobs (34.3%).

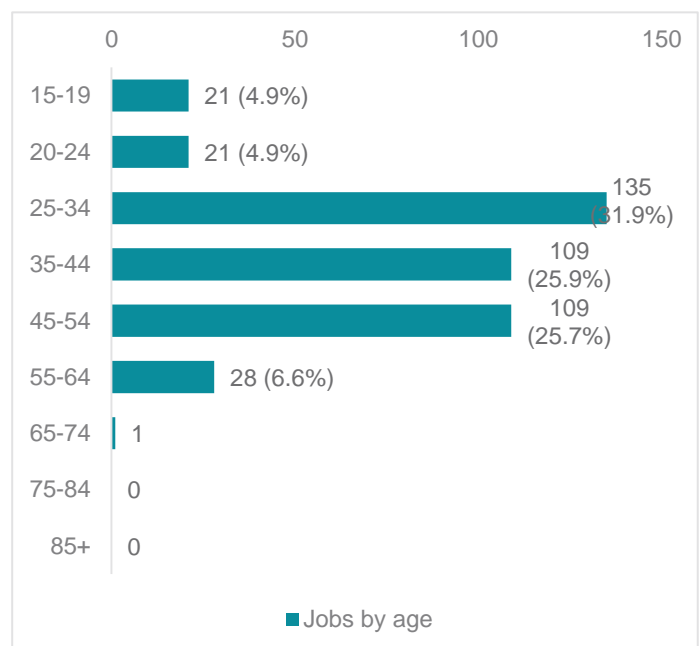
Occupation	Jobs	%
Technicians and Trades Workers	174	41.1%
Machinery Operators And Drivers	145	34.3%
Clerical and Administrative Workers	26	6.2%
Managers	24	5.6%
Labourers	19	4.6%
Professionals	19	4.6%
Sales Workers	14	3.3%
Community & Personal Service Workers	1	0.2%
<b>Total</b>	<b>423</b>	<b>100.0%</b>

## QUALIFICATION / EDUCATION

The chart below shows the level of education for employed people in the *Manufacturing* industry sector.

Level of Education	Jobs	%
Certificate	208	49.1%
Not applicable	127	30.1%
Bachelor Degree	39	9.1%
Advanced Diploma and Diploma	37	8.8%
Postgraduate Degree	7	1.7%
Level of education not stated	5	1.1%
<b>Total</b>	<b>423</b>	<b>100%</b>

## JOBS BY AGE



## BUSINESS NUMBERS

As at 8 October 2018, there were 3,230 businesses registered in the Isaac region (excluding self-managed superannuation and trust funds).

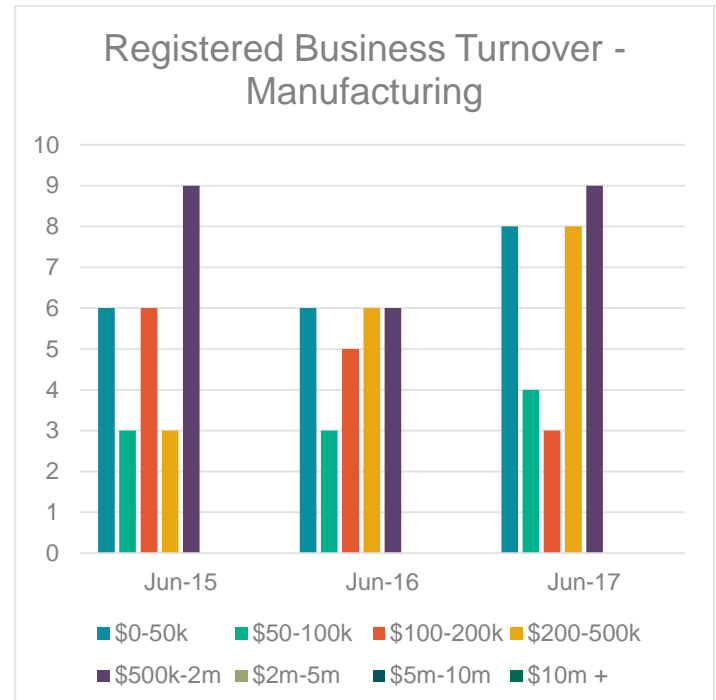
There were 125 businesses registered within the *Manufacturing* sector, accounting for 3.87% of registered businesses within the region.

Sector	Count	%
Construction	453	14.02%
Agriculture, Forestry & Fishing	442	13.68%
Other Services	380	11.76%
Administrative & Support Services	303	9.38%
Retail Trade	236	7.31%
Professional, Scientific & Technical Serv.	233	7.21%
Rental, Hiring & Real Estate Services	199	6.16%
Health Care & Social Assistance	127	3.93%
<b>Manufacturing</b>	<b>125</b>	<b>3.87%</b>
Transport, Postal & Warehousing	124	3.84%
Education & Training	101	3.13%
Accommodation & Food Services	89	2.76%
Financial & Insurance Services	88	2.72%
Arts & Recreation Services	75	2.32%
Wholesale Trade	42	1.30%
Mining	35	1.08%
Information Media & Telecommunications	20	0.62%
Public Administration & Safety	15	0.46%
Electricity, Gas, Water & Waste Services	6	0.19%
Other	137	4.24%
<b>Total</b>	<b>3,230</b>	<b>100%</b>

The construction sector recorded the highest number of registered businesses in the Isaac region with 453 (or 14.02%) of the total count. Agriculture, Forestry and Fishing was the second highest with 442 businesses or 13.68%.

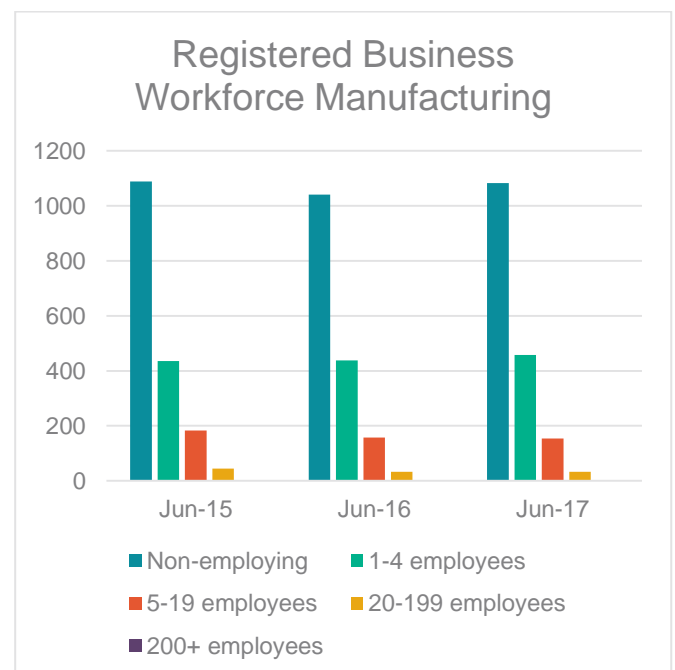
## TURNOVER

The highest turnover range for Isaac's *Manufacturing* sector was in the \$500,000 to less than \$2m range. The most number of *manufacturing* businesses also registered their turnover within this cohort.



## WORKFORCE SIZE

Within the Isaac region, the majority of businesses, including the *Manufacturing* sector, do not employ staff (i.e. are business owners only).



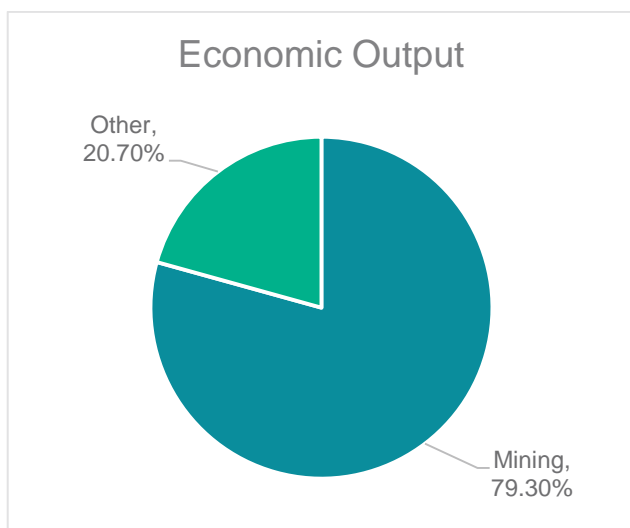
## APPENDIX 5

### MINING SECTOR PROFILE

#### OUTPUT

Output data represents the gross revenue generated by businesses /organisations in each of the industry sectors in a defined region.

The output generated by the Isaac region economy is estimated at \$14.041 billion. The *Mining* sector makes the highest contribution to output with \$11.131 billion (79.3%), followed by *Manufacturing* (\$610.564 million), *Construction* (\$423.253 million), *Rental, Hiring & Real Estate Services* (\$372.961 million) and *Agriculture, Forestry & Fishing* (\$308.653 million).



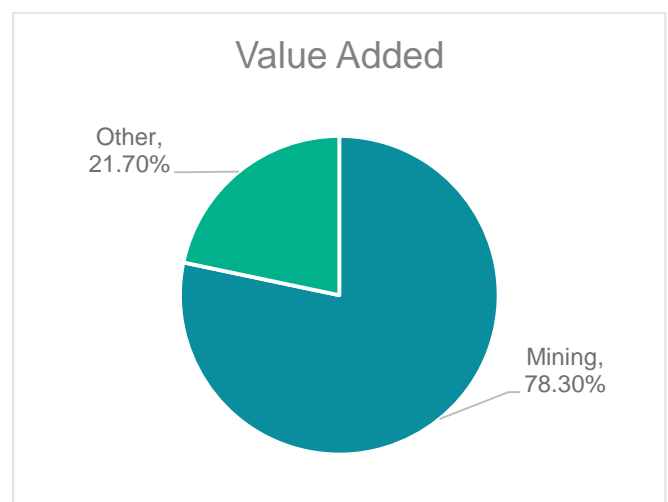
At the 114 industry sector level, the top *Mining* sub-sectors contributing to output are:

Industry Sector	\$M	%
Coal Mining	\$10,424.514	74.2%
Oil Gas Extraction	\$509.321	3.6%
Exploration Mining Support Services	\$86.119	0.6%
Non Ferrous Metal Ore Mining (copper, gold, mineral and other ore)	\$66.750	0.5%
Iron Ore Mining	\$32.433	0.2%
Non Metallic Mineral Mining (gravel and sand quarrying)	\$12.455	0.1%
<b>Sub-Total</b>	<b>\$11,131.591</b>	<b>79.3%</b>

#### VALUE ADDED

Value-added data represents the marginal economic value that is added by each industry sector. Value-added can be calculated by subtracting local expenditure and expenditure on regional imports from the output generated by an industry sector.

The total value-added by the Isaac region economy is estimated at \$5.827 billion. *Mining* is the highest value-added industry sector contributing \$4.566 billion (78.3%). The second-highest value-added industry sector is *Rental, Hiring & Real Estate Services* contributing \$254.504 million (4.4%), followed by *Construction* with \$146.078 million (2.5%) and *Agriculture, Forestry & Fishing* with \$119.589 (2.1%).



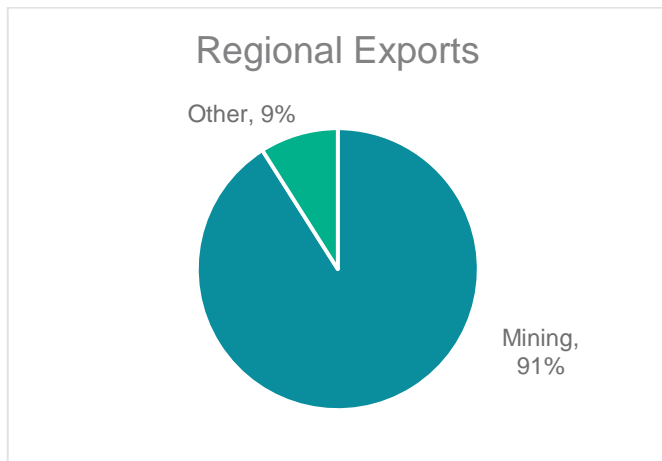
At the 114 industry sector level, the top value-added *Mining* sub-sectors are:

Industry Sector	\$M	%
Coal Mining	\$4,204.162	72.1%
Oil & Gas Extraction	\$266.173	4.6%
Exploration & Mining Support Services	\$47.262	0.8%
Iron Ore Mining	\$22.434	0.4%
Non Ferrous Metal Ore Mining	\$20.208	0.3%
Non Metallic Mineral Mining	\$5.780	0.1%
<b>Sub-Total</b>	<b>\$4,566.020</b>	<b>78.3%</b>

## REGIONAL EXPORTS

Regional exports data represents the value of goods and services exported by industry sectors within the region.

The total regional export estimate for the Isaac Region is \$11.618 billion. The *Mining* sector has the highest level of regional exports of \$10.571 billion (91%). *Manufacturing* had the second highest level of regional export at \$369.343 million (3.2%) and *Agriculture, Forestry and Fishing* was third with \$256.098 (2.2%) of regional exports.



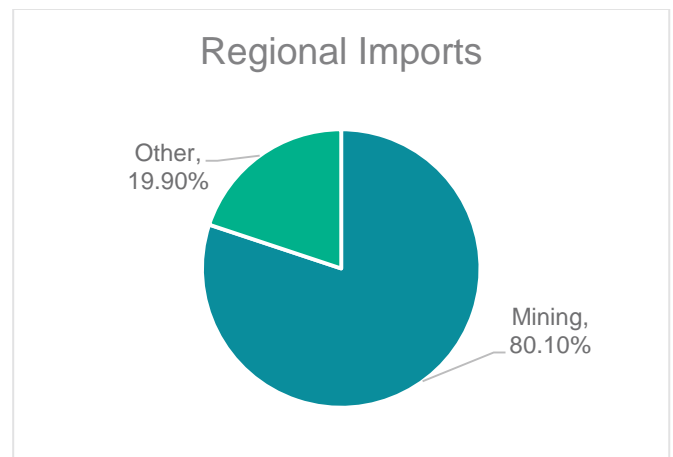
At the 114 industry sector level, the top *Mining* sub sectors contributing to exports are:

Industry Sector	\$M	%
Coal Mining	\$10,092.869	86.9%
Oil & Gas Extraction	\$396.587	3.4%
Iron Ore Mining	\$30.059	0.3%
Non Ferrous Metal Ore Mining	\$21.886	0.2%
Exploration & Mining Support Services	\$28.669	0.2%
Non Metallic Mineral Mining	\$1.875	0.0%
<b>Sub-Total</b>	<b>\$10,571.946</b>	<b>91.0%</b>

## REGIONAL IMPORTS

Regional imports data represents the value of goods and services imported into the region in each of the industry sectors.

The total regional import estimate for the Isaac region is \$6.662 billion. The *Mining* sector has the highest level of regional imports with \$5.336 billion (80.1%). The *Manufacturing* sector had the second highest level of regional imports (\$417.132 million), followed by *Construction* (\$214.685 million) and *Agriculture, Forestry and Fishing* (\$136.605 million).



At the 114 industry sector level, the top *Mining* sub-sectors contributing to imports are:

Industry Sector	\$M	%
Coal Mining	\$5,025.118	75.4%
Oil & Gas Extraction	\$223.422	3.4%
Non Ferrous Metal Ore Mining	\$39.137	0.6%
Exploration & Mining Support Services	\$34.939	0.5%
Iron Ore Mining	\$8.068	0.1%
Non Metallic Mineral Mining	\$5.463	0.1%
<b>Sub-Total</b>	<b>\$5,336.147</b>	<b>80.1%</b>

## MINING OPPORTUNITIES - GAPS IN THE LOCAL SUPPLY CHAIN

Imports reflect demand for goods and services not supplied locally and therefore represent **gaps in the local supply chain**. A proportion of this escape expenditure may be captured locally, providing opportunities for import replacement, increased value-adding and supply chain development in the region.

The *Mining* sector imports \$5.181 billion worth of goods and services per annum from the rest of Australia, with the *Manufacturing* sector supplying \$1.470 billion in imports followed by the *Mining* sector with \$1.098 billion and *Professional, Scientific & Technical Services* sector with \$590.555 million.

External Supply Sectors (19 industry sector level)	\$M	%
Manufacturing	\$1,470.187	23.8%
Mining	\$1,098.249	17.7%
Professional, Scientific & Technical Services	\$590.555	9.5%
Transport, Postal & Warehousing	\$568.205	9.2%
Construction	\$491.424	7.9%
Financial & Insurance Services	\$443.832	7.2%
Wholesale Trade	\$304.144	4.9%
Rental, Hiring & Real Estate Services	\$253.867	4.1%
Accommodation & Food Services	\$229.572	3.7%
Other Services	\$217.869	3.5%
Electricity, Gas, Water & Waste Services	\$161.405	2.6%
Public Administration & Safety	\$109.152	1.8%
Retail Trade	\$87.780	1.4%
Info Media & Telecomm.	\$51.900	0.8%
Agriculture, Forestry & Fishing	\$46.406	0.7%
Administrative & Support Services	\$30.285	0.5%
Education & Training	\$17.095	0.3%
Arts & Recreation Services	\$15.108	0.2%
Health Care & Social Assistance	\$2.011	0.0%
<b>Total</b>	<b>\$6,189.047</b>	<b>100.0%</b>

At the 114 industry sector level, the top 30 external supply sectors supplying goods and services to the Isaac *Mining* industry are:

External Supply Sectors (114 industry sector level)	\$M	%
1. Exploration & Mining Support Services	\$1,004.11	16.20%
2. Professional, Scientific & Tech Services	\$572.14	9.20%
3. Specialised Mach & Equip Manufacturing	\$357.11	5.80%
4. Petroleum & Coal Product Manufacturing	\$354.41	5.70%
5. Wholesale Trade	\$304.14	4.90%
6. Construction Services	\$297.09	4.80%
7. Finance	\$255.37	4.10%
8. Transport Support Services & Storage	\$249.50	4.00%
9. Structural Metal Product Manufacturing	\$174.00	2.80%
10. Other Repair & Maintenance	\$171.14	2.80%
11. Accommodation	\$169.00	2.70%
12. Rail Transport	\$160.85	2.60%
13. Auxiliary Finance & Insurance Services	\$160.51	2.60%
14. Rental & Hiring Services (except real estate)	\$130.67	2.10%
15. Non-Residential Property Ops & Real Estate Serv.	\$123.20	2.00%
16. Heavy & Civil Engineering Construction	\$112.87	1.80%
17. Other Fab Metal Product Manufacturing	\$87.88	1.40%
18. Retail Trade	\$87.78	1.40%
19. Electricity Distribution	\$77.28	1.20%
20. Road Transport	\$70.64	1.10%
21. Food & Beverage Services	\$60.58	1.00%
22. Electricity Generation	\$60.75	1.00%
23. Public Admin & Regulatory Services	\$64.05	1.00%
24. Iron & Steel Manufacturing	\$54.30	0.90%
25. Clothing Manufacturing	\$50.48	0.80%
26. Oil & Gas Extraction	\$49.10	0.80%
27. Air & Space Transport	\$51.31	0.80%
28. Residential Building Construction	\$48.33	0.80%
29. Prof, Scientific, Computer & Electronic Equip. Manu.	\$43.03	0.70%
30. Railway Rolling Stock Manufacturing	\$46.37	0.70%



## EMPLOYMENT

Employment data represents the number of people employed in each of the industry sectors in a defined region. Employment data presented by REMPLAN is destination of work data.

The total employment estimate for Isaac Region is 21,462 jobs. The *Mining* sector has the highest number of jobs with 13,080 jobs (60.9%).

At the 114 industry sector level, the top *Mining* sub-sectors contributing to employment are:

Industry Sector	Jobs	%
Coal Mining	12,337	57.5%
Exploration & Mining Support Services	357	1.7%
Oil & Gas Extraction	239	1.1%
Non Ferrous Metal Ore Mining	79	0.4%
Non Metallic Mineral Mining	41	0.2%
Iron Ore Mining	27	0.1%
<b>Sub-Total</b>	<b>13,080</b>	<b>60.9%</b>

## OCCUPATION

*Machinery Operators and Drivers* account for 51.8% of occupations within the Isaac region's *Mining* industry sector with 6771 jobs.

*Technicians and Trade Workers* represent the next highest occupation in the industry with 4,036 jobs (30.9%).

Occupation	Jobs	%
Machinery Operators And Drivers	6,771	51.8%
Technicians and Trades Workers	4,036	30.9%
Professionals	864	6.6%
Managers	516	3.9%
Clerical and Administrative Workers	376	2.9%
Labourers	317	2.4%
Other	199	1.6%
<b>Total</b>	<b>13,080</b>	<b>100.0%</b>

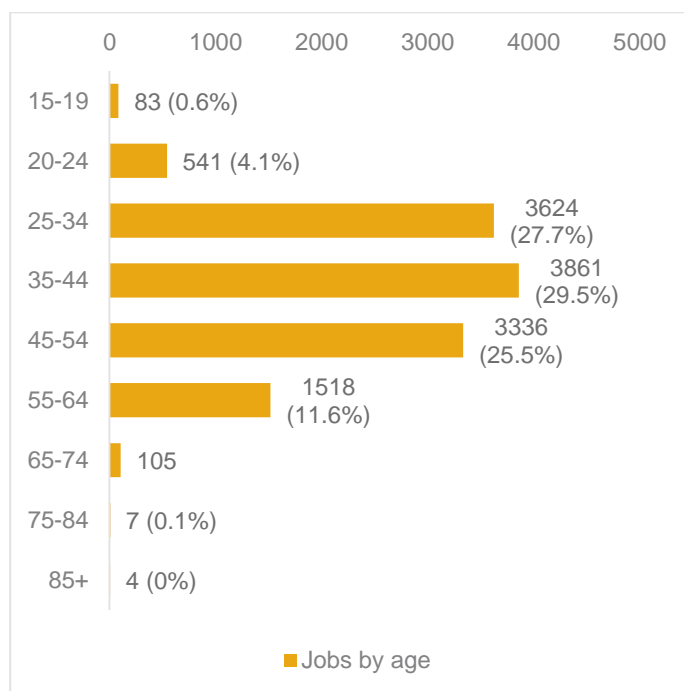
## QUALIFICATION / EDUCATION

The chart below shows the level of education for employed people in the *Mining* industry sector.

Level of Education	Jobs	%
Certificate	6,355	48.6%
Not applicable	4,521	34.6%
Bachelor Degree	876	6.7%
Advanced Diploma and Diploma	776	5.9%
Level of education not stated	253	1.9%
Postgraduate Degree	163	1.2%
Graduate Diploma and Graduate Certificate	96	0.7%
Level of education inadequately described	41	0.3%
<b>Total</b>	<b>13,080</b>	<b>100.0%</b>

## AGE

Of the 13,080 *Mining* jobs in the Isaac region, 82.7% of employees are aged 25-54. The 35-44 age group represented the largest cohort with 29.5% of jobs.



## BUSINESS NUMBERS

As at 8 October 2018, there were 3,230 businesses registered in the Isaac region (excluding self-managed superannuation and trust funds).

There were 35 businesses registered within the *Mining* sector, accounting for 1.08% of registered businesses within the region.

It is important to note the majority of mining business employment and turnover is generated by large multi-national companies, whose business registration exists outside of the Isaac region.

Sector	Count	%
Construction	453	14.02%
Agriculture, Forestry & Fishing	442	13.68%
Other Services	380	11.76%
Administrative & Support Services	303	9.38%
Retail Trade	236	7.31%
Professional, Scientific & Technical Serv.	233	7.21%
Rental, Hiring & Real Estate Services	199	6.16%
Health Care & Social Assistance	127	3.93%
Manufacturing	125	3.87%
Transport, Postal & Warehousing	124	3.84%
Education & Training	101	3.13%
Accommodation & Food Services	89	2.76%
Financial & Insurance Services	88	2.72%
Arts & Recreation Services	75	2.32%
Wholesale Trade	42	1.30%
<b>Mining</b>	<b>35</b>	<b>1.08%</b>
Information Media & Telecommunications	20	0.62%
Public Administration & Safety	15	0.46%
Electricity, Gas, Water & Waste Services	6	0.19%
Other	137	4.24%
<b>Total</b>	<b>3,230</b>	<b>100%</b>

The construction sector recorded the highest number of registered businesses in the Isaac region with 453 (or 14.02%) of the total count. Agriculture, Forestry and Fishing was the second highest with 442 businesses or 13.68%.

## TURNOVER

The highest turnover range for Isaac's Mining sector was in the \$500,000 to less than \$2m range. From June 2015, the greatest proportion of turnover was less than \$50,000.



## WORKFORCE SIZE

Within the Isaac region, the majority of businesses, including the *Mining* sector, do not employ staff (i.e. are business owners only).

