



Fuel excise tax gap

How we estimate and reduce the fuel excise tax gap for 2022–23.

Published 31 October 2024

Latest estimate and trends



Compare the 2022–23 fuel excise tax gap to trends from previous years.

ATO action to reduce the gap



How we support our clients to meet their compliance obligations.

Methodology



What method we use to estimate the fuel excise tax gap.

Reliability



How we make sure the tax gap estimate is reliable.

QC 103197

Latest estimate and trends

Compare the 2022–23 fuel excise tax gap to trends from previous years.

Published 31 October 2024

For the 2022-23 year we estimate a net gap of 3.9% or \$812 million. In other words, we estimate that more than 96% of the 2022-23 theoretical fuel excise has been collected.

This gap forms part of our overall tax performance program. Find out more about the concept of **tax gaps and the latest gaps available**.

Over the period from 2017–18 to 2022–23, the estimated net fuel excise tax gap has ranged between 1.3% and 3.9%.

As noted in the **limitation** section, the method is dependant upon a number of factors that can lead to changes in the estimate, but do not reflect changes in the underlying compliance. This year's gap estimate is within the margins of variation we expect from this model.

Table 1 shows 2017–18 to 2022–23 data for the:


- excise and duty reported
- amendments
- gross and net fuel excise gap estimates.

Table 1: Fuel excise tax gap, 2017–18 to 2022–23

Element	2017–18	2018–19	2019–20	2020–21	2021–22
Gross gap (\$m)	251	266	618	492	1,015
Amendments (\$m)	1	0	0	0	0
Net gap (\$m)	250	266	618	492	1,015
Excise and duty	18,715	18,769	18,705	19,461	17,700

reported (\$m)					
Theoretical liability (\$m)	18,966	19,035	19,322	19,952	17,0
Gross gap (%)	1.3%	1.4%	3.2%	2.5%	1
Net gap (%)	1.3%	1.4%	3.2%	2.5%	1

Figure 1: Net fuel excise tax gap as a percentage of total theoretical liability, 2017–18 to 2022–23

Figure 1 shows the net fuel excise tax gap in percentage terms as outlined in Table 1.

QC 103197

ATO action to reduce the gap

How we support our clients to meet their compliance obligations.

Published 31 October 2024

The fuel industry is regulated through licensing and permission regimes.

A small number of businesses contribute the majority of fuel excise revenue. We support our larger clients with client managers who provide help and assurance for **compliance obligations**.

In the current environment, our key focus is on compliance with:

- timely lodgment
- correct reporting
- payment.

Our client managers monitor the highest payers so they understand their obligations and can engage and assist where necessary.

We work with new entities entering the fuel market to ensure their controls and systems are appropriate. Our 'New to Excise' program assists them to understand and meet obligations.

Some factors increase the likelihood of errors being made, including:

- biannual indexation on all fuels (except aviation fuel)
- policy changes
- environmental factors such as COVID-19 and natural disasters
- changes in technology, personnel and IT systems

We have early engagement strategies in place to detect and monitor impacts of these potential errors on obligations.

We focus our activities on early identification of compliance issues. Our recent activities have not identified any new issues or areas for concern.

QC 103197

Methodology

What method we use to estimate the fuel excise tax gap.

Published 31 October 2024

We use a 5-step top-down method to estimate the fuel excise tax gap.

Step 1: Estimate the total volume available

We estimate the excisable volume available in this order:

1. Estimate the volume imported.
2. Add the volume produced in Australia.
3. Remove the volume exported from Australia.

4. Add the volume held in inventory at the end of the previous financial year.
5. Remove the volume held in inventory at the end of the current financial year.
6. Remove the volume not subject to excise.

Step 2: Estimate average excise rates each year

Next, we estimate the average excise rates by dividing actual revenue by actual volumes, after ensuring that there is no double-counting in the volume data.

Step 3: Estimate theoretical excise liability amounts

We multiply the total volume available by the average excise rate to calculate the total theoretical excise liability.

Step 4: Calculate the fuel excise tax net gap

We subtract ATO fuel excise revenue on an accrual basis using an economic transaction method (ETM) from the total theoretical excise liability to yield the net gap.

Step 5: Calculate the fuel excise tax gross gap

We calculate the tax gross gap by adding our compliance results to the net gap. We calculate the compliance outcomes by taking our compliance case results and allocating them to specific financial years on an accrual basis.

The total excise compliance outcomes are apportioned using the percentage of total excise revenue attributable to:

- petrol

- diesel
- ethanol
- biodiesel
- associated blends.

Summary of the estimation process

Table 2 shows the:

- methodology and dollar amounts for the steps used to estimate the tax gap
- percentage figures for the gross and net gaps.

Table 2: Applying the methodology – fuel excise tax gap

Step	Description	2017–18	2018–19	2019–20	2020–21
1 to 3	Total theoretical excise liability (\$m)	18,966	19,035	19,322	19,952
4.1	Less actual excise reported (\$m)	18,716	18,769	18,705	19,461
4.2	Equals fuel excise tax net gap (\$m)	250	266	618	492
5.1	Add compliance outcomes and taxpayer adjustments (\$m)	1	0	0	0

5.2	Equals fuel excise tax gross gap (\$m)	251	266	618	492
5.3	Gross gap (%)	1.3	1.4	3.2	2.5
5.4	Net gap (%)	1.3	1.4	3.2	2.5

Find more about our overall research methodology, data sources and analysis for [How we measure tax gaps](#).

Limitations

Although the gap methodology is reliable, it does not account for variations due to:

- temperature correction
- timing
- certain adjustments.

There could be errors stemming from non-standard measurement practices for the volumes of fuel products. Given that the volumes of fuel products would vary with temperature, they should always be measured at 15 degrees Celsius to maintain a consistent benchmark. However, *Australian Petroleum Statistics* volumes may be measured at different temperatures. Survey respondents are not given instructions to correct fuel volumes to 15 degrees Celsius.

A timing difference could arise between when product sales data are reported for compilation in the *Australian Petroleum Statistics* and when excise data enters our systems.

Assumptions around related volumetric calculations may also have an impact.


Updates and revisions to previous estimates

Each year we refresh our estimates in line with the annual report. Changes from previously published estimates occur for a variety of

reasons, including:

- improvements in methodology
- revisions to data
- additional information becoming available.

Figure 2: Current and previous published net fuel excise tax gap estimates, 2012–13 to 2022–23

Figure 2: Current and previous net fuel excise tax gap estimates, 2017-18 to 2022-23

The changes are set out in Table 3 and shown as a percentage.

Table 3: Current and previous published net fuel excise tax

	2012– 13	2013– 14	2014– 15	2015– 16	2016– 17
2024 program	n/a	n/a	n/a	n/a	2.5
2023 program	n/a	n/a	n/a	n/a	2.5
2022 program	n/a	n/a	n/a	2.8	2.5
2021 program	n/a	n/a	1.0	1.9	1.8
2020 program	n/a	2.1	1.0	1.9	1.9
2019 program	2.5	2.1	1.0	1.9	1.9
2018 program	2.5	2.1	1.0	1.9	1.9

2017 program	2.5	2.1	1.1	1.9	n/a
-----------------	-----	-----	-----	-----	-----

QC 103197

Reliability

How we make sure the tax gap estimate is reliable.

Published 31 October 2024

We seek feedback and advice about how we estimate the gap from external and internal subject matter experts. Based on this advice, we have assessed our estimate as reliable.

The methodology employed and the reliability assessment reflects the nature of the fuel excise system and data available to us:

- the population size is very small, and our activities confirm overall high levels of compliance
- our main data source is an external survey of large-scale petroleum and diesel producers. We have some reservations about how we employ this data including assumptions of volume sales due to temperature changes
- small producers are not covered through this survey, but their market share is negligible given the small number of participants in the fuel industry.

QC 103197

Our commitment to you

We are committed to providing you with accurate, consistent and clear information to help you understand your rights and entitlements and meet your obligations.

If you follow our information and it turns out to be incorrect, or it is misleading and you make a mistake as a result, we will take that into account when determining what action, if any, we should take.

Some of the information on this website applies to a specific financial year. This is clearly marked. Make sure you have the information for the right year before making decisions based on that information.

If you feel that our information does not fully cover your circumstances, or you are unsure how it applies to you, contact us or seek professional advice.

Copyright notice

© Australian Taxation Office for the Commonwealth of Australia

You are free to copy, adapt, modify, transmit and distribute this material as you wish (but not in any way that suggests the ATO or the Commonwealth endorses you or any of your services or products).