

EARTH RESOURCES REGULATION

2016-17 STATISTICAL REPORT



Acknowledgement of Victoria's Traditional Owners

The Victorian Government proudly acknowledges Victorian Traditional Owners as Victoria's first peoples and pays its respects to their Elders past and present.

We recognise the intrinsic connection of the first peoples to their Country for countless generations and their inherent obligation to maintain and strengthen their distinct cultural rights and responsibilities to care for their Country.

We value Traditional Owners' role in the management of land, water and biodiversity and acknowledge the ongoing contribution this makes to our earth resources.

We have distinct legislative obligations to Traditional Owner groups that are paramount in our responsibilities in managing Victoria's resources.

We support the need for genuine and lasting partnerships with Aboriginal people and communities to understand culture and connections to Country in the way we plan for and regulate our earth resources.

Disclaimer

The information contained in this report is provided for general guidance and assistance only and is not intended as advice. You should make your own enquiries as to the appropriateness and suitability of the information provided. While every effort has been made to ensure the currency, accuracy or completeness of the content we endeavour to keep the content relevant and up to date and reserve the right to make changes as required. The Victorian Government, authors and presenters do not accept any liability to any person for the information (or the use of the information) which is provided or referred to in the report.

Version	Amendments
v1.01	FY 2014-15 Expenditure on minerals exploration and mining correction Amendments made to Table 2.5 (page 14): <ul style="list-style-type: none">• MRSDA Exploration expenditure amended from \$32.3M to \$47.5M• MRSDA Mining expenditure \$622.3M to \$607.8M
v1.01	FY 2016-17 Gold production and Sale Value correction Amendments made to Introduction (page4) and Table 2.7 (page 16): <ul style="list-style-type: none">• Gold Production from 329,452 ounces to 312,229 ounces• Gold Sales Value from \$547.8M to \$519.8M
V1.02	Table 2.2.2.3 Gas Production Updated the table to 2016-17 data.

Authorised by the Victorian Government
Department of Economic Development, Jobs, Transport and Resources
1 Spring Street Melbourne Victoria 3000
Telephone (03) 9651 9999

ISBN 978-1-925629-21-7 (pdf/online)

© Copyright State of Victoria 2018

Except for any logos, emblems, trademarks, artwork and photography this document is made available under the terms of the Creative Commons Attribution 3.0 Australia licence.

For more information see the Earth Resources Regulation website www.earthresources.vic.gov.au/earth-resources-regulation

This document is also available in PDF and accessible Word format at <http://earthresources.efirst.com.au/categories.asp?clD=46&c=4307>

TABLE OF CONTENTS

1	Introduction	4
2	Petroleum, geothermal and pipelines	5
	2.1 Petroleum	5
	2.2 Petroleum tenements.....	5
	2.2.2 Petroleum exploration and development	7
	2.2.3 Geothermal energy	8
	2.2.4 Geothermal energy tenements	8
	2.3 Pipelines	9
3	Minerals	10
	3.1 Mineral tenements	10
	3.2 Mineral exploration and mining expenditure	14
	3.3 Mineral production	16
4	Extractive resources	18
5	Revenue and bonds	21
	5.1 Revenue	21
	5.2 Rehabilitation bonds	23
6	Monitoring, compliance and enforcement	25

1 Introduction

The Earth Resources Regulation Branch (ERR) in the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) is responsible for the regulation of minerals, extractives, petroleum, pipelines, geothermal and carbon storage activities in Victoria and offshore (Victorian) waters. The Earth Resources Regulation administers a consistent and transparent tenement management regime and conducts monitoring and compliance operations to ensure that authority holders comply with their statutory obligations.

Earth Resources Regulation administered the following Acts.

- *Mineral Resources (Sustainable Development) Act 1990* (MRSDA) (mineral exploration, mining and quarrying);
- *Offshore Petroleum and Greenhouse Gas Storage Act 2010* (OPGGSA) (petroleum exploration and development, greenhouse gas storage and pipelines in the Victorian offshore waters);
- *Petroleum Act 1998* (petroleum exploration and development onshore);
- *Pipelines Act 2005* (licensing and regulation of high pressure pipelines onshore);
- *Geothermal Energy Resources Act 2005* (geothermal energy exploration and development); and
- *Greenhouse Gas Geological Sequestration Act 2008* (greenhouse gas storage onshore).

The 2016-17 Statistical Report presents a compilation of data as reported by Victoria's earth resources authority holders to Earth Resources Regulation. The report includes data on exploration, production, expenditure, licensing, revenues and regulatory actions.

All production and expenditure figures are certified by authority holders and submitted to Earth Resources Regulation.

Key observations and statistics for 2016-17 include:

- There were 411 licences as at 30 June 2017, which was a decline of 6.4 per cent compared to 2015-16.
- The number of new licences granted and renewed increased to 68 from 57 in 2015-16.
- In the petroleum sector, production from three new development wells came on stream in September 2016. H-2 well from Halladale field, S-1 and S-2ST1 wells from Speculant field were located within Offshore Petroleum Production Licence VIC/L1(V) located within three nautical mile zone.
- In the extractive sector, 529 quarries produced a total of 57.4 million tonnes of rock at a reported value of \$849 million dollars, an increase of 4.5 per cent (\$33.5 million) year on year.
- The minerals sector continued to reflect the general trend of a fluctuating commodity market over the past five years. The production of gold remained high with a further increase of 21.6 per cent to 312,229 ounces, while the production of brown coal decreased by 6.1 per cent. The amount spent on exploration increased from \$38.0 million to \$43.5 million (14.5 per cent increase).
- State revenue (rent, royalty and administrative fees) derived from the earth resources sector totalled \$87.9 million, an increase of 69 per cent (\$36 million). This increase was mostly attributable to an adjustment in the royalty rate for brown coal, which came into effect on 1 January 2017.

2 Petroleum, geothermal and pipelines

2.1 Petroleum

Exploration for petroleum within Victoria's jurisdiction occurred in the Otway and Gippsland geological basins. Production activity occurred in the Otway Basin.

Offshore activities occur within three nautical miles off the coast, as covered by Victorian legislation. Waters greater than three nautical miles offshore from the coast are covered by Commonwealth legislation and reported separately by Commonwealth Government agencies.

2.2 Petroleum tenements

In 2016-17, no Petroleum Exploration Permits, Retention Leases or Production Leases applications were received or granted.

Table 1.1 Overview of petroleum tenements current as at 30 June 2017

	Petroleum Exploration Permits	Petroleum Retention Leases	Petroleum Production Licences	Other Tenements (PSAA, PSDA, AA)
Onshore	11	3	13	3
Offshore (Vic)	3	1	1	2

Source: DEDJTR

2.2.1.1 Onshore

No onshore petroleum retention licence or exploration permit applications were received or granted in 2016-17.

Table 1.2 Overview of onshore petroleum exploration permits

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	1	0	0	0	0	0
Granted	0	2	2	0	0	0

Source: DEDJTR

Table 1.3 Overview of onshore petroleum retention licences

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	0	0	0	0
Granted	0	0	0	0	0	0

Source: DEDJTR

2.2.1.2 Offshore (Victorian Waters)

No offshore petroleum exploration permits were granted and no applications were received. No applications for offshore petroleum retention and production licences were received nor were any granted.

Table 1.4 Overview of offshore petroleum exploration permits

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	2	0	0	0
Granted	1	0	0	2	0	0

Source: DEDJTR

Table 1.5 Overview of offshore petroleum retention leases

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	0	0	0	0
Granted	0	0	0	0	0	0

Source: DEDJTR

Table 1.6 Overview of offshore petroleum production licences

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	1	0	0	0
Granted	0	0	0	1	0	0

Source: DEDJTR

2.2.1.3 Greenhouse gas storage

There was one application for a Greenhouse Gas Access Permit.

Table 1.7 Overview of offshore Greenhouse Gas Assessment Permit

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	0	0	1	1
Granted	0	0	0	0	0	1

Source: DEDJTR

2.2.2 Petroleum exploration and development

No drilling or seismic activities occurred on Onshore Petroleum tenements in Victoria.

2.2.2.1 Drilling

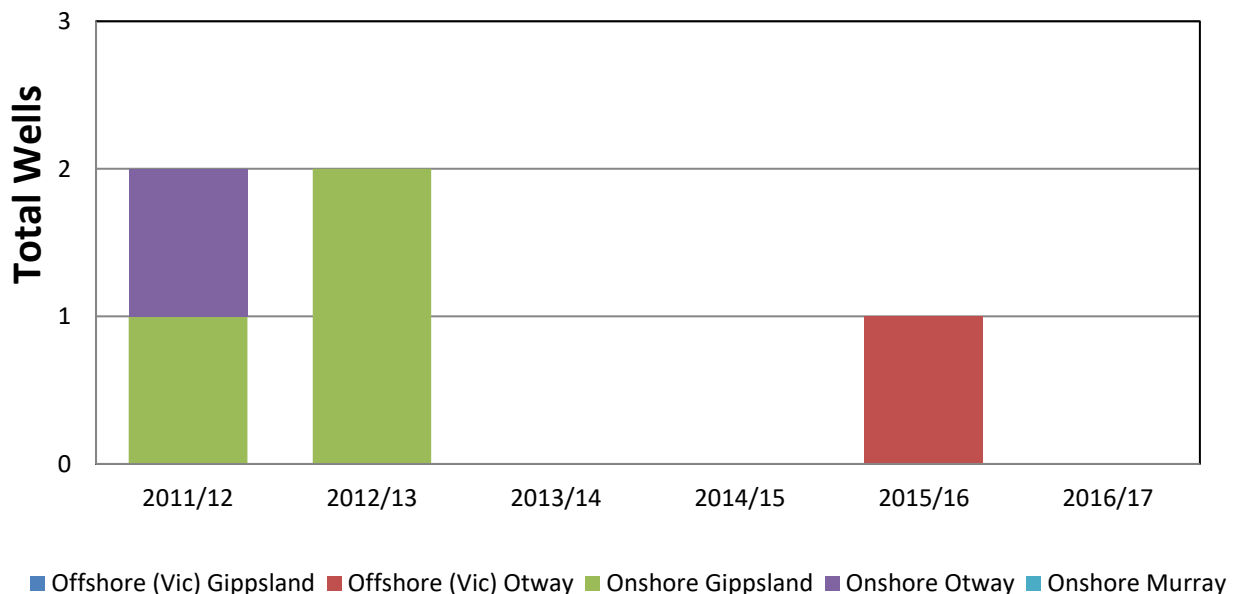
During 2016/17, no onshore wells were drilled. A legislated moratorium on exploration and production of onshore conventional gas is in place until June 2020, while scientific investigations are undertaken on the risks, benefits and impacts. Onshore unconventional gas activities, including hydraulic fracturing, are banned by law.

Table 1.8 Number of exploration wells drilled in Victoria

Year	Offshore (Vic) Gippsland	Offshore (Vic) Otway	Onshore Gippsland	Onshore Otway	Onshore Murray	Total wells
2011-12	0	0	1	1	0	2
2012-13	0	0	2	0	0	2
2013-14	0	0	0	0	0	0
2014-15	0	0	0	0	0	0
2015-16	0	1	0	0	0	1
2016-17	0	0	0	0	0	0
Total	0	1	3	1	0	5

Source: DEDJTR

Graph 1.1 Number of exploration wells drilled



Source: DEDJTR

2.2.2.2 Geophysical Surveys

Enterprise II 3D TZ (Transition Zone) Marine Seismic Survey was acquired in Offshore Petroleum Exploration Permit VIC/P42(V), Onshore (Petroleum Exploration Permits) PEP 168, PEP169 and (Petroleum Production Licence) PPL8. The survey was initiated in January and completed in April 2017.

2.2.2.3 Production

Production from three new development wells came on stream in September 2016. H-2 well from Halladale field, S-1 and S-2ST1 wells from Speculant field were located within Offshore Petroleum Production Licence VIC/L1(V) located within three nautical mile zone.

Carbon dioxide production at Boggy Creek (PPL3) and gas injection and production at the Iona gas storage facility (PPL1 and PPL2) which are both onshore facilities located in the Otway Basin.

Table 1.9: Otway onshore production and injection 2016-17[^]

Field	Condensate (bbl*)	Gas Production (MMscf**)	CO2 Prod. (tonnes)	Gas Injection (MMscf)	Comments
Iona	587	9,668	-	13,952	
Boggy Creek	3.7	-	34,937	-	Ex wellhead figures
Halladale BlackWatch and Speculant (HBWS)	201,935	19,598	-	-	

Source: DEDJTR

*bbl = barrels **MMscf = million standard cubic feet

[^] Table updated the 2016-17 figures

2.2.3 Geothermal energy

As at 30 June 2017, there were six current geothermal energy exploration permits. No geothermal energy retention leases or production licences were granted in 2016-17. Geothermal energy activities in Victoria remain limited to exploration.

2.2.4 Geothermal energy tenements

No geothermal energy tenements in 2016-17.

Table 1.10 Overview of geothermal exploration permits

Description	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	0	0	0	0
Granted	0	0	0	0	0	0

Source: DEDJTR

2.3 Pipelines

One onshore application and one offshore application were granted during the year. Five alterations to pipeline routes were registered, with four classified as minor alterations and one classified as a significant alteration.

Table 1.11 Onshore pipeline licences applications received and granted

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	2	3	1	0
Granted	1	0	1	0	3	1

Source: DEDJTR

Table 1.12 Offshore pipeline licences applications received and granted (Victorian waters)

	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Application Received	0	0	0	0	0	1
Granted	0	0	0	0	0	1

Source: DEDJTR

Table 1.13 Pipeline licences current as at 30 June 2017

Tenement	Number of licences
Onshore	214
Offshore (Vic)	14

Source: DEDJTR

Table 1.14 Onshore pipeline licence alterations of route registered

Type of Alteration of Route	Number of registrations
Minor	4
Significant	1
Total	5

Source: DEDJTR

3 Minerals

3.1 Mineral tenements

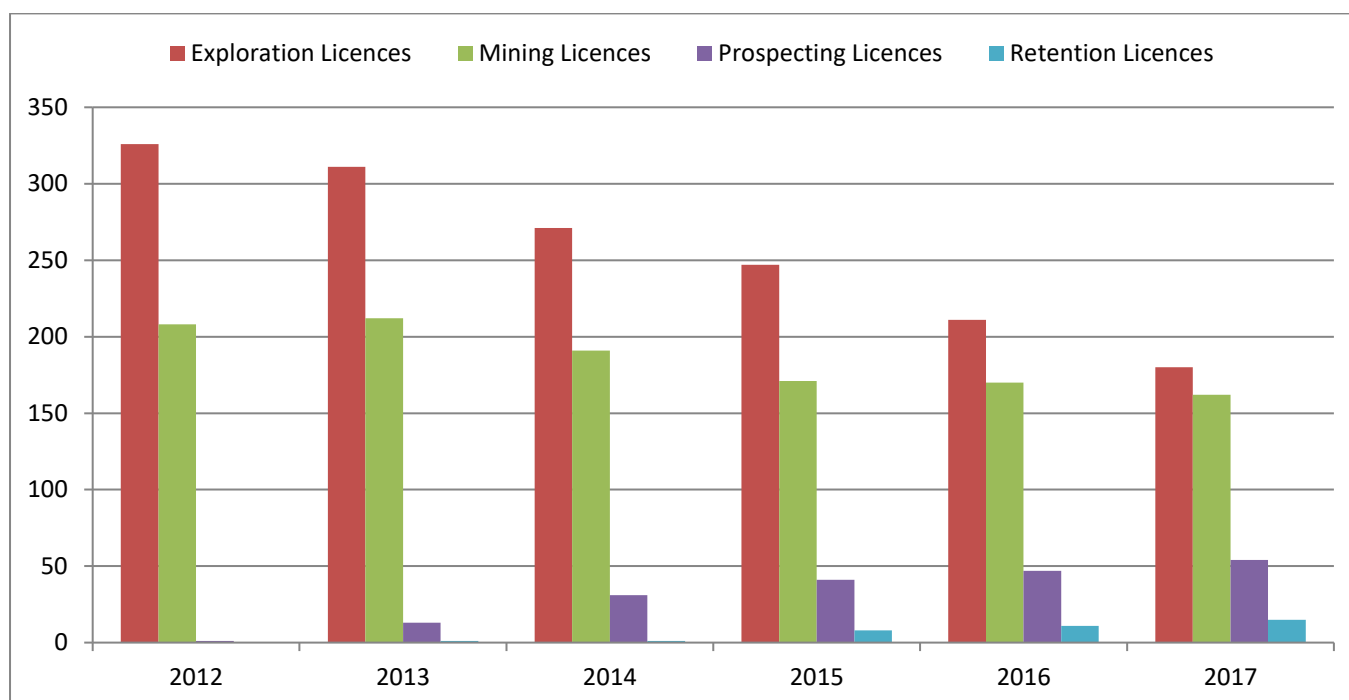
The number of current retention and prospecting licences continued to increase year on year. The area covered by exploration licences also increased by 7 per cent. The total number of exploration and mining licences continued to reduce year on year.

Table 2.1 Licences current as at 30 June

Tenement Type	2012	2013	2014	2015	2016	2017
Exploration Licences	326	311	271	247	211	180
Mining Licences	208	212	191	171	170	162
Prospecting Licences	1	13	31	41	51	54
Retention Licences	0	1	1	8	11	15
Totals	535	537	494	467	443	411
Change year-on-year (%)	2.9	0.4	-8.0	-5.5	-6.0	-6.4

Source: DEDJTR

Graph 2.1 Licences current as at 30 June



Source: DEDJTR

Table 2.2 New licence applications and licence renewals in 2016-17

	Received	Granted / Renewed	Withdrawn	Refused
Exploration Licence Applications	41	21	6	0
Renewal Exploration Licence Applications	18	17	0	0
Sub Total Exploration Licence Applications	59	38	6	0
Mining Licence Applications	1	0	1	0
Renewal Mining Licence Applications	10	15	0	0
Sub Total Mining Licence Applications	11	15	1	0
Prospecting Licence Applications	19	11	0	0
Retention Licence Applications	3	4	0	0
Total	92	68	7	0

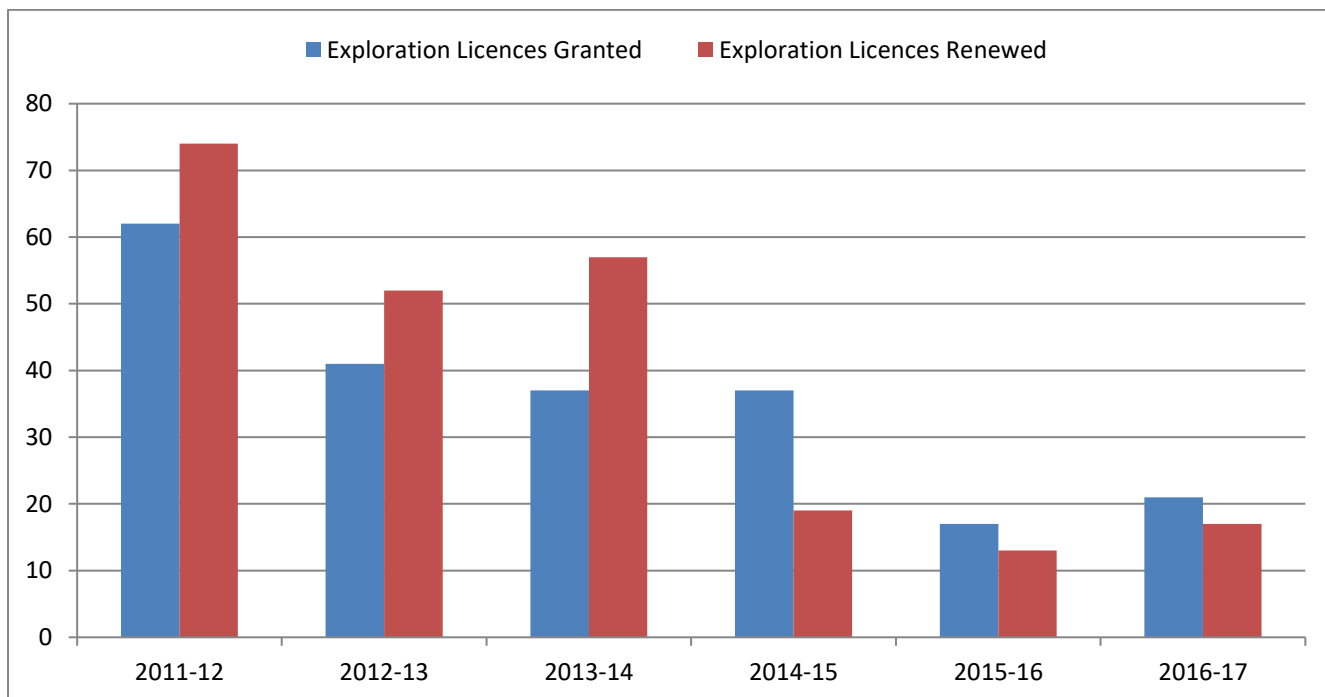
Source: DEDJTR

Table 2.3 Licences granted and renewed

Year	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Exploration Licences Granted	62	41	37	37	17	21
Exploration Licences Renewed	74	52	57	19	13	17
Subtotal Exploration Licences Granted and Renewed	136	93	94	56	30	38
Mining Licences Granted	12	11	9	3	2	0
Mining Licences Renewed	21	14	28	14	10	15
Sub Total Mining Licences Granted and Renewed	33	25	37	17	12	15
Prospecting Licences Granted	1	12	18	13	12	11
Retention Licences Granted	0	0	1	7	3	4
Total Licences	170	130	150	93	57	68

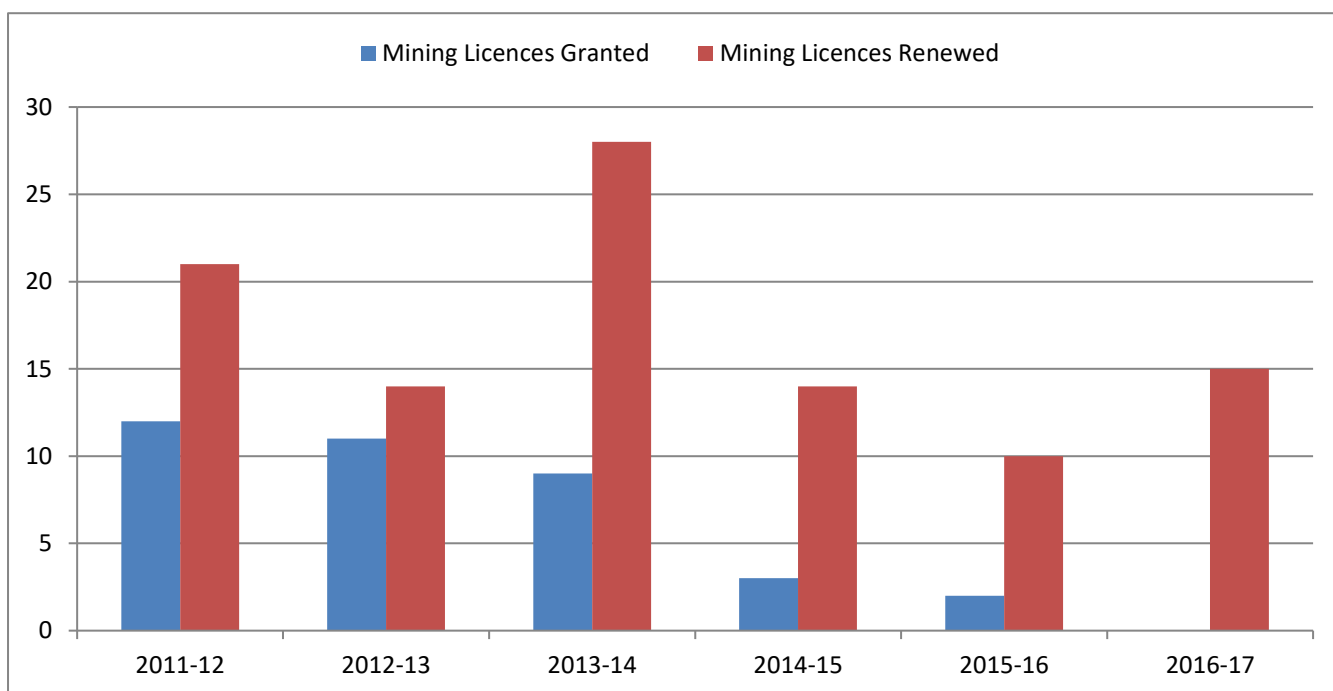
Source: DEDJTR

Graph 2.3 a) Exploration licences granted and renewed



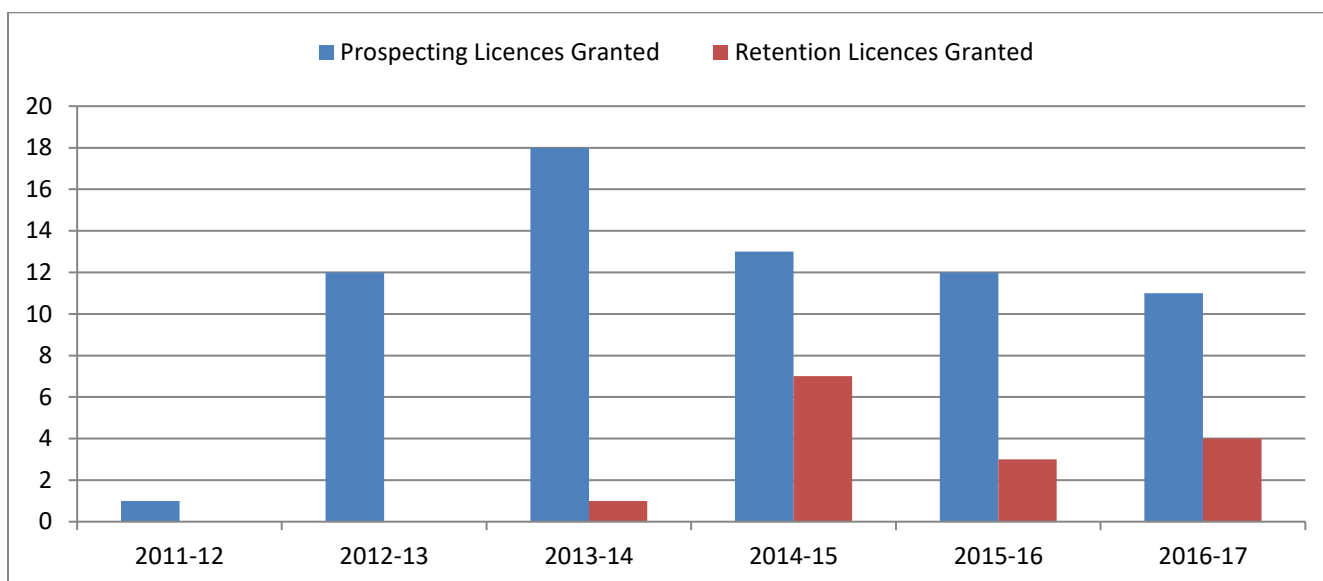
Source: DEDJTR

Graph 2.3 b) Mining licences granted and renewed



Source: DEDJTR

Graph 2.3 c) Prospecting* and retention licences granted



Source: DEDJTR

* A prospecting licence cannot be renewed.

The total area covered by exploration licences (current and in application) was 51,984 km², an increase of 7 per cent compared to 2017.

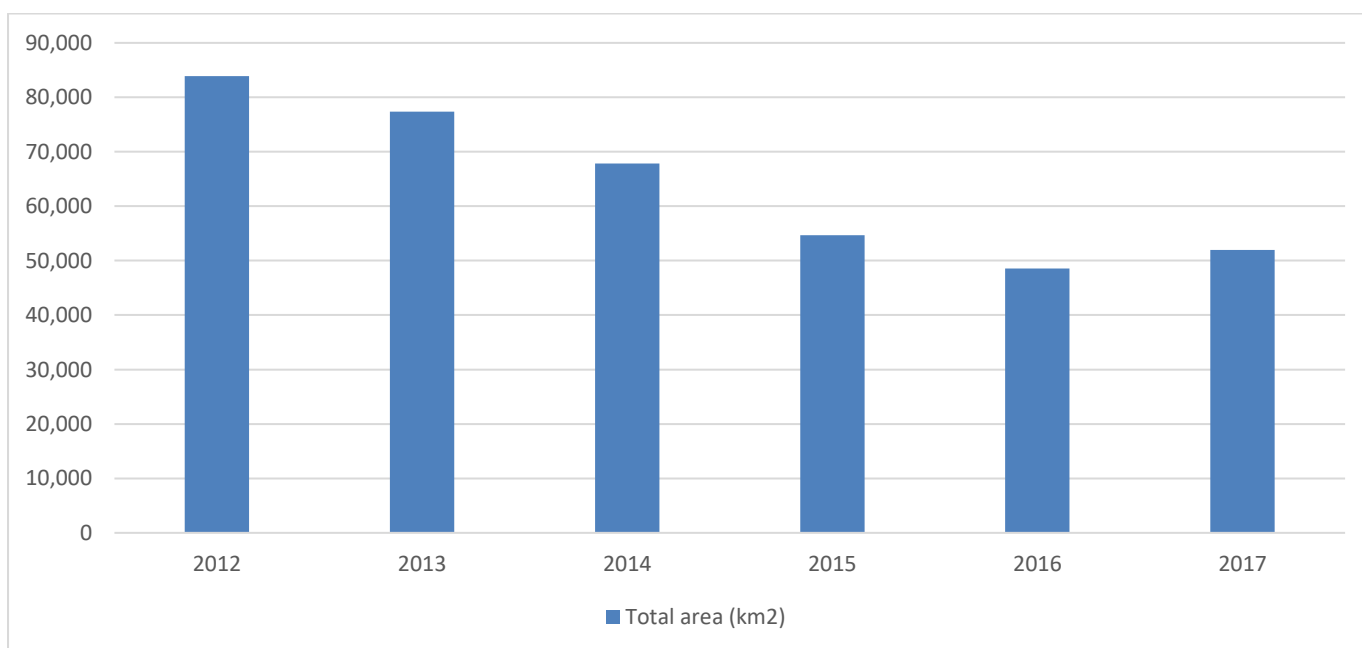
Table 2.4 Total area covered by exploration licences (current and in application as at 30 June 2016)

Year	2012	2013	2014	2015	2016	2017
Total area (km²)	83,900	77,366	67,833*	54,698*	48,569	51,984

Source: DEDJTR

*Figures for 2014 and 2015 have been revised due to calculation errors.

Graph 2.4 a) Total area of Victoria covered by mineral exploration licences



Source: DEDJTR

3.2 Mineral exploration and mining expenditure

Australian Bureau of Statistics (ABS) data shows an increase of 40.8 per cent (\$28.9 M to \$40.7M) in Victorian exploration expenditure in 2016/17 compared to 2015/16. Data reported to Earth Resources Regulation on mineral exploration shows that the amount spent on exploration increased from \$38.0 million to \$43.5 million (14.5 per cent increase). MRSDA data shows that expenditure on mining has increased 10.6 per cent from \$685.6 million to \$758.3 million.

Table 2.5 Expenditure on mineral exploration and mining development (\$A million)

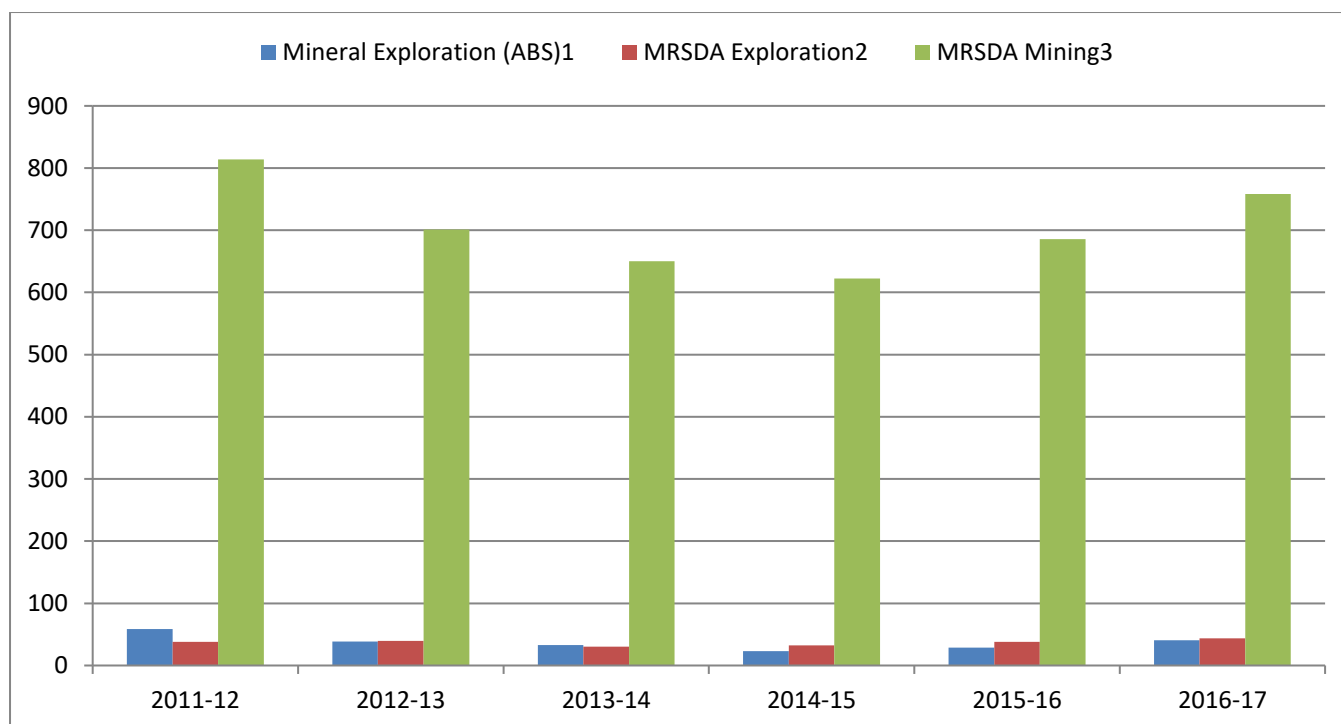
	2011-12	2012-13	2013-14	2014-15	2015-16	2016-17
Mineral Exploration (ABS)¹	58.5	38.6	32.6	22.9	28.9	40.7
MRSDA Exploration²	37.8	39.7	30.5	47.5 [^]	38.0	43.5
MRSDA Mining³	813.8	701.2	650.3	607.8 [^]	685.6	758.3

Source: Figures collated from activity reports forwarded to DEDJTR required under the MRSDA, and ABS, Actual and Expected Private Mineral Exploration (Catalogue No. 8412.0)

[^] Data corrected as at 15/06/2018

By sector, exploration in gold mining and mineral sands accounted for over two-thirds of all exploration expenditure.

Graph 2.5 a) Expenditure on mineral exploration and mining



Source: DEDJTR

¹ The ABS reports quarterly on private mineral exploration expenditure for all Australian states and the Northern Territory (NT). Victorian mineral exploration and mining expenditure is also reported in accordance with the requirement of the MRSDA. The ABS exploration expenditure statistics can vary significantly from expenditure reported under the MRSDA. The difference between these two exploration expenditure data sets is mainly due to the difference in methodologies for data collection, and the inclusion of the exploration expenditure on mining licences in the MRSDA figure. The ABS statistics are a valid basis for comparison of Victorian expenditure with that of other states/NT. However, the MRSDA figures provide greater detail.

² Change of metric - expenditure on Exploration and Retention Licences with an Expenditure Reporting Period that ends within the Financial Year.

³ The MRSDA mining expenditure figure covers all expenditure on mining and prospecting licences (including capital and operating expenses), less any specified exploration expenditure on mining and prospecting licences.

Table 2.6 Expenditure on mineral exploration and mining by commodity*

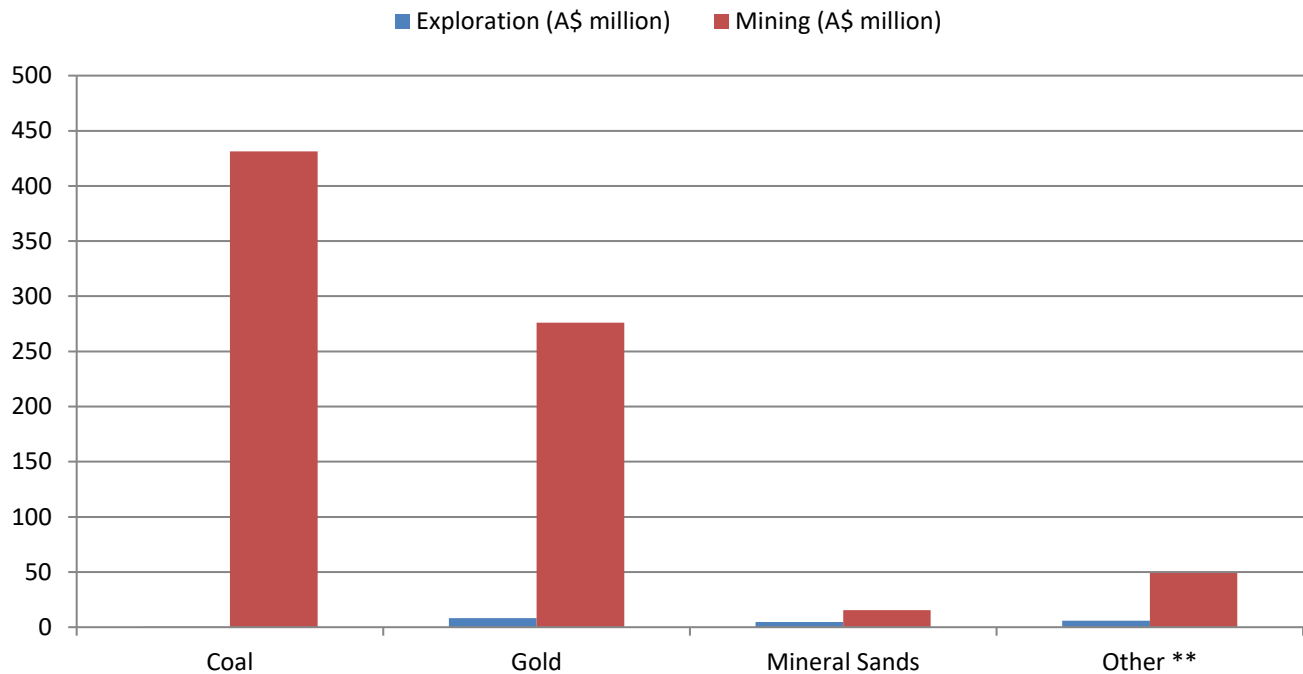
Sector	Exploration (\$A million)	As % of total	Mining (\$A million)	As % of total
Coal	0.46	2.4%	431.21	55.1%
Gold	8.29	42.4%	275.99	36.6%
Mineral Sands	4.76	24.4%	15.55	2.0%
Other**	6.03	30.8%	48.99	6.3%
Total	19.55	100%	771.74	100%

Source: DEDJTR

*Notes: Expenditures are allocated to commodity according to the primary nominated mineral commodity on the licence.

** "Other" includes cases where there is more than one primary mineral.

Graph 2.6 Mineral exploration and mining expenditure by commodity (MRSDA) 2016-17



Source: DEDJTR

3.3 Mineral production

Gold production increased 72.8K ounces (28.4 per cent) from 256,653 ounces to 329,452 ounces. Brown coal production decreased by 6.1 per cent from 59.75 million tonnes to 56.1 million tonnes.

Table 2.7 Mineral production over time*

Year	Brown Coal (1000 Tonnes)	Gold (Ounce)	Antimony (Tonnes)	Zircon (Tonnes)	Rutile (Tonnes)	Ilmenite (Tonnes)	Feldspar (Tonnes)	Gypsum (M ³)	Kaolin and fine clay (Tonnes)
2011-12	69,124	211,201	5,007	187,538	261,744	42,814	95,310	630,258	80,202
2012-13	59,854	225,776	4,558	86,243	140,842	67,067	61,578	499,681	204,164
2013-14	58,001	225,168	5,336	128,064	243,355	563,371	44,254	454,526	167,333
2014-15	60,957	198,387	3,684	77,162	85,983	383,369	40,232	335,374	152,047
2015-16	59,757	256,653	5,945	52,026	90,318	57,763	30,730	314,759**	202,229**
2016-17	56,095	312,229 [^]	5,138	45,597	73,812	44,944	0	282,720	192,150
Change year-on-year (%)	-6.1%	21.6%	-13.6%	-12.4%	-18.3%	-22.2%	-100.0%	-10.2%	-5.0%

Source: DEDJTR, statutory returns under the MRSDA.

*Gold reported in ounces, brown coal in thousand tonnes, gypsum in cubic meters, and the remainder in tonnes.

** Data correction for 2015/16 values

[^]Data corrected as at 15/06/2018

Table 2.8 Mineral production sales values (A\$ million)

Mineral	2014-15	2015-16	2016-17	Change year-on-year (%)
Brown Coal*	N/A	N/A	NA	NA
Gold	286.9	411.4**	519.8 [^]	+26.3%
Antimony	37.8	30.6	33.6	+9.8%
Heavy Mineral Sands (Zircon, Rutile, Ilmenite)	185.1	175.9	188.5	+7.2%
Industrial Minerals (Feldspar, Gypsum, Kaolin & fine clay)	10.2	10.0	8.0	-20.0%
Others (including silver, peat and quartz)	0.1	0.6	0.2	-66.7%
Total (excl. brown coal)	520.1	628.5	750.1	+19.3%

Source: DEDJTR, statutory returns under the MRSDA.

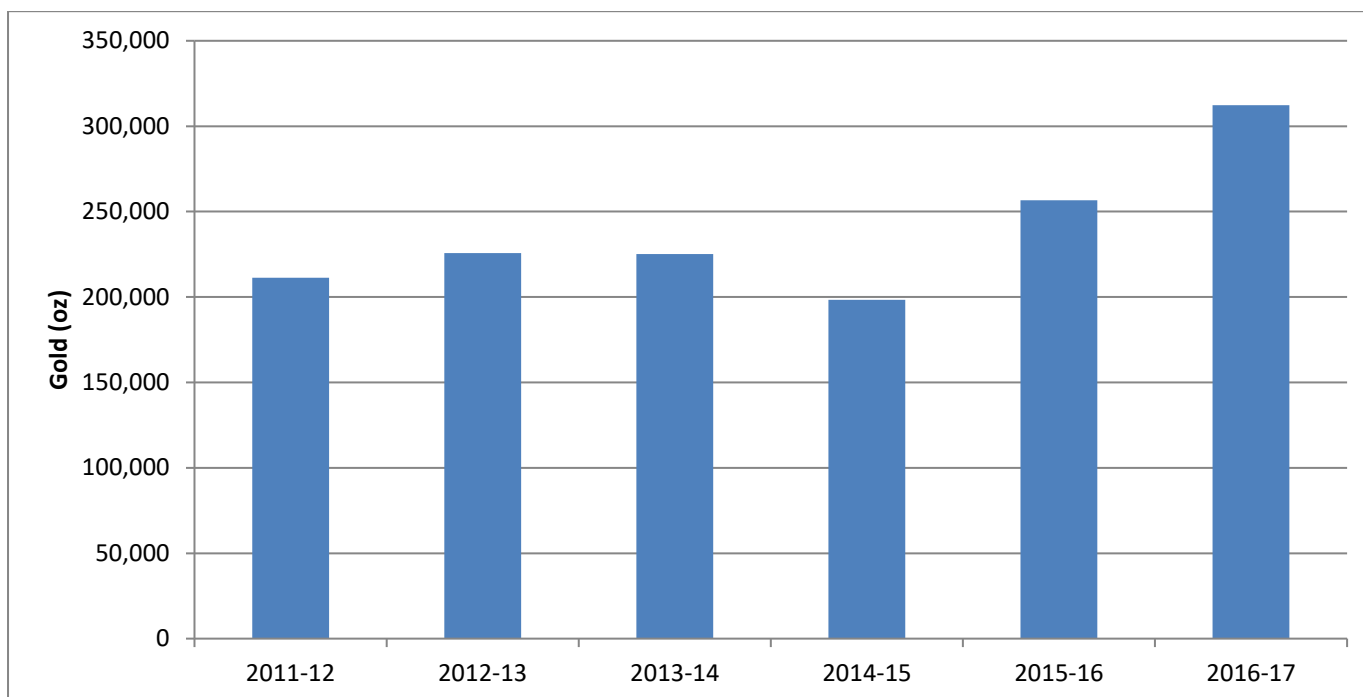
*No unit value is assigned to brown coal for the purposes of determining its production value. Brown coal is almost entirely used for electricity production and is largely an internal transfer within mining/generation entities. As such, there is no available market price for brown coal.

**The average price of gold for 2015-16 was used multiplied by production amount.

[^]Data corrected as at 15/06/2018

Graph 2.8 Gold production (ounces) by year

Gold production for 2016-17 was 312,229 ounces, being the highest in the last six years.



Source: DEDJTR

Table 2.9 Brown coal production ('000 tonnes) by year

Year	Maddingley Brown Coal Co. Bacchus Marsh	Alcoa Anglesea	Loy Yang	Yallourn	Hazelwood	Annual Total
2011-12	21	1,022	30,237	17,404	20,440	69,124
2012-13	18	913	28,921	12,885	17,118	59,854
2013-14	19	1,034	26,967	13,494	16,487	58,001
2014-15	19	-	27,624	17,171	16,144	60,957
2015-16	23	-	27,066	17,979	14,689	59,757
2016-17	45	-	27,752	17,674	10,624	56,095

Source: DEDJTR, statutory returns under the MRSDA.

4 Extractive resources

Quarries produce predominantly hard rock, clay, sand and gravel, which are mostly used for constructing houses, public infrastructure and private sector developments.

As at 30 June 2017, there were 888 current work authorities for quarries granted under the MRSDA. The total number of quarries has remained relatively stable over the last decade.

Table 3.1 Status of extractive industry work authorities* as at 30 June 2017

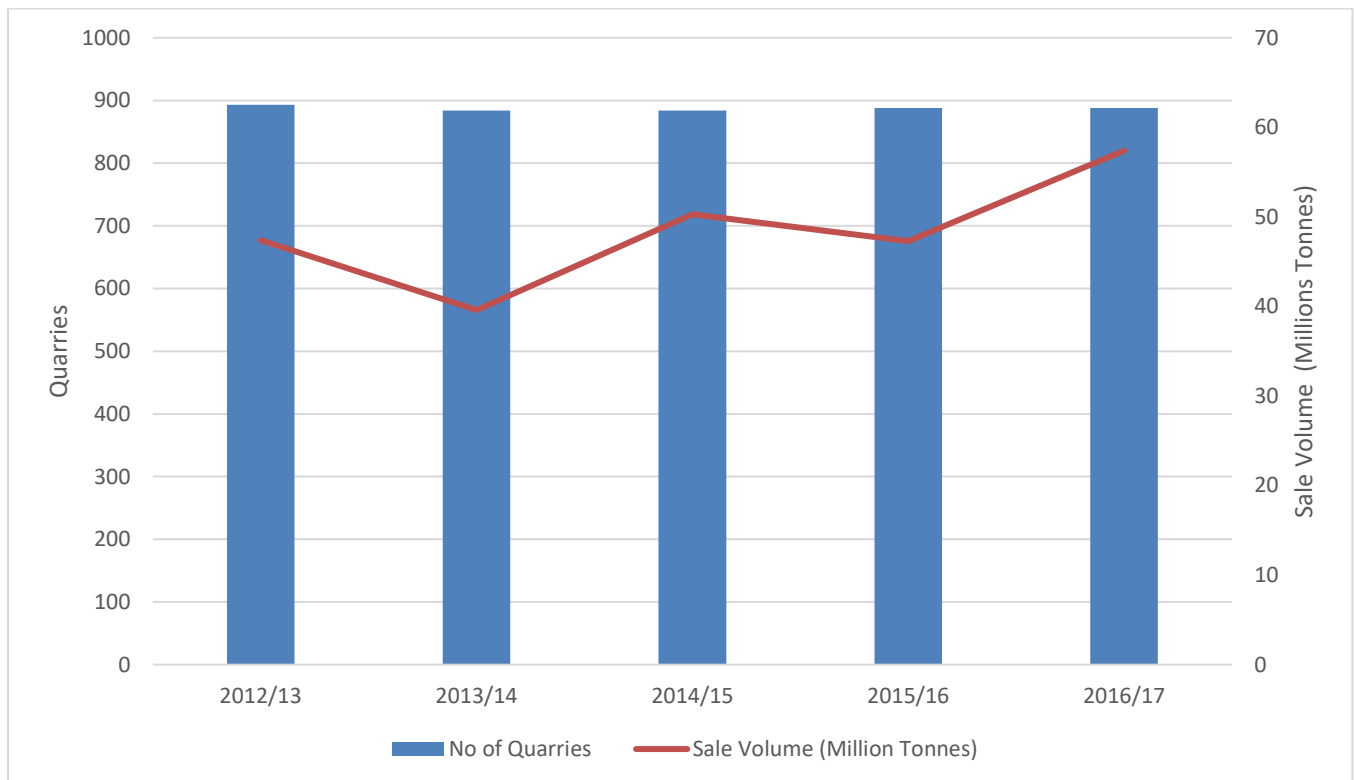
Tenement	Application**	Current
Work Authority	25	888

Source: DEDJTR

*A Work Authority is granted under the MRSDA.

**This is when an applicant has paid a Work Authority application fee or a Work Plan fee.

Graph 3.1 Extractive industry quarries 2012-13 to 2016-17



Source: DEDJTR

Sales of quarry products fluctuate based on the demand from the domestic building and construction sector.

A total of 529 quarries reported production in 2016/17 compared to 535 in 2015/16.

Sales volume 2016-17 increased by 21.3 per cent (10.1 million tonnes). Sales value increased by \$33.5 million or 4.5 per cent compared to 2014-15 and 2015-16.

Table 3.2 Victorian Extractive industry sale by Product Type 2016-17

Product Group	Product Type	Sales Volume (Million Tonnes)	Sales Value (\$Am)
Single Size Products	Aggregate	20.65	383.47
	Armour	0.10	1.64
Single Size Products Total		20.76	385.12
Multi Size Products	Fill	3.33	29.95
	Road Base	6.37	84.66
	Road Sub-Base	10.39	125.57
Multi Size Products Total		20.08	240.17
Clay Products	Brick	0.78	2.17
	Stoneware Pottery	0.00	0.03
	Tile/Pipe	0.03	0.08
Clay Products Total		0.81	2.28
Limestone Products	Agriculture	0.52	14.14
	Cement	0.03	0.57
	Lime	0.15	2.43
Limestone Products Total		0.69	17.15
Sand Products	Concrete Sand	8.94	124.40
	Fine Sand	1.70	16.95
	Foundry Sand	0.74	17.22
	Industrial Filters	0.03	0.31
Sand Products Total		11.41	158.88
Miscellaneous	Dimension Stone	0.07	1.00
	Soil	0.03	0.42
	Unspecified	3.56	44.25
Miscellaneous Total		3.67	45.66
Grand Total		57.42	849.27

Source: DEDJTR, statutory returns under the MRSDA.

Table 3.3 Victorian extractive industries sales by rock type 2016-17

Rock Type	Product Type	Sales Volume	Sales Value
		(million tonnes)	(\$Am)
Hard Rock	BASALT	20.72	333.97
	GNEISS	0.03	0
	GRANITE	5.73	101.09
	HORNFELS	5	73.1
	QUARTZITE	0.05	0.54
	RHYODACITE	1.8	38.03
	SCHIST	0.21	4.04
	SLATE	0.03	0.98
	TRACHYTE	0.03	0.54
Hard Rock Total		33.6	552.29
Soft Rock	CLAY & CLAY SHALE	1.08	2.62
	LIMESTONE	1.78	25.58
	SAND & GRAVEL	16.59	216.74
	SEDIMENTARY*	2.95	37.09
	SCORIA	0.67	11.09
	SOIL	0.03	0.42
	TUFF	0.72	3.44
Soft Rock Total		23.82	296.98
Other/Aggregates		0	0
GRAND TOTAL		57.42	849.27

Source: DEDJTR, statutory returns under the MRSDA.

*Sedimentary (usually rippable rocks including sandstone, shale, siltstone, chert, mudstone, claystone).

5 Revenue and bonds

5.1 Revenue

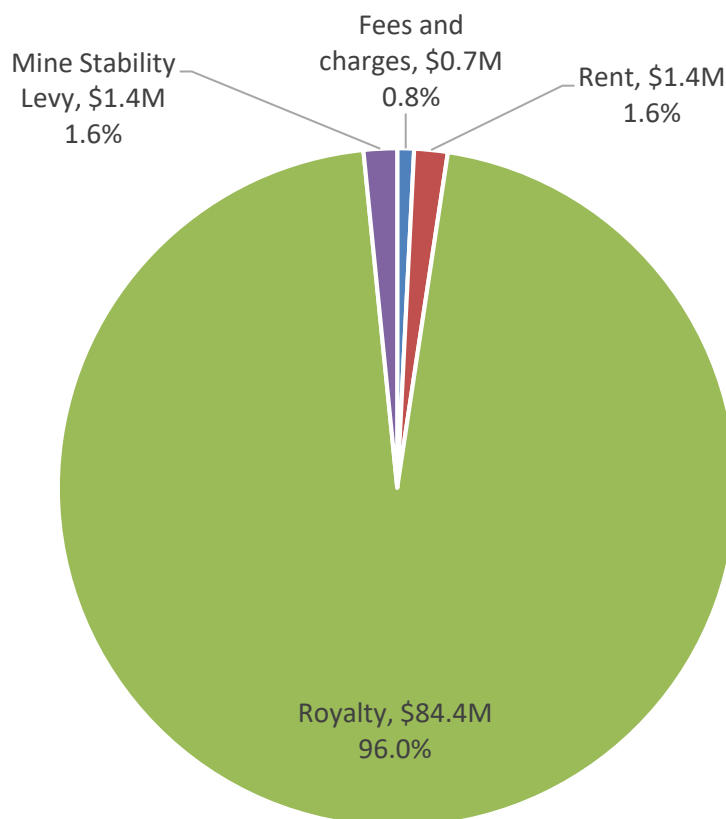
In 2016-17, a total of \$87.9 million was collected from industry in royalties and fees under the relevant Acts. This was an increase of 69 per cent (\$36 million) compared to \$51.9 million collected in 2015-16. This increase was mostly attributable to an adjustment in the royalty rate for brown coal from \$0.0776/Gigajoule to \$0.2324/Gigajoule, which came into effect on 1 January 2017.

Table 4.1 Mineral, extractive and petroleum revenue 2016-17

Revenue Stream	Revenue (\$A million)
Fees and charges	0.7
Rent	1.4
Royalty	84.4
Mine Stability Levy	1.4
Total	87.9

Source: DEDJTR

Graph 4.1 a) Mineral, extractive and petroleum revenue 2016-17



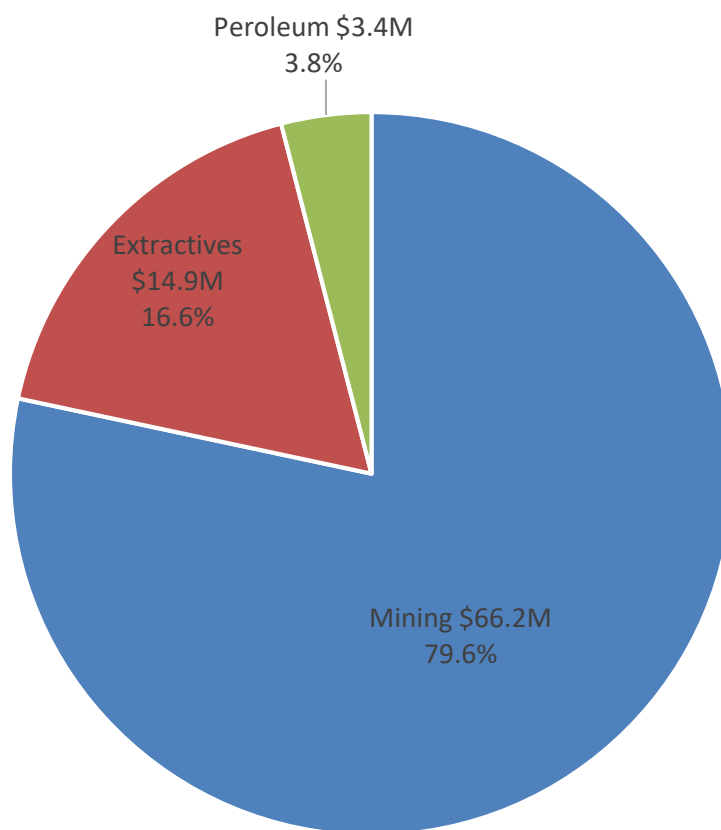
Source: DEDJTR

Table 4.2 Minerals, extractive and petroleum royalties 2016-17

Sector	Royalties (\$A million)
Mining	66.2
Extractive	14.9
Petroleum	3.4
Total	84.5

Source: DEDJTR

Graph 4.2 Mineral, extractive and petroleum royalties 2016-17



Source: DEDJTR

5.2 Rehabilitation bonds

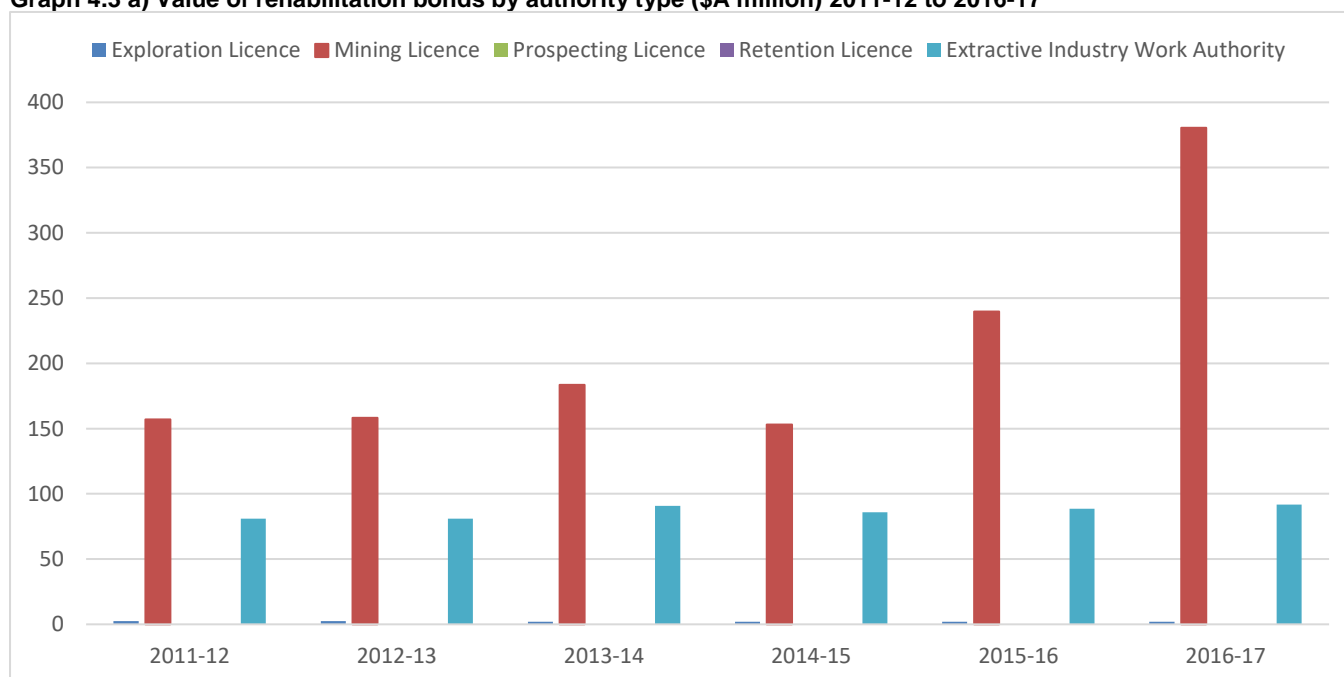
The total monetary value of the rehabilitation bonds held by Earth Resources Regulation in 2016-17 was \$474.5 million, an increase of 43.5 per cent (\$144 million) year on year.

Table 4.3 Value of rehabilitation bonds by authority type (\$A million)

Year	Exploration Licence	Mining Licence	Prospecting Licence	Retention Licence	Extractive Industry Work Authority	Total
2011-12	2.5	156.9	0	N/A	80.9	240.3
2012-13	2.4	158.3	0.025	N/A	81.0	241.7
2013-14	2.1	183.4	0.091	0.010	90.9	276.5
2014-15	1.9	153.0	0.138	0.050	85.8	241.0
2015-16	2.0	239.6	0.2	0.1	88.6	330.5
2016-17	2.0	380.5	0.2	0.1	91.7	474.5

Source: DEDJTR

Graph 4.3 a) Value of rehabilitation bonds by authority type (\$A million) 2011-12 to 2016-17



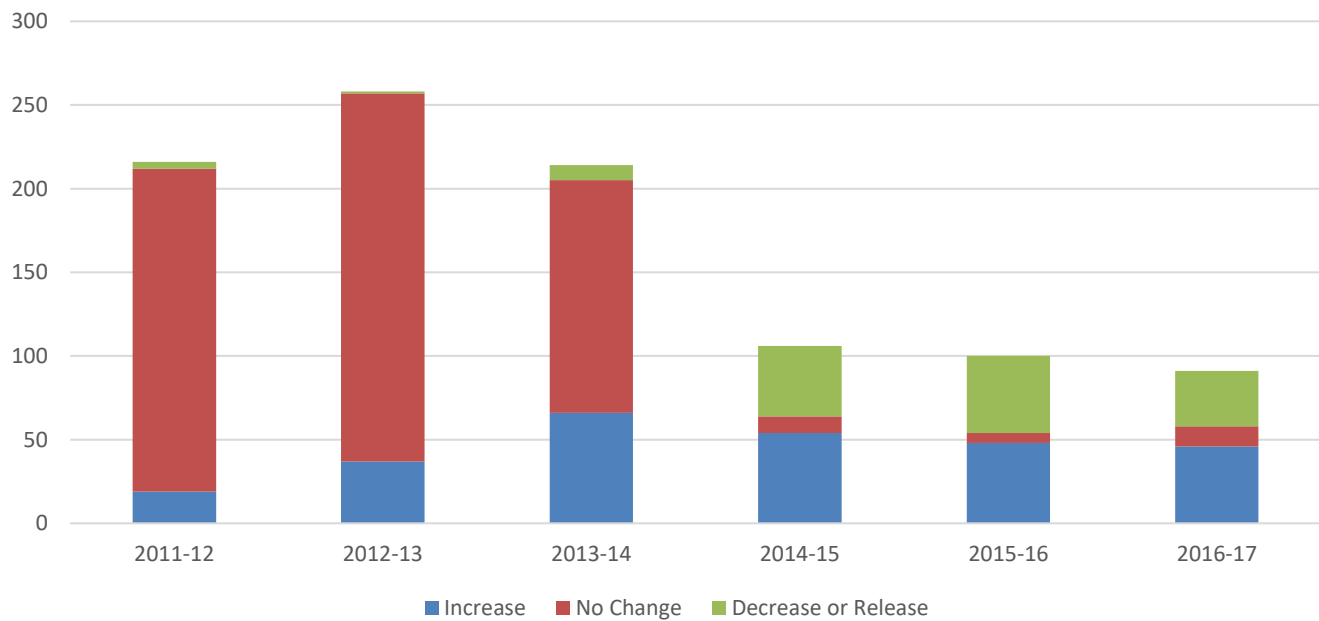
Source: DEDJTR

Table 4.4 Rehabilitation bond reviews over time

Year	Number of Bonds Reviewed	Result of Review - Increase	Result of Review - No Change	Result of Review - Decrease or Release
2011-12	216	19	193	4
2012-13	258	37	220	1
2013-14	214	66	139	9
2014-15	106	54	10	42
2015-16	100	48	6	46
2016-17	91	46	12	33

Source: DEDJTR

Graph 4.4 Outcome of bond reviews over time

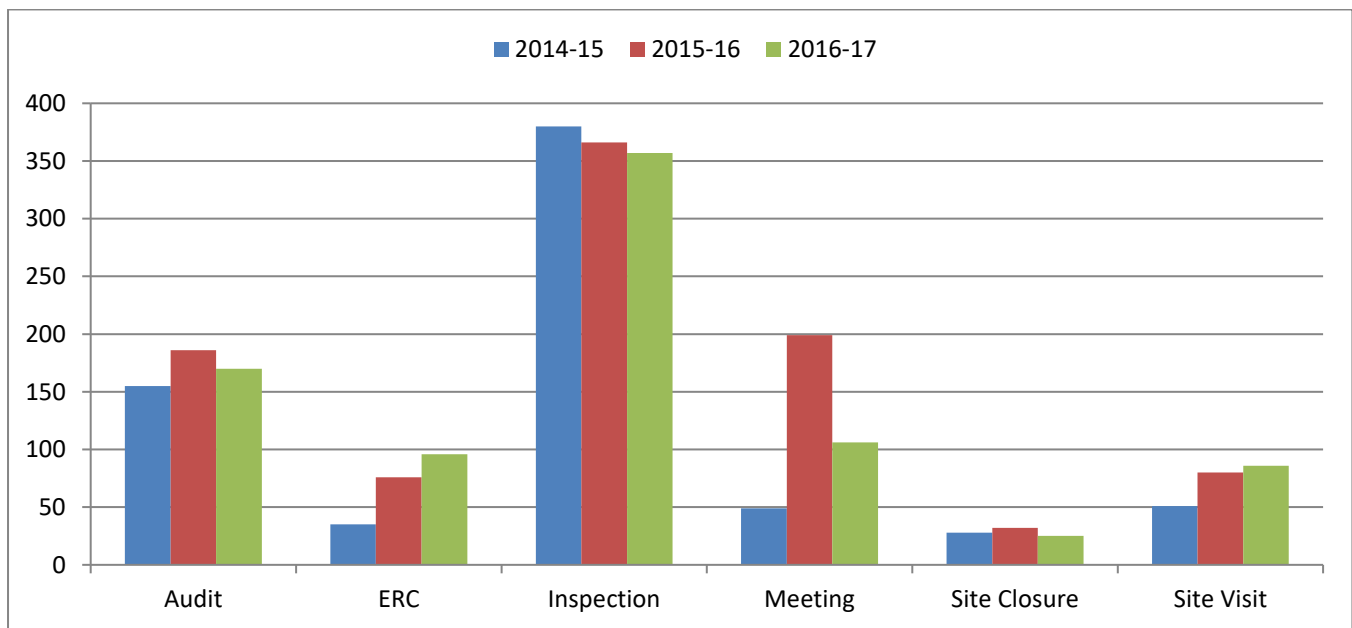


6 Monitoring, compliance and enforcement


Earth Resources Regulation undertakes a compliance program to ensure that authority holders comply with their obligations. Monitoring, compliance and enforcement activities under the MRSDA are summarised in the table below.

Activities	2014-15	2015-16	2016-17
Audit	155	186	170
Environmental Review Committees	35	76	96
Inspections	380	366	357
Meetings	49	199	106
Site Closures	28	32	25
Site Visits	51	80	86
Total	698	939	840

Graph 5.1 Monitoring, compliance and enforcement activities 2016-17



Source: DEDJTR



Department of Economic Development, Jobs, Transport and Resources

1 Spring Street Melbourne Victoria 3000

Telephone 1300 366 356

© Copyright State of Victoria, Department of Economic Development, Jobs, Transport and Resources 2018

Except for any logos, emblems, trademarks, artwork and photography, this document is made available under the terms of the Creative Commons Attribution 3.0 Australia licence.

This document is also available in an accessible format at <http://earthresources.efirst.com.au/categories.asp?cID=46>