

Diesel use in Australian mining

Mining companies in Australia used almost 8 billion litres of diesel in 2023-24, a quarter of Australia's total, 3.5 times more than agriculture, and more than all of the country's 2.9 million dual-cab utes combined. Eliminating diesel subsidies for mining would encourage electrifying mining equipment, improving Australia's fuel security and budget balance while reducing greenhouse gas emissions.

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INTRODUCTION

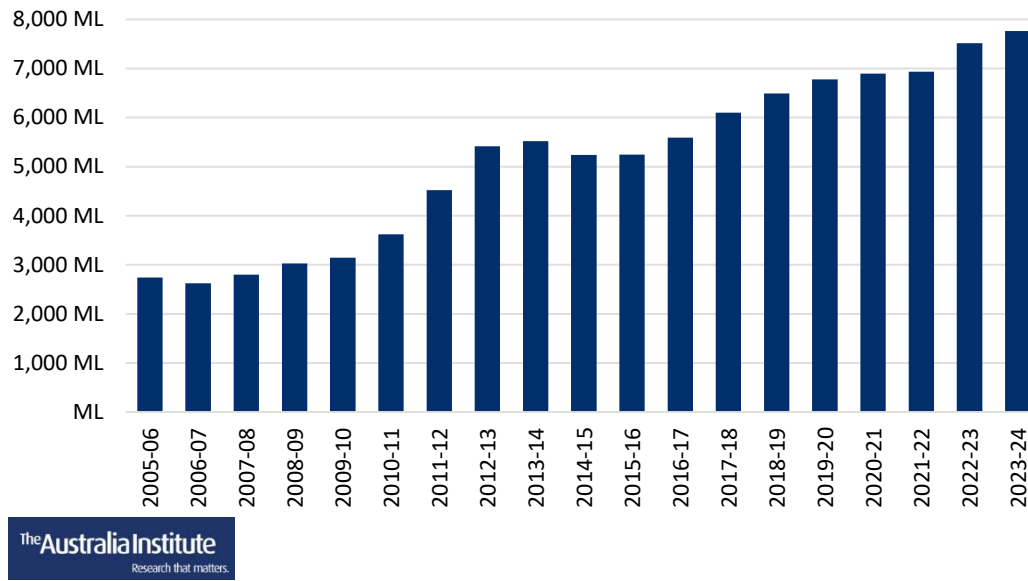
In May 2026, leaked documents showed that BHP had shelved decarbonisation plans that would reduce diesel usage by the huge trucks used in its iron ore mines in the Pilbara, Western Australia. The 'BHP files' were provided to journalists at ABC's Four Corners and Guardian Australia.

This coverage has highlighted how diesel-intensive mining is, particularly in iron ore and coal mining. While it is clear from the coverage that BHP uses a lot of diesel, this paper estimates total diesel use in the mining industry and puts it in the context of Australian road use, particularly considering the ever-growing number of large utility vehicles (utes) on Australian roads. We emphasise that Australia's fuel security, federal budget balance and climate targets would all benefit from reducing diesel use in mining.

MINING INDUSTRY DIESEL USE

Diesel use in the mining industry has tripled over the last 20 years, rising from a low of 2,624 million litres in 2006-07 to 7,763 million litres in 2023-24 (Figure 1).

Figure 1: Megalitres of diesel used by the mining industry each year



Sources: Australian Energy Statistics¹

The mining industry uses a quarter of all the diesel sold in Australia. Of the 32,637 million litres of diesel sold in Australia in 2023-24, mining used around 7,763 million litres. Mining’s share of overall Australian diesel use has increased from 13% at the start of the century to 24% in 2023-24.²

Despite claims of climate action by mining companies and the Albanese Government alike, diesel use is forecast to increase rather than decrease. The Albanese Government’s own budget expects diesel use “to continue increasing from 2027-28 to 2029-30.”³

The vast majority of diesel in the mining industry is used by firms mining and transporting iron ore and coal. Research from the *Climate Energy Finance* think tank has estimated the diesel fuel usage by the biggest coal and iron-ore mining companies in Australia, as shown in Table 1 below:

¹ Department of Climate Change, Energy, Environment and Water (DCCEEW) (2025) *Australian Energy Statistics*, <https://www.energy.gov.au/publications/australian-energy-update-2025>

² Sale data from DCCEEW (2026) *Australian Petroleum Statistics 2026*, <https://www.energy.gov.au/publications/australian-petroleum-statistics-2026>. Mining use figure from DCCEEW (2025) *Australian Energy Update 2025 – Table F*, <https://www.energy.gov.au/publications/australian-energy-update-2025>. Petajoules converted to litres using DCCEEW (2025) *Guide to the Australian Energy Statistics*, Table 9, https://www.energy.gov.au/sites/default/files/2025-08/guide_to_the_australian_energy_statistics_2025.pdf

³ Australian Government (2026) *Budget Paper No.1: Budget 2026-27*, page 237, https://budget.gov.au/content/bp1/download/bp1_2026-27.pdf

Table 1: Diesel use in coal and iron ore mining, 2023-24

	Industry	Diesel use, ML
BHP	Iron Ore/ Coal	1,278
Rio Tinto	Iron Ore	849
Fortescue	Iron Ore	631
Hancock Prospecting	Iron Ore	262
Mineral Resources	Iron Ore	219
Glencore	Coal	742
Mitsubishi Development	Coal	293
Peabody Energy	Coal	193
Whitehaven Coal	Coal	201
Yancoal	Coal	309
Anglo American	Coal	185
Stanmore Resources	Coal	186
QCoal Group	Coal	131
Pacific National	Coal & Commodity Freight	284
Aurizon	Coal & Commodity Freight	228
Total		5,991

Sources: Climate Energy Finance (2025), p.28.⁴

Table 1 shows that these companies used 5,991 million litres of diesel in 2023-24, or 77% of the total 7,763 million litres used by the industry overall. Coal and iron ore use so much diesel because the volumes unearthed and transported are large, usually measured in millions of tonnes per year. By contrast, gold mines usually measure their output in ounces. Large volumes of coal and iron ore then have to be trucked, railed and shipped long distances to get to customers.

Other ways of conceptualising diesel use in mining:

- Mining uses so much diesel each year that it could fill up the fuel tanks of every dual-cab ute in Australia more than 30 times over.⁵
- Mining uses 3.4 times more diesel than agriculture. Mining used 7,763 million litres of diesel in 2023-24, while agriculture used just 2,301 million litres.⁶ As shown in Table 1, BHP and Rio Tinto alone use almost as much diesel as all agricultural operations in Australia.

⁴ Climate Energy Finance (2025) *Transition Tax Incentive: Reforming Fuel Tax Credits into a Decarbonisation Tailwind*, https://climateenergyfinance.org/wp-content/uploads/2025/08/CEF_Transition-Tax-Incentive-Report-FINAL_20August2025.pdf

⁵ Estimate based on methodology in Appendix.

⁶ DCCEEW (2026) *Australian Energy Statistics, Table F*, conversion from PJ to ML as above.

- The tankers that are used for diesel hold around 50 million litres, meaning it takes 155 ships to import the 7,763 million litres that the mining industry uses.⁷

DISCUSSION

Despite claims by both the mining industry and the Albanese Government that the mining industry is ‘decarbonising’, the statistics above show that mining is using more diesel than ever before, and is set to continue increasing.

While mines around the world are adopting electrification as a way to reduce both production costs and greenhouse gas emissions, reporting on the BHP files and the figures above show that this trend has not caught on in Australia. Electrification of mining in Australia is curtailed by a combination of:

- the Fuel Tax Credits Scheme, which subsidises diesel used in mines, and
- the availability of low-quality carbon ‘offsets’ that can be used as a substitute for genuine emission reductions under the Albanese Government’s Safeguard mechanism.

This combination of diesel subsidy and no firm obligation on the mining industry to achieve any actual reductions in greenhouse gas emissions creates a policy environment that harms Australia’s fuel security. According to the latest data from the Treasury and the Australian Tax Office, the Fuel Tax Credits Scheme costs the Australian Government over \$9 billion per year⁸, of which over \$3 billion went to the iron ore and coal companies.⁹

Electrification of the mining industry has significant potential to reduce the amount of diesel used in Australia, simultaneously improving liquid fuel security and reducing greenhouse gas emissions. But this transition will take time because of the long lifespan of the trucks, generators and other diesel-powered equipment used on mine sites. It is the long life of these assets that makes their electrification so important,

⁷ Primo Nautic (2026) *Oil Tankers: Classes, Sizes, and Global Fleet Data*, <https://primonautic.com/blog/oil-tankers-classes-sizes-and-global-fleet-data> : Prime Minister of Australia (2026) *Additional jet fuel and additional diesel secured*, Press release 1 May 2026, <https://www.pm.gov.au/media/additional-jet-fuel-and-additional-diesel-secured>

⁸ Treasury (2026) *Budget 2026-27 – Budget Paper 1*, p.221, <https://budget.gov.au/content/bp1/index.htm>

⁹ Australian Taxation Office (2025) *Excise and fuel scheme statistics for Taxation statistics 2022–23*, <https://www.ato.gov.au/about-ato/research-and-statistics/in-detail/taxation-statistics/taxation-statistics-2022-23/statistics/excise-and-fuel-scheme-statistics>

because new trucks and generators purchased this year will burn diesel long into the future.

It is not that the electrification of mining in Australia is impossible or inappropriate. As covered in the BHP files reporting, rival mining company Fortescue is placing considerable emphasis on electrification. BHP and Rio Tinto are jointly trialling battery-electric haul trucks,¹⁰ with trials of Caterpillar 793 and Komatsu 930 models announced in 2024 for Pilbara iron ore mines, specifically to test performance, charging systems and productivity in Australian conditions.¹¹

In addition to improving Australia's fuel security and reducing emissions, electrification offers a range of economic benefits to the mining industry and the national economy. This is because of the significant number of skilled maintenance and repair workers that will be freed up by the use of electric trucks and trains and the replacement of generators with batteries. Electric drivetrains have fewer moving parts than diesel engines, reducing maintenance requirements for engines, gearboxes and braking systems. Regenerative braking is also particularly valuable on mine haul roads with large elevation changes. Reuters reported that the BHP/Rio trials are explicitly aimed at reducing diesel use and operational emissions at large Pilbara iron ore operations.¹²

China is already moving rapidly on mine electrification. In 2025, China Huaneng Group deployed what has been described as the world's largest fleet of autonomous electric mining trucks —100 battery-electric driverless trucks at the Yimin mine in Inner Mongolia.¹³

Likewise, Chile is far more advanced in its use of electric trucks in its large copper mines than Australia. Even though BHP operates large copper mines in both Australia

¹⁰ BHP (2024) *BHP and Rio Tinto collaborate on battery-electric haul truck trials in the Pilbara*, <https://www.bhp.com/news/media-centre/releases/2024/05/bhp-and-rio-tinto-collaborate-on-battery-electric-haul-truck-trials-in-the-pilbara>

¹¹ Rio Tinto (2024) *BHP and Rio Tinto welcome first Caterpillar battery-electric haul trucks to the Pilbara*, <https://www.riotinto.com/en/news/releases/2025/bhp-and-rio-tinto-welcome-first-caterpillar-battery-electric-haul-trucks-to-the-pilbara>

¹² Reuters (2025) *BHP, Rio Tinto start trial of electric haul trucks at Jimblebar*, <https://www.reuters.com/sustainability/climate-energy/bhp-rio-tinto-start-trial-electric-haul-trucks-jimblebar-2025-12-05/>

¹³ Electrive (2025) *China launches world's largest fleet of autonomous electric mining trucks*, <https://www.electrive.com/2025/05/20/china-launches-worlds-largest-fleet-of-autonomous-electric-mining-trucks/>; Huawei (2025) *North China's Yimin Mine deploys world's first fleet of 100 5G-A connected, self-driving electric trucks*, <https://www.huawei.com/en/media-center/our-value/2025/driverless-trucks-yimin-mine>

and Chile, reporting on the BHP files shows the company has decided against pursuing its own plans for electrification in Australia despite pursuing them in Chile.¹⁴

While it is clear that the removal of subsidies for diesel fuel use would accelerate Australia's transition to the electrification of our mining industry, it is not clear why the Albanese government is determined to maintain subsidies for the use of a fuel it says it is trying to conserve as part of its fuel security and climate policies.

CONCLUSION

Australia's expanding use of diesel fuel in mining is in stark contrast to the Albanese Government's stated objectives of increasing fuel security and reducing emissions. The Budget's projected increase in liquid fuel use highlights how ineffective the government expects to be in both reducing Australia's dependence on imported fuel and reducing greenhouse gas emissions. The cost to the Commonwealth Budget of fuel tax credits adds a fiscal dimension to this failure.

The Commonwealth's flawed Safeguard Mechanism exacerbates this problem by allowing heavy users of diesel to 'achieve' their obligations to reduce greenhouse gas emissions while actually increasing their emissions as long as they buy 'carbon offsets' that have been shown to lack integrity.¹⁵

When supply lines are constrained or cut, Australia must make hard decisions about how best to prioritise access to liquid fuel. One of the easiest and lowest-cost, ways to make Australia less dependent on imported fuel is to electrify the Australian mining industry, and one of the easiest ways to do so would be to remove subsidies for diesel and impose obligations on the mining industry to reduce their actual emissions at each of their sites. But for reasons that defy basic economics and climate science, the Albanese Government is currently resisting such reform.

¹⁴ Morton (2026) *Australian taxpayers subsidise Big Mining's use of fossil fuel to the tune of \$4bn a year. It's a strange way to tackle emissions*,
<https://www.theguardian.com/world/commentisfree/2026/may/25/bhp-climate-promises-slash-emissions-global-solutions>

¹⁵ Australia Institute (2024) *Here are 23 Times Carbon Offsets Were Found to be Dodgy*,
<https://australiainstitute.org.au/post/here-are-23-times-carbon-offsets-were-found-to-be-dodgy-2/>

Appendix: Dual cab ute diesel use

Australia's mining sector has used over 6,000 megalitres of diesel every year since 2017-18 (Figure 1); meanwhile, dual cab utes use approximately 4,420 megalitres of diesel each year.

Total diesel use by dual cab utes can be estimated using the following formula:

- Number of dual cab utes x Average distance travelled x Average fuel efficiency
= Total diesel use

Number of dual cab utes

Dual cab utes are classified as light commercial vehicles (LCVs). According to the *Bureau of Infrastructure and Transport Research Economics* (BITRE) there were 4,195,833 (LCV) in Australia in 2025.¹⁶

Approximately 70% of LCVs in Australia are dual cab utes, meaning there are around 2.9 million dual cab utes. This 70% estimate is based on:

- According to vehicle sales data from the *Federal Chamber of Automotive Industries* (FCAI), 78% of LCV sales in 2025 were dual-cab utes, with the vast majority using a diesel engine.¹⁷
- If this sales pattern were stable, then 78% of the stock (new and old) of LCVs would be dual cab utes. But the growth in the popularity of dual cab utes is a recent trend, spurred on in part by tax incentives.¹⁸ This means that share of utes in the existing fleet of LCVs is likely to be less than 78%.
- In 2014, ute sales were 67% of total LCV sales.¹⁹ Assuming that the 2014 sales pattern was similar to the existing fleet in 2014, then projecting forward to

¹⁶ BITRE (2025) *Australian Infrastructure and Transport Statistics—Yearbook 2025*, <https://www.bitre.gov.au/publications/2025/australian-infrastructure-and-transport-statistics-yearbook-2025>

¹⁷ FCAI (2026) *Australia's new vehicle market remains resilient*, <https://www.fcai.com.au/australias-new-vehicle-market-remains-resilient/>; RACV (2026) *Australia's best-selling cars, utes and SUVs for 2025*, <https://www.racv.com.au/royalauto/transport/cars/australian-new-car-sales-2025.html>

¹⁸ Drive.com (2024) *Every tax break currently available to ute owners*, <https://www.drive.com.au/caradvice/ute-tax-breaks-exemptions/>

¹⁹ Car Expert (2023) *The rise of 4x4 utes in Australia: Sales tracked from 2013 to 2022*, <https://www.carexpert.com.au/car-news/the-rise-of-4x4-utes-in-australia-sales-tracked-from-2013-to-2022/>; FCAI (2016) *New Car sales Reach Record Heights in 2015*, <https://www.fcai.com.au/new-car-sales-reach-record-heights-in-2015/>

today the ute share in the 2025 fleet would be around 72%. For simplicity we have conservatively assumed 70%.

Average distance travelled

According to data from BITRE, each LCV travelled on average 14,608 km in 2024-25.²⁰

Average fuel efficiency

The average dual-cab ute, across the five top selling models has a fuel tank size of 77.8 litres, and a fuel efficiency of 10.44 litres per 100 kms, or 0.1044 litres per km.²¹

Total diesel use

Combining the above data suggests that the fleet of dual-cab utes used about 4,420 million litres of diesel, equivalent to 56.8 million tanks of diesel in total, or just over 19 tanks of diesel for each dual cab ute through the year.

In comparison, the mining industry used 7,763 million litres in of diesel in 2023-24 (Figure 1) equivalent to over 99 million tanks of diesel in total, or over 30 tanks of diesel for each dual cab ute on Australian roads.

²⁰ BITRE (2025) *Australian Infrastructure and Transport Statistics—Yearbook 2025*

²¹ 4x4 Australia (2023) *2023 Dual-Cab Utes: Fuel Efficiency Comparison*,
<https://www.4x4australia.com.au/reviews/2023-fuel-efficient-dual-cab-utes>