

DOWNSTREAM PETROLEUM



ECONOMIC CONTRIBUTION OF THE INDUSTRY



KEY MESSAGES

- Australian refineries have been very long standing participants in the local market as the major transport fuel suppliers, with all current refineries being operational for over 50 years.
- The four Australian refineries typically supply around 45% of Australia's total liquid fuel needs, and around 65% of petrol consumed in our market.
- Other Australian industries are positively supported by refineries which provide key inputs to their own activities. Approximately 65% of the total value of Australian liquid fuel consumption is in the transport, mining, construction, agriculture and manufacturing industries.
- Total new capital investment in the refining industry was \$2 billion over the last 5 years.
- As a high-tech industry, the refining sector has highly skilled workforces with an even mix between direct employees and contractors whose numbers can double during major maintenance turnaround work.
- The Australian refineries also spend hundreds of millions each year purchasing goods and services in their local area and State, contributing to significant jobs and business opportunities.
- The refineries also make a very significant contribution to government revenue, including collecting over \$15 billion in fuel excise for the Federal Government from fuel sales.
- Independent economic modelling has found that a refinery contributes around \$1 billion in economic activity on average to the local economy each year
- This industry also provides significant additional indirect benefits, including reliability and security of fuel supply, sharing inputs with other industries, and innovation, technology and knowledge spillovers.
- Australian refineries are also active investors and participants in numerous community development activities to enhance the education, environment and health outcomes of the local communities where they operate.



DIRECT CONTRIBUTION OF REFINERIES

Each refinery provides significant economic benefits to the local and State economy where it is located, and also contributes to fuel supply security for Australia as a whole through supply diversity and flexibility.

The economic impact of each refinery includes:

- the economic benefit of value adding (i.e. refining petroleum products)
- the impact on industries that source inputs from the refinery or that provide products/ services to it
- financial impacts (new capital investment and profits)
- taxes that the refinery collects and pays to the Commonwealth and State Governments as well as local council rates
- the economic benefit of employment - demand for qualified personnel and providing apprenticeships and other forms of on the job training.

AUSTRALIAN REFINERIES: KEY DIRECT ECONOMIC BENEFITS

	2015	2016
Refinery Production (Value Add)		
Total Petroleum Products (million litres)	24,194	25,722
Total Petrol products (million litres)	10,818	11,653
New Capital Investment		
Refinery Investment (\$million)	\$308	\$389
Total for the Last 5 Years (\$million)	n/a	\$2,050
Direct Employment		
Refinery Employees (FTE)	2,048	1,966
Australia – Total Employment (FTE)	10,669	10,282
Direct Wages & Salaries		
Refinery Employees (\$million)	\$323	\$303



Financial Benefits

Due to the capital intensive nature of petroleum refining, the industry routinely requires large and ongoing capital investment in plant and equipment to continue safe and reliable operations. Over the last 5 years, the total new capital investment in Australian refineries was over \$2 billion. This represents an average annual investment of \$400 million across the four refineries, which is consistent with the total refinery investment of \$389 million in 2016. In simple terms, the average annual investment per refinery is in the range of \$50-\$150 million.

Employment Benefits

IN 2016, 2,000 WORKERS WERE DIRECTLY EMPLOYED BY THE AUSTRALIAN REFINERIES

This compares with total direct employment for AIP member companies across all their Australian operations was more than 10,000 persons in 2016.

Actual labour use in the refineries is substantially larger than this direct employment, because the refining sector also employs a significant number of contractors on a non-permanent basis and which varies throughout the year, and also year-to-year depending on major maintenance cycles.

During normal periods of operation, refineries employ almost as many contractors as direct permanent employees. During these periods, the main tasks of contractors include maintenance, engineering, inspection, water treatment and security. However, the number of contractors can double during periods when some production units are shut down to allow for major upgrade and maintenance programs (called “turnarounds”, which occur every 4-6 years).

The Australian refineries paid wages and salaries to their direct refinery employees totaling \$303 million in 2016, similar to the previous year. Total wages and salaries paid are significantly higher when including contractor wages.

Contribution to government revenue

AIP member companies recognise that the taxes they pay and collect form a significant part of their economic contribution to Australia and to the States where they operate.

The refining companies in Australia:

- pay corporate income taxes, royalties and stamp duties,
- collect and pay employee taxes, GST and fuel excise tax, and
- pay land tax and local council rates, licenses and charges.

In 2016, the Australian refining companies collected and paid around \$15 billion in fuel excise. On average, around \$290 million a week in fuel excise is collected and paid to the Australian Government by all the refining companies, making them amongst the largest corporate tax collectors in Australia.

The bulk fuel terminals (refinery, import and marketing terminals) of AIP member companies constitute the bonded warehouses at which fuel excise is collected. The current fuel excise on petrol and diesel is 40.3 cents per litre, aviation fuel 3.6 cents per litre, LPG 13.2 cents per litre and ethanol 5.3 cents per litre.

AROUND \$5-6 MILLION PER ANNUM IS PAID IN LOCAL GOVERNMENT RATES AND CHARGES FOR REFINERY AND TERMINAL RELATED ACTIVITIES

INTRINSIC INDUSTRY LINKAGES

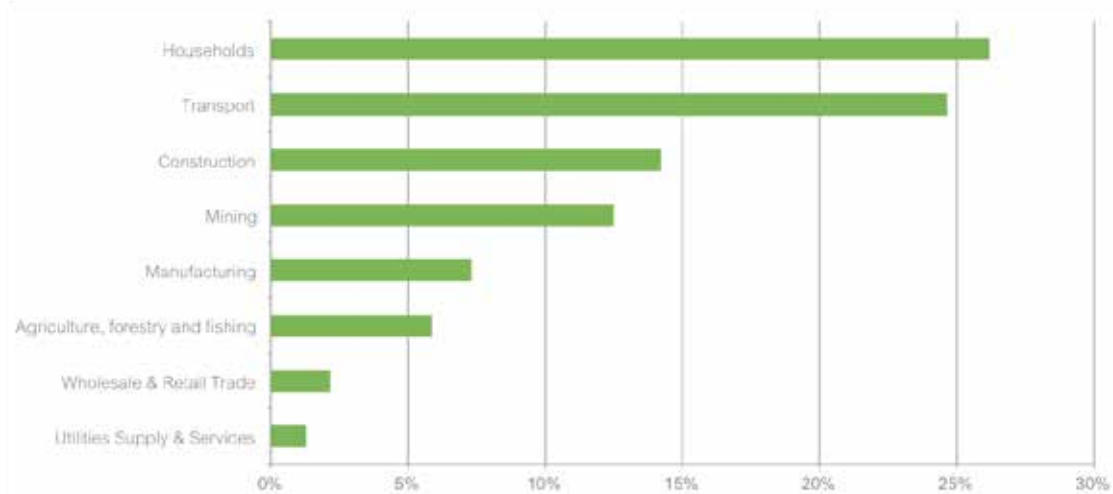
Many industries use petroleum products, and for some industries they make up a large share of intermediate input costs. This means that the petroleum refining industry’s products have intrinsic links with the rest of the Australian economy.

The chart below shows the use of petroleum products in industries where refinery products are particularly important inputs. Use in each industry is reported as a share of total use of petroleum products in Australia. Based on the latest available ABS data, all industries account for 74 percent of domestic petroleum product use and households account for 26 percent – making households the largest fuel user group in Australia.

The five major industrial users of petroleum products are the transport, construction, mining, manufacturing and agriculture industries, which make up 64 percent of petroleum product use in Australia. Transport is the largest industry user of petroleum products, making up around 25 percent of total Australian use.

Some outputs from these industries are, in turn, important inputs for other Australian industries. Therefore, any shocks (such as the closure of a refinery) to the petroleum refining sector will flow through all sectors of the economy via links with the agriculture, manufacturing, mining and transport industries.

USE OF REFINERY PRODUCTS AS A SHARE OF TOTAL AUSTRALIAN USE: 2013-14



Source: ABS, Australian National Accounts: Input-Output Tables Cat No 5209.0.55.001 (latest edition).

NOTE: Manufacturing use excludes that used by the petroleum industry itself.



INDIRECT BENEFITS

Refining also provides for a range of indirect benefits including:

- **Reliability and security of supply:** The domestic refining capacity contributes to the overall health of the Australian economy through its contributions to the level of fuel supply reliability and flexibility. This is important for efficient production and mobility of labour and other products. Supply security is enhanced in Australia through the availability of both domestically refined and imported fuels from a wide diversity of supply sources.
- **Input sharing:** The refining industry benefits other sectors through increasing demand for certain inputs shared with other industries (e.g. engineering services, chemicals, electronic equipment and mechanical components); this assists these sectors achieve economies of scale and benefit from lower costs in their supply chains (e.g. petrochemicals, plastics and heavy industry/manufacturing sectors).
- **Innovation and spillovers:** As a high-tech industry, the refining industry benefits the economy through innovation, technology and knowledge spillovers to other sectors (inc. through the mobile contractor workforce). Major technological investments made by the refining industry include improvements in safety, environmental management, new product development, and production improvements and de-bottlenecking. This stimulates innovation and technological improvements in other sectors, without them having to bear the full costs.
- **Community development and investment:** Australian refineries actively participate in numerous community development activities and groups to enhance the education, environment and health outcomes of the local area (including grants, donations, volunteer work, and sponsorship). These can be expected to have wider economic benefits like higher GDP and consumer living standards.



QUICK FACTS: AUSTRALIAN REFINERIES



TOTAL TRANSPORT FUEL PRODUCED BY AUSTRALIA'S FOUR REFINERIES

50%

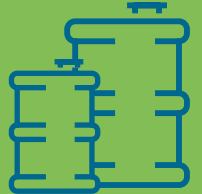


TOTAL PETROL PRODUCED BY AUSTRALIA'S FOUR REFINERIES

65%

27 BILLION LITRES

TOTAL CRUDE OIL REFINED LAST YEAR



AIP MEMBER COMPANY DIRECT EMPLOYEES: AT REFINERIES

2,000



ACROSS AUSTRALIA **10,000+**

TYPICALLY, AS MANY CONTRACTORS ARE EMPLOYED AS DIRECT (PERMANENT) EMPLOYEES

TWICE THE NUMBER OF CONTRACTORS DURING MAJOR REFINERY MAINTENANCE



X2



TOTAL INVESTMENT IN AUSTRALIAN REFINERIES OVER THE LAST FIVE YEARS

\$2.0 BILLION



DIRECT WAGES AND SALARIES PAID EACH YEAR TO REFINERY EMPLOYEES (EXCLUDING CONTRACTORS)

\$300+ MILLION



AVERAGE INDUSTRY ANNUAL PROFIT FOR ALL FUEL SOLD

2 CENTS PER LITRE



AVERAGE ANNUAL FUEL TAX (EXCISE) COLLECTED AND PAID TO GOVERNMENT

\$15 BILLION



AVERAGE ANNUAL CONTRIBUTION TO THE LOCAL ECONOMY BY A REFINERY

\$1 BILLION



HUNDREDS

OF COMMUNITY GROUPS, PROGRAMS, SCHOOLS AND LOCAL ENVIRONMENT INITIATIVES SUPPORTED EACH YEAR BY REFINERIES





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