

Golden nation

The gold industry's
economic and social
contribution to Australia

May 2017

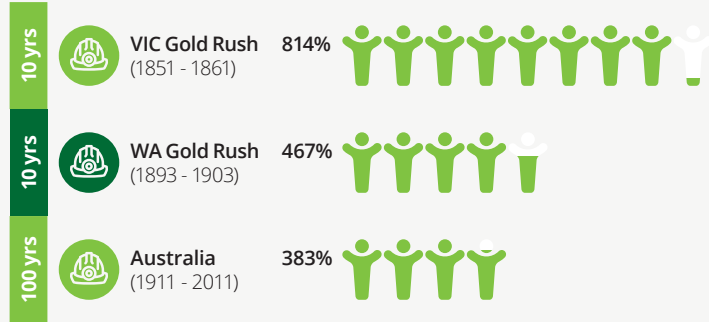
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From the 1850s, the demand for gold has helped grow, sustain and define Australia

The **populations** of Victoria and Western Australia during the gold rush periods grew at a faster rate than Australia's population during the 100 years to 2011

Population increase during period



Source: ABS, Melbournewater.com

The rush for gold led to the development of major rail, road, port and water **infrastructure** in Australia

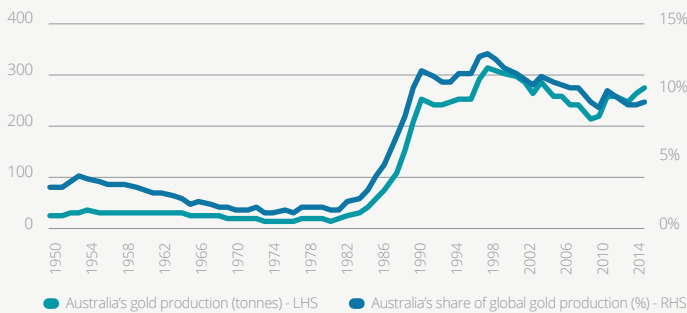
- Australia's First Train Victoria (1854)**
Built following the influx of migrants coming for WA gold.
- Coolgardie-Esperance Highway WA (1891)**
Developed to link the Goldfields to Esperance harbour.
- Goldfields Railway WA (1894)**
Built to connect Perth with the Eastern Goldfields.
- Fremantle Port WA (1897)**
Est. by CY O'Connor, to meet need from the Gold Rush.
- Golden Pipeline WA (1903)**
566km long, built to provide fresh water to the Goldfields.

Source: National Museum of Australia

The gold industry makes a strong contribution to our nation's economic prosperity, creating jobs

Australia is the **world's second largest gold producer**, behind China, producing more than **280 tonnes** in 2016 (around 9% of global production)

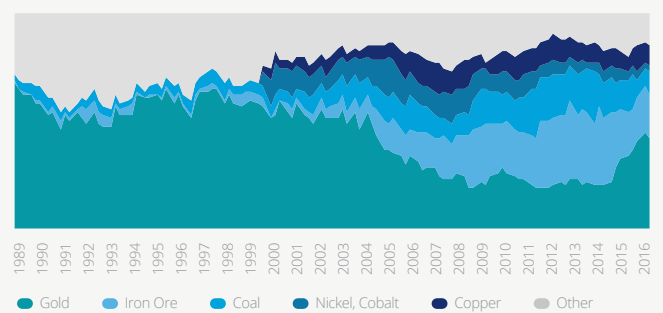
Australia's gold production (tonnes) and percentage of global production (%)



Source: ABS, Australian Department of Industry, Innovation and Science, US Geological Survey

Currently, gold accounts for around 50% of all expenditure on mineral **exploration** in Australia - **\$617.6 million** in 2016

Mineral exploration in Australia expenditure by commodity (%)

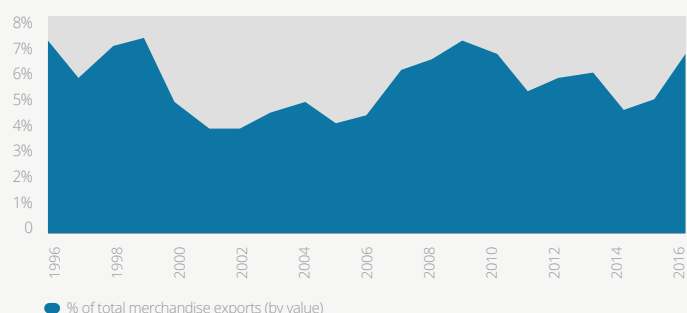


Source: ABS Note: data for Copper and Nickel exploration expenditure is not available prior to Sept 1999

Gold companies produce a treasured, essential commodity and give back to communities

Gold has accounted for around **6%** of Australia's total **merchandise exports** over the last two decades

Gold's share of Australia's merchandise exports



Source: ABS

Five countries account for over 90% of **Australia's gold exports (2016)**

- 43% China**
- 24% United Kingdom**
- 15% Hong Kong**
- 8% Indonesia**
- 4% India**

Top 5 uses for gold

- Jewellery**
- Finance & Investing**
- Electronics**
- Medicine & Dentistry**
- Aerospace**

Source: ABS, Scottsdale Bullion & Coin

The gold industry has played and continues to play a fundamental role in Australia's history, economy and social fabric

Gold has been instrumental in **shaping Australia's national identity**



Convict transport to Australia ceased in 1853 as the British Crown did not wish to provide people with free passage to the newly-found gold. By 1861, Victoria had the highest literacy rates globally, as people with means arrived to make their fortune from the Gold Rush.



In 1861, the first Melbourne Cup was held, born from growing wealth and demand for entertainment flowing from the Victorian Gold Rush. Five years later the first English-Australian cricket match was played, laying the foundation for the perennial rivalry.



Even Federation has links to the gold industry. An initially reluctant Western Australia agreed to the union in 1901 as eastern-Australians, migrating to the West's Gold Rush, voted for Western Australia to join the Federation.

Source: National Museum of Australia

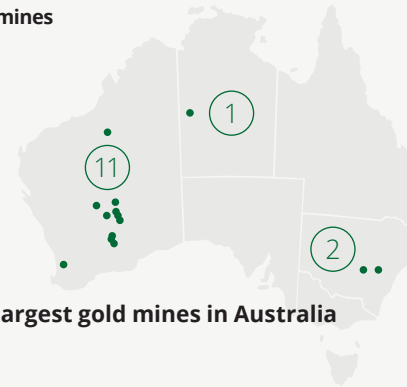
The gold industry contributes to and **helps sustain communities** and populations in regional Australia



Australia has **66 operating gold mines** and **14 of the world's largest**.



Over 80,000 people in Australia live in towns and regions with operating gold mines.



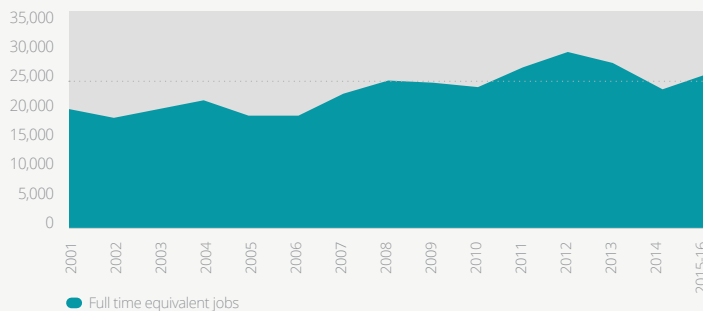
Largest gold mines in Australia

Source: ABS, S&P

and generating wealth

Over **26,000 people** in Australia rely directly on the gold mining sector for **employment**

Full time jobs in Australia's gold mining sector



Source: ABS, Deloitte Access Economics, WA Department of Mines and Petroleum

In total, the mining of gold ore is estimated to contribute more than **\$13.4 billion** to the **Australian economy** in 2016-17

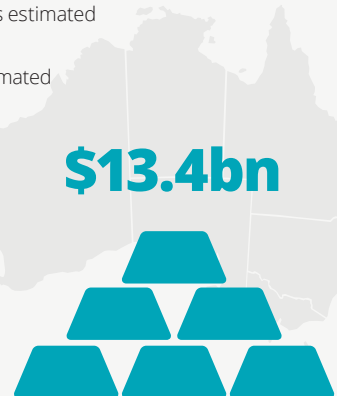
The **direct** contribution of the mining of gold ore is estimated to be **\$5.9 billion**.

The **indirect** contribution of gold ore mining is estimated to be a further **\$7.5 billion**.

This includes value added by:

- Professional, scientific and technical services
- Exploration and mining support services
- Other repair and maintenance services
- Construction services.

Source: Deloitte Access Economics, IBIS World



Gold is increasingly used and recycled in **new technology** and medical developments



Environment

Recycled gold constitutes approximately one third of global world supply. In 2013-14 Australia recycled mobile phones containing around \$7.6 million worth of gold.



Nanotechnology

Gold nanoparticles are a key component of optical modulators, which may offer a new way of processing information using light in the same way a computer processes information using electrons.



Medical

Gold is used to modify anatomic particles, supporting the detection and treatment of cancerous cells.



Source: National Centre for Biotech Info, Queensland University of Technology

Gold mining companies make an important contribution to the **social fabric** of **local communities**

- Norton Gold Fields donated \$50,000 to the Goldfields Individual and Family Support Association's weekend program, providing activities for children with disabilities and respite for their carers
- Gold Fields Australia's Foundation donated \$50,000 to fund facial recognition software, which helps to diagnose medical conditions in Indigenous children
- Since 2009, Gold Fields Australia's scholarship program has assisted Indigenous students to complete tertiary education
- Gold Road Resources supports the 'Together We Can' activity program, improving the health and wellbeing of Indigenous youth in the remote Cosmo-Newberry community
- Ramelius Resources provides unlimited support to St John Ambulance and the Royal Flying Doctor Service in Mount Magnet.

Source: Gold Industry Group

Deloitte Access Economics was commissioned by the Gold Industry Group to study the economic and social contribution of the gold industry in Australia.

The Gold Industry Group is a not-for-profit, member-based industry association governed by a Board of Directors.

The Gold Industry Group represents the interests of gold producers, explorers, prospectors, and service providers to collectively champion and promote the importance of the gold sector in Australia.



www.goldindustrygroup.com.au

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