

PS LA 2010/3 - Apportionment for the purposes of the Fuel Tax Act 2006

⚠ This cover sheet is provided for information only. It does not form part of *PS LA 2010/3 - Apportionment for the purposes of the Fuel Tax Act 2006*

⚠ From 1 July 2015, the term 'Australia' is replaced in nearly all instances within the GST, Luxury Car Tax, and Wine Equalisation Tax legislation with the term 'indirect tax zone' by the *Treasury Legislation Amendment (Repeal Day) Act 2015*. The scope of the new term, however, remains the same as the now repealed definition of 'Australia' used in those Acts. This change was made for consistency of terminology across the tax legislation, with no change in policy or legal effect. For readability and other reasons, where the term 'Australia' is used in this document, it is referring to the 'indirect tax zone' as defined in subsection 195-1 of the GST Act.

⚠ This document has changed over time. This version was published on *30 July 2014*



Practice Statement Law Administration

PS LA 2010/3

This law administration practice statement is issued under the authority of the Commissioner and must be read in conjunction with Law Administration Practice Statement [PS LA 1998/1](#). ATO personnel, including non ongoing staff and relevant contractors, must comply with this law administration practice statement, unless doing so creates unintended consequences or is considered incorrect. Where this occurs, ATO personnel must follow their business line's escalation process.

Taxpayers can rely on this law administration practice statement to provide them with protection from interest and penalties in the way explained below. If a statement turns out to be incorrect and taxpayers underpay their tax as a result, they will not have to pay a penalty. Nor will they have to pay interest on the underpayment provided they reasonably relied on this law administration practice statement in good faith. However, even if they don't have to pay a penalty or interest, taxpayers will have to pay the correct amount of tax provided the time limits under the law allow it.

SUBJECT: Apportionment for the purposes of the *Fuel Tax Act 2006*
PURPOSE: To provide guidance to ATO personnel by explaining when and how an entity can satisfy the 'fair and reasonable' requirement in determining the extent to which it is entitled to a fuel tax credit

TABLE OF CONTENTS	Paragraph
TERMS USED IN THIS PRACTICE STATEMENT	1
BACKGROUND	2
SCOPE	5
STATEMENT	7
Consistency of apportionment method(s)	12
Examples of commonly used methods and measures that may provide a fair and reasonable basis for working out an entity's fuel tax credit entitlement	14
Approaches to apportionment	19
Apportionment methodologies – fuel for use in different activities	21
Constructive method – actual use	21
<i>Example 1 – constructive method for actual use with different rates that is a fair and reasonable basis</i>	22
Constructive method – planned use	29
<i>Example 2 – constructive method for planned use with different rates that is a fair and reasonable basis</i>	30
Deductive method – actual use	35
<i>Using the deductive method to apportion between eligible and ineligible fuel and/or uses</i>	36
<i>Using the deductive method to apportion between multiple uses</i>	37

<i>Example 3 – deductive method for actual use where part of the taxable fuel is not eligible that is a fair and reasonable basis</i>	38
<i>Example 4 – deductive method for actual use for different taxable fuels and rates that is a fair and reasonable basis</i>	39
<i>Deductive method – planned use</i>	44
<i>Using the deductive method to apportion between eligible and ineligible fuel and/or uses</i>	45
<i>Using the deductive method to apportion between multiple uses</i>	46
<i>Example 5 – deductive method for planned use where part of the fuel is not eligible that is a fair and reasonable basis</i>	47
<i>Percentage use method</i>	50
<i>How to calculate percentages</i>	54
<i>Example 6 – percentage use method applied to more than one activity that is a fair and reasonable basis</i>	59
<i>Example 7 – percentage use method applied to more than one activity that is a fair and reasonable basis</i>	69
<i>Example 8 – percentage use method applied to more than one activity that is not a fair and reasonable basis</i>	73
<i>Estimate use method</i>	79
<i>Example 9 – estimate use method that is a fair and reasonable basis</i>	81
<i>Example 10 – estimate use method that is a fair and reasonable basis</i>	86
<i>Measures</i>	91
<i>Example 11 – average hourly fuel consumption of vehicle or equipment that is a fair and reasonable basis</i>	94
<i>Use of manufacturer’s specifications</i>	98
<i>Example 12 – use of manufacturer’s specifications when actual use is greater than amount specified in manufacturer’s specifications that is a fair and reasonable basis</i>	102
<i>Example 13 – use of manufacturer’s specifications where actual use is less than amount prescribed in the manufacturer’s specifications that is not a fair and reasonable basis</i>	109
<i>Statistical sampling</i>	115
<i>Example 14 – percentage use and statistical sampling that is a fair and reasonable basis</i>	121
<i>Example 15 – average hourly fuel consumption and statistical sampling that is a fair and reasonable basis</i>	125
<i>Example 16 – statistical sampling that is a fair and reasonable basis</i>	130
<i>Example 17 – percentage use and statistical sampling that is not a fair and reasonable basis</i>	137
<i>Fuel used in auxiliary equipment of a heavy vehicle travelling on a public road</i>	142
<i>Auxiliary equipment of a vehicle travelling on a public road</i>	147
<i>Example 18 – fuel acquired on or after 1 July 2012</i>	148
<i>Example 19 – fuel acquired between 1 July 2008 and 30 June 2012</i>	153
<i>Apportionment methodologies</i>	154
<i>Fuel to power auxiliary equipment</i>	156

<i>Statistical sampling</i>	157
<i>Variables affecting the measurement of fuel consumption in powering auxiliary equipment</i>	159
<i>Methods of determining fuel consumption of auxiliary equipment</i>	160
<i>Example 20 – separate fuel tank – log book records</i>	163
<i>Example 21 – controlled trialling based on litres per hour</i>	167
<i>Example 22 – average litres of fuel consumed by the auxiliary equipment on each journey</i>	176
<i>Example 23 – controlled trialling based on litres per activity</i>	181
<i>Example 24 – manufacturer specifications</i>	190
Using a third party's apportionment amount	196
Review of method(s) used	201
<i>Example 25 – when a review is necessary</i>	205
<i>Example 26 – when a review is not necessary</i>	208
<i>Example 27 – when it is prudent to conduct a review</i>	212
Adjustments when actual use of fuel is different from planned use of fuel	214
<i>Example 28 – adjustment to a fuel tax credit claim where actual use is different from planned use</i>	216
Documentation	218
ATTACHMENT A	Page 41

TERMS USED IN THIS PRACTICE STATEMENT

1. The following terms are used in this document:

Term	Explanation
'acquire'	'acquire' is a reference to 'acquire, manufacture in, or import into Australia' in Divisions 41, 42 and 43 of the <i>Fuel Tax Act 2006</i> and to 'acquire manufacture or import taxable fuel' in Items 10 and 11 of Schedule 3 to the <i>Fuel Tax (Consequential and Transitional Provisions) Act 2006</i> .
'auxiliary equipment'	'auxiliary equipment' means equipment of the vehicle travelling on a public road that is not used to operate the vehicle for propulsion and aspects of the vehicle's function and operation that are for the purposes of travelling on a public road. Examples of such equipment includes the bin lifting and compacting equipment of a garbage compactor, the refrigeration unit of a refrigerated vehicle and the concrete barrel of a concrete transit vehicle and the air conditioning unit of commercial buses and coaches used for passenger comfort.
'eligible activity'	'eligible activity' means an activity conducted in the course of carrying on an enterprise, making a taxable supply of or packaging taxable fuel, or generating electricity for domestic use, for which an entity has an entitlement to a fuel tax credit.

Term	Explanation
'Energy Grants Act'	'Energy Grants Act' is a reference to the <i>Energy Grants (Credits) Scheme Act 2003</i> .
'FT Act'	'FT Act' is a reference to the <i>Fuel Tax Act 2006</i> .
'enterprise'	'enterprise' is a reference to 'enterprise' as defined in section 110-5 of the FT Act. ¹
'for use in eligible activity' or 'used in an eligible activity'	'for use in eligible activity' or 'used in an eligible activity' covers taxable fuel that an entity acquires: <ul style="list-style-type: none"> for use in carrying on its enterprise for the purposes of section 41-5 of the FT Act to make a taxable supply or package in accordance with the requirements of section 41-10 of the FT Act, or for use in generating electricity for domestic use under Division 42 of the FT Act.² It includes taking into account the requirements of Divisions 41, 42, 42A and 43 of the FT Act and Items 10 and 11 of Schedule 3 to the <i>Fuel Tax (Consequential and Transitional Provisions) Act 2006</i> .
'GVM'	gross vehicle mass
'heavy vehicle'	A vehicle with a GVM of more than 4.5 tonnes. Diesel vehicles acquired before 1 July 2006 can equal 4.5 tonnes GVM and are still considered heavy vehicles.
'light vehicle'	A vehicle with a GVM of 4.5 tonnes or less
'planned use'	'planned use' is a reference to 'acquired for use' and 'intended for use'.
PTO	A power take-off is a unit fitted to the engine of a vehicle which draws power from the engine to operate the auxiliary equipment.
'taxable fuel'	'taxable fuel' is a reference to 'taxable fuel' as defined in section 110-5 of the FT Act.
'tax period'	'tax period' has the meaning given by section 195-1 of the <i>A New Tax System (Goods and Services Tax) Act 1999</i>
'Transitional Act'	'Transitional Act' is a reference to the <i>Fuel Tax (Consequential and Transitional Provisions) Act 2006</i> .

BACKGROUND

2. The FT Act provides that an entity is entitled to a fuel tax credit for taxable fuel to the extent that it is acquired for use in carrying on the entity's enterprise. The amount of the fuel tax credit may be reduced to the extent:
- because of a cleaner fuel grant, or

¹ Section 110-5 of the FT Act provides that enterprise has the meaning given by section 9-20 of *A New Tax System (Goods and Services Tax) Act 1999*. For a full explanation of the meaning of enterprise for the purposes of the FT Act see Fuel Tax Determination FTD 2006/3 *Fuel tax: what is an 'enterprise' for the purposes of the Fuel Tax Act 2006?*

² For gaseous fuel subject to the carbon pricing mechanism that was acquired during the period 1 July 2012 to 30 June 2014, a fuel tax credit was also available if the fuel was for use in agriculture, fishing operations or forestry.

- by the road user charge, to the extent that fuel is acquired for use, in a vehicle, for travelling on a public road.³
3. Fuel Tax Determination FTD 2010/1 *Fuel tax: is apportionment used when determining total fuel tax credits in calculating the net fuel amount under section 60-5 of the Fuel Tax Act 2006?*, sets out the Commissioner's view. The Commissioner considers that the use of the phrase 'to the extent that', in the context of determining fuel tax credit entitlements, contemplates apportionment.
 4. In FTD 2010/1, the Commissioner considers that an entity can use any apportionment method that is fair and reasonable in its circumstances to calculate its fuel tax credit entitlement.

SCOPE

5. This practice statement provides guidance to ATO personnel in determining whether a method of apportionment used to calculate an entity's fuel tax credit entitlement is fair and reasonable in the entity's circumstances.
6. Whilst this practice statement discusses commonly used methods, an entity is not limited to the particular methods set out. Reference has been made to these commonly used methods to illustrate to ATO personnel the 'fair and reasonable' principle in assessing the apportionment methods applied by an entity.

STATEMENT

7. In this practice statement, unless otherwise stated all legislative references are to the FT Act.
8. ATO personnel must read this practice statement in conjunction with FTD 2010/1.
9. With any provision of advice or guidance, or compliance activity, ATO personnel need to examine whether an apportionment method applied by an entity is fair and reasonable in its circumstances.
10. An entity's decision to apply an apportionment method discussed in this practice statement does not remove the need to consider if the application of that apportionment method is fair and reasonable in the entity's circumstances.
11. A method of apportionment not discussed in this practice statement may be used, provided the method is fair and reasonable in the entity's circumstances.

³ For fuel acquired during the period 1 July 2012 to 30 June 2014, fuel tax credits were also subject to a carbon reduction depending on the use of the fuel.

Consistency of apportionment method(s)

12. ATO personnel should note that the apportionment method used by an entity in a tax period must be applied consistently. Inconsistent methods used by an entity in the same tax period are likely to make the quantities of fuel worked out under them unreliable in calculating the fuel tax credit entitlement of the entity for the period. If, in the course of carrying on an enterprise,⁴ or generating electricity for domestic use, an entity acquires one or more types of fuel for use in multiple activities, it may apply a different calculation method to different activities and fuel types.⁵
13. To ensure that the method of apportionment gives a fair and reasonable reflection of the entity's fuel use, ATO personnel should review whether the method of apportionment excluded factors which may distort the results in the calculation, or modify them such that the inclusion of those factors is fair and reasonable. These factors may include extraordinary acquisitions or uses, for example a substantial acquisition of taxable fuel for a one-off contract, or a one-off increase in the use of taxable fuel for off-road use when the vehicle is generally used for transporting goods using public roads.

Examples of commonly used methods and measures that may provide a fair and reasonable basis for working out an entity's fuel tax credit entitlement

14. The Commissioner's primary concern is that the method an entity chooses for apportioning taxable fuel for the purposes of claiming fuel tax credits is fair and reasonable in its circumstances.
15. The following methods are examples of commonly used methods to assist in explaining what is a fair and reasonable basis for apportionment. There may be other methods or variations to the methods below that will be a fair and reasonable basis for apportionment, depending on the entity's circumstances.
16. The methods discussed below are:
 - the constructive methods (actual use or planned use)
 - the deductive methods (actual use or planned use)
 - the percentage use method,⁶ and
 - the estimate use method.
17. Similarly, the method an entity chooses to determine the amount of fuel used to power the auxiliary equipment of a heavy vehicle must be fair and reasonable in the circumstances. Such methods may include but are not limited to:
 - meter readings – generally the hourly use of the auxiliary equipment
 - engine monitoring system
 - fuel consumption trials, or
 - driver refuelling records.

⁴ Including making a taxable supply, or packaging of taxable fuel in accordance with section 41-20.

⁵ This does not mean that an entity cannot change the method or methods that it uses. For example, an entity may determine that another method, which also provides a fair and reasonable result, is now more appropriate in its circumstances. It can reassess its apportionment method for the whole of the relevant tax period or use a new method for a subsequent tax period. Where a change in method occurs during a tax period, the ATO personnel must check that the entity has taken into account the differences in the calculation of entitlements and that adequate records have been kept by the entity.

⁶ This incorporates the alternative percentage use method.

18. The entity may choose any method that is fair and reasonable. If the circumstances of the entity allows for more than one fair and reasonable method, but the methods produce different results, the entity may nevertheless choose any method that is fair and reasonable.

Approaches to apportionment⁷

19. Whilst apportionment for the purpose of working out an entitlement and calculating the amount of the entitlement are distinct phases, ATO personnel are to accept that in working out a fuel tax credit entitlement, an entity can either:
- undertake all the necessary apportionment (for example, with reference to section 41-5 and subsection 43-10(3)) as a single step process that encompasses working out the entitlement as well as the calculation of a fuel tax credit amount, or
 - undertake apportionment as discrete steps, for example:
 - apportionment takes place in working out entitlement to a fuel tax credit (for example with reference to section 41-5) and then in calculating the fuel tax credit amount (for example with reference to subsection 43-10(3)), or
 - apportionment takes place in working out the amount of fuel used in particular equipment or particular auxiliary equipment of a vehicle travelling on a public road or in a group of equipment or group of auxiliary equipment and then apportioning the uses of fuel in relation to that equipment or group to calculate the fuel tax credit amount.
20. The amount of the entitlement calculated should be the same whether a single step process or a discrete step calculation is performed.

Apportionment methodologies – fuel for use in different activities

Constructive method – actual use

21. This constructive method requires an entity to add up the quantity of taxable fuel that it actually used in an eligible activity in a tax period.

Example 1 – constructive method for actual use with different rates that is a fair and reasonable basis

22. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 9 and 10.*
23. *IM Company uses gravel in road construction. It transports the gravel from its depot to road construction sites using tipper trucks. IM apportions the quantity of fuel used for the tipper trucks between that used for travelling, and that which is used to power the tipper mechanism. IM Company also uses graders in the construction of the road.*

⁷ See Attachment A of this practice statement, for a flowchart and example that explain these approaches to apportionment.

24. *IM Company is entitled to a fuel tax credit for:*
- *fuel used in the tipper trucks for travelling on public roads, - which is reduced by the road user charge⁸*
 - *fuel used to power the auxiliary equipment of the tipper trucks (the tipping mechanism) - which is not reduced by the road user charge⁹*
 - *fuel used in the graders - which is not reduced by the road user charge.¹⁰*
25. *Each time it refuels a tipper truck or a grader, IM Company records the date, the vehicle, and quantity of fuel taken.*
26. *In working out the amount of fuel tax credit entitlement for the fuel used for the tipper trucks, IM Company adds up the number of litres of diesel used in the trucks for travelling on a public road (that is for the vehicle's movement along the road) and multiplies the result by the full rate of fuel tax credit.*
27. *In working out the amount of fuel tax credit entitlement for the fuel used to power the auxiliary equipment of the tipper trucks, IM Company determines, in a fair and reasonable manner, the amount of fuel used to power the auxiliary equipment of the truck. IM Company multiplies the result by the full rate of fuel tax credit.*
28. *In working out the amount of fuel tax credit entitlement for the fuel used for the graders, IM Company adds up the number of litres of diesel used in the graders and multiplies the result by the full rate of fuel tax credit.*

Constructive method – planned use¹¹

29. This constructive method requires an entity to add up the quantity of taxable fuel that it acquired for use (intended to use) in an eligible activity in a tax period.

⁸ Paragraph 23B of FTR 2008/1 explains that fuel to use 'for travelling', in the context of subsection 43-10(3), encompasses not only fuel for propulsion, but also fuel for aspects of the vehicle's function and operation that are for the purpose of travelling on a public road. Fuel for travelling would include fuel used for stopping and idling while stationary in the course of a journey as well as the use of lights, brakes, power-steering and windscreen wipers. The fuel tax credit is not reduced by the carbon charge because of the operation of paragraph 43-8(4)(c).

⁹ The fuel tax credit for fuel used to power the tipping mechanism of the tipper truck is not reduced by the road user charge as this fuel is not used in the vehicle for travelling on the public road and therefore subsection 43-10(3) does not apply. Note too that for fuel acquired between 1 July 2012 and 30 June 2014, the fuel tax credit for fuel used to power the tipping mechanism of the tipper truck is not subject to a carbon reduction because the fuel is used in a vehicle with a GVM greater than 4.5 tonnes 'travelling on a public road' and therefore paragraph 43-8(4)(c) applies.

¹⁰ FTR 2008/1 explains that the movement of a vehicle engaged in the construction, repair or maintenance of a road, for example, a grader, bulldozer, or water cart which occurs on the road or portion of the road that is under construction, repair or maintenance is not 'travelling' for the purposes of subsection 43-10(3). For fuel acquired before 1 July 2012, if the movement of the vehicle on a public road does not constitute 'travelling on a public road' and there would not have been an entitlement to an on-road credit under the Energy Grants Act for the fuel acquired for this movement, entities are entitled to a half fuel tax credit from 1 July 2008 to 30 June 2012 and the full fuel tax credit from 1 July 2012. However, if the movement of the vehicle on a public road does not constitute 'travelling on a public road' and there would have been an entitlement to an on-road credit under the Energy Grants Act for the fuel acquired for this movement, entities are entitled to a fuel tax credit which is reduced by the road user charge for fuel acquired between 1 July 2008 and 30 June 2012. Note: for taxable fuel acquired between 1 July 2012 and 30 June 2014, the fuel tax credit was also subject to a carbon reduction.

¹¹ Also referred to as the constructive method – acquired for use.

Example 2 – constructive method for planned use with different rates that is a fair and reasonable basis

30. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 13 and 14.*
31. *Allegra Company runs a wet hire¹² business and uses front end loaders of a similar make and model with a GVM greater than 4.5 tonnes in carrying out work in agricultural¹³ and building construction activities. The front end loaders do not travel on public roads.*
32. *Allegra Company acquires diesel fuel in bulk for use in carrying on its enterprise, including for use in its front end loaders. It is entitled to a fuel tax credit for diesel fuel acquired for use in agricultural and building construction activities.¹⁴*
33. *Allegra Company is a monthly BAS lodger and at the start of the month plans the operating hours for the front end loaders in agricultural and road construction activities. This is done by reference to their scheduled work activity for the month.*
34. *Allegra Company adds up the number of litres of diesel fuel acquired for use in each activity to apportion its fuel tax credit entitlement for the month.*

Deductive method – actual use

35. The deductive method may provide a fair and reasonable basis for apportioning the following:
 - eligible and ineligible fuel and/or uses, and/or
 - multiple uses that either attract a full fuel tax credit or a fuel tax credit reduced by a cleaner fuel grant or the road user charge.¹⁵

Using the deductive method to apportion between eligible and ineligible fuel and/or uses

36. The deductive method of working out the quantity of taxable fuel that an entity actually used in an eligible activity in a tax period is:

the total quantity of fuel used less the quantity of disqualified fuel where:

total quantity of fuel used is the total quantity of fuel that an entity actually used in the tax period

¹² The reference to wet hire here is a reference to an arrangement that covers the supply of equipment, driver and fuel, and charging the customer an hourly fee for the supply.

¹³ For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to a carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied for the period between 1 July 2012 and 30 June 2014.

¹⁴ In this example, for fuel acquired between 1 July 2008 and 30 June 2012, Allegra Company is entitled to a full fuel tax credit for fuel acquired for use in its front end loaders in agricultural activities as it was (or would have been) previously entitled to an off-road credit for the fuel acquired for these agricultural activities under the Energy Grants Act. An entitlement to a half fuel tax credit for fuel acquired prior to 1 July 2012, for use in the building construction activities is the result of Allegra Company not being (or would not have been) entitled to an off-road credit for the fuel acquired for these activities under the Energy Grants Act. Note: for fuel acquired between 1 July 2012 and 30 June 2014, the fuel tax credit for fuel used in construction activities was reduced by a carbon reduction. No carbon reduction applied to fuel used in agricultural activities.

¹⁵ In accordance with the requirements of Division 43. For fuel acquired between 1 July 2012 and 30 June 2014, fuel tax credits were also subject to a carbon reduction depending on the use of the fuel.

quantity of disqualified fuel is:

- the quantity of taxable fuel that was actually used for a purpose for which there is no entitlement to a fuel tax credit in the tax period, and/or
- the quantity of fuel that is not taxable fuel.¹⁶

Using the deductive method to apportion between multiple uses

37. Depending on the entity's circumstances, the deductive method may be used to apportion between multiple uses, these being, ineligible uses and eligible uses attracting different rates by applying the method to each type of taxable fuel and use of that taxable fuel.

Example 3 – deductive method for actual use where part of the taxable fuel is not eligible that is a fair and reasonable basis

38. *Ella Company operates a delivery business and acquires diesel fuel in bulk for use in both heavy and light vehicles in its enterprise. Ella Company is not entitled to a fuel tax credit for the fuel acquired for use in its light vehicles. Each time Ella Company refuels a vehicle, it records the date, the vehicle and quantity of taxable fuel taken. As Ella Company is a monthly BAS lodger, once a month it adds up the number of litres of taxable fuel used in the light vehicles to calculate the amount of taxable fuel for which it is not entitled to a fuel tax credit and subtracts this amount from the total amount of taxable fuel acquired for the month to calculate the amount of taxable fuel for which it is entitled to a fuel tax credit.*

Example 4 – deductive method for actual use for different taxable fuels and rates that is a fair and reasonable basis

39. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 17, 18 and 20.*
40. *Jackson Company operates a forestry business. It acquires diesel fuel in bulk for use in both its heavy vehicles and light vehicles to transport, on public roads, planks from the sawmill to customers. The heavy vehicles do not have auxiliary equipment. It also acquires petrol in bulk for use in its light vehicles travelling on a public road, and its forklifts to move timber during the processing of timber into planks, to move the planks to the dispatch bay, and to load the planks onto the trucks at the dispatch bay. Jackson Company is entitled to a fuel tax credit, which is reduced by the road user charge, for diesel fuel used in the heavy vehicles. Jackson Company has no entitlement to a fuel tax credit for diesel fuel used in the light vehicles, travelling on public roads. It is entitled to a full fuel tax credit for petrol used in the forklifts.¹⁷*

¹⁶ Fuel can be disqualified fuel on the basis that it is not taxable fuel or that it is used for an ineligible purpose – see for example the disqualification rules in Subdivision 41-B.

¹⁷ In this example, for fuel acquired between 1 July 2008 to 30 June 2012, Jackson Company is entitled to a full fuel tax credit for petrol acquired for use in its forklifts in forestry activities as it was (or would have been) previously entitled to an off-road credit for the fuel acquired for these forestry activities under the Energy Grants Act. For fuel acquired during this period for use in forklifts in activities that do not constitute forestry activities, a half credit was available. For fuel acquired during the period 1 July 2012 to 30 June 2014, there was no carbon reduction to the extent the fuel was for use in forestry. Where fuel was acquired for use in forklifts between 1 July 2012 and 30 June 2014, and that use did not qualify as use in forestry activities, a carbon reduction applied.

41. *Jackson Company decides to use the deductive method to calculate the quantity of diesel fuel and petrol that it acquired.*
42. *Each time they refuel a light vehicle, Jackson Company records the date, the vehicle, and quantity of diesel fuel taken. As Jackson Company is a monthly BAS lodger, once a month it adds up the number of litres of diesel fuel used in the light vehicles to calculate the amount of diesel fuel for which it is not entitled to a fuel tax credit and subtracts this amount from the total amount of diesel fuel acquired for the month to calculate the amount of diesel fuel for which it is entitled to a fuel tax credit.*
43. *Each time they refuel a light vehicle, Jackson Company records the date, the vehicle, and quantity of petrol taken. As Jackson Company is a monthly BAS lodger, once a month it adds up the number of litres of petrol used in its light vehicles to calculate the amount of petrol used. It subtracts the amount of fuel used from the total amount of petrol acquired for the month to calculate the amount of petrol for which it is entitled to a fuel tax credit for use of the fuel in the forklifts.¹⁸*

Deductive method – planned use¹⁹

44. The deductive method may provide a fair and reasonable basis for apportioning the following:
 - eligible and ineligible fuel and/or uses, and/or
 - multiple uses that either attract a full fuel tax credit or a fuel tax credit reduced by a cleaner fuel grant or the road user charge.²⁰

Using the deductive method to apportion between eligible and ineligible fuel and/or uses

45. The deductive method of working out the quantity of taxable fuel that an entity acquires for use in an eligible activity in a tax period is:

the total quantity of fuel acquired less the proposed quantity of disqualified fuel where:

total quantity of fuel acquired is the total quantity of fuel that an entity acquired in the tax period.

proposed quantity of disqualified fuel is:

 - the quantity of taxable fuel that was acquired for use for a purpose for which there is no entitlement to a fuel tax credit in the tax period or; and/or
 - the quantity of fuel that is not taxable fuel.²¹

¹⁸ As explained above, for fuel acquired between 1 July 2008 and 30 June 2012, a full or half credit would apply depending on whether the fuel used in forklifts was used in forestry activities. Similarly, for fuel acquired between 1 July 2012 and 30 June 2014, a full credit was available for fuel used in forklifts in forestry activities, but where the forklift was used for non-forestry activities, a carbon reduction applied.

¹⁹ Also referred to as the deductive method – acquired for use.

²⁰ In accordance with the requirements of Division 43. For fuel acquired between 1 July 2012 and 30 June 2014, fuel tax credits may also have been reduced by the carbon reduction depending on the use of the fuel.

²¹ Fuel can be disqualified fuel on the basis that it is not taxable fuel or that it is used for an ineligible purpose– see for example the disentitlement rules in Subdivision 41-B.

Using the deductive method to apportion between multiple uses

46. Depending on the entity's circumstances, the deductive method may be used to apportion between multiple uses, these being ineligible uses and eligible uses attracting different rates by applying the method to each type of taxable fuel and use of that taxable fuel.

Example 5 – deductive method for planned use where part of the fuel is not eligible that is a fair and reasonable basis

47. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnote 22.*
48. *Nugget runs a farm and acquires diesel fuel in bulk for use in his agricultural activities²² and in a four wheel drive light vehicle. Nugget is entitled to a fuel tax credit for diesel fuel acquired for agricultural activities and has no entitlement to a fuel tax credit for diesel fuel used in the light vehicle travelling on public roads. Nugget chose the deductive method to calculate the amount of taxable fuel used in the light vehicle for which he is not entitled to a fuel tax credit.*
49. *Nugget uses the light vehicle to collect provisions from town twice a week. He has worked out using odometer readings that each trip uses 5 litres of diesel fuel. As Nugget claims his fuel tax credit entitlement on a monthly basis, he works out the number of litres of fuel acquired for use (planned use) in the light vehicle to calculate the amount of taxable fuel for which he is not entitled to a fuel tax credit (that is, 8 trips x 5 litres per trip = 40 litres) and subtracts this amount from the total amount of fuel he acquires for the month to calculate the amount of taxable fuel for which he is entitled to a fuel tax credit.*

Percentage use method

50. Where an entity's taxable fuel usage between activities is fairly constant over tax periods, the percentage use method may provide a fair and reasonable basis for apportioning the following taxable fuel uses in subsequent periods:
- eligible and ineligible uses, and/or
 - multiple uses that either attract a full fuel tax credit or a fuel tax credit reduced by the a cleaner fuel grant or the road user charge.²³
51. By using this method, the amount of taxable fuel that an entity acquires for use in an eligible activity is expressed as a percentage of the total quantity of taxable fuel that it acquires.²⁴
52. If an entity acquires one or more types of taxable fuel for use in one or more activities it should establish a separate percentage for each taxable fuel type and each activity for which they are not entitled to a fuel tax credit, entitled to a fuel tax credit and/or a different amount of fuel tax credit.

²² For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to a carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied to fuel acquired between 1 July 2012 and 30 June 2014.

²³ In accordance with the requirements of Division 43. For fuel acquired between 1 July 2012 and 30 June 2014, a carbon reduction may also have applied depending on the use of the fuel.

²⁴ If an entity's operations or fuel usage is not constant, the percentage use method may not be suitable for calculating its entitlement to a fuel tax credit.

53. If an entity's operations or fuel usage is variable, for example, subject to seasonal fluctuations, it may be difficult for the entity to establish a percentage that is representative of its taxable fuel usage over a number of tax periods. In these circumstances, the percentage use method may not be a fair and reasonable basis for calculating a fuel tax credit entitlement.

How to calculate percentages

54. To calculate the percentage of different taxable fuel uses, an entity must keep detailed records of its taxable fuel usage over a sample period that it chooses depending on its circumstances (for example, if the pattern of use is regular, a four week sample period may be appropriate).
55. The quantity of taxable fuel actually used in an eligible activity in the sample period may be worked out from the entity's taxable fuel usage records using one of the basic calculation methods (constructive or deductive method).
56. An entity's taxable fuel usage pattern in the sample period must be representative of its taxable fuel usage in an eligible activity.
57. The percentage is then calculated using the following formula:

$$\text{Percentage rate} = \frac{\text{Taxable fuel used in an activity}}{\text{Total taxable fuel used}} \times \frac{100}{1}$$

where:

taxable fuel used in an activity is the quantity of taxable fuel used in an activity during the sample period.

Depending on the purpose of the calculation, the activity may be:

- an eligible or ineligible taxable fuel use
- multiple eligible purposes attracting different rates of fuel tax credit,²⁵ and/or
- multiple activities that attract the same rate of fuel tax credit.

total taxable fuel used is the total quantity of taxable fuel used (comprising all uses of taxable fuel) during the sample period.

58. Depending on the size of the fleet of vehicles/equipment, an entity may find it expedient to employ statistical sampling in calculating the relevant percentage of taxable fuel used in an activity.²⁶

Example 6 – percentage use method applied to more than one activity that is a fair and reasonable basis

59. *For this example, for an explanation on the entitlement to a fuel tax credit in relation to a vehicle travelling on a public road refer to footnotes 27 and 28.*

²⁵ Please note that there will be a different percentage for each activity or where activities are grouped a different percentage for each fuel tax credit rate.

²⁶ Please refer to paragraphs 115 to 141 of this practice statement for an explanation on the use of statistical sampling in this context.

60. *Raj Heavy Enterprises runs a delivery business for a major distributor. It is on a long term contract to deliver goods to a fixed number of outlets three times a week. It uses 10 heavy vehicles and five 4WD light vehicles in operating this business. The heavy vehicles all have auxiliary equipment used to load and unload the vehicles.²⁷ The vehicles only travel on public roads.*
61. *Raj Heavy Enterprises purchases diesel fuel which is stored in a bulk fuel tank for use in both the heavy and the light vehicles. The diesel fuel used in the heavy vehicles for travelling on public roads attracts a fuel tax credit that is reduced by the road user charge and there is no entitlement to a fuel tax credit for fuel used in the light vehicles. Raj Heavy Enterprises needs to apportion between heavy and light vehicles and further apportion the fuel used in the heavy vehicles between fuel used in powering auxiliary equipment of the vehicles and fuel used for travelling on public roads.²⁸*
62. *Raj Heavy Enterprises needs to show that the diesel fuel usage for which it will claim fuel tax credits is in the same proportion as diesel fuel used in the trucks, compared to the total amount of diesel fuel that it acquires. To do this, it uses maintenance records to verify equipment usage and establish fuel consumption rates for its vehicles. It also keeps a record of the number and type of vehicles, including any of those vehicles which have auxiliary equipment, as well as the journeys for which the vehicles are used.*
63. *Raj Heavy Enterprises decides that since it has a reasonably steady diesel fuel usage pattern, between its heavy and light vehicles, based on its fixed long term contract, it will establish a percentage for the diesel fuel used in the trucks and use that percentage in future to work out the amount of diesel fuel for which it is entitled to a fuel tax credit.*
64. *Raj Heavy Enterprises purchases 5,000 litres of diesel fuel and records all fuel usage for a six week period, as Raj Heavy Enterprises considers that a six week sample period represents its pattern of fuel use.*
65. *The records for the six week period showed that Raj Heavy Enterprises used 4000 litres for eligible uses.*
66. *The percentage is calculated as follows:*

$$\begin{aligned} \text{Percentage rate} &= \frac{\text{Taxable fuel used in an activity}}{\text{Total taxable fuel purchased}} \times \frac{100}{1} \\ \text{Percentage rate} &= \frac{4000}{5000} \times \frac{100}{1} \\ &= 80\% \end{aligned}$$

Where the **taxable fuel used in an activity** is the quantity of taxable fuel used in Raj Heavy Enterprises' heavy vehicles and the **total taxable fuel purchased** is the total quantity of diesel fuel purchased during the six week sample period.

²⁷ Under section 41-20 there is no fuel tax credit entitlement for taxable fuel for use in a vehicle with a gross vehicle mass of 4.5 tonnes or less for travelling on a public road. The provision applies to all fuel used in the vehicle, including any auxiliary equipment of the vehicle.

²⁸ Paragraph 23B of FTR 2008/1 explains that fuel to use 'for travelling', in the context of subsection 43-10(3), encompasses not only fuel for propulsion, but also fuel for aspects of the vehicle's function and operation that are for the purpose of travelling on a public road. Fuel for travelling would include fuel used for stopping and idling while stationary in the course of a journey as well as the use of lights, brakes, power-steering and windscreen wipers. For the period between 1 July 2012 and 30 June 2014 the fuel tax credit is not subject to the carbon reduction because of the operation of paragraph 43-8(4)(c). The carbon reduction provisions only applied to fuel acquired between 1 July 2012 and 30 June 2014.

67. *Raj Heavy Enterprises calculates its eligible taxable fuel use to be 80% of the total taxable fuel usage. When Raj Heavy Enterprises make future bulk purchases of diesel fuel, it is entitled to a fuel tax credit, reduced by the road user charge, for 80% of the diesel fuel that it purchases, provided that this percentage continues to provide a fair and reasonable basis of apportionment.*
68. *In working out the amount of fuel tax credit for this fuel Raj Heavy Enterprises must further apportion the fuel between the fuel used in the vehicle, for travelling, and for powering the auxiliary equipment of the vehicle.²⁹*

Example 7 – percentage use method applied to more than one activity that is a fair and reasonable basis

69. *George runs a dairy farm on which he uses equipment to milk cows. The milk is sold to distributors. George also runs a road transport business from an adjoining property in which he uses heavy vehicles. The heavy vehicles do not have auxiliary equipment. George acquires diesel fuel for use in both of his businesses. The diesel fuel is stored in a bulk fuel tank on his farm.*
70. *George needs to show that the diesel fuel usage for which he will claim fuel tax credits is in the same proportion as the diesel fuel usage in the activities he carries out in running his farm and his road transport businesses, compared to the total amount of diesel fuel he acquires. George is entitled to a full fuel tax credit for diesel fuel acquired for use on his farm. He is also entitled to a fuel tax credit, reduced by the road user charge, for diesel fuel used in his road transport business. As the heavy vehicles do not have auxiliary equipment, no further apportionment of the fuel used in the heavy vehicles is required. George should therefore calculate a percentage rate for each eligible activity representing the proportion of diesel fuel used in each activity relative to total diesel fuel used.*
71. *George acquires 50,000 litres of diesel fuel. Taking into account his business operations and regular pattern of fuel usage, George decides to use a five week sample period. He records all usage of the diesel fuel in each activity for five weeks. As he is entitled to both a full and a reduced fuel tax credit for the respective activities, he calculates a separate percentage rate for diesel fuel used in each activity.*
72. *Using the percentage use method, George determines that 80% of the total diesel fuel he has acquired is used in his road transport business and 20% is used on his farm. When George makes future bulk acquisitions of diesel fuel he is entitled to claim a fuel tax credit, reduced by the road user charge, for 80% of the diesel fuel and a full fuel tax credit for the remaining 20% provided that those percentages continue to provide a fair and reasonable basis of apportionment in the tax period to which George is attributing the claim.*

Example 8 – percentage use method applied to more than one activity that is not a fair and reasonable basis

73. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 31 and 32.*

²⁹ Refer to paragraphs 142 to 195 of this practice statement for an explanation of auxiliary equipment and methodologies of apportionment.

74. *Roger Company runs a wet hire³⁰ business and provides bobcat services for various activities in a rural area, in landscaping, agricultural³¹ and construction activities. Roger Company also uses 4-WD light vehicles in his enterprise. The 4-WD light vehicles travel on public roads. The bobcats are only used off public roads.*
75. *Roger Company acquires diesel fuel in bulk for use in carrying on its enterprise, for use in the bobcats and the 4-WD light vehicles. Roger Company is entitled to a full fuel tax credit for diesel fuel for use in the agricultural activities landscaping and construction activities.³² Roger Company has no entitlement to fuel tax credit for taxable fuel issued in the 4-WD light vehicles.*
76. *The use of the vehicles in the various activities is variable as it depends on the flow of work and type of work in which Roger Company is engaged to provide its wet hire services.*
77. *Roger Company decides to apply the percentage use method to calculate the amount of diesel fuel it acquires for use in carrying on its enterprise. Roger Company chooses a 12 week sample period and usage of the diesel fuel in each activity is recorded for 12 weeks. As the fuel tax credit to which Roger Company is entitled will depend on the activity for which the fuel is used, Roger Company calculates a separate percentage rate for diesel fuel used in each activity. It determines that in that 12 week period 50% of the total diesel fuel it has acquired is used in agricultural activities, 25% in landscaping activities, and 15% in construction activities and 10% in the 4-WD light vehicles. This equates to a full fuel tax credit for 90% of the diesel fuel (used in the bobcats) and nil fuel tax credit for the remaining 10% (used in the 4-WD light vehicles).*
78. *Due to the variable pattern of use of the bobcats in various activities, the percentage use method would not be considered a fair and reasonable basis to apportion diesel fuel between different activities to calculate Roger Company's entitlement to a fuel tax credit in relation to fuel acquired for use in the various activities. This is because the fuel usage pattern in the sample period is not representative of fuel usage between activities over tax periods due to the variable nature of the flow of work.*

Estimate use method

79. The estimate use method may provide a fair and reasonable basis for apportioning the following uses:
- eligible and ineligible uses, and/or

³⁰ The reference to wet hire here is a reference to an arrangement that covers the supply of equipment, driver and fuel, and charging the customer an hourly fee for the supply.

³¹ For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied to fuel acquired between 1 July 2012 and 30 June 2014.

³² In this example, for fuel acquired between 1 July 2008 and 30 June 2012, Roger Company is only entitled to a full fuel tax credit for diesel fuel acquired for use in the bobcats in agricultural activities as it was (or would have been) previously entitled to an off-road credit for the diesel fuel acquired for these agricultural activities under the Energy Grants Act. For fuel acquired during this period for landscaping and construction activities, only a half credit was available as Roger Company would not have been entitled to an off-road credit for the diesel fuel acquired for these activities under the Energy Grants Act. For fuel acquired between 1 July 2012 and 30 June 2014, a full fuel tax credit (with no carbon reduction) was available for fuel acquired for use in the bobcats in agricultural activities. However, the fuel tax credit in respect of landscaping and construction activities had to be reduced by the carbon reduction. Note: for fuel acquired between 1 July 2012 and 30 June 2014, the breakdown of fuel use between agricultural activities and other activities would have been relevant, as no carbon reduction was applicable to fuel used in agricultural activities (or use in a vehicle travelling on a public road) but a carbon reduction applied to Roger Company's other uses of fuel.

- multiple uses that either attract a full fuel tax credit or a fuel tax credit reduced by a cleaner fuel grant or the road user charge.³³
80. The estimate use method of working out the quantity of taxable fuel that an entity acquires for use in an eligible activity in a tax period requires the entity to make a fair and reasonable estimate of the quantity of taxable fuel it acquires for use or actually uses in a tax period.

Example 9 – estimate use method that is a fair and reasonable basis

81. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnote 34.*
82. *David and Grace run a small potato farm 15km from Manjimup. They contract out the transport of their crop and their only diesel road vehicle is a 4WD utility (a light vehicle). The utility is used on the farm for various farm activities and on average is used eight times per month to travel to Manjimup for groceries, social and recreational activities.*
83. *David and Grace are aware that diesel fuel acquired for use in making the journeys to Manjimup is not eligible for a fuel tax credit. Based on the vehicle's fuel consumption, they estimate that each of these journeys uses three litres of diesel fuel. Their fuel supplier delivers four 200 litre drums of fuel each month. Some of this diesel fuel is used to fuel their utility and the rest in agricultural activities.³⁴*
84. *David and Grace are registered for Goods and Services Tax and have elected to lodge their BAS on a monthly basis. As they are billed monthly David and Grace calculate and claim their fuel tax credits monthly. Their monthly fuel quantities are calculated as follows:*
- total diesel fuel purchased (200 litres × 4 drums per month) = 800 litres*
- *fuel used on road (2 trips per week × 4 weeks = 8 trips)*
 - *8 trips × 3 litres per trip = 24 litres*
 - *fuel used in agriculture = 800 litres less 24 litres = 776 litres*
85. *Using the estimate use method, David and Grace determine they are entitled to a fuel tax credit each month in respect of 776 litres of fuel.*

Example 10 – estimate use method that is a fair and reasonable basis

86. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnote 36.*
87. *Attilo Enterprises operates a construction business. Attilo Enterprises acquires diesel fuel in bulk for use in its fleet of vehicles comprising 10 graders, 10 bobcats, 10 front end loaders, and 10 4WD light vehicles travelling on public roads. Each type of vehicle is of a similar make and model.*

³³ In accordance with the requirements of Division 43. For fuel acquired between 1 July 2012 and 30 June 2014, apportionment may also be required where fuel is used for both activities that attract a nil carbon reduction and activities that do require a carbon reduction.

³⁴ For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to carbon charge by the operation of subsection 43-8(4). The carbon reduction provisions only applied for the period between 1 July 2012 and 30 June 2014.

88. *Based on the nature of its operations, Attilo Enterprises is entitled to a full fuel tax credit for fuel used in the graders, bobcats, and front end loaders in off-road construction activities, a fuel tax credit, reduced by the road user charge, for fuel used in the graders, bobcats, and front end loaders, for travelling on public roads, to get to and from worksites, and has no entitlement to a fuel tax credit for fuel used in the light vehicles travelling on public roads.*
89. *The use of the vehicles in the construction activities across tax periods is variable as it depends on the flow of work. Accordingly, Attilo Enterprises decides to use the estimate use method to calculate its fuel tax credit entitlement.*
90. *Attilo Enterprises has established the average hourly fuel consumption for each type of vehicle. To apportion diesel fuel between a full fuel tax credit, a fuel tax credit, reduced by the road user charge, and no fuel tax credit, Attilo Enterprises uses the relevant average hourly fuel consumption³⁵ to work out the quantity of diesel fuel acquired for use in each activity based on its planned activities for the tax period.³⁶*

Measures

91. A measure can be used as part of an apportionment method (for example, the percentage use method).³⁷
92. The Commissioner accepts that an entity can use any appropriate reliable measure as the basis for calculating the amount of taxable fuel that it acquires for use in an eligible activity. Examples of known reliable measures include:
- odometer readings of kilometres actually travelled
 - route distances if a vehicle operates on fixed routes
 - kilowatt hours of electricity generated
 - hours of operation of vehicle or equipment, or
 - average hourly fuel consumption of vehicle or equipment.³⁸
93. Although these are commonly used measures, because of the diverse range of eligible activities, this is not an exhaustive list and there may be other measures that are appropriate in an entity's circumstances.

Example 11 – average hourly fuel consumption of vehicle or equipment that is a fair and reasonable basis

94. *For the example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 40 and 41.*

³⁵ See paragraphs 91 to 101 of this practice statement for a discussion on reliable measures.

³⁶ For fuel acquired between 1 July 2012 and 30 June 2014 the 'full' fuel tax credit rate would be reduced by the carbon reduction.

³⁷ As explained at paragraphs 50 to 78 of this practice statement.

³⁸ For example, from job sheet records.

95. *Following on from Example 2 of this practice statement,³⁹ Allegra Company uses its sales invoices itemising actual hours of work completed by each front end loader over two separate four week periods (one in summer and one in winter) and the quantity of fuel actually used in the same periods to determine an average hourly fuel consumption of the front end loaders in carrying out work in the agricultural⁴⁰ and building construction activities. Allegra Company establishes that the front end loaders have different average hourly fuel consumption figures for each activity.⁴¹*
96. *To apportion fuel between the two activities, Allegra Company works out the quantity of diesel fuel acquired for use in each activity by multiplying the front end loaders' total operating hours for each activity by the respective average hourly fuel consumption figure.*
97. *The apportionment of fuel by reference to the average hourly fuel consumption of a front end loader in various working and climatic conditions would be considered a fair and reasonable basis for calculating Allegra Company's entitlement to a fuel tax credit in relation to its front end loaders for diesel fuel for use in agricultural and building construction activities.*

Use of manufacturer's specifications

98. If an entity uses the manufacturer's specifications to calculate its fuel consumption, it should determine if it is suitable in its circumstances.
99. The appropriateness of the manufacturer's specifications is a question of fact, to be decided on the facts and circumstances of each case by considering relevant factors including:
- whether the entity's use of the vehicle/equipment aligns with the use of the vehicle/equipment on which the manufacturer has based the fuel consumption indications
 - the age of the entity's vehicle/equipment with reference to the manufacturer's specifications
 - the maintenance history of the vehicle/equipment, or
 - an assessment of the nature of the entity's use with reference to the manufacturer's general indicators of light, medium or heavy use.
100. Where an entity's fuel consumption for a particular vehicle/equipment is greater than the manufacturer's figures, the entity may decide that a different measure is appropriate, but it will need to demonstrate the basis on which the variation occurs.
101. It is accepted that in some cases, in order to reduce its compliance costs, an entity may choose to rely on the manufacturer specifications, notwithstanding that it may indicate a lower fuel consumption than its actual fuel consumption.

³⁹ Please see paragraphs 31 to 34 of this practice statement.

⁴⁰ For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to a carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied for the period between 1 July 2012 and 30 June 2014.

⁴¹ Note: the breakdown between agricultural and construction use of the front end loaders was only required for fuel acquired between 1 July 2008 and 30 June 2012 (to allow for a full rate for fuel used in agriculture activities and a half rate for construction use) and for fuel acquired between 1 July 2012 and 30 June 2014 (to differentiate between a nil carbon reduction for fuel used in agriculture activities and the carbon reduction applicable to construction activities).

Example 12 – use of manufacturer’s specifications when actual use is greater than amount specified in manufacturer’s specifications that is a fair and reasonable basis

102. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnote 42.*
103. *Jack runs a farm on which he operates two tractors in carrying out agricultural activities.⁴² He also uses a 4WD light vehicle for travel on public roads.*
104. *Jack acquires diesel fuel in bulk for use in the tractors and the 4WD light vehicle. He is entitled to a full fuel tax credit for the fuel used in the tractors, and has no entitlement to a fuel tax credit for the fuel used in the 4WD travelling on public roads.*
105. *Jack is therefore required to apportion the taxable fuel between fuel acquired for use in the two tractors and fuel acquired for use in the 4WD light vehicle.*
106. *In order to determine a fair and reasonable basis of apportionment, Jack decides to calculate his fuel consumption based on an appropriate assessment of his use of the tractors against the manufacturer’s specifications for the tractors. The manufacturer’s specifications for his tractors provide the hourly fuel consumption based on a light, medium and heavy load factor.*
107. *One of the tractors has been modified for a particular use and as a result its actual fuel consumption per hour is higher than the amount provided for in the manufacturer’s specifications for a heavy load factor.*
108. *Jack decides to use the manufacturer’s specifications to calculate the fuel consumption of the tractors.*

Example 13 – use of manufacturer’s specifications where actual use is less than amount prescribed in the manufacturer’s specifications that is not a fair and reasonable basis

109. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 44 and 45.*
110. *Guilia Pty Ltd runs a wet hire⁴³ business and operates 10 mobile cranes. Guilia Pty Ltd provides its services in agricultural and construction activities. The mobile cranes do not travel on public roads.⁴⁴*
111. *Guilia Pty Ltd acquires diesel fuel in bulk for use in the mobile cranes.*

⁴² For the period between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to a carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied for the period between 1 July 2012 and 30 June 2014.

⁴³ The reference to wet hire here is a reference to an arrangement that covers the supply of equipment, driver and fuel, and charging the customer an hourly fee for the supply.

⁴⁴ Guilia will not have to apportion its use for fuel acquired after 1 July 2014 as no carbon reduction applies to fuel acquired after 30 June 2014 regardless of use. For fuel acquired between 1 July 2012 and 30 June 2014, no carbon reduction applies to fuel for use in agriculture, but a carbon reduction applies to fuel used in construction. For fuel acquired between 1 July 2008 and 30 June 2012, Guilia Pty Ltd is entitled to a full fuel tax credit for fuel acquired for use in the mobile cranes in agricultural activities as it was (or would have been) previously entitled to an off-road credit for the fuel acquired for these agricultural activities under the Energy Grants Act, and to a half fuel tax credit for fuel acquired for use in the mobile cranes in construction activities as it was not (or would not have been) entitled to an off-road credit for the fuel acquired for these activities under the Energy Grants Act.

112. *The manufacturer's specifications for the mobile cranes provide the hourly fuel consumption based on a light, medium and heavy load factor. Guilia Pty Ltd uses the cranes for different activities under various conditions. These elements affect the load factor. In these circumstances, the fuel consumed per hour for a mobile crane should be determined with reference to the relevant load factor in the manufacturer's specification. In Guilia Pty Ltd's case, the load factor is high for agricultural activities and medium for construction activities. However, Guilia Pty Ltd decides to use a high load factor to calculate its fuel use in the mobile cranes.*
113. *In these circumstances, Guilia Pty Ltd's assessment of the nature of use of the mobile cranes in construction activities is incorrect. Accordingly, Guilia Pty Ltd's apportionment of fuel used between agricultural and construction activities based on the mobile cranes being used under a high load factor would not be on a fair and reasonable basis.*
114. *Guilia Pty Ltd should instead calculate its claim by applying the manufacturer's specifications against the correct load factor in each activity. This will allow the calculation of the diesel fuel used in the mobile cranes to be based on the correct consumption per hour. This would result in a fair and reasonable basis of apportionment between the diesel fuel used in the mobile cranes between the different activities.⁴⁵*

Statistical sampling

115. An entity may use acceptable statistical sampling as part of any method that it uses.
116. This means that if an entity has a number of the same or similar vehicles or equipment that are used in the same or similar way:
- it may use statistical sampling to work out the relevant method or measure (for example, percentage use, average hourly fuel consumption) for some of the vehicles or equipment, and
 - the sample result may be applied to the other same or similar vehicles or equipment.
117. The appropriateness of statistical sampling is determined by consideration of the circumstances of each particular case.
118. The Commissioner considers that appropriate statistical sampling will occur where:
- an adequate statistical sampling design has been employed (for example, stratified sampling where an entity has a fleet of different types of vehicles or equipment and they are sampling different types of vehicles or equipment, which requires grouping vehicles or equipment into relatively homogenous groups and sampling each group)
 - the sample size is determined on an appropriate confidence interval and tolerable error⁴⁶
 - the sample is a random and representative sample of the population from which it has been drawn, and
 - the data obtained from the sample is correct.⁴⁷

⁴⁵ As stated above, Giulia will not have to apportion its fuel use between agriculture and construction activities for fuel acquired from 1 July 2014.

⁴⁶ Confidence interval is the reliability you would like the sample to generate. Tolerable error is the error in a population (sample size) that you are prepared to accept.

119. The Commissioner will accept, in all circumstances a sample size determined on a maximum confidence interval of 95% and a tolerable error of 10%.⁴⁸ However, this does not mean that an entity cannot select a higher or lesser confidence interval or tolerable error. If an entity chooses a lower confidence interval and/or higher tolerable error than the accepted maximum level, it must be able to demonstrate that the parameters chosen are fair and reasonable in its circumstances.
120. An entity must be able to substantiate the reasonableness of applying the sample result to a fleet or group of vehicles or a number of pieces of equipment.

Example 14 – percentage use and statistical sampling that is a fair and reasonable basis

121. *Bunji Company Pty Ltd runs a mining operation. It acquires diesel fuel in bulk for use in a fleet of heavy vehicles, equipment and a large number of 4WD light vehicles of a similar make and model. It is entitled to a fuel tax credit for diesel fuel used in the light vehicles for use other than when travelling on a public road, and has no entitlement to a fuel tax credit for diesel fuel used in the light vehicles travelling on public roads.*
122. *As its fuel usage is fairly constant, Bunji Company Pty Ltd decides to use the percentage use method to calculate the amount of taxable fuel for which it is entitled to a fuel tax credit.*
123. *Based on the high number of light vehicles in the fleet and their pattern of use, Bunji Company Pty Ltd uses statistical sampling to establish the quantity of diesel fuel used in the light vehicles for use other than when travelling on a public road and when travelling on a public road. The sample size is determined using a 95% confidence level and a tolerable error of 10%, and a random but representative selection of its light vehicles.*
124. *Using the representative sample of its light vehicles and respective log book records, Bunji Company Pty Ltd works out the quantity of diesel fuel acquired for use in the light vehicles for a sample period of four weeks to apportion taxable fuel between use in the vehicle for other than when travelling on a public road and in the vehicle when travelling on a public road. It uses this to calculate the percentage of diesel fuel used in its light vehicles for use other than travelling on a public road for which it has an entitlement to a fuel tax credit.*

Example 15 – average hourly fuel consumption and statistical sampling that is a fair and reasonable basis

125. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 50 and 51.*
126. *Hay Walker Pty Ltd runs a wet hire⁴⁹ business and uses 25 harvesters of a same or similar make and model.*

⁴⁷ See the Audit statistical sampling guidelines on ATO website at www.ato.gov.au for more information.

⁴⁸ A tolerable error of 10% is the same as a tolerable error of +/- 5%. For example the tolerable error range is 90% – 100%. See *Keeping records and calculating eligible litres* on the ATO website at www.ato.gov.au (Alternative percentage use method) for an example of a sampling table which provides a 95% confidence level and a tolerable error of 10%.

⁴⁹ The reference to wet hire here is a reference to an arrangement that covers the supply of equipment, driver and fuel, and charging the customer an hourly fee for the supply.

127. *Hay Walker Pty Ltd acquires diesel fuel in bulk for use in carrying on its enterprise, including for use in its harvesters⁵⁰ and is entitled to a full fuel tax credit for fuel acquired for use in the harvesters in agricultural activities.⁵¹*
128. *Based on the number of harvesters, Hay Walker Pty Ltd decides to use statistical sampling to establish the average hourly fuel consumption of the harvesters in agricultural activities.*
129. *Provided Hay Walker Pty Ltd uses the appropriate statistical sampling technique in its circumstances, the use of statistical sampling to establish the average hourly fuel consumption of the harvesters can provide a fair and reasonable basis for calculating the amount of taxable fuel acquired for use in the harvesters in agricultural activities.*

Example 16 – statistical sampling that is a fair and reasonable basis

130. *Whelan Enterprises Ltd acquires diesel fuel and petrol for use in its generators to generate electricity, in its forklifts to load goods onto the trucks in the warehouse, and in its heavy vehicles to deliver goods. The heavy vehicles do not have auxiliary equipment. Whelan Enterprises Ltd acquires LPG for use in light vehicles that travel on public roads to deliver some goods to customers. Excise duty had been paid on the LPG.*
131. *Whelan Enterprises Ltd does not have an amount of fuel tax credit for the LPG acquired for use in the light vehicles. It is entitled to a fuel tax credit for the taxable fuels acquired for use in the generators and forklifts, and a fuel tax credit, reduced by the road user charge, for taxable fuels acquired for use in the heavy vehicles.*
132. *In the circumstance, a fair and reasonable method to calculate the fuel tax credit entitlement will exclude the LPG, for which there is no fuel tax credit, and apportion taxable fuels to determine what proportion of fuel is reduced by the road user charge.*
133. *To achieve this outcome, Whelan Enterprises Ltd decides to proceed with discrete steps using the statistical sampling method with the measure⁵² being hourly consumption.*
134. *As a preceding step to statistical sampling, Whelan Enterprises Ltd excludes vehicles that run on LPG from those vehicles/equipment that run on the other taxable fuel (that is, diesel fuel or petrol).*
135. *Whelan Enterprises Ltd then groups its vehicles and equipment according to the type and use of fuel, such as, a group being generators that use diesel fuel, generators that use petrol, forklifts that use diesel fuel, forklifts that use petrol, trucks that use diesel fuel. By taking a statistically valid sample from these groups based on hourly consumption (the measure), Whelan Enterprises Ltd will be able to determine a fair and reasonable apportionment between the different types and rates of fuel tax credits.*

⁵⁰ For fuel acquired between 1 July 2012 and 30 June 2014 the agricultural activities are as specified in Subdivision 43-B and as such the fuel tax credit for the fuel used in the activity is not subject to a carbon reduction by the operation of subsection 43-8(4). The carbon reduction provisions only applied to fuel acquired between 1 July 2012 and 30 June 2014.

⁵¹ In this example, for fuel acquired between 1 July 2008 and 30 June 2012 Hay Walker Pty Ltd is entitled to a full tax credit for fuel acquired for use in its harvesters in agricultural activities as it was (or would have been) previously entitled to an off-road credit for the fuel acquired for these agricultural activities under the Energy Grants Act.

⁵² See paragraphs 91 to 114 of this practice statement for the discussion on measures.

136. *If Whelan Enterprises Ltd did not isolate those vehicles that run on LPG from those vehicles/equipment that run on diesel or petrol the apportionment of taxable fuel would not be on a fair and reasonable basis.*

Example 17 – percentage use and statistical sampling that is not a fair and reasonable basis

137. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnote 53.*
138. *Setzer Mining Company runs a mining operation. Setzer Mining Company acquires diesel fuel in bulk for use in its fleet of vehicles comprising 50 forklifts, 25 front end loaders, 25 graders and 100 4WD light vehicles travelling on public roads. Based on the nature of its operations, Setzer Mining Company is entitled to a fuel tax credit for diesel fuel used in the forklifts, front end loaders, graders, and has no entitlement to a fuel tax credit for diesel fuel used in the light vehicles travelling on public roads.⁵³*
139. *Setzer Mining Company decides to use the percentage use method to calculate its fuel tax credit entitlement. Based on the high number of each type of vehicle in the fleet it decides to use statistical sampling to establish the quantity of fuel used in the vehicles. The sample size is determined using a 95% confidence level and a tolerable error of 10% and a random selection of vehicles from the total fleet of 200.*
140. *Given the different types and uses of the vehicles, the random selection of vehicles without first grouping them into relatively homogenous groups would not provide an adequate sampling design to provide a fair and reasonable basis for calculating the percentage rate for fuel used in the various types of vehicles.*
141. *Setzer Mining Company should group the vehicles into homogenous groups (having regard to the make and model of each type of vehicle) and sample each group. For example, if the type of vehicle is of the same/similar make and model and the fuel used for the various purposes in each type of vehicle is fairly constant then it would be appropriate to sample from each group, that is, a group of 50 forklifts, a group of 25 front end loaders, a group of 25 graders and a group of 100 light vehicles.*

Fuel used in auxiliary equipment of a heavy vehicle travelling on a public road

142. At paragraph 2 of this practice statement, it is mentioned that an entity is entitled to a fuel tax credit for taxable fuel to the extent that it is acquired for use in carrying on the entity's enterprise. The amount of the fuel tax credit entitlement may be reduced:
- because of a cleaner fuel grant, or
 - by the road user charge, to the extent that fuel is acquired for use, in a vehicle, for travelling on a public road.⁵⁴

⁵³ For fuel acquired between 1 July 2012 and 30 June 2014, any fuel tax credit available for use in forklifts, front end loaders and graders would have been subject to a carbon reduction.

⁵⁴ Paragraph 23B of FTR 2008/1 explains that fuel to use 'for travelling', in the context of subsection 43-10(3), encompasses not only fuel for propulsion, but also fuel for aspects of the vehicle's function and operation that are for the purpose of travelling on a public road. Fuel for travelling would include fuel used for stopping and idling while stationary in the course of a journey as well as the use of lights, brakes, power-steering and windscreen wipers. The fuel tax credit is not reduced by the

143. Where the fuel was acquired between 1 July 2006 and 30 June 2012 the entitlement to and the amount of a fuel tax credit entitlement was affected by the Transitional Act. The Transitional Act also referred to the entitlement to a credit under the Energy Grants Act. The Transitional Act dealt with fuel acquired:
- (i) for use in a vehicle travelling on a public road⁵⁵
 - (ii) for incidental use in relation to a vehicle travelling on a public road⁵⁶
 - (iii) for a use for which an on-road credit (other than for (i) or (ii) above) would have been payable under the Energy Grants Act⁵⁷
 - (iv) for a use for which an off-road credit would have been payable under the Energy Grants Act,⁵⁸ or
 - (v) between 1 July 2008 and 1 July 2012, for a use where no grant would have been payable under the Energy Grants Act.⁵⁹
144. Fuel acquired for use in a vehicle for travelling on a public road is subject to the road user charge. Fuel acquired for use in the auxiliary equipment of such a vehicle is not subject to the road user charge, however the amount of fuel tax credit is subject to the;
- FT Act where it was acquired on or after 1 July 2012, or
 - Transitional Act where it was acquired between 1 July 2006 and 30 June 2012.
145. Therefore, to determine the amount of fuel tax credit entitlement for fuel that is acquired for use in a heavy vehicle travelling on a public road, where the vehicle has auxiliary equipment, the fuel must be apportioned between that which is for use for the vehicle's movement on the road, and that which is for use to power the auxiliary equipment. This is not limited to auxiliary equipment in use while the vehicle is travelling on the public road.

carbon charge because of the operation of paragraph 43-8(4)(c). The operation of section 41-20 means that there is no entitlement to a fuel tax credit for fuel used in a vehicle with a GVM of 4.5 tonnes or less travelling on a public road. Subitem 12(1) of the Transitional Act provides that section 41-20 does not apply to vehicles with a GVM of 4.5 tonnes acquired before 1 July 2006. Note, for fuel acquired between 1 July 2012 and 30 June 2014, fuel tax credits were also subject to a carbon reduction depending on the use of the fuel.

⁵⁵ Where fuel was acquired for use in a vehicle travelling on a public road the Transitional Act did not apply. The amount of the fuel tax credit was reduced by the road user charge by application of subsection 43-10(3).

⁵⁶ Incidental use meant a use within the meaning of section 8 of the Energy Grants Act. The Transitional Act did not apply to fuel acquired for this use. Subsection 43-10(3) did not apply to this fuel as it was not used in a heavy vehicle for travelling on a public road. The amount of the fuel tax credit for this fuel was that which would have been payable under Division 43.

⁵⁷ If an on-road credit would have been payable under the Energy Grants Act for the use of the fuel, the amount of fuel tax credit was that which would have been payable under Division 43. Subsection 43-10(3) applied to all of the fuel used in the vehicle including the fuel used to power the auxiliary equipment of the vehicle. Refer to subitems 10(4) and 11(4) of the Transitional Act.

⁵⁸ If an off-road credit would have been payable under the Energy Grants Act for the use of the fuel, the amount of fuel tax credit was that which would have been payable under Division 43. Subsection 43-10(3) did not apply to reduce the fuel tax credit by the road user charge. Refer to subitem 11(5) of the Transitional Act.

⁵⁹ The amount of fuel tax credit was half of the amount payable under Division 43 of the FT Act. Refer to subitem 11(6) of the Transitional Act.

146. PSLA 2013/4 (GA)⁶⁰ sets out the percentage the Commissioner considers is a fair and reasonable apportionment of the taxable fuel used to power the auxiliary equipment of heavy vehicles. An entity may choose to apply the percentage set out in PSLA 2013/4 (GA), or an apportionment they have determined under an apportionment methodology that is fair and reasonable in the entity's circumstance. How an entity can meet the fair and reasonable requirement in determining the apportionment is explained below.

Auxiliary equipment of a vehicle travelling on a public road

147. Auxiliary equipment is a mechanism or apparatus of a vehicle that does not propel or operate the aspects of the vehicle that are for the purpose of travelling. Auxiliary equipment includes, but is not limited to:
- the mechanisms for loading and unloading goods transported (including pumps for bulk haulage vehicles, tipper mechanisms of dump trucks)
 - the mixing barrel and associated loading and unloading mechanism of a concrete transit vehicle
 - the bin lift and compacting mechanism of a garbage compactor (including side, front and rear loading)
 - the waste jetter and vacuum system of vehicles used in the cleaning of drains
 - the gas pump of a gas tanker
 - winches and towing equipment of a tow truck
 - elevated platforms (buckets) and snorkels
 - truck mounted drilling equipment
 - truck loading crane
 - brushing mechanism of street sweepers⁶¹
 - the refrigeration unit of a refrigerated trailer, and
 - air conditioning of commercial buses and coaches for passenger comfort.

Example 18 – fuel acquired on or after 1 July 2012

148. *For this example, the amount of fuel tax credit entitlement, as affected by the use of the taxable fuel and relevant to the date of acquisition of the fuel is explained in footnotes 62 and 63.*

⁶⁰ Practice Statement Law Administration (General Administration) PS LA 2013/4 *Fuel tax credits - Road user charge - apportioning taxable fuel used in a vehicle for powering the auxiliary equipment of the vehicle.*

⁶¹ Paragraph 23 of FTR 2008/1 explains that vehicles undertaking road maintenance and road construction are not 'travelling' for the purpose of subsection 43-10(3). A street sweeper is included as a vehicle conducting road maintenance. Therefore, whilst the brushing mechanism is auxiliary equipment of the vehicle, the vehicle is not travelling when the brushes are operating. This means there is no requirement to apportion the fuel used in the vehicle between fuel used to move the vehicle and fuel used to power the brushes while the street sweeper is performing its role. However the vehicle is 'travelling' when moving to and from the point of brushing and therefore the fuel used in the vehicle for this purpose is subject to the road user charge.

149. *Rundle Billboard Advertising erects and maintains advertising billboards. The billboards are placed in prominent positions near a public road or on the street front of large buildings. Rundle Billboard Advertising operates heavy vehicles with auxiliary equipment. The auxiliary equipment includes a truck mounted drill and a mounted mobile crane, used in erecting new billboards, and an elevated platform. All of the auxiliary equipment is powered by a PTO.*
150. *The vehicles travel on a public road to the location of the billboard. The vehicles may move off the public road a short distance when the work is done to the billboard or may remain on the public road if the billboard is affixed to a building.*
151. *The fuel used in the vehicles needs to be apportioned to that used in the vehicle for travelling on the public road and that used in operating the auxiliary equipment.*
152. *The fuel was acquired after 1 July 2012 and therefore the FT Act applies. The fuel tax credit for:*
- *the fuel used in the heavy vehicles for travelling on the public road is reduced by the road user charge⁶²*
 - *the fuel used to power the elevated platform, the truck mounted drill and the mobile crane is not reduced by the road user charge.⁶³*

Example 19 – fuel acquired between 1 July 2008 and 30 June 2012

153. *Using the same situation as discussed in Example 18, but for fuel acquired between 1 July 2008 and 30 June 2012, the fuel tax credit for:*
- *the fuel used in the heavy vehicles for travelling on the public road is reduced by the road user charge⁶⁴*
 - *the fuel used to power the elevated platform, the truck mounted drill and the mobile crane is half of the fuel tax credit that would otherwise be payable under the FT Act.⁶⁵*

⁶² Paragraph 23B of FTR 2008/1 explains that fuel to use 'for travelling', in the context of subsection 43-10(3), encompasses not only fuel for propulsion, but also fuel for aspects of the vehicle's function and operation that are for the purpose of travelling on a public road. Fuel for travelling would include fuel used for stopping and idling while stationary in the course of a journey as well as the use of lights, brakes, power-steering and windscreen wipers. The fuel tax credit is not reduced by the carbon charge because of the operation of paragraph 43-8(4)(c).

⁶³ For fuel acquired between 1 July 2012 and 30 June 2014, the fuel tax credit applicable to this fuel use was subject to a carbon reduction because at the time the auxiliary equipment is operated the associated vehicle is not travelling on the public road and therefore subsection 43-8(4) does not apply. It does not matter whether the vehicle remains on the public road while the work on the billboard is undertaken. Refer to examples 2 and 3 of FTR 2008/1. The carbon reduction provisions only applied to fuel acquired between 1 July 2012 and 30 June 2014.

⁶⁴ Paragraph 11(1)(i) of the Transitional Act applies to the use of the fuel. The Transitional Act does not apply and therefore subsection 43-10(3) applies.

⁶⁵ As there would have been no entitlement to either an on-road or off-road credit under the Energy Grants Act for the use of the fuel, subitem 11(6) of the Transitional Act applies. The amount of fuel tax credit for the fuel is half of the amount that would have been under Division 43.

Apportionment methodologies

154. The constructive, deductive, percentage and estimate use methods are acceptable methods for determining the extent of a fuel tax credit entitlement. The methods are used to apportion the quantity of fuel between the different activities of the enterprise. Similarly, these methods may be applied in apportioning the fuel used, or to be used, in a heavy vehicle, for either its travel on a public road, or for use in powering the auxiliary equipment of the vehicle. However, in apportioning the fuel, the fuel consumption of the auxiliary equipment, or for the vehicle's travel, must be determined so that quantity of fuel acquired for use in the heavy vehicle can be reasonably apportioned between each use.
155. An entity can use any methodology, which is fair and reasonable in the circumstances in determining the fuel used to power auxiliary equipment. In considering whether a methodology used by the entity is fair and reasonable in the circumstances regard should be given as to whether the methodology takes into account the type and use of the auxiliary equipment, the variables in the use of the auxiliary equipment, the mechanisms available to measure the fuel usage and the records required to substantiate the amount of fuel apportioned. If the circumstances of the entity allows for more than one fair and reasonable method, but the methods produce different results, the entity may nevertheless choose any method that is fair and reasonable.

Fuel to power auxiliary equipment

156. Fuel used to power the auxiliary equipment may be sourced from a separate fuel tank or from the tank that fuels the main engine. The auxiliary equipment may also take power from the main engine through a PTO, which in turn increases the fuel used by the vehicle while it is travelling, or while the vehicle is idling.

Statistical sampling

157. Statistical sampling is discussed at paragraphs 115 to 120 of this practice statement. The discussion is in the context of fuel acquired for use in different activities of the enterprise. In the context of apportionment of fuel used to power the auxiliary equipment of a heavy vehicle, that discussion is not relevant.
158. What is required is that the sample of auxiliary equipment tested is a reasonable representation of the auxiliary equipment used in the enterprise. The sample of vehicles tested must include vehicles of various size and age. Similarly, the sample of auxiliary equipment tested must include the equipment of the different configuration, size and age. Where the fuel consumption of the vehicles and their auxiliary equipment tested are inconsistent, a larger test sample may be such that a consistent fuel consumption rate may be derived. Importantly, an entity must be able to substantiate the reasonableness of applying the testing result from the sample tested to a fleet or group of vehicles or a number of pieces of equipment.

Variables affecting the measurement of fuel consumption in powering auxiliary equipment

159. Listed below are several variables and factors that affect the fuel consumption of the auxiliary equipment or the associated vehicle:
- the terrain the vehicle travels (steep or undulating roads affecting fuel consumption of the vehicle)
 - variable distance of travelling 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 vehicle
 - weight and capacity of the cargo area
 - configuration of the vehicle's cargo area (fully or partially insulated, curtain or solid construction, shipping container)
 - Australian standards or statutory requirements to be met in relation to goods transported, and
 - driver influence, for example conservative driving practices.

Methods of determining fuel consumption of auxiliary equipment

160. The variables that affect the fuel consumption of the auxiliary equipment or the vehicle mean that the testing methods may vary. Any method may be used provided it results in a fair and reasonable apportionment of the fuel and can be substantiated.
161. Examples of methods of calculating fuel consumption of auxiliary equipment may include and are not limited to:
- (a) Actual records of fuel supplied to auxiliary equipment based on the amount of fuel acquired. This method is suitable where the equipment is fuelled from a separate tank to the vehicle's main tank.
 - (b) Manufacturer specification of fuel consumption of the auxiliary equipment.
 - (c) Engine diagnostic download.

A vehicle that is equipped with an electronic control module has the capacity to report a detailed history of the actual fuel consumption of the vehicle. If the PTO is connected to the module, the running time and fuel consumption of the PTO will be reported. Generally, the diagnostic will indicate the idle time and fuel consumption of the vehicle with and without the PTO engaged.
 - (d) Trials to compare the fuel consumption of the vehicle with and without the auxiliary equipment operating.
 - (e) Comparing the vehicle's fuel consumption when the vehicle is idling with, and without the PTO engaged.
 - (f) A combination of any of the methods above, as the situation requires.

162. The following examples are of apportionment methodologies which are considered to be fair and reasonable. The examples are for demonstration purposes only and are not intended to be specific to the particular type or use of auxiliary equipment discussed in the example. An entity that has the same type of auxiliary equipment mentioned in an example is not limited to using the methodology discussed in that example.

Example 20 – separate fuel tank – log book records

163. *Weymouth Heavy Haulage operates several heavy vehicles. Each vehicle has auxiliary equipment attached.*
164. *Fuel is supplied to the auxiliary equipment from a fuel tank that is separate to that which supplies the main engine.*
165. *Each driver purchases fuel using a fuel card account held by Weymouth Heavy Haulage. The vehicle registration is recorded by the fuel supplier at the time of fuel purchase. The driver makes a log book entry of each purchase of fuel and records separately the litres of fuel supplied to the main fuel tank and to the fuel tank of the auxiliary equipment.*
166. *Using the monthly statement issued by the fuel card operator, the amount of fuel purchased is reconciled against the log book records. On reconciliation, the fuel is allocated to that supplied to the fuel tank of the auxiliary equipment based on the driver log book records.*

Example 21 – controlled trialling based on litres per hour

167. *Infrastructure Services operates several heavy vehicles in its enterprise. The vehicles vary in size and age. Infrastructure Services uses 3 types of auxiliary equipment, truck mounted drilling rigs, mobile cranes and mobile elevated platforms. The auxiliary equipment varies in size and age and are all powered through a PTO while the vehicle is idling. Only one type of equipment is attached to a vehicle at any time.*
168. *Each vehicle travels on a public road to the point of the operation of the auxiliary equipment. When the auxiliary equipment is operated the vehicle is stationary on the public road. The fuel used to power the auxiliary equipment is not subject to the road user charge hence Infrastructure Services need to determine the amount of fuel used to power the auxiliary equipment.*
169. *A sample of each type of auxiliary equipment, and the vehicle to which it is attached, is selected for fuel consumption trialling. The sample includes equipment and vehicles of various ages and manufacturers and is representative of the different types of auxiliary equipment used by Infrastructure Services. The equipment is sorted into categories by type, and then into subcategories, by size and the size of its associated vehicle.*
170. *The vehicle is fuelled to capacity. The fuelling site is a short distance from the trialling site and as such Infrastructure Services do not take into account the fuel consumed travelling from the fuelling site.*
171. *The auxiliary equipment is operated for 1 hour while the vehicle is idling. The vehicle is then refuelled to capacity at the same fuelling site. Again the fuel consumed travelling to and from the fuelling site is not taken into account.*
172. *The amount of fuel needed to refuel the vehicle to capacity after the testing period represents the amount of fuel used to power the auxiliary equipment.*

173. *Infrastructure Services determines the operating hours of each type of auxiliary equipment from a sample of service records of the equipment. The sample is representative of the size of that type of equipment. Using the total hours the auxiliary equipment is operated for a period and the fuel usage per hour of operation, as determined during the fuel consumption trial, the amount of fuel used by each type of auxiliary equipment is calculated.*
174. *The percentage of fuel used by each type of auxiliary equipment for the period is derived from the total amount of fuel acquired for the period. The percentage is then apportioned, based on a weighted average to account for the different sizes of each type of auxiliary equipment.*
175. *This weighted average percentage is used to apportion the use of fuel going forward.*

Example 22 – average litres of fuel consumed by the auxiliary equipment on each journey

176. *Cement Supplier operates several heavy vehicles in the transportation of concrete. The vehicles vary in size and age. Auxiliary equipment attached to the vehicle is used for the loading, transportation and unloading of the material. The auxiliary equipment is powered through a PTO. During loading and unloading the PTO is engaged while the vehicle is idling.*
177. *To meet the Australian Standards for the delivery of concrete, Cement Supplier operates the auxiliary equipment of the vehicle during the loading and unloading process under specific conditions. These conditions include the speed and period the auxiliary equipment is operated. The Australian Standard must be complied with for every delivery of concrete and therefore Cement Supplier maintains accurate records of the time and conditions in which the auxiliary equipment operates. Cement Supplier also keeps accurate records of each delivery.*
178. *Cement Supplier tests the fuel consumption of a sample of its heavy vehicles. The vehicles selected are representative of the various sizes and ages of vehicles in its fleet. The fuel consumption is measured while the vehicle is idling, both with and without the auxiliary equipment in operation. The auxiliary equipment is operated during the tests under the same conditions as required to meet the Australian Standard for the delivery of concrete.*
179. *The testing enables Cement Supplier to determine the average amount of fuel consumed by the auxiliary equipment for each delivery. Although the auxiliary equipment is in operation while the vehicle is travelling on the public road to the delivery site, Cement Supplier considers the amount of energy required to power the auxiliary equipment is negligible and does not measure nor take this fuel consumption into account.*
180. *Cement Supplier apportions the amount of fuel used in powering the auxiliary equipment during each tax period based on the average fuel consumption of the auxiliary equipment of each delivery (that is, fuel consumed during loading and unloading of the concrete) multiplied by the number of deliveries accounted for during the tax period.*

Example 23 – controlled trialling based on litres per activity

181. *Gouger Services operates several heavy vehicles in its enterprise, all of which include auxiliary equipment. While the auxiliary equipment is used for the same activity, rubbish bin lifting and compacting the rubbish deposited into the tray of the vehicle, the auxiliary equipment varies in configuration, that is, either side or front bin lifting mechanism. The associated vehicle varies in size in relation to the configuration of the bin lifting mechanism. The auxiliary equipment is powered by a PTO and is operated only while the vehicle is stationary and idling.*
182. *Gouger Services sorts the vehicles into categories based on the configuration of the bin lifting mechanism. The vehicles within the categories are then sorted into subcategories by age. Gouger Services selects a sample of vehicles of each subcategory for fuel consumption testing. The sample is representative of the configuration and age of the vehicles operated by Gouger Services.*
183. *While there is the function of compacting the rubbish deposited in the tray of the vehicle, Gouger Services considers that determining the amount of fuel used in this function is too difficult to measure and that the fuel used for this operation is not significant. Gouger Services therefore does not take into account the fuel used in this function in determining the percentage of fuel used in the auxiliary equipment.*
184. *The vehicle is fuelled to capacity. Bins, typical of those from which the vehicles collect rubbish, are filled to capacity. Each bin is lifted several times using the lifting mechanism. The vehicle is again refuelled to capacity.*
185. *The amount of fuel needed to refuel the vehicle after the testing period represents the amount of fuel used to power the bin lifting mechanism. It is determined that the amount of fuel consumed varied depending on the configuration of the bin lifting mechanism. The amount of fuel consumed is consistent for each configuration.*
186. *Gouger Services maintains records of the number of bins from which rubbish is collected (and hence each bin lift) for each category of vehicle it operates. From this data they calculate the number of bins lifted during a typical month. This amount of bins is multiplied by the number of litres it takes to lift a bin. The result is the number of litres used to lift bins in a typical month.*
187. *Gouger Services maintains records of fuel dispensed to its vehicles. From these records they calculate the total litres of fuel dispensed to each category of vehicles during the selected month.*
188. *The total fuel used to lift the bins for the month is shown as the percentage of the total fuel used in the vehicles for the month. This percentage of fuel is apportioned to powering the bin lifting equipment. The remaining amount of fuel is apportioned to powering the vehicle.*
189. *This apportionment is applied going forward.*

Example 24 – manufacturer specifications

190. *Grote Logistics operates several heavy vehicles with auxiliary equipment in its transportation enterprise.*
191. *The auxiliary equipment is fuelled from the same tank that fuels the main engine. The auxiliary equipment is operated independently from the vehicle and as such the vehicle does not need to be idling while the auxiliary equipment is in use.*

192. *A meter on the auxiliary equipment measures the hours it operates. This information is used to identify when the equipment is to be serviced.*
193. *Grote Logistics refer to the manufacturer specification to determine the fuel consumption of the auxiliary equipment. The specifications state a range of fuel consumption from high level operation to low level operation. The actual consumption in this range depends on the climatic conditions and the type of goods transported.*
194. *Grote Logistics operates throughout the year and throughout Australia and therefore the auxiliary equipment is operated in differing climatic conditions. They also transport a range of goods requiring the auxiliary equipment to be operated at differing levels. Grote Logistics therefore consider it is reasonable to base the fuel consumption on the average fuel consumption of the high and low operation rates.*
195. *To apportion the amount of fuel acquired during the tax period to its auxiliary equipment, Grote Logistics use the number of hours of operation during the tax period multiplied by the average litres of fuel consumed per hour.*

Using a third party's apportionment amount

196. As mentioned at paragraph 14 of this practice statement, the Commissioner's primary concern is that the method an entity chooses for apportioning taxable fuel for the purposes of claiming fuel tax credits is fair and reasonable in its circumstances. This means that an entity must determine its own apportionment of fuel and the subsequent amount of the fuel tax credit entitlement.
197. Some entities, and in particular those in the cement transport or commercial coach and bus transportation industry, engage subcontractors to do the same services as those done by the heavy vehicles of their fleet.
198. Typically, under such an arrangement the subcontractor:
- works exclusively for the entity they are contracted to
 - own or lease the vehicle they use under the contract
 - operate a vehicle of a similar type, size and age as those that are typical of the vehicles operated by the contracting entity
 - perform journeys under the contract that are identical to those performed by the vehicles of the contracting entity
 - operate their vehicle under the same conditions as that of the contractor's vehicles.
199. In this situation, where the methodology used by the contractor to determine the amount apportioned to use in the auxiliary equipment of its vehicles is fair and reasonable, it is reasonable that the subcontractor apportion the same amount of fuel in their vehicles. This is because the circumstance under which the subcontractor operates is substantially identical to that of the contractor. The only distinguishing factor between the operation of the vehicles is in their ownership.

200. It is not considered appropriate for another entity to apply the same amount of apportionment of fuel used in their vehicle on the basis that they operate in the same industry. An entity that does not meet the factors of a contractual arrangement mentioned above will need to establish its own apportionment of fuel using any method that is considered fair and reasonable in their circumstances. This is because, in determining the entitlement to a fuel tax credit, including any apportionment of fuel, it is the circumstances of the entity claiming the fuel tax credit that must be taken into account not the general circumstances of the industry.

Review of method(s) used

201. Where an entity's circumstances change, the method of apportionment needs to be reviewed to establish if it is still a fair and reasonable basis on which to calculate its fuel tax credit entitlement. For example, a method should be reviewed if there has been a significant impact on factors that are important to the conduct of an enterprise, or a change in the assumptions which form the basis for the selection and application of the method. This includes the loss of contracts that affect an entity's business operations or a change in the activities undertaken as part of business operations.
202. ATO personnel are to have regard to the changing circumstances of the entity and the duration of time between reviews conducted by the particular entity. These are questions of fact to be determined on a case by case basis.
203. ATO personnel should appropriately tailor any compliance activity to the risks inherently present in circumstances where an entity has not reviewed its methodology over an extended period of time. For this purpose, an extended period of time is five years.
204. To determine whether or not an entity has adequately reviewed its method of apportionment during the relevant periods, ATO personnel should seek documentation that sets out the process undertaken, the steps taken by the entity in monitoring the continuing relevance of any method used, and reasons why the method of apportionment was reviewed for changing circumstances.

Example 25 – when a review is necessary

205. *Chandra Shine Operations Ltd runs a civil construction business. It uses the percentage use method to calculate the amount of taxable fuel that it acquires for use in carrying on its enterprise to work out its fuel tax credit entitlement.*
206. *Six months into using the relevant percentages, Chandra Shine Operations Ltd gains a major long term contract to construct a tunnel. As a result of the new contract and the difficult nature of the project, it adds new vehicles to its fleet and determines it necessary to allocate additional equipment to activities that would ordinarily require less equipment.*
207. *These changes result in particular classes of equipment consuming more fuel than normal. Given the changes in fuel consumption and that the tunnel project is long term, the basis of the previously derived percentages has changed. Thus, for Chandra Shine Operations Ltd to apportion its fuel use on a fair and reasonable basis, a reassessment of the percentages calculated is warranted.*

Example 26 – when a review is not necessary

208. *Luca Company runs a mining operation and acquires diesel fuel in bulk for use in heavy vehicles and equipment for mining activities and in 4WD light vehicles.*

209. *Based on its mining operations, Luca Company is entitled to a fuel tax credit for diesel fuel acquired for use in mining activities and no entitlement to a fuel tax credit for diesel fuel used in the light vehicles travelling on public roads. Luca Company decides to use the percentage use method to apportion diesel fuel between the different activities and calculates separate percentage rates for diesel fuel used in each activity.*
210. *Fifteen months into using the relevant percentages, five of the light vehicles were used for some unexpected travel on a public road, totalling about 250 km each, in place of their normal pattern of use.*
211. *Given the unexpected and one-off nature of the use of diesel fuel in the five light vehicles, Luca Company would not need to review the percentages it has calculated to work out the amount of taxable fuel that it acquires for use in each activity. However Luca Company will need to make a fuel tax adjustment as explained in Example 28 of this practice statement.⁶⁶*

Example 27 – when it is prudent to conduct a review

212. *Following on from Example 26 of this practice statement, Luca Company has not conducted a review of its method of apportionment for almost five years. Although there has not been a change in circumstances which has prompted an earlier review by Luca Company, it decides to review all procedures and systems in place to ensure that its method of apportionment and calculations continue to be on a fair and reasonable basis. Luca Company documents this review.*
213. *After 5 years from the tax period in which Luca Company commenced using its apportionment method an audit is conducted. The ATO officer obtains documents that provide evidence that Luca Company has reviewed its method of apportionment and is satisfied that the review has been adequately performed. This is because the documents show the method of apportionment continues to provide a fair and reasonable basis for working out the fuel tax credit. Although this represents only part of the review process, under a risk based audit, the ATO officer is satisfied that a lower level of scrutiny is appropriate.*

Adjustments when actual use of fuel is different from planned use of fuel

214. An entity's entitlement to a fuel tax credit for taxable fuel is worked out on the basis of what the fuel is intended for when it was acquired. If an entity acquired the fuel with the intention of using it for a particular purpose but subsequently used it for a different purpose for which a different amount of fuel tax credit is applicable or for a purpose for which there is no entitlement to a fuel tax credit, there will be a fuel tax adjustment.⁶⁷
215. Fuel tax adjustments are attributable to the tax period in which the entity becomes aware of the adjustment.⁶⁸

⁶⁶ See paragraphs 214 to 217 of this practice statement for a discussion on adjustments.

⁶⁷ See Division 44 for fuel tax adjustments.

⁶⁸ See section 65-10 for attribution rules for fuel tax adjustments. Paragraph 2.97 of the Revised Explanatory Memorandum to the Fuel Tax Bill 2006 and the Fuel Tax (Consequential and Transitional Provisions) Bill 2006 considers the test of when a person becomes aware that an adjustment is necessary is an objective test. This means they will be taken to become aware of a fuel tax adjustment when all the necessary facts to make a reasonable person aware are known to them.

Example 28 – adjustment to a fuel tax credit claim where actual use is different from planned use

216. *Following on from Example 26 of this practice statement, Luca Company had claimed its fuel tax credit entitlement on its planned use of the light vehicles. It realises after it has claimed its fuel tax credit entitlement that five of the light vehicles were actually used for more travel on public roads than planned.*
217. *As Luca Company has no entitlement to a fuel tax credit for diesel fuel used in the light vehicles travelling on public roads, it will need to adjust the original fuel tax credit claimed in relation to diesel fuel acquired for use in the five light vehicles to reflect the actual use of diesel fuel in these vehicles. For example, if under the percentage use method Luca Company had made a claim based on the five light vehicles' general 90% off-road use and the unexpected trips reduce this percentage to 70% for off-road use for that tax period, Luca Company will have to make an increasing fuel tax adjustment to reflect the decreased percentage of off-road use of the five vehicles.⁶⁹*

Documentation

218. ATO personnel should ensure that an entity has sufficient and appropriate records to support its method of apportionment and any changes to that method over time.⁷⁰ This requirement may also extend to steps taken by an entity to monitor the continuing relevance of any method of apportionment used, including documenting the factors that led to its conclusion that the method was appropriate, or whether a change in method and/or adjustments was necessary.
219. The records should contain the following information:
- the total quantity of taxable fuel that was acquired for use or actually used in an eligible activity
 - the quantity of fuel that was actually used in an eligible activity in a tax period
 - the quantity of fuel that was acquired for use in an eligible activity in a tax period
 - each use of taxable fuel in an eligible activity in a tax period, and
 - the methods of calculation of the fuel tax credit entitlement.
220. Similarly, records relevant to substantiate the outcome of any fuel usage trials of auxiliary equipment must be retained.
221. Records that an entity normally keeps as part of carrying on its enterprise may be sufficient to support the method of apportionment adopted. If this is not the case, ATO personnel should consider the need to refer to additional records.
222. Examples of records that may be relevant for supporting the method of apportionment adopted include:
- records of business expenses that relate to activities conducted in the course of carrying on an enterprise
 - sales and production records

⁶⁹ As explained at paragraph 211 of this practice statement, Luca Company does not need to review and can continue using the percentages it calculated for future claims.

⁷⁰ For details of the records an entity needs to keep to substantiate its claim for a fuel tax credit see Fuel Tax Determination FTD 2006/2 *Fuel tax: what records are required to be kept by taxpayers to substantiate a claim for a fuel tax credit?*

- lease documents for agricultural land or equipment
- share farming contracts
- vehicle and equipment use and maintenance records
- work contracts, or government requirements (such as licences)
- date of acquisition or delivery of taxable fuel
- type of taxable fuel purchased or delivered
- quantity of taxable fuel delivered
- location or address to which the taxable fuel was delivered
- date and location of each activity
- type of work performed
- quantity of taxable fuel used in each activity
- log books
- odometer readings
- kilowatt hours of electricity generated
- route distances
- hours of vehicle or equipment operation
- type of vehicle with a GVM greater than 4.5 tonnes, machine or equipment.

Amendment History

Date of amendment	Part	Comment
30 July 2014	Terms Background Statement	Remove references to the carbon charge. Change relevant footnotes to indicate where a fuel tax credit would have been affected by the carbon charge and period in which the carbon charge was effective.
5 July 2013	Statement	Deleted: <ul style="list-style-type: none"> • Example 1 and 3. • Example at Attachment A. • Footnotes to examples deleted where no longer relevant. Updated: <ul style="list-style-type: none"> • Examples 2 to 19 inclusive to reflect fuel tax treatment of fuel acquired after 1 July 2012. • Footnotes to several examples updated to reflect the fuel tax credit treatment if the relevant fuel had been acquired before 1 July 2012. • Discussion on 'Review of methods(s) used' condensed. Added: <ul style="list-style-type: none"> • Discussion on 'Fuel used in auxiliary equipment of a vehicle travelling on a public road'. • Discussion of 'Apportionment methodologies'. • Examples of fair and reasonable apportionment methodologies. • Discussion on 'Using a third party's apportionment amount'.
28 June 2012	Paragraphs 35, 62, 66 & 112 Footnotes 18, 25, 28 & 44	Omitted text and inserted new text

Subject references	apportionment of cost carrying on an enterprise fuel tax credits FTC acquisition FTC fuel tax FTC manufacture gross vehicle mass total quantity of fuel
Legislative references	Energy Grants (Credit) Scheme Act 2003 FTA 2006 FTA 2006 Div 41 FTA 2006 41-5 FTA 2006 41-10 FTA 2006 41-20 FTA 2006 Subdiv 41-B FTA 2006 Div 42 FTA 2006 Div 42A FTA 2006 Div 43 FTA 2006 Subdiv 43-B FTA 2006 43-8(4) FTA 2006 43-8(4)(c) FTA 2006 43-10 (3) FTA 2006 Div 44 FTA 2006 60-5 FTA 2006 65-10 FTA 2006 110-5 Fuel Tax (Consequential and Transitional Provisions) Act 2006 Fuel Tax (Consequential and Transitional Provisions) Act 2006 Sch 3 Item 10 Fuel Tax (Consequential and Transitional Provisions) Act 2006 Sch 3 Item 11 ANTS(GST)A 1999 9-20 ANTS(GST)A 1999 195-1
Related public rulings	FTR 2008/1 FTD 2006/2 FTD 2006/3 FTD 2010/1
Related practice statements	PS LA 1998/1 PS LA 2013/4 (GA)
Other references	Revised Explanatory Memorandum to the Fuel Tax Bill 2006 and the Fuel Tax (Consequential and Transitional Provisions) Bill 2006 <i>Audit statistical sampling guidelines</i> on the ATO website at www.ato.gov.au <i>Keeping records and calculating eligible litres</i> on ATO website at www.ato.gov.au
File references	1-1Y669F2
Date issued	28 July 2010
Date of effect	28 July 2010
Other Business Lines consulted	Excise

Attachment A provides a flow chart and example to explain the approaches to apportionment outlined in paragraph 19 of this practice statement.

Example and flowchart to explain the approaches to apportionment.

Flowchart

