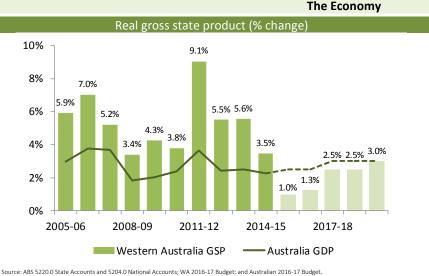
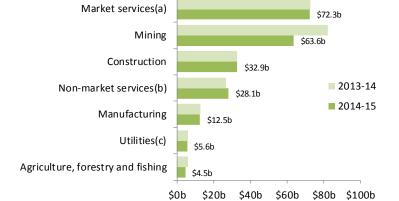


Western Australia Economic Profile October 2016





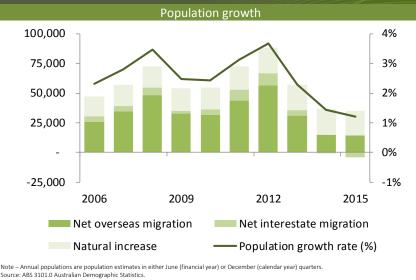


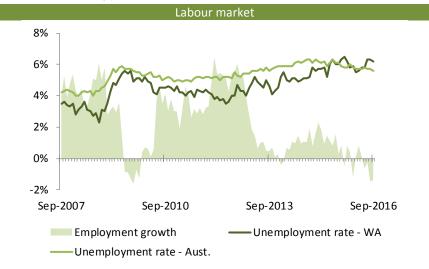


(a) Wholesale trade; retail trade; accommodation and food; transport, postal and warehousing; information, media and telecommunications; finance and insurance; rental, hiring and real estate; professional, scientific and technical; administrative and support; arts and recreation; and other services. (b) Public administration and safety; health care and social assistance; and education and training. (c) Electricity, gas, water and waste services. Source: ABS 5220.0 State Accounts.

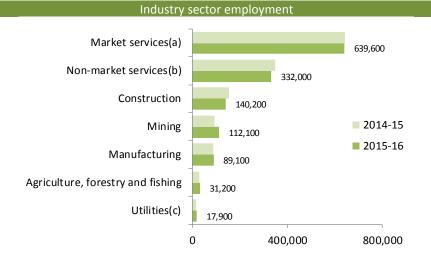
- Western Australia's gross state product (GSP) was \$249 billion in 2014-15, 15% of Australia's gross domestic product (GDP).
- GSP per capita was \$96,475, 42% above the national average of \$68,171.
- Real GSP rose 3.5% in 2014-15, below annual average growth of 5.3% over the past ten years.
- The WA Government Budget forecasts real GSP growth of 1.0% in 2015-16.
- Australia's real GDP rose 2.3% in 2014-15 and the Australian Government Budget forecasts growth of 2.5% in 2015-16.
- Merchandise exports made the largest contribution to real GSP growth in 2014-15, up 9%, above annual average growth of 5% over the past ten years.
- Real business investment fell 12% in 2014-15, compared with annual average growth of 12% over the past ten years.
- Real merchandise exports rose 6% and business investment fell 19% in 2015-16.
- The WA Government Budget forecasts real merchandise exports to rise 5.5% and business investment to fall 19% in 2016-17.
- Mining was the largest industry contributing to real GSP growth in 2014-15, up 10%.
- The mining industry accounted for 26% of Western Australia's GSP and 58% of Australia's mining gross value added in 2014-15.
- Mining industry gross value added fell 23% to \$63.6 billion in 2014-15, despite a 10% rise in volumes.
- Construction gross value added rose 1% to \$32.9 billion in 2014-15, despite a 5% fall in volumes.
- Agriculture, forestry and fishing gross value added fell 23% to \$4.5 billion and volumes fell 16% in 2014-15.







Source: ABS 6202.0 Monthly Labour Force

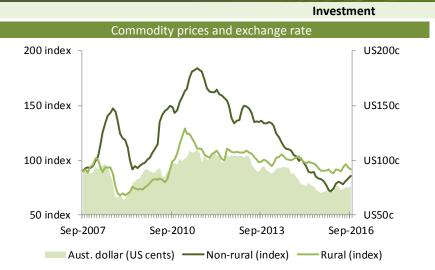


⁽a) Wholesale trade; retail trade; accommodation and food; transport, postal and warehousing; information , media and telecommodation and food; transport, postal and warehousing; information , media and telecommodation and food; transport, postal and warehousing; information and telecommodation and food; transport, postal and warehousing; information and telecommodation and food; transport, postal and warehousing; information and telecommodation and food; transport, postal and warehousing; information and telecommodation and telecomm unications; finance and insurance; rental, hiring and real estate; professional, scientific and technical; administrative and support; arts and recreation; and other services. (b) Public administration and safety; health care and social assistance; and education and training. (c) Electricity, gas, water and waste services Source: ABS 6291.0.55.003 Quarterly Labour Force

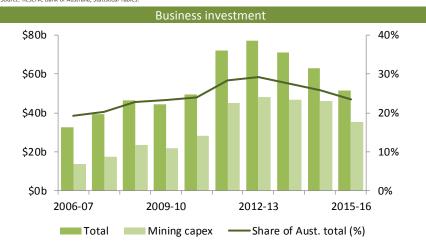
Western Australia **Economic Profile** October 2016

- Western Australia's population was 2.61 million in the March quarter 2016, 11% of the national population.
- The 2015 WA Tomorrow report forecasts a population of 3.27 million by 2026.
- Population rose 1.2% (30,898) in 2015, below annual average growth of 2.5% over the past ten years.
- Natural increase (20,601) and net overseas migration (up 14,610) offset falling net interstate migration (down 4,313) in 2015.
- The WA Government Budget forecasts annual average population growth of 1.3% in 2016-17.
- Western Australia's employment fell by 7,600 to 1.33 million in September 2016.
- Employment fell 1.3% (18,100) through the year to September 2016, compared with Australia's growth of 1.4% (163.200).
- The unemployment rate was 6.2% in September 2016, below the 6.3% in the previous month, but above the 6.0% a year ago.
- Australia's unemployment rate was 5.6% in September 2016.
- The WA Government Budget forecasts annual average employment growth of 0.25% in 2016-17, with an average unemployment rate of 6.75%.
- In 2015-16, Western Australia's employment comprised market services (47%), non-market services (24%), construction (10%), mining (8%), manufacturing (7%), agriculture, forestry and fishing (2%) and utilities (1%).
- Total employment fell 1% (11,000) to 1.36 million in 2015-16, in non-market services (down 17,500 or 5%), construction (down 14,400 or 9%) and market services (down 4,300 or 1%).
 - Employment rose in mining (up 18,200 or 19%), manufacturing (up 2,800 or 3%), agriculture, forestry and fishing (up 2,200 or 8%) and utilities (up 2,000 or 13%) in 2015-16.

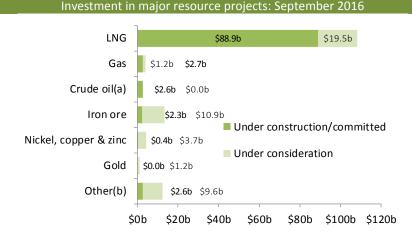




Note – Monthly index of commodity prices for Australia, Special Drawing Rights, 2014-15 = 100. Source: Reserve Bank of Australia, Statistical Tables.



Source: ABS 5220.0 State Accounts; 5206.0 Quarterly National Accounts; and 5625.0 Private New Capital Expenditure.



Economic Profile October 2016

The Reserve Bank of Australia's (RBA) monthly index of non-rural commodity prices rose 3% in September 2016. The annual index fell 21% in 2015-16 (down 24% in 2015).

Western Australia

- The RBA's monthly index of rural commodity prices fell 2% in September 2016. The annual index fell 9% in 2015-16 (down 6% in 2015).
- The monthly average \$A exchange rate rose 1.5% to US76.3 cents in September 2016. The annual average \$A exchange rate fell 12% to US72.7 cents in 2015-16 (down 17% to US74.6 cents in 2015) and is forecast by the WA Government Budget to be US75.7 cents in 2016-17.
- Business investment contributed 25% of Western Australia's GSP in 2014-15.
- Western Australia contributed 24% of Australia's business investment in 2015-16 (25% in 2015).
- Nominal business investment fell 18% to \$51.6 billion in 2015-16. It fell 15% to \$10.8 billion in the June quarter 2016.
- Mining new capital expenditure fell 23% to \$35.2 billion in 2015-16. Mining accounted for 82% of Western Australia's private new capital expenditure and 66% of Australia's mining investment.
- Mining new capital expenditure fell 10% to \$7.0 billion in the June quarter 2016.
- In October 2015, Western Australia accounted for 56% of the value of Australia's major resource projects under construction or committed.
- In September 2016, there was \$96.9 billion of major resource projects under construction or committed in Western Australia and \$46.1 billion under consideration.
- There was \$88.9 billion of LNG projects under construction or committed and \$19.5 billion under consideration.
- There was \$2.3 billion of iron ore projects under construction or committed and \$10.9 billion under consideration.

(a) Includes condensate.

(b) Includes other minerals and petroleum commodities and minerals and petroleum infrastructure Source: WA Department of Mines and Petroleum, Resource Data Files.

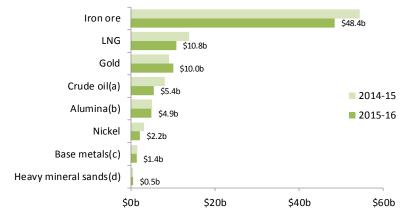
source. WA Department of Willes and Fetroleum, Resource Data Files.



Western Australia **Economic Profile** October 2016

			Commodities				
Western Australia's share of minerals and petroleum production: 2015							
	Unit	World % share	Aust. % share	WA	Australia	World	
Iron ore	million tonnes	37	99	741	751	2,030	
Garnet	'000 tonnes	17	98	283	290	1,660	
Zircon	'000 tonnes	14	39	195	500	1,410	
Alumina	million tonnes	12	34	14	41	115	
Diamonds	million carats	10	100	13	13	125	
Rutile	'000 tonnes	8	28	40	144	480	
LNG	million tonnes	8	69	20	29	245	
Illmenite	'000 tonnes	8	62	449	720	5,610	
Nickel	'000 tonnes	7	100	174	174	2,530	
Gold	tonnes	6	68	193	283	3,000	

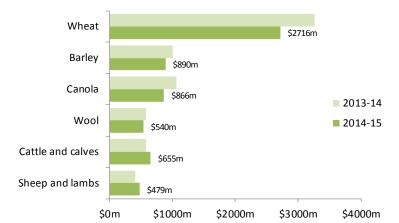
Major minerals and petroleum sales



(a) Includes condensate.

(b) Includes bauxite

(c) includes backte.
(c) Includes copper, lead and zinc.
(d) Includes garnet, illmenite, leucoxene, zircon and rutile.
Source: WA Department of Mines and Petroleum, Resource um. Resource Data Files



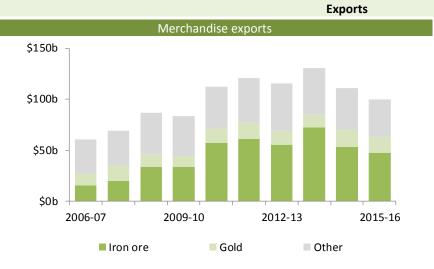
Major agriculture production

Source: ABS 7501.0 Value of Principal Agricultural Commodities Produced and 7503.0 Value of Agricultural Commodities Produced.

- Minerals and petroleum accounted for 92% (\$91.6b) of Western Australia's merchandise exports in 2015-16.
- Minerals and petroleum sales fell 12% to \$87.9 billion in 2015-16.
- Iron ore accounted for 55% (\$48.4b) of Western Australia's minerals and petroleum sales in 2015-16, followed by LNG (12% or \$10.8b), gold (11% or \$10.0b), crude oil and condensate (6% or \$5.4b), alumina (6% or \$4.9b), nickel (2% or \$2.2b), base metals (2% or \$1.4b) and heavy mineral sands (1% or \$539m).
- Western Australia's agricultural commodity production fell 8% to \$7.9 billion in 2014-15.
- Production fell for wheat (down 17% or \$545m), canola (down 18% or \$194m), barley (down 11% or \$109m) and wool (down 7% or \$41m) in 2014-15.
- Production rose for cattle and calves (up 13% or \$76m) and sheep and lambs (up 17% or \$69m) in 2014-15.

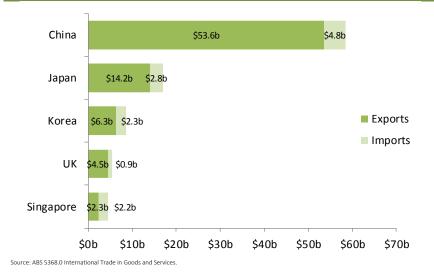


Western Australia Economic Profile October 2016



Source: ABS 5368.0 International Trade in Goods and Services; 5220.0 State Accounts; and 5206.0 Quarterly National Accounts





- Exports of goods and services accounted for 47% of Western Australia's GSP in 2014-15. Merchandise exports accounted for 45% of GSP while services exports accounted for 2.5% of GSP.
- The value of merchandise exports fell 10% to \$99.7 billion in 2015-16.
- Merchandise exports in 2015-16 were mainly iron ore (50%), gold (16%), petroleum – LNG, crude oil, condensate and LPG (15%) and alumina (5%).

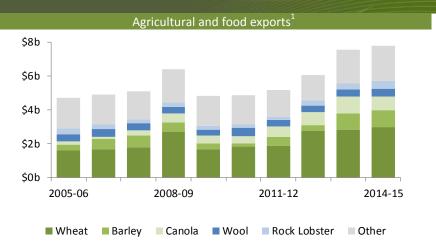
Western Australia accounted for 41% of Australia's merchandise exports in 2015-16 (41% in 2015), including large shares of national exports to China (67%), Japan (40%) and Korea (37%).

- China was Western Australia's largest export market in 2015-16 (\$53.6b or 54%), followed by Japan (\$14.2b or 14%).
- Western Australia's exports fell to China (down 3% or \$1.5b) and Japan (down 32% or \$6.8b) in 2015-16.
- In the June quarter 2016, Western Australia's exports to China rose 18% to \$13.9 billion, but fell to Japan by 24% to \$2.7 billion.
- China was Western Australia's largest source of imports in 2015-16 (\$4.8b or 14%), followed by Japan (\$2.8b or 8%).

		Majo	r minerals and pe	troleum export m	arkets:	2015-16		
Iron ore	\$million	%	Gold	\$million	%	Petroleum ¹	\$million	%
China	40,304	81	China	8,762	56	Japan	8,425	58
Japan	4,760	10	UK	3,924	25	China	2,052	14
Korea	2,956	6	Singapore	1,189	8	Korea	1,554	11
Taiwan	1,161	2	India	686	4	Singapore	595	4
Other	290	1	Other	1,107	7	Other	1,887	13
Total	49,471	100	Total	15,669	100	Total	14,513	100
Alumina	\$million	%	Base metals ²	\$million	%	Nickel	\$million	%
UAE	977	21	Korea	795	28	Malaysia	821	41
China	645	14	China	756	26	Singapore	272	14
Bahrain	525	11	Philippines	468	16	China	260	13
South Africa	442	10	Japan	356	12	Japan	137	7
Other	1,982	43	Other	516	18	Other	498	25
Total	4,572	100	Total	2,891	100	Total	1,988	100

¹ Includes LNG, crude oil and condensate and LPG. ² Includes copper, lead and zinc.

Source: WA Department of Mines and Petroleum, Resource Data Files.



Agriculture, forestry and fishing: natural and cultured pearls: and food and beverage manufactured products irce: ABS and Department of Agriculture and Food Western Australia

Western Australia **Economic Profile** October 2016

- Western Australia's agricultural and food exports rose 3% to \$7.8 billion in 2014-15, including wheat (38%), barley (13%), canola (10%), wool (6%) and rock lobster (6%).
- Wheat exports rose 6% to \$3 billion in 2014-15, in line with annual average growth of 6% over the past ten years.
- Major agricultural and food export markets in 2014-15 were China (22%), Indonesia (14%), Vietnam (9%), Japan (9%) and Korea (6%).
- Agricultural and food exports to China rose 23.5% to \$1.7 billion in 2014-15.

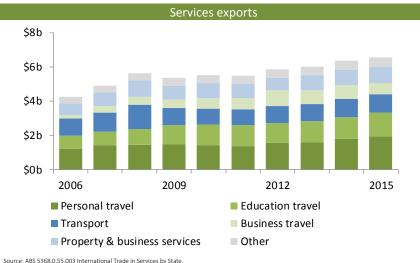
		Majo	or agricultural and fo	od export ma	rkets: 20	014-15		
Cereals ¹	\$million	%	Pulses/oilseeds ²	\$million	%	Fisheries ³	\$million	%
Indonesia	975	22	China	208	22	Vietnam	428	75
China	945	22	Belgium	143	15	Hong Kong	77	13
Japan	476	11	Japan	142	15	Japan	23	4
Korea	409	9	UAE	107	11	USA	20	3
Other	1,586	36	Other	363	38	Other	22	4
Total	4,391	100	Total	963	100	Total	570	100
Sheep⁴	\$million	%	Wool	\$million	%	Cattle⁵	\$million	%
China	72	14	China	416	87	Indonesia	88	21
Kuwait	58	11	India	33	7	Israel	54	13
UAE	57	11	Czech Republic	17	4	Japan	36	8
Jordan	48	9	Italy	4	1	Vietnam	36	8
Other	287	55	Other	7	2	Other	215	50
Total	522	100	Total	477	100	Total	430	100

wneat, barley oats and other cereal grains and proc Canola, lupins and other oilseeds and pulses.

Rock lobster, pearls, prawns, abalone, finfish and other marine products

Lamb, mutton and live sheep.

Live cattle and bec. Source: ABS and Department of Agriculture and Food Western Australia



- Western Australia contributed 10% of Australia's services exports in 2015 (10% in 2014-15).
- Services exports rose 3% to \$6.6 billion in 2015, below annual average growth of 5% over the past ten years.
- Services exports in 2015 included personal travel (30%), education travel (21%), transport (16%), property and business services (15%) and business travel (10%).
- Services exports growth in 2015 came mainly from increases in personal travel (up 9%), education travel (up 10%) and property and business services (up 13%).



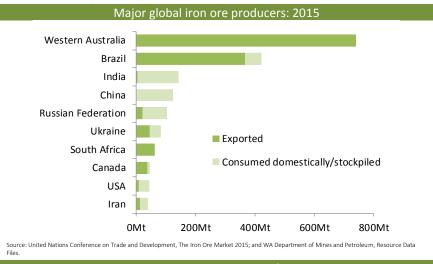
Western Australia **Economic Profile** October 2016





Monthly average China spot prices in nominal US dollars (cost and freight). Monthly average China steel product price index. ource: World Bank, Commodity Markets, Monthly Price Data; and CEIC, China Premium Database







- Iron ore and steel prices are closely related given iron ore accounts for around half of the cost of producing steel at current prices. Around 1.4 tonnes of iron ore is required to produce a tonne of crude steel.
- The monthly average price of iron ore fell 5% to US\$58.0 a tonne in September 2016. The annual average price fell 28% to US\$51.6 a tonne in 2015-16 (down 42% to US\$55.8 a tonne in 2015).
- The monthly average price of steel products rose 1% in September 2016. The annual average price fell 21% in 2015-16 (down 27% in 2015).
- Western Australia is the world's largest iron ore producer, accounting for 37% of world production and 52% of world seaborne exports in 2015.
- Western Australia accounted for 27% of global crude iron ore reserves in 2015. Western Australia had an estimated 63 billion tonnes of iron ore reserves in 2015-16, which could sustain its iron ore industry for another 76 years at current production rates.
- In 2015, Western Australia accounted for more than half of iron ore imports to China (64% or 612mt), Japan (54% or 71mt), Korea (71% or 52mt) and Taiwan (59% or 15mt).
- China made up 82% of Western Australia's iron ore export volumes in 2015-16, followed by Japan (9%), Korea (6%) and Taiwan (2%).
- Western Australia's iron ore exports to China rose 8% to 633 million tonnes in 2015-16, below annual average growth of 18% over the past ten years.
- Western Australia's iron ore exports fell to Japan (down 2% to 73mt), Korea (down 3% to 50mt) and Taiwan (down 6% to 15mt) in 2015-16.

Western Australia **Economic Profile** October 2016



The value of Western Australia's iron ore sales fell 11% to \$48.4 billion in 2015-16, compared with annual average growth of 14% over the past ten years.

The volume of iron ore sales rose 5% to 757 million tonnes in 2015-16, below annual average growth of 12% over the past ten years.

The annual average price of iron ore sales fell 15% to A\$64.0 a tonne in 2015-16.





The WA Government Annual Report on State Finances forecasts a rise of 60 million tonnes in Western Australia's iron ore sales to 817 million tonnes, between 2015-16 and 2019-20 – an annual average growth rate of 2%.

The WA Government Annual Report on State Finances forecasts the annual average price of iron ore will fall to US\$47.7 a tonne in 2016-17, before recovering to US\$54.0 a tonne by 2019-20.

Source: WA Department of Mines and Petroleum, Resource Data Files; World Bank Commodity Markets, Monthly Price Data; and WA 2015-16 Annual Report on State Finances.

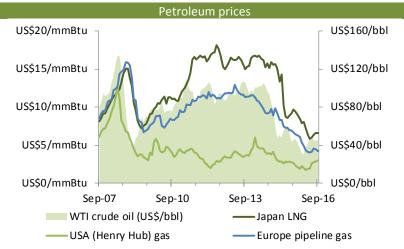
Major iron ore producers, ports and projects: 2015-16						
Exports (mtpa)	Target (mtpa)	Date				
		Reach target in:				
331	360	2019				
257	290	2018-19				
169	180	-				
		Target installed by:				
433	495	2018				
172	210	2015				
132	150	2015				
12	30	-				
12	20	-				
		Start operation in:				
8	28	Sep.2013				
70	70	Jun.2015				
55	55	Dec.2015				
	Exports (mtpa) 331 257 169 433 172 132 12 12 8 70	Exports (mtpa) Target (mtpa) 331 360 257 290 169 180 433 495 172 210 132 150 12 30 20 30 70 70				

inclusive of third party tonnes.

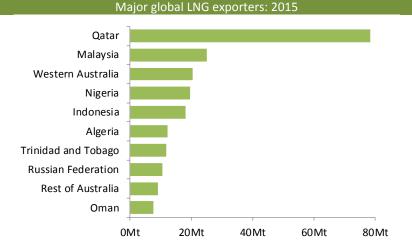
Inclusive or unity party connect ¹ Dry tonnes. Recently completed and ramping up production, under construction or committed. Source: Producer quarterly production and investment reports; Pilbara Ports Authority Strategic Plans; and ABS 5368.0 International Trade in Goods and Services.



Western Australia Economic Profile October 2016



Note – Monthly average prices in nominal US dollars. Source: World Bank, Commodity Markets Monthly Price Data.



Source: International Group of Liquefied Natural Gas Importers, The LNG Market 2015; and WA Department of State Development Estimates.

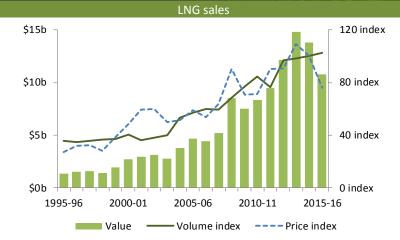
Natural gas reserves/resources by basin (trillion cubic feet): August 2016								
Basin:	Conventional	Conventional	Tight	Shale				
	reserves (2P)	resources (2C)	resources	resources				
Carnarvon	53.7	35.7	-	4 - 9				
Browse	16.4	19.4	-	-				
Bonaparte	0.9	18.1	-	-				
Perth	0.4	0.9	12	17 - 34				
Canning	0.0	1.5	74	70 - 150				
Total	71.4	75.6	86	91 - 193				

Source: EnergyQuest Quarterly; and WA Department of Mines and Petroleum.

- Liquefied Natural Gas (LNG)
- The monthly average price of West Texas Intermediate (WTI) crude oil rose 1% to US\$45.2 a barrel in September 2016. The annual average price fell 40% to US\$41.8 a barrel in 2015-16 (down 48% to US\$48.7 a barrel in 2015).
- The monthly average price of LNG imported by Japan was US\$6.6 a million British thermal unit in September 2016. The annual average price fell 41% to US\$8.0 a million British thermal unit in 2015-16 (down 35% to US\$10.4 a million British thermal unit in 2015).
- Western Australia is the world's third largest LNG exporter behind Qatar (78.4mt) and Malaysia (25.0mt), accounting for 8% (20.4mt) of global LNG exports of 245 million tonnes in 2015.
- The rest of Australia (excluding Western Australia) exported 9.1 million tonnes of LNG in 2015.
- According to EnergyQuest, 72% (4.6mt) of Western Australia's LNG exports went to Japan in the September quarter 2016, followed by China (18% or 1.2mt), India (7% or 0.4mt), Taiwan (2% or 0.1mt) and Korea (1% or 0.1mt).
- Western Australia accounted for 1.1% of global natural gas reserves in 2015, according to the BP Statistical Review of World Energy and EnergyQuest.
- In August 2016, EnergyQuest estimated offshore western and northern Australia had 71 trillion cubic feet of conventional natural gas reserves. Western Australia's share of these reserves could sustain its LNG and domestic gas industry for another 39 years at current production rates. However, Western Australia's LNG production will more than double over the next few years, reducing the reserve life to around 20 years.

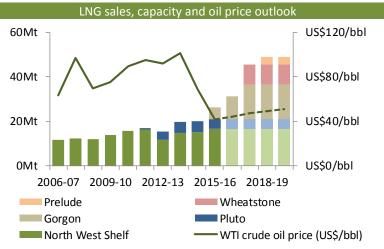


Western Australia **Economic Profile** October 2016



- The value of Western Australia's LNG sales fell 22% to \$10.8 billion in 2015-16, compared with annual average growth of 9% over the past ten years.
- The volume of LNG sales rose 2.5% to 21.0 million tonnes in 2015-16, below annual average growth of 6% over the past ten years.
- The annual average price of LNG sales fell 24% to A\$9.9 a million British thermal unit in 2015-16.

Note – Base year of index is 2014-15. Source: WA Department of Mines and Petroleum, Resource Data Files



The WA Department of State Development expects Western Australia's LNG production capacity to grow from 26.2 million tonnes a year in 2015-16 to 49.1 million tonnes a year in 2018-19, when the Gorgon, Wheatstone and Prelude projects are complete.

The WA Government Annual Report on State Finances forecasts the annual average price of West Texas Intermediate (WTI) crude oil will rise to US\$44.4 a barrel in 2016-17 and recover further to US\$50.9 a barrel by 2019-20.

Source: WA Department of Mines and Petroleum, Resource Data Files; World Bank Commodity Markets, Monthly Price Data; WA 2015-16 Annual Report on State Finances; and WA Department of State Development Estimates.

	projects: 2013 10		
	Exports (mtpa)	Capacity ¹ (mtpa)	Start operation
Major producers ² :			
Woodside	7.0	6.5	-
Chevron	2.5	5.1	-
Shell	2.5	3.9	-
Operating projects:			
North West Shelf (A\$27 billion)	15.9	16.7	Aug.1989
Pluto (A\$15 billion)	5.0	4.3	Apr.2012
Gorgon – Train 1 (A\$55 billion - total project)	-	5.2	Mar.2016
Total operating	20.8	26.2	
Major projects under construction or committed:			
Gorgon – Train 2	-	5.2	Dec.2016
Gorgon – Train 3	-	5.2	Jun.2017
Wheatstone – Train 1 (A\$29 billion - total project)	-	4.5	Jun.2017
Wheatstone – Train 2	-	4.5	Dec.2017
Prelude FLNG (A\$13 billion)	-	3.6	Jun.2018
Total capacity under development	-	22.9	
Total capacity operating and under development	-	49.1	

Major LNG producers and projects: 2015-16

Nameplate capacity. Capacity of major producers is their share of the total capacity of operating projects. Source: Producer quarterly production and investment reports; and the WA Department of State Development



Gold sales \$15b \$10b \$5b \$5b \$0b 1995-96 2000-01 2005-06 2010-11 2015-16

Note – Base year of index is 2014-15. Source: WA Department of Mines and Petroleum, Resource Data Files.

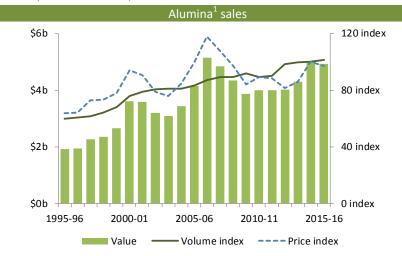
Value

Volume index

---- Price index

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Note – Base year of index is 2014-15. Source: WA Department of Mines and Petroleum, Resource Data Files



Note – Base year of index is 2014-15

The monthly average price of gold fell 1% to US\$1,327 an ounce in September 2016. The annual average price fell 4.5% to US\$1,168 an ounce in 2015-16 (down

Western Australia

Economic Profile

October 2016

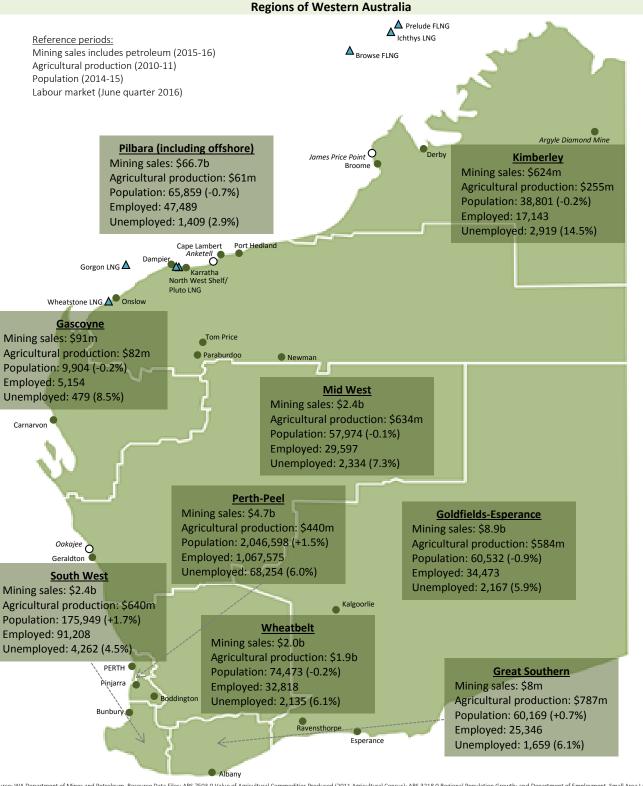
- 8% to US\$1,161 an ounce in 2015).
 The value of Western Australia's gold sales rose 10% to \$10.0 billion in 2015-16, below annual average growth of 10.5% over the past ten years.
- The volume of gold sales rose 1% to 195 tonnes in 2015-16, below annual average growth of 2% over the past ten years.
- The annual average price of gold sales rose 9% to A\$1,460 an ounce in 2015-16.
- The value of Western Australia's crude oil and condensate sales fell 32% to \$5.4 billion in 2015-16, compared with annual average decline of 5% over the past ten years.
- The volume of crude oil and condensate sales fell 1% to 14.5 gigalitres in 2015-16, compared with annual average decline of 1.5% over the past ten years.
- The annual average price of crude oil and condensate sales fell 31% to A\$59.8 a barrel in 2015-16.
- The monthly average price of aluminium fell 3% to US\$1,589 a tonne in September 2016. The annual average price fell 18% to US\$1,543 a tonne in 2015-16 (down 11% to US\$1,665 a tonne in 2015).
- The value of Western Australia's alumina sales fell 2% to \$4.9 billion in 2015-16, compared with annual average growth of 2% over the past ten years.
- The volume of alumina sales rose 1% to 14 million tonnes in 2015-16, below annual average growth of 2% over the past ten years.
- The annual average price of alumina sales fell 3% to A\$354 a tonne in 2015-16.

Crude oil and condensate sales \$16b 160 index \$12b 120 index 80 index \$8b \$4b 40 index \$0b 0 index 1995-96 2000-01 2005-06 2010-11 2015-16 Value • Volume index ---- Price index

Source: WA Department of Mines and Petroleum, Resource Data Files.



Western Australia Economic Profile October 2016



Source: WA Department of Mines and Petroleum, Resource Data Files; ABS 7503.0 Value of Agricultural Commodities Produced (2011 Agricultural Census); ABS 3218.0 Regional Population Growth; and Department of Employment, Small Area Labour Markets.