Heavy vehicles

You can claim fuel tax credits for eligible fuels you use in heavy vehicles with a GVM greater than 4.5 tonnes.

22 February 2023

Fuel tax credits for heavy vehicles

Find out about fuel tax credits for eligible fuels.

Travelling on public roads

Find out about fuel tax credits and travelling on public roads.

Travelling off public roads

Find out about fuel tax credits and travelling off public roads.

Powering auxiliary equipment

Find out about fuel tax credits and powering auxiliary equipment.

Work out your fuel tax credits

You can use the following methods when working out your fuel tax credits for heavy vehicles.

Records you need to keep

Find out what records you need to keep.

44648

Fuel tax credits for heavy vehicles

Find out about fuel tax credits for eligible fuels.

22 February 2023

Fuel tax credits for eligible fuels can be claimed if you use heavy vehicles:

- on public roads
- off public roads – including on private roads and work sites
- powering auxiliary equipment.

Heavy vehicles, including heavy emergency vehicles, are vehicles that have a gross vehicles mass (GVM) greater than 4.5 tonnes.

Diesel vehicles acquired before 1 July 2006 can be equal to 4.5 tonnes GVM.

The GVM of a vehicle is determined by the authority that registered the vehicle. For prime movers, the GVM is the gross combination mass of the mass of the vehicle and the trailer. Trailers cannot be included in the GVM of a rigid vehicle.

81787

Travelling on public roads

Find out about fuel tax credits and travelling on public roads.

22 February 2023

What is a public road

A public road is available for use by members of the public.

Roads (sealed and unsealed including tracks and lanes) that are accessible to the public and integrated into the overall public road network are public roads regardless of whether they are publicly or privately owned, operated or maintained.

Common public roads include toll roads, bus lanes, busways, transit ways (T-ways), roads providing access to, or access between Indigenous communities, roads through shopping centres, within hospitals, ports and airports allowing public access.

Taxi lanes, taxi ranks and bus stops on streets are part of the public road network.

You can claim fuel tax credits for fuel you use in a heavy vehicle on public roads. This includes using fuel for:

- travelling on public roads
- Activities not considered travelling

If your heavy diesel vehicle is used on public roads and was manufactured before 1 January 1996, you need to meet an environmental criteria before you can claim fuel tax credits.

Example: public roads

Tim's Transport operates a fleet of buses in metropolitan and rural areas.

After departing Tim's Transport depot, the buses travel on lanes designated as bus lanes in peak hours, busways and through bus and train interchanges, shopping centres and the airport and port.

Some roads have bays set aside on the roads to enable the passengers to board and alight the vehicles.

The airport and port roads allow access to the buses for loading and unloading goods and passengers.

Even though a fare is required to board the buses, all of these are public roads as they exist for the purpose of conveying the public.

The buses also transport passengers to remote indigenous communities. Permits are required to travel on roads that traverse the community lands in case the traveller leaves the road and enters the lands.

The roads providing access to, traversing the communities and allowing movement between the communities are public roads.

Roads solely within the community on the lands serving the needs of the residents and under the authority of the community are not public roads. These roads are like privately owned roads on agricultural properties that exist for the benefit of the owner.

Travelling begins when a vehicle starts to move and ends when it arrives at a destination, regardless of the distance.

Fuel is used for travelling when:

- the vehicle is travelling along public roads, including stopping or idling, during the journey
- all aspects of the vehicle are operating, such as the use of lights, brakes, power-steering, windscreen wipers, powering the vehicle's cabin air-conditioning and bus passenger air-conditioning.

The fuel tax credit rate for fuel used in heavy vehicles for travelling on public roads is reduced by the road user charge. The road user charge reduces fuel tax credits for gaseous fuels to nil.

To **calculate fuel tax credits** for fuel used when travelling on public roads, use the current **fuel tax credit rates**.

Fuel tax credit tools can also help you to work out your fuel tax credits.

Activities not considered travelling

Vehicles are often engaged in travel and movement or other activities in their operations.

Movement of a vehicle undertaking road construction, maintenance or repair, such as by a grader or bulldozer is not considered travelling.

The fuel tax credit rate for this activity is not reduced by the road user charge. Use the rate for 'All other business uses' in the **fuel tax credits rates**.

Fuel tax credit tools can also help you to work out your fuel tax credits.

The following fuel tax rulings provide additional information:

- FTR 2008/1 *Fuel tax: vehicle's travel on a public road that is incidental to the vehicle's main use and the road user charge* – provides guidance on when a vehicle's travel is incidental to the vehicle's main use for determining whether the road user charge applies, it also provides guidance on public roads for the purposes of claiming fuel tax credits
- FTD 2016/1 *Fuel tax: fuel tax credits – fuel used for idling and cabin air-conditioning of a vehicle on a public road* – provides guidance that outlines the fuel tax credit rate will be reduced by the road user charge for fuel used in a heavy vehicle for
  - idling on a public road
  - powering the air conditioning unit of a main cabin when travelling on a public road.

Environmental criteria for heavy diesel vehicles

If your heavy diesel vehicle was manufactured before 1 January 1996, it must meet **one** of the following criteria to claim fuel tax credits:

- be registered in an audited maintenance program accredited by the Transport Secretary
- meet Rule 147A of the *Australian Vehicle Standards Rules 1999* (the 'DT80' test)
- comply with a maintenance schedule endorsed by the Transport Secretary.

If your heavy diesel vehicle was manufactured before 1 January 1996, but has been retrofitted with an engine manufactured on or after 1 January 1996, the engine must meet **all** the following criteria:

- be certified to the Australian Design Rule (ADR) 70/00 (or later) emission standard (currently ADR 80/00 or ADR 80/01)
- be properly installed
- retain all the original (or equivalent) components.

The Department of Infrastructure, Transport, Regional Development and Communications and the Arts provides more information about the environmental criteria.

You must keep records to demonstrate that your heavy vehicle meets environmental criterion.

When the environmental criteria do not apply

The environmental criteria **do not apply** if your heavy diesel vehicle is:

- manufactured on or after 1 January 1996
- a farm vehicle used primarily on an agricultural property for primary production
- not used on a public road, such as private roads or work sites.

More information is available in the ATO Interpretive Decision ATO ID 2019/1 *Fuel tax: fuel tax credits – vehicles and satisfying environmental criteria*.

81788

Travelling off public roads

Find out about fuel tax credits and travelling off public roads.

22 February 2023

You can claim fuel tax credits for eligible fuels you use in heavy vehicles off public roads. This includes private roads, work sites (for example, construction sites and mines) and agricultural properties.

Examples of roads that are not public roads:

- Forestry, mining access and agricultural property roads.

- Actual tramways and guided transport corridors that are not capable of normal vehicular movement are not public roads, for example the Adelaide O-Bahn.

The fuel tax credit rate for this activity is not reduced by the road user charge. Use the rate for 'All other business uses' in the **fuel tax credits rates**.

Fuel tax credit tools can also help you to work out your fuel tax credits.

Incidental travel on public roads

Incidental travel is when a vehicle designed for use off public roads and not for the purpose of carrying goods or passengers, travels briefly on public roads.

Some of these vehicles can be treated as always used off public roads, even when they sometimes travel on public roads. For these vehicles, you don't need to apportion on and off-road travel when calculating your fuel tax credits. You can claim all your fuel at the 'all other business uses' rate, which is not reduced by the road user charge.

Vehicle types treated as used fully off public roads:

- grader
- backhoe loader
- front-end loader
- wheeled excavator
- forklift
- wheeled bulldozer
- fertiliser spreader
- combine harvester
- tractor.

For more information on incidental travel on public roads, see:

- PCG 2016/4 *Fuel tax credits – incidental travel on public roads by certain vehicles*. This guideline sets out when the road user charge does not apply to a fair and reasonable apportionment for the listed vehicles.

- FTR 2008/1 *Fuel tax: vehicle's travel on a public road that is incidental to the vehicle's main use and the road user charge*. This ruling explains when the when a vehicle's travel on a public road is 'incidental to the vehicle's main use' and other related terms.

81789

Powering auxiliary equipment

Find out about fuel tax credits and powering auxiliary equipment.

22 February 2023

You can claim fuel tax credits for liquid and gaseous fuels used to power auxiliary equipment in your heavy vehicles.

These are equipment and mechanisms unrelated to a vehicle's travel on public roads, for example:

- the mixing barrel of a concrete truck
- garbage bin lifters and compacting mechanisms of a garbage truck
- the refrigeration unit of a vehicle that transports temperature-sensitive goods
- elevated work platforms.

The fuel used to power the auxiliary equipment may be sourced from:

- a separate fuel tank
- the tank that fuels the main engine
- power from the main engine (known as 'power take-off') which in turn increases the fuel used

The fuel tax credit rate for fuel used to power auxiliary equipment of a heavy vehicle is not reduced by the road user charge, even when the vehicle is travelling on public roads.

When calculating fuel tax credits for fuel used in vehicles with auxiliary equipment, you need to apportion the fuel used for:

- powering the auxiliary equipment
- the heavy vehicle for travelling on a public road and other activities

You can use any apportionment method considered fair and reasonable for your circumstances. This includes the Simplified method or the **Basic method for heavy vehicles**. You cannot use both the simplified method and the basic method for apportioning fuel use in auxiliary equipment.

For information on apportionment, see:

- PCG 2016/11 *Fuel tax credits – apportioning taxable fuel used in a heavy vehicle with auxiliary equipment* – See the simplified method in Table 1 for percentages that are considered fair and reasonable apportionment you can use for the listed vehicles. The accepted percentage means that the fuel is not reduced by the road user charge (it covers both fuel used to power the auxiliary equipment as well as fuel used when the vehicle is not on a public road).
- PCG 2021/2 *Fuel tax credits – basic method for heavy vehicles* - this method makes it easier to work out the litres of diesel used in vehicles on and off public roads. You can only use this method for diesel used in heavy vehicles if you claim less than $10,000 each year.

81790

Work out your fuel tax credits

You can use the following methods when working out your fuel tax credits for heavy vehicles.

22 February 2023

General methods for heavy vehicles

You can use any apportionment method considered fair and reasonable for your circumstances to **work out the quantity of fuel** when claiming fuel tax credits.

The most common methods which are considered fair and reasonable are:

- Basic method – determining the quantity of taxable fuel used for travelling on public roads, off public roads and auxiliary equipment.
- Percentage use method – where a reliable percentage of taxable fuel used for travelling on a public road, for a sample period, is applied over a number of tax periods.

If you are using the percentage rates across your fleet you must:

- have undertaken the necessary testing. The testing must take into account the age, model, GVM and driver influence, conditions (terrain and climatic conditions) and the type of activity of each vehicle type
- retain documentary evidence to support the percentage rate is reasonable and, applicable to the vehicle
- you cannot use an average percentage rate without supporting documentation relevant to your vehicle and activity.

For more information see:

- **Working out your fuel tax credit**
- **PCG 2016/8** Fuel tax credits – apportioning fuel for fuel tax credits

Basic method for heavy vehicles

You can use this **basic method for heavy vehicles** to calculate fuel tax credits for diesel used in heavy vehicles if you claim less than $10,000 each year.

This method makes it easier to work out your on and off public road use.

You can use this method for all diesel acquired on or after 1 October 2020.

If you use this method you cannot use any other methods (e.g. the simplified method for auxiliary equipment)

For more information on apportioning fuel, see **PCG 2021/2** Fuel tax credits – basic method for heavy vehicles

Simplified method for calculating fuel used in heavy vehicles with auxiliary equipment

If you use fuel to power the auxiliary equipment of a heavy vehicle (for example, a concrete mixing barrel or elevated work platform) you can use a percentage that we have set to work out how much fuel is used for powering this equipment.

You can apply the percentage listed below to the fuel used in your heavy vehicle with auxiliary equipment.

This percentage covers both fuel used in powering the auxiliary equipment of the relevant vehicle as well as fuel used while the vehicle is not on a public road.

If you use these percentages you don't need to do a separate calculation for fuel used while the vehicle is off public roads (such as for idling or propelling the vehicle and use of auxiliary equipment).

The percentage you use to work out your fuel tax credits will cover this use. You also won't need to do complex calculations or sample testing when you use this method.

Table 1: Heavy vehicle with auxiliary equipment

Vehicle	Percentage
Concrete truck: includes the mixing barrel and all mechanisms used in loading, unloading and transporting the concrete.	30
Refrigerated vehicle – refers to all the refrigeration units of a vehicle transporting temperature-sensitive goods. Includes fuel sourced from a separate or the same fuel tank as that which fuels the main engine.	10
Waste management collection: equipment of a vehicle used to lift the bin to deposit contents into the vehicle's hopper and to compact the contents of the hopper. Includes all configurations of bin-lifting equipment. Does not include pumping in relation to waste management (refer below to 'Vehicles with	15

specialised auxiliary equipment').	
Vehicles with specialised auxiliary equipment – refers only to the following specialised equipment: • elevated work platform • truck mounted loader cranes • truck mounted drilling equipment • pumping equipment • truck blower for dry goods • tipping equipment for loading and unloading. The apportionment of 5% is only applied once even if you have used fuel to power more than one type of specialised equipment.	5
Air-conditioner units that moderate the temperature of the vehicle's sleeping compartment when the driver is on a sleeping break during a long-haul trip. **Notes:** The vehicle **must use fuel** to power the air conditioner during the sleeping break of a long-haul trip. Generally, a vehicle will qualify under only one category, except for a long haul refrigerated vehicle with an air-conditioner unit of a sleeper cabin.	5

Calculating your fuel tax credit for fuel used in vehicles with auxiliary equipment using the simplified method

Step 1: Determine the total amount of fuel acquired and used for the vehicle for that period.

Step 2: See **Table 1** to find your vehicle type that uses auxiliary equipment and the correct percentage rate.

Step 3: Multiply the amount of fuel for use in that vehicle by the percentage in the table.

Step 4: Multiply the result of step 3 by the relevant 'all other business uses' **fuel tax credit rate**.

Step 5: Multiply the remaining fuel by the relevant 'used in heavy vehicles for travelling on public roads' rate.

Step 6: Add the results from steps 4 and 5 to total the fuel tax credit you can claim for this vehicle.

Example: construction

BIATWC Construction use diesel in different vehicles including their fleet of tipping trucks.

Step 1: They calculated they used 1,000 L of fuel for their tipping trucks for the period ending 30 June 2021.

Step 2: To calculate their fuel tax credits they locate the tipping trucks percentage from Table 1 (5%).

Step 3: They multiply the 5% by the 1,000 L of fuel used = 50 L.

Step 4: They multiply 50 L by 'all other business uses' fuel tax credit rate for the period, which was 42.7 cents per litre = $21.35.

Step 5: The remaining fuel used (1,000 L − 50 L = 950 L) is multiplied by the relevant 'used in heavy vehicles for travelling on public roads' rate which is 16.9 cents per litre for that period = $160.55.

Step 6: To calculate the total fuel tax credit they can claim, BIATWC Construction add the two amounts together from Step 4 and Step 5 ($21.35 + $160.55 = $181.90).

If your vehicle is not in Table 1, you need to consider one of the other methods to figure out your fuel use.

For more information, see PCG 2016/11 *Fuel tax credits – apportioning taxable fuel used in a heavy vehicle with auxiliary equipment*.

Other methods of calculating fuel used in auxiliary equipment

Examples of other methods to calculate fuel used in auxiliary equipment include:

- actual records of fuel purchased and used if the auxiliary equipment of your heavy vehicle is fuelled by a separate tank
- actual fuel consumption data of the auxiliary equipment if it uses a power take-off connected to the module, such as engine diagnostic downloads
- running trials to compare the
  - vehicle's fuel consumption when the vehicle is idling with, and without the power take-off engaged
  - fuel consumption of the vehicle with and without the auxiliary equipment operating.

If you are using average fuel consumption rates that are to apply across your fleet you must:

- have undertaken the necessary testing. The testing must take into account the age, model, GVM and driver influence, conditions (terrain and climatic conditions) and the type of activity.
- retain documentary evidence to support the fuel consumption rate is reasonable and, applicable to the vehicle.

You cannot use an average fuel consumption rate without supporting documentation relevant to your vehicle and activity.

The following example is not specific to a particular type or use of auxiliary equipment. You'll need to consider your individual circumstances to determine a fair and reasonable method for your heavy vehicle and equipment.

Example: fuel consumption of the vehicle with and without the auxiliary equipment operating

TrashBGone Inc operates several 20-tonne garbage trucks with rear bin-lifting equipment and compactors (auxiliary equipment). The auxiliary equipment is powered through a power take-off while the vehicle drives along the road and while idling.

TrashBGone selects several vehicles of different ages for fuel consumption trialling. The vehicles are fuelled to capacity. Each of the vehicles then operates the bin lifting equipment and compactor, mimicking the number of bin lifts and compacting, as if it were travelling on its normal route.

For the purposes of this test, they use the tipping/compacting function 500 times. The vehicles are then refuelled and the amount of fuel used is recorded.

The amount of fuel required to refuel the vehicles represents the amount of fuel used to power the auxiliary equipment for that test.

In this example, the amount of fuel used in the test is divided by 500 for each vehicle to work out fuel consumption per bin lift/compacting.

When calculating their fuel tax credits, TrashBGone works out the amount of fuel used to power the bin lifter and compactor below:

The average fuel consumption per bin lift/compacting multiplied by the number of bin lifts/compacting made during the tax period.

The total is multiplied by the 'All other business uses rate' to total the fuel tax credits for auxiliary equipment for these vehicles.

For more information on apportioning fuel, see PCG 2016/8 *Fuel Tax Credits – apportioning fuel for fuel tax credits* which provides guidance on acceptable, practical methods for apportioning fuel .

Variables affecting fuel consumption

To work out the fuel used either by the heavy vehicle or its auxiliary equipment, your testing methods need to account for variables that affect the fuel consumption, such as:

- the terrain the heavy vehicle travels over (steep or undulating roads affecting fuel consumption)
- travelling distance compared to the interval between use of the auxiliary equipment
- climatic conditions during transportation – including whether the cargo area is thermostatically controlled
- age and design of the auxiliary equipment

- servicing and maintenance of the auxiliary equipment or heavy vehicle
- weight and capacity of the cargo area
- the vehicle's cargo configuration – fully or partially insulated, curtain or solid construction, shipping container
- Australian standards or statutory requirements required for transported goods
- driver influence, for example conservative driving practices.

Amending claims for auxiliary equipment

You can amend fuel tax credit claims for fuel used to power the auxiliary equipment of heavy vehicles travelling on public roads, if **both** the following apply:

- you claimed for liquid fuels using the rate 'in a heavy vehicle for travelling on public roads' that was reduced by the road user charge, or you didn't claim for gaseous fuels because the road user charge reduced your entitlement to nil
- the amendment is within the time limit – 4 years from the day after you needed to lodge the BAS for the tax period in which the fuel was acquired.

To work out the quantity of fuel used to power auxiliary equipment for each BAS period, you can use any apportionment method considered fair and reasonable for your circumstances.

Amending claims for liquid fuels used to power auxiliary equipment

- **Step 1:** Work out the quantity of fuel used to power the auxiliary equipment of the heavy vehicle travelling on public roads for each BAS period.
- **Step 2:** Multiply the quantity of fuel (from Step 1) by the fuel tax credit **rate** 'To power auxiliary equipment of a heavy vehicle travelling on public roads' for that period.
- **Step 3:** Multiply the quantity of fuel (from Step 1) by the fuel tax credit rate you originally used when calculating your fuel tax credits for each BAS period (rate reduced by the road user charge).

- **Step 4:** Work out the amount of your amendment for each BAS period as follows: Step 2 minus Step 3.
- **Step 5:** Add the amounts from each BAS period (from Step 4) to get the total amount of your amendment. Include your amendment at label **7D** on your BAS.

Example: work out amendment amount for a BAS period

Paul's transport business supplies goods to stores in 12-tonne trucks with refrigerated trailers.

On 10 July 2021, Paul buys 10,000 litres of diesel for use in his trucks. When he originally worked out his fuel tax credits, he used the rate 16.3 cents per litre for the entire amount of fuel. This rate is reduced by the road user charge.

Paul works out 10% of that fuel was used to power the refrigeration unit. He can submit an amendment to claim back the road user charge on 10% of the fuel used in his trucks – 1,000 litres.

Paul refers to the rates table (see **Fuel tax credits rates - business**) and works out the amount of his amendment as follows:

Step 1: Paul has determined 1,000L was used to power the auxiliary equipment

Step 2: 1,000 L × $0.427 = $427.00 (this is the amount he should have claimed)

Step 3: 1,000 L × $0.163 = $163.00 (this is the amount he has already claimed)

Step 4: $427.00 − $163.00 = $264.00 (this is the additional amount he can claim)

Step 5: Paul adds the amount from Step 4 to his business activity statement at label **7D**.

For more information on correcting errors, see **FTE 2013/1** *Fuel Tax Act 2006 – Fuel Tax: Correcting Fuel Tax Errors Determination 2013*.

Using a third party's apportionment amount

If you're subcontracted to use heavy vehicles, and the contractor engages in the same activities – for example, concrete transport industry – you may be able to use the same apportionment amounts as the contractor.

You can do this if the contractor used a fair and reasonable method to determine the amount of fuel used in auxiliary equipment, and the circumstances under which you operate is substantially identical to the contractors.

This generally means you:

- work exclusively for the contractor
- own or lease the vehicle you use under the contract
- operate a vehicle of a similar type, size and age as those operated by the contractor
- perform journeys under the contract identical to those performed by the vehicles of the contractor
- operate your vehicle under the same conditions as the contractor's vehicles.

If you operate in a similar industry to others, but don't meet the factors of a contractual arrangement detailed above, you'll need to establish your own apportionment of fuel using any method that is fair and reasonable in your circumstances.

81791

Records you need to keep

Find out what records you need to keep.

22 February 2023

You need to keep complete and accurate records to work out your fuel tax credits and support your claims. Find out what **records you need to keep**.

81792

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