



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

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<http://earthresources.vic.gov.au/earth-resources-regulation/about-us/regulator-and-industry-reporting/earth-resources-regulation-annual-statistical-report/>

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# Introduction

The Earth Resources Regulation unit in the Department of Jobs, Precincts and Regions (DJPR) is responsible for the regulation of minerals, extractives, petroleum, pipelines, geothermal and carbon storage activities in Victoria and offshore (Victorian) waters. Earth Resources Regulation administers a consistent and transparent regulatory regime and conducts monitoring and compliance operations to ensure that authority holders comply with their statutory obligations.

Earth Resources Regulation administers 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);
* *Geothermal Energy Resources Act 2005* (geothermal energy exploration and development); and
* *Greenhouse Gas Geological Sequestration Act 2008* (greenhouse gas storage onshore).
* *Extractive Industries* (Lysterfield) Act 1986
* *Nuclear Activities* (Prohibitions) Act 1983
* *Underseas Mineral Resources* Act 1963
* *Mines* (Aluminium Agreement) Act 1961

**Key observations and statistics from the 2018-19 returns include:**

**Extractive operations**

* Rock production increased 2.5% from 61.2 to 62.7 million tonnes. *(Table 2.1)*
* Value of sales increased 3.4% from $987.9 million to $1021.6 million *(Table 2.1)*

**Minerals Exploration and Mining operations**

* Exploration expenditure increased 46.5% from $69.0 to $101.1 million. *(Table 3.1.1)*
* Mining expenditure increased 12.2% from $654.7 to $734.9 million. *(Table 3.1.1)*
* Gold exploration expenditure increased 29.1% from $44.3 to $57.2 million. *(Table 3.1.2)*
* Gold mining expenditure increased 33.0% from $238.2 to $316.8 million. *(Table 3.1.4)*
* Gold production increased 55.8% from 364,294 to 567,501 ounces. *(Table 3.2.1)*

**Petroleum**

* Gas production totalled 14,523 million standard cubic feet, which equates to approximately 15.4 petajoules of energy, an increase of 1.5 petajoules year on year. *(Table 4.1.1)*

**Royalties and Regulatory Fees**

* Royalties payable decreased from $99.1 to $96.4 million *(Table 5.1.1)*
* Regulatory fees increased from $5.1 million to $5.9 million. *(Table 5.2.1)*

**Rehabilitation bonds**

* Total value of rehabilitation bonds held remained steady at approximately $812.7 million. *(Table 6.1.1)*

The 2018-19 Statistical Report presents a compilation of data as reported by authority holders to Earth Resources Regulation. All production and expenditure figures are certified by authority holders. As at 31st December 2019, 92 per cent of MRSDA licence holders have submitted an annual **Production & Royalty** / **Expenditure & Activity** report. Compliance action is continuing to ensure that all authority holders fulfil their reporting obligations. The highest level of reporting compliance was achieved in the extractives (quarries) sector.

The report also includes data on exploration, production, expenditure, revenues, regulatory actions, licences and data from the Australian Bureau of Statistics (ABS).

The annual statistical report may be revised in the future as more **Production & Royalty** / **Expenditure & Activity** reports are received from the industry.

# Extractives

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 2019, there were 873 quarries with a current work authority under the MRSDA. The number remained relatively stable over the last seven years. As at 31st December 2019, a total of 539 quarries reported production in 2018-19. The production volume increased from 61.2 to 62.7 million tonnes and value of sale increased from $987.9 million to $1021.6 million. Sales of quarry products fluctuate based on the demand from the domestic building and construction sector.

**Table 2.1 Production and Value of Sale by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Quarries with production** | 535 | 485 | 554 | 542 | 544 | 552 | 539 |
| **Production (million tonnes)** | 47.44 | 40.33 | 50.69 | 54.09 | 58.05 | 61.22 | 62.72 |
| **Value of Sale ($million)** | $737.4 | $676.55 | $767.3 | $801.01 | $854.67 | $987.87 | $1021.63 |

**Figure 2.1 Production and Value of Sale by financial year**

**Table 2.2 Extractive industry production and value of sale by product type 2018-19**

|  |  |  |  |
| --- | --- | --- | --- |
| Product Group | Product Type | Production Volume (million tonnes) | Value of Sale  ($ million) |
| Clay products | Brick | 0.81 | 2.32 |
| Brick Pavers | 0.13 | 0.39 |
| Stoneware Pottery | 0.004 | 0.05 |
| Tile/Pipe | 0.00 | 0.00 |
| Clay products Total |  | **0.94** | **2.75** |
| Limestone products | Agriculture | 0.62 | 16.25 |
| Cement | 0.03 | 0.72 |
| Lime | 0.07 | 1.28 |
| Limestone products Total |  | **0.71** | **18.26** |
| Miscellaneous | Dimension Stone | 0.00 | 0.12 |
| Soil | 0.05 | 0.59 |
| Unspecified | 2.80 | 30.89 |
| Miscellaneous Total |  | **2.84** | **31.60** |
| Multi size products | Fill | 3.78 | 38.37 |
| Road Base Class 1 | 7.39 | 118.73 |
| Road Base Class 2 | 0.22 | 3.46 |
| Road Sub-Base | 11.92 | 147.65 |
| Road Sub-Base Class 3 | 0.57 | 8.76 |
| Road Sub-Base Class 4 | 0.09 | 1.42 |
| Road Sub-Base NDCR | 0.16 | 2.17 |
| Road Sub-Base Track Material | 0.14 | 0.52 |
| Multi size products Total |  | **24.27** | **321.07** |
| Sand products | Concrete Sand | 9.18 | 150.78 |
| Fine Sand | 1.61 | 19.33 |
| Foundry Sand | 0.86 | 19.11 |
| Industrial Filters | 0.02 | 0.20 |
| Sand products Total |  | **11.67** | **189.42** |
| Single size products | Aggregate | 21.36 | 427.62 |
| Armour | 0.05 | 0.92 |
| Armour Beaching | 0.87 | 29.99 |
| Single size products Total |  | **22.28** | **458.53** |
| Grand Total |  | 62.72 | 1021.63 |

Source: DJPR, statutory returns under the MRSDA.

**T****able 2.3 Extractive industries production and value of sale by rock type 2018-19**

|  |  |  |  |
| --- | --- | --- | --- |
| Rock Group | Rock Type | Production Volume  (million tonnes) | Value of Sale  ($ million) |
| Hard Rock | Basalt | 25.46 | 435.24 |
| Dolerite | 0.001 | 0.01 |
| Gneiss | 0.01 | 0.00 |
| Granite | 5.35 | 117.65 |
| Hornfels | 5.22 | 86.87 |
| Quartzite | 0.03 | 0.75 |
| Rhyodacite | 1.51 | 33.52 |
| Schist | 0.48 | 9.31 |
| Slate | 0.04 | 1.17 |
| Trachyte | 0.03 | 0.70 |
| Hard Rock Total |  | **38.13** | **685.22** |
| Soft Rock | Clay and Clay Shale | 1.20 | 3.52 |
| Limestone | 1.98 | 28.91 |
| Sand and Gravel | 16.52 | 247.23 |
| Scoria | 0.76 | 12.97 |
| Sedimentary\* | 3.75 | 39.68 |
| Soil | 0.05 | 0.62 |
| Tuff | 0.32 | 3.48 |
| Soft Rock Total |  | **24.59** | **336.41** |
| GRAND TOTAL |  | 62.72 | 1021.63 |

Source: DJPR, statutory returns under the MRSDA

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

**Table 2.4 Status of extractive industry work authorities as at 30 June 2019**

|  |  |  |
| --- | --- | --- |
| Tenement | Work Authority Application\* | Current |
| Extractive | 18 | 873 |

Source: DJPR

\*This category is when an applicant has lodged a valid Work Authority application fee

# Minerals

## Mineral exploration and mining expenditure

**Table 3.1.1 Expenditure on mineral exploration and mining development ($ million)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Mineral Exploration  (ABS)1 | $38.6 | $32.6 | $22.9 | $28.9 | $40.7 | $73.7 | $102.2 |
| MRSDA Exploration2 | $39.7 | $30.5 | $47.5 | $38.5 | $44.3 | $69.0\* | $101.1 |
| MRSDA  Mining3 | $701.2 | $650.3 | $607.8 | $685.8 | $748.8 | $654.7\* | $734.9 |

Source: Figures collated from activity reports forwarded to DJPR required under the MRSDA, and ABS, Actual and Expected Private Mineral Exploration ([Catalogue No. 8412.0](http://www.abs.gov.au/ausstats/abs@.nsf/mf/8412.0) http://www.abs.gov.au/ausstats/abs@.nsf/mf/8412.0)

\*The 2017-18 figures have been updated to include industry submissions after the last publication of the 2017-18 Annual Statistical Report.

**Figure 3.1.1 Expenditure on mineral exploration and mining**

Source: DJPR

*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 requirements 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 other states and territories. 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.*

*3The 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 3.1.2 Mineral exploration expenditure by commodity and financial year ($ million)**

Exploration expenditure are allocated to the primary nominated mineral commodity on the license in accordance with the MRSDA.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Gold | Mineral Sands | Coal | Other \* | Total |
| 2015-16 | $16.4 | $6.5 | $0.37 | $15.3 | **$38.5** |
| 2016-17 | $25.9 | $5.1 | $0.46 | $12.7 | **$44.2** |
| 2017-18 | $44.3 | $8.1 | $0.47 | $16.1 | **$69.0** |
| 2018-19 | $57.2 | $24.2 | $1.0 | $18.7 | **$101.0** |

\* “Other” includes cases where there is more than one primary mineral.

**Figure 3.1.2 Mineral exploration expenditure by commodity and financial year ($ million)**

**Table 3.1.3 Mineral exploration expenditure by licence type and financial year ($ million)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Exploration Licence | Mining Licence | Prospecting Licence | Retention Licence | Total |
| 2015-16 | $15.4 | $19.8 | $0.1 | $3.3 | **$38.5** |
| 2016-17 | $17.0 | $24.5 | $0.1 | $2.7 | **$44.2** |
| 2017-18 | $21.8 | $42.4 | $0.1 | $4.7 | **$69.0** |
| 2018-19 | $43.0 | $41.4 | $0.1 | $16.6 | **$101.1** |

**Figure 3.1.3 Mineral exploration expenditure by licence type financial year ($ million)**

**Table 3.1.4 Mining expenditure by commodity and year 2015-16 to 2018-19 ($ million)**

Mining expenditure are allocated to the primary nominated mineral commodity on the license in accordance with the MRSDA.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Gold | Mineral Sands | Coal | Other \* | Total |
| 2015-16 | $280.2 | $21.8 | $339.4 | $44.4 | $685.8 |
| 2016-17 | $259.9 | $15.2 | $431.2 | $42.5 | $748.8 |
| 2017-18 | $238.2 | $12.6 | $359.1 | $44.8 | $654.7 |
| 2018-19 | $316.9 | $14.6 | $329.3 | $74.2 | $734.9 |

\* “Other” includes cases where there is more than one primary mineral.

**Figure 3.1.4 Mining expenditure by commodity by commodity and financial year ($ million)**

**Table 3.1.5 Mining expenditure by licence types and financial year ($ million)**

|  |  |  |  |
| --- | --- | --- | --- |
| Year | Mining Licence | Prospecting Licence | Total |
| 2015-16 | $685.1 | $0.7 | **$685.8** |
| 2016-17 | $748.2 | $0.6 | **$748.8** |
| 2017-18 | $654. | $0.7 | **$654.7** |
| 2018-19 | $734.2 | $0.7 | **$734.9** |

**Figure 3.1.5 Mining expenditure by licence type by financial year ($ million)**

## Mineral production

In 2018-19, 56 mining and prospecting licences reported production with a value of $1,046.9 million.

**Table 3.2.1 Mineral production by financial year**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Financial Year | Gold\*  (ounce) | Antimony  (tonne) | Zircon  (tonne) | Rutile  (tonne) | Ilmenite  (tonne) | Feldspar  (tonne) | Coal  (1,000 tonnes) | Gypsum  (m³) | Kaolin and Clay  (tonne) |
| 2012-13 | 225,776 | 4,558 | 86,243 | 140,842 | 67,067 | 61,578 | 59,854 | 499,681 | 204,164 |
| 2013-14 | 225,168 | 5,336 | 128,064 | 243,355 | 563,371 | 44,254 | 58,001 | 454,526 | 167,333 |
| 2014-15 | 198,387 | 3,684 | 77,162 | 85,983 | 383,369 | 40,232 | 60,957 | 335,374 | 152,047 |
| 2015-16 | 256,653 | 5,945 | 52,026 | 90,318 | 57,763 | 30,730 | 59,757 | 314,759 | 202,229 |
| 2016-17 | 312,229 | 5,138 | 45,597 | 73,812 | 44,944 | 0 | 56,095 | 282,720 | 192,150 |
| 2017-18 | 364,294 | 2,570 | 27,515 | 48,381 | 24,390 | 0 | 45,062 | 399,569 | 171,932 |
| 2018-19 | 567,501 | 2,016 | 0 | 0 | 0 | 0 | 42,256 | 291,842 | 114,050 |

Source: DJPR, statutory returns under the MRSDA.

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

**Table 3.2.2 Mineral production value by financial year ($ million)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Year | Gold | Antimony | Mineral Sands² | Industrial Minerals³ | Coal¹ | Others⁴ | Total |
| 2012-13 | $333.1 | $30.8 | $282.7 | $12.8 | N/A | $0.3 | $659.7 |
| 2013-14 | $303.4 | $12.5 | $316.5 | $14.1 | N/A | $0.2 | $646.7 |
| 2014-15 | $286.9 | $37.8 | $185.1 | $10.2 | N/A | $0.1 | $520.1 |
| 2015-16 | $411.4 | $30.6 | $175.9 | $10.0 | N/A | $0.6 | $628.5 |
| 2016-17 | $519.8 | $33.6 | $188.5 | $8.0 | N/A | $0.2 | $750.1 |
| 2017-18 | $613.5 | $28.2 | $172.6 | $11.7 | N/A | $0.2 | $826.2 |
| 2018-19 | $1015.5 | $21.2 | $0 | $10.2 | N/A | $0.04 | $1,046.9 |

Source: DJPR, statutory returns under the MRSDA.

¹ No unit value is assigned to coal for the purposes of determining its production value. 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 coal.

² Mineral Sands (zircon, rutile, ilmenite)

³ Industrial Minerals (feldspar, gypsum, kaolin & fine clay)

⁴ Others (includes silver, peat and quartz)

**Figure 3.2.1 Gold production (ounces) by financial year**

Gold production for 2018-19 was 567,501 ounces, the highest in the last seven years.

Source: DJPR

**Table 3.2.3 Coal production (‘000 tonnes) by producer**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Maddingley   Bacchus Marsh | Alcoa Anglesea | Loy Yang | Yallourn | Hazelwood | Annual Total |
| **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 |
| **2017-18** | 44 | - | 29,526 | 15,491 | - | 45,062 |
| **2018-19** | 54 | - | 27,033 | 15,169 | - | 42,256 |

Source: DJPR, statutory returns under the MRSDA.

## Mineral tenements

**Table 3.3.1 Number of current licences by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Licence Type | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Exploration Licences | 311 | 271 | 247 | 211 | 180 | 200 | 212 |
| Mining Licences | 212 | 191 | 171 | 170 | 162 | 156 | 145 |
| Prospecting Licences | 13 | 31 | 41 | 51 | 54 | 59 | 55 |
| Retention Licences | 1 | 1 | 8 | 11 | 15 | 20 | 21 |
| Total | **537** | **494** | **467** | **443** | **411** | **435** | **433** |

Source: DJPR

**Figure 3.3.1 Number of current licences by financial year**

Source: DJPR

**Table 3.3.2 Licence applications finalised (Granted, Withdrawn, Refused) in 2018-19**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Received | Granted | Withdrawn | Refused |
| Exploration Licence | 67 | 36 | 1 | 0 |
| Mining Licence | 1 | 1 | 2 | 0 |
| Prospecting Licence | 14 | 14 | 4 | 0 |
| Retention Licence | 6 | 1 | 1 | 0 |
| Total | 88 | 52 | 8 | 0 |

**Table 3.3.3 Licences renewed in 2018-19**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Received | Renewed\* | Withdrawn | Refused |
| Exploration Licence | 17 | 19 | 0 | 0 |
| Mining Licence | 28 | 22 | 2 | 0 |
| Retention Licence | 1 | 0 | 0 | 0 |
| Total | 46 | 41 | 2 | 0 |

\*Some renewal completed in 2018-19 was received from previous financial years

**Table 3.3.4 Licence applications granted by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Exploration Licence | 41 | 37 | 37 | 17 | 21 | 63 | 36 |
| Mining Licence | 11 | 9 | 3 | 2 | 0 | 3 | 1 |
| Prospecting Licence | 12 | 18 | 13 | 12 | 11 | 12 | 14 |
| Retention Licence | 0 | 1 | 7 | 3 | 4 | 7 | 1 |
| Total | 64 | 65 | 60 | 34 | 36 | 85 | 52 |

**Table 3.3.5 Licences renewed by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Exploration Licence | 52 | 57 | 19 | 13 | 17 | 29 | 19 |
| Mining Licence | 14 | 28 | 14 | 10 | 15 | 26 | 22 |
| Total | 66 | 85 | 33 | 23 | 32 | 55 | 41 |

Source: DJPR

**Figure 3.3.2 Exploration licences granted and renewed by financial year**

**Figure 3.3.3 Mining licences granted and renewed by financial year**

**Figure 3.3.4 Prospecting licences granted by financial year**

**Figure 3.3.5 Retention licences granted by financial year**

# Petroleum, geothermal, offshore pipelines and greenhouse gas

Exploration for petroleum within Victoria’s jurisdiction occurred in the offshore parts of 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.

A legislative moratorium is in place for onshore conventional gas. Hydraulic fracturing is banned under Victorian legislation.

## Gas production and storage

Gas production located within Victoria’s three nautical mile zone.

**Table 4.1.1 Gas production 2018-19**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Condensate (bbl\*) | Gas Production (MMscf\*\*) | Gas Production (Petajoules^) | CO2 Prod. (tonnes) | Gas Injection (MMscf) | Comments |
| 146,186 | 14,523 | 15.40 | 32,293 | - | Ex wellhead figures |

\*bbl = barrels

\*\*MMscf = million standard cubic feet

(Unit Conversion: 1 Sm3 of oil = 6.29 bbl and 1 Sm3 of gas = 35.3 Scf)

^ Convert Gas mmscf to petajoules using online sales gas converter: https://www.santos.com/conversion-calculator/

**Table 4.1.2 Underground gas storage 2018-19**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Condensate (bbl\*) | Gas Storage (MMscf\*\*) | Gas Storage (Petajoules^) | CO2 Prod. (tonnes) | Gas Injection (MMscf) | Comments |
| 1.220 | 13,100 | 13.89 | - | 12,514 | Storage |

\*bbl = barrels

\*\*MMscf = million standard cubic feet

(Unit Conversion: 1 Sm3 of oil = 6.29 bbl and 1 Sm3 of gas = 35.3 Scf)

^ Convert Gas mmscf to petajoules using online sales gas converter: https://www.santos.com/conversion-calculator/

## Drilling

No drilling or seismic activities occurred on onshore petroleum tenements in 2018-19

**Table 4.2.1 Number of exploration wells drilled in Victoria by financial year**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Offshore (Vic) Gippsland | Offshore (Vic) Otway | Onshore Gippsland | Onshore Otway | Onshore Murray | Total wells |
| 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 |
| 2017-18 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2018-19 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 0 | 1 | 2 | 0 | 0 | 3 |

Source: DJPR

**Figure 4.2.1 Number of exploration wells drilled by financial year**

Source: DJPR

## Petroleum geothermal, offshore pipelines and greenhouse gas licences

In 2018-19, no Petroleum Exploration Permits, Retention Leases or Production Leases applications were received or granted.

**Table 4.3.1 Overview of petroleum tenements current as at 30 June 2019**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Petroleum Exploration Permits | Petroleum Retention Leases | Petroleum Production Licences | Other Tenements ^ | Total |
| Onshore | 11 | 1 | 13 | 1 | 26 |
| Offshore (Vic) | 3 | 1 | 1 | 1 | 6 |

^Petroleum Special Drilling Authorisation, Petroleum Access Authority

Source: DJPR

### Onshore

No onshore petroleum retention licence or exploration permit applications received or granted in 2018-19.

**Table 4.3.1.1 Overview of onshore petroleum exploration permits by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Granted** | 2 | 2 | 0 | 0 | 0 | 0 | 0 |

Source: DJPR

**Table 4.3.1.2 Overview of onshore petroleum retention licences by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Granted** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Source: DJPR

### Offshore (Victorian waters)

No offshore petroleum permits were received or granted in 2018-19

**Table 4.3.2.1 Overview of offshore petroleum exploration permits by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 2 | 0 | 0 | 0 | 0 | 0 |
| **Granted** | 0 | 0 | 2 | 0 | 0 | 0 | 0 |

**Table 4.3.2.2 Overview of offshore petroleum retention leases by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| **Granted** | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**Table 4.3.2.3 Overview of offshore petroleum production licences by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| **Granted** | 0 | 0 | 1 | 0 | 0 | 0 | 0 |

### Offshore pipelines

**Table 4.3.3.1 Offshore pipeline licences applications received and granted (Victorian waters) by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 0 | 0 | 0 | 1 | 0 | 0 |
| **Granted** | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

**Table 4.3.3.2 Offshore Pipeline licences current as at 30 June 2019**

|  |  |
| --- | --- |
| Tenement | Number of licences |
| **Offshore (Vic)** | **14** |

### Greenhouse gas storage

There were no applications received or granted for greenhouse gas access permit during 2018-19.

**Table 4.3.4.1 Offshore greenhouse gas assessment permit applications received and granted by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| **Application Received** | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| **Granted** | 0 | 0 | 0 | 0 | 1 | 0 | 0 |

### Geothermal energy

As at 30 June 2019, there was one current geothermal energy exploration permit. No geothermal energy retention leases or production licences were granted in 2018-19. Geothermal energy activities in Victoria involve exploration only at this time.

**Table 4.3.5.1 Overview of geothermal exploration permits by financial year**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Description | 2012-13 | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| Application Received | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Granted | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Licence Relinquished | 2 | 7 | 0 | 0 | 0 | 1 | 4 |
| Current Licences | 13 | 6 | 6 | 6 | 6 | 5 | 1 |

# Revenue

## Royalties Payable

**Table 5.1.1 Royalties payable by financial year ($ million)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year | Extractive  ($ million) | Minerals  ($ million) | Petroleum  ($ million) | Coal  ($ million) | Total  ($ million) |
| 2015-16 | 6.2 | 5.7 | 0.1 | 36.6 | 47.7 |
| 2016-17 | 5.9 | 6.1 | 4.2 | 66.9 | 83.1 |
| 2017-18 | 6.2 | 5.6 | 3.2 | 84.0 | 99.1 |
| 2018-19 | 6.2 | 1.9 | 7.9 | 80.4 | 96.4 |

**Figure 5.1.1 Royalties payable by financial year ($ million)**

Source: DJPR

## Regulatory Fees

**Table 5.2.1 Regulatory Fees by financial year ($ million)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Regulatory Charges  ($ million) | Rent  ($ million) | Mine Stability Levy  ($ million) | Total  ($ million) |
| 2015-16 | 0.7 | 2.0 | 1.4 | 4.1 |
| 2016-17 | 0.7 | 1.4 | 1.4 | 3.5 |
| 2017-18 | 0.8 | 2.8 | 1.5 | 5.1 |
| 2018-19 | 0.9 | 3.5 | 1.5 | 5.9 |

Source: DJPR

**Figure 5.2.1 Regulatory fees by financial year ($ million)**

Source: DJPR

# Rehabilitation Bonds

## Bonds Held

The total monetary value of the rehabilitation bonds held by Earth Resources Regulation in 2018-19 was $812.7 million.

**Table 6.1.1 Value of rehabilitation bonds by authority type by financial year ($ million)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Year | Extractives  ($ million) | Mining Licence  ($ million) | Exploration Licence  ($ million) | Prospecting Licence  ($ million) | Retention Licence  ($ million) | Total  ($ million) |
| 2012-13 | 81.0 | 158.3 | 2.4 | 0.03 | N/A | **241.7** |
| 2013-14 | 90.9 | 183.4 | 2.1 | 0.1 | 0.010 | **276.5** |
| 2014-15 | 85.8 | 153.0 | 1.9 | 0.1 | 0.050 | **241.0** |
| 2015-16 | 88.6 | 239.6 | 2.0 | 0.2 | 0.1 | **330.5** |
| 2016-17 | 91.7 | 380.5 | 2.0 | 0.2 | 0.1 | **474.5** |
| 2017-18 | 92.2 | 717.7 | 2.0 | 0.2 | 0.1 | **812.2** |
| 2018-19 | 91.9 | 717.7 | 2.6 | 0.2 | 0.4 | **812.7** |

Source: DJPR

**Figure 6.1.1 Extractive and Mining rehabilitation bonds held by financial year ($ million)**

**Figure 6.1.2 Exploration, Prospecting and Retention licence rehabilitation bonds held by financial year ($ million)**

## Bond Reviews

**Table 6.2.1 Rehabilitation bond reviews by financial year**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Year | Number of bonds reviewed | Result of review -  increase | Result of review - no change | Result of review -  decrease or release |
| 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 |
| 2017-18 | **114** | 49 | 8 | 57 |
| 2018-19 | **71** | 31 | 5 | 35 |

Source: DJPR

**Figure 6.2.1 Outcome of bond reviews by financial year**

Source: DJPR

# Compliance

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.

**Table 7.1 Compliance activities by financial year**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Activities | Audits | Inspections^ | Meetings | Enforcement Notices \* | Total |
| 2015-16 | 186 | 478 | 199 | 59 | 922 |
| 2016-17 | 170 | 468 | 106 | 61 | 805 |
| 2017-18 | 160 | 533 | 91 | 8 | 792 |
| 2018-19 | 164 | 460 | 58 | 27 | 709 |

\*MRSDA s110 and s110a Notices issued

^ Inspection includes site closures and site visits

Source: DJPR

**Figure 7.1 Compliance activities by financial year**

Source: DJPR

**Extractive Production & Royalty /Mineral Expenditure & Activity submission rate**

As at 31st December 2019, 92% of licences have submitted the annual Extractive Production & Royalty /Mineral Expenditure & Activityreturns.

**Table 7.2 Production & Royalty / Mineral Expenditure & Activity 2018-19 report submission rate as at 31 Dec 2019**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Licence Types | Licences required to submit annual return in 2018-19 | Annual Return received | Annual Return not yet received | Submission Rate |
| Mining licence | **157** | 143 | 14 | **91%** |
| Exploration Licence | **237** | 202 | 35 | **85%** |
| Retention Licence | **21** | 20 | 1 | **95%** |
| Prospecting Licence | **73** | 52 | 21 | **71%** |
| Extractives | **892** | 852 | 40 | **96%** |
|  | 1,380 | 1,269 | 111 | 92% |

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