


# ***CR 2021/95 - EROAD Australia Pty Ltd - Fuel Tax Credits Solution***

 This cover sheet is provided for information only. It does not form part of *CR 2021/95 - EROAD Australia Pty Ltd - Fuel Tax Credits Solution*



---

Status: **legally binding**

---

## Class Ruling

# EROAD Australia Pty Ltd – Fuel Tax Credits Solution

---

### **❶ Relying on this Ruling**

This publication is a public ruling for the purposes of the *Taxation Administration Act 1953*.

If this Ruling applies to you, and you correctly rely on it, we will apply the law to you in the way set out in this Ruling. That is, you will not pay any more tax or penalties or interest in respect of the matters covered by this Ruling.

---

<b>Table of Contents</b>	<b>Paragraph</b>
What this Ruling is about	1
Who this Ruling applies to	4
When this Ruling applies	5
<b>Ruling</b>	<b>6</b>
<b>Scheme</b>	<b>15</b>

---

### **What this Ruling is about**

1. This Ruling sets out when the FTC Report generated from EROAD Australia Pty Ltd's (EROAD) Fuel Tax Credits Solution (FTC solution) can be used as a record (but not the only record) for fuel tax credit record-keeping purposes.
2. Full details of this scheme are set out in paragraphs 14 to 79 of this Ruling. This Ruling does not:
  - rule on whether particular roads are public roads for the purposes of the *Fuel Tax Act 2006*
  - extend to determining entitlement to claim and calculation of fuel tax credit
  - extend to determining whether the road user charge is correctly applied in the apportionment methodology
  - rule on whether the methodology or processes used to determine location, the nature of the activity taking place at that location or other inputs (such as fuel consumption rates) are correct
  - address the assessability of fuel tax credit for income tax purposes.
3. Although the FTC solution generates an estimate of the fuel tax credit calculations, clients need to check these calculations and assess that they are entitled to claim based on all the information in the FTC solution. This Ruling does not extend to the calculation and the fuel tax credit amounts that are estimated for a fuel tax credit amount. Also, EROAD is not a tax adviser – entities within the class of entities to which this Ruling

---

Status: **legally binding**

---

applies need to seek independent tax advice on any fuel tax credit taxation issue that may be relevant to the FTC solution, as per EROAD's disclaimer on their website<sup>1</sup>:

EROAD is not a tax adviser. Please seek independent tax advice to ensure that the figures you're entering into EROAD's FTC solution will be acceptable in the case of an audit.

In all circumstances, make sure you obtain your own legal advice.

**Note:** By issuing this Ruling, the ATO is not endorsing the FTC solution. Potential FTC solution clients (clients, purchasers, or users) must form their own view about the FTC solution.

### Who this Ruling applies to

4. This Ruling applies to you as a client of EROAD that:
- is registered for goods and services tax
  - uses measurements from the FTC solution (including EROAD telematics system and associated reports), and
  - generates and uses the FTC Report.

### When this Ruling applies

5. This Ruling applies from 1 June 2021 to 31 December 2022.

## Ruling

6. Subsection 382-5(1) of Schedule 1 to the *Taxation Administration Act 1953* (TAA) provides that an entity must keep records that record and explain all transactions and other acts it engages in that are relevant to an entitlement to a fuel tax credit.

7. An entity must retain those records for at least five years after the completion of the transactions or acts to which they relate.

8. Subsection 382-5(8) of Schedule 1 to the TAA provides that the records must be in English, or easily translated into English, and enable an entitlement under an indirect tax law (that is, fuel tax) to be ascertained.

9. The FTC solution is a telematics technology-based reporting tool which generates the FTC Report, which shows the following information for a selected period:

- vehicle
- vehicle type (heavy vehicle, light vehicle, auxiliary equipment)
- fuel type
- type of auxiliary equipment
- litres dispensed
- public road (on-road) apportionment of fuel (litres) – total and also allocation of fuel to each vehicle

---

<sup>1</sup> [Fuel Tax Credits \(eroad.com\)](https://eroad.com)

---

Status: **legally binding**

---

- off-road apportionment of fuel (litres) – total and also allocation of fuel to each vehicle
- idle off-road (litres)
- auxiliary equipment fuel use (litres).

10. The FTC Report is produced in English and allows you to export information for a specific period into portable document format (PDF) and comma-separated values (CSV) (Excel files).

11. Provided the FTC Report is retained for five years, or in accordance with the specific requirements under section 382-5 of Schedule 1 to the TAA, it can be used for record-keeping purposes in respect of fuel tax credit claims.

12. The FTC Report is a document that satisfies a record for the purposes of subsection 382-5(8) of Schedule 1 to the TAA.

13. However, the FTC Report will not be the only record required to be produced or retained for fuel tax credit purposes. Other evidence or reports could include:

- data input information reports
- reports showing accuracy of fuel consumption rates used for vehicles and other inputs
- fuel acquisition records (such as tax invoices)
- confirmation of location and time (such as driver job sheet)
- or environmental criteria documentation.

14. In addition, clients using the FTC Report will need to retain evidence of other assurance or process checks that have been undertaken to ensure the amounts included in any part of the FTC Report are accurate.

## Scheme

15. The following description of the scheme is based on information provided by the applicant. If the scheme is not carried out as described, this Ruling cannot be relied upon.

16. Certain information has been provided on a commercial-in-confidence basis and will not be disclosed or released under Freedom of Information legislation. Other information referenced is:

- Class Ruling application and further information dated 2 June 2021, 13 August 2021, 17 September 2021 and 2 November 2021.
- Class Ruling CR 2019/54 *Clients of EROAD (Australia) Pty Ltd who use the EROAD Fuel Tax Credits Product Report information showing litres allocated according to travel generated by EROAD Fuel Tax Credits product for fuel tax credit purposes.*

17. EROAD has developed the FTC solution, which has a means of electronically recording and reporting information relevant to fuel tax credit.

18. The telematics technology product consists of:

- a secure in-vehicle electronic device – (IVEDR) - EROAD 'Ehubo2' secure in-vehicle telematics device

---

Status: **legally binding**

---

- a unique serial number embedded on the enclosure and internally in the central processing unit
- a secure remote application server (Gateway)
- a secure central data repository
- cellular service connection from the IVEDR to the applications server
- a secure remote client self-service portal and web-based software application back office system (Depot) allowing clients to view and monitor vehicles in real-time from any web-enabled device
- capability to record fuel transactions electronically
- the FTC solution application – IVEDR and Gateway
- internet service connection between Depot and the client web-enabled devices.

19. There are micro-electrical mechanical systems included within the IVEDR that are designed to detect movement and used to validate Global Positioning System (GPS)-sensed movement.

20. The central piece of equipment is the IVEDR, which is a hard-wired installation that draws information on the vehicle system's activities from the electrical system. The IVEDR records, stores and continuously transmits encrypted data via the cellular network. The IVEDR gathers a range of data relating to the location and operation of the vehicle it is installed in and captures distance, location, route and a variety of additional operational data from the vehicle.

21. At the start of a journey when ignition is switched on, the IVEDR collects:

- Location – GPS satellite information (latitude and longitude) is captured and returned to the IVEDR when the ignition is turned on. This includes latitude and longitude. The GPS tracking hardware device tracks all vehicle travel on public roads, off public roads and idle time. It automatically classifies into one of these activities using a mapping data tool.
- Time/date – collected from the GPS satellite and returned to the IVEDR at the time the ignition is turned on.
- Auxiliary equipment usage – each GPS tracking hardware device can connect up to three digital inputs/outputs for monitoring the auxiliary equipment usage. It also collects the time the auxiliary equipment/s is in operation.

22. At the end of each vehicle journey, the following information is collected:

- Location – GPS satellite information is captured in the IVEDR when the ignition is turned off, including latitude and longitude.
- Time/date – time and date are collected from the GPS satellite and captured by the IVEDR at the time the ignition is turned off.

23. The vehicle travel-related information on each journey is sent as encrypted data (for secure transmission) via the mobile network from the IVEDR and is returned via Gateway.

24. The transmitted data is stored in a third-party central data store and application server where it is accessed via Depot. All Depot users are given an individual username and a password for access to the web portal.

---

Status: **legally binding**

---

25. If the mobile network is not available, all data is stored on the IVEDR until such time as the network becomes available again. Each IVEDR has an inbuilt battery unit that will continue to record and provide a signal in the event of vehicle battery failure.

26. Depot is used to create vehicle and auxiliary equipment master data. Vehicles, when entered into Depot, are classified as heavy (vehicle greater than 4.5 tonne gross vehicle mass (GVM)) or light (vehicle less than 4.5 tonne GVM).

27. The following vehicle and auxiliary equipment data must be entered by the clients using Depot:

- vehicle registration number, display name, make, model, year and GVM
- vehicle fuel type
- hourly fuel consumption rate for idling
- auxiliary equipment name and fuel type
- hourly fuel consumption rate for operating auxiliary equipment.

28. Clients can enter idling fuel consumption and/or auxiliary equipment fuel consumption rates using the following methods:

- sampling (units per hour)
- manufacturing (units per hour)
- engine diagnostics (units per hour).

29. Depot is used for entering fuel acquisitions data and there are currently three ways the data can be entered:

- manually for each vehicle
- using 'Upload Fuel Records' function (CSV upload) for multiple vehicles, or
- via daily electronic fuel transactions updates from fuel companies via an application programming interface.

30. Fuel dispense data is sourced from the client's fuel acquisition/purchase records. The fuel purchases must record, within Depot, the following details:

- date of the dispense
- vehicle ID
- fuel type
- number of litres dispensed
- supplier
- location.

31. The FTC solution provides summary and detailed fuel apportionment reports for clients to review and use that data to submit fuel tax credit claims for a selected period. Clients can view, manage and maintain a list of all their organisation's vehicles and assets, including registration number, vehicle model, IVEDR serial details, auxiliary inputs and status for the IVEDR of the vehicles. Clients can search for a particular vehicle activity or can filter by business department activity. EROAD's material and marketing collaterals specifically include a disclaimer that the FTC solution is a data calculation service only and not a tax advice service.

---

Status: **legally binding**

---

32. Auxiliary equipment fuel usage is calculated based on clients' selection of the calculation method.

33. The IVEDR's digital input/output ports are used to establish dedicated connections with auxiliary equipment or power take off. The IVEDR can then detect the auxiliary equipment on/off via the digital input to determine if and when the auxiliary is activated and deactivated. This indicates the duration for which each auxiliary equipment is in operation. The number of auxiliary items that can be monitored can be increased through the use of an expander box (socket adapter).

34. The FTC solution reconciles the total fuel allocated to each activity with total fuel dispensed within the period to make sure it matches with on-road, off-road, idle off-road and auxiliary equipment usage (where entered) over the same period. The FTC solution does not record fuel (that is, electricity transferred in charging) use for electrical vehicles. Hybrid vehicles are supported within the existing framework, by virtue of the client providing the appropriate fuel consumption rate for the vehicle.

### **Locational information and geofences**

35. HERE Technologies (HERE) is EROAD's third-party map provider.

36. EROAD conducts updates, including quarterly, where there are minor and major updates based on client feedback or notified by the relevant authority.

37. For HERE Maps, 'non-public' and 'public' roads are initially derived from HERE Maps general classifications where:

- private relates to roads which reside on private land and are owned or maintained by private agents and treated as non-public, and
- open to the public means access to the road is not limited and treated as public.

38. These are cross-referenced with a secondary data source for validation; for example, local or central government public road ownership data. The maps can be further adjusted as real-world information or changes are notified and validated.

39. Geofences (map polygon) are either added as a global off-road geofence controlled by EROAD or created by a client when required (for example, construction site or client site) using the Depot portal. Only authorised users and clients can create geofences. There are warnings in the system if a geofence is created over a public road and the client is required to provide a mandatory explanation to justify the classification.

40. The client can extract the off-road trip extract listing for all off-road trips per vehicle for a selected period. The client can review this report and if they find an invalid geofence or off-road journeys they can reapportion the distance travelled off-road to on-road and disregard idling duration in the invalid geofence.

41. Geofences currently do not have an end date; however, a review date is input for assurance purposes. Clients are ultimately responsible for using the digital geofence tool with integrity.

### **Methodology**

42. The FTC solution apportions the fuel used by each vehicle by calculating fuel for use in off-road idling and (where applicable) auxiliary equipment by multiplying hours of operation by the hourly consumption rate.

---

Status: **legally binding**

---

43. It deducts this fuel from the total fuel dispensed for each vehicle. Fuel dispensed for a vehicle is first reduced by the fuel calculated for off-road idling and for auxiliary equipment (where applicable).

44. Remaining fuel dispensed for each vehicle is then apportioned using a percentage of the travel (public road or private/off-road) against total travel undertaken by the vehicle.

45. That is:

Off-road idling fuel calculation = number of hours idling off-road × consumption rate entered by the client for vehicle idling per hour

On-road travel% = (on-road travel ÷ total travel) × 100

Off-road travel% = (off-road travel ÷ total travel) × 100

46. Auxiliary equipment fuel usage is calculated based on clients' selection of the calculation method. Clients can use manual method (sample testing or manufacturer specifications). Clients are recommended to always use one method consistently for each auxiliary equipment.

### **Idling**

47. EROAD detects vehicle idling by interpreting a combination of telematics events transmitted via the IVEDR. The standard installation of the IVEDR uses a hardwired connection connecting the device to a continuous power source and to selected data source points, including the vehicle ignition. This enables it to determine when the ignition is on or off.

48. Idling time is based on a stationary heavy vehicle and engine turned on because the device connects to 'true ignition', which records the actual time the engine is operating. Only idle time used off public roads is apportioned within the system. For instance, ignition on and zero distance travelled between two event times is considered as an idling event.

49. For heavy vehicles, a wire goes to the alternator and detects if the engine is on (True Idle). For light vehicles, that wire goes to the ignition. Combined with movement data, this then allows vehicle idling to be identified and timed.

50. To ensure there is no risk of double-counting fuel used idling and fuel used idling while operating auxiliary equipment, the auxiliary equipment is connected to the IVEDR via a separate direct cable from the equipment to a digital input port on the IVEDR. Auxiliary equipment is operated via a or power take off, hence its usage is detected as on/off via digital input. This provides a separate signal indicating when the auxiliary equipment is turned on or off, allowing the run time to be measured.

51. The auxiliary equipment time multiplied by the equipment fuel use value gives the total fuel used by the auxiliary equipment. The separate data feeds allow idling and auxiliary equipment use to be separately identified and counted so that vehicle idling will not be confused with or counted towards the operation of the auxiliary equipment.

52. The fuel consumption rate for auxiliary equipment use is also provided by the client as a separate data point. As these are separate events, with separate fuel consumption rates for the vehicle idling and the auxiliary equipment running, there is no risk of double-counting the fuel between the two.

53. The idling time multiplied by the idling fuel consumption value provided by the client gives the fuel used during idling.



---

Status: **legally binding**

---

54. In heavy vehicles, the system can attach to True Idle and record when the engine is operating. This is not the case for all light vehicles, which fall into the following categories:

- older models that have an ignition key setting that would, if used to determine idling hours, generate inflated results in some cases, and
- new models with push-button ignition that generate a clear distinction between engine operating/not operating.

55. Only push-button ignition light vehicles where these vehicles operate in on-or-off mode will have off-road idling time recorded for the purposes of fuel tax credit for this system.

### **Fuel apportionment – reconciliation**

56. The FTC solution reconciles the total fuel allocated to each activity with total fuel dispensed within the period to make sure it matches the fuel usage with on-road, off-road, idle off-road and auxiliary equipment usage (where entered) over the same period.

57. If the vehicle idles while operating auxiliary equipment, it will be necessary to ensure that there is no double counting of fuel. For instance, the client cannot use an hourly consumption rate for idling as well as an hourly consumption rate for auxiliary equipment that includes fuel used when idling.

58. Should any record details be incomplete, the administrator will be alerted of these omissions through a scheduled exception report and will be able to take the appropriate action to correct.

59. The Fuel Exception Report for a period shows details of the:

- transaction date
- odometer reading
- distance (kilometres)
- fuel quantity (litres)
- cost (dollars)
- site location
- exception details, and
- driver (where applicable).

60. The Fuel Usage Report combines transactional data with vehicle location and distance to provide consumption, cost, and emission information across client vehicles for the selected reporting period. Emission information is calculated using distance travelled and fuel consumed by the vehicle.

61. The Fuel Transaction Management Report displays all fuel transactions, including bulk fuel upload. This report lists one fuel transaction per row and displays the:

- vehicle name
- plate
- model
- transaction date and time
- receipt number

---

Status: **legally binding**

---

- fuel quantity
- fuel type, and
- address.

### **Controls and integrity**

62. Various control and integrity measures have been included in the IVEDR to prevent tampering or interfering with the data held on or generated by the unit. There are also other tamper mechanisms in place to prevent damage or removing the screen. Any attempt to move the device to another vehicle is strictly controlled by authorised roles only.

63. External access to Depot is restricted to authorised users nominated by the client and provided with individual passwords.

64. Unit integrity and performance (when the device enters a Degraded Mode, the hatch is opened, wiring issues occur and/or system tampering is detected) is monitored via an audit report process.

### **Data integrity**

65. All communications between the IVEDR and Gateway are encrypted to prevent unauthorised interference and authentication.

### **Accuracy**

66. The IVEDR samples the GPS signal approximately every second and transmits data back through Gateway. The IVEDR verifies GPS time and date accuracy by ensuring all GPS system checks are valid and the unit has multiple accuracy checks to ensure time is accurate.

### **Vehicle-specific accuracy**

67. The vehicle's odometer reading is captured when the IVEDR is installed. A subsequent re-reading of the vehicle's odometer, to be undertaken by the client, then provides a comparison figure for the GPS-derived distance calculated by the IVEDR. The assurance process ensures consistent distance capture making anomalies easier to detect.

68. The IVEDR report faults when its distance measurement is impaired.

### **Governance and reviews**

69. The FTC solution enables the records of fuel allocated to be put alongside the actual operation of that vehicle and any auxiliary equipment. It helps each client see and understand the normal working pattern for a vehicle or group of vehicles doing similar tasks, therefore making it easier for a client or auditor to notice and investigate irregularities. Clients can export the data and perform their own analysis to detect trends, anomalies, and other macro-insights, independent of FTC solution.

70. The vehicle's operational information is permanently retained and can then support historical analyses. In this way checks can be made for anomalies in fuel use (changes in consumption rates), in general and by vehicle.

---

**Status: legally binding**

---

71. The client will input true and complete information relating to matters beyond the ability of the FTC solution to directly observe, for example, fuel acquisitions and volumes; idling fuel consumption rates; auxiliary equipment fuel consumption rates. Monitoring for and responding to certain aspects are the responsibilities of the client, including fuel consumption rates (evidence, testing and ongoing validity), checking data against business records and identifying anomalies (for example, high idle time).

72. The IVEDR self-monitors for faults and issues. Once the IVEDR detects a fault/tamper and enters an unauthorised mode, an Audit Report will be created. This can be viewed by Client Administrators and Unit Managers. Clients must contact EROAD Support if the IVEDR enters into an unauthorised mode to resolve the fault/tamper via a formal resolution process.

73. EROAD has developed various change management controls.

#### ***EROAD Australia Pty Ltd's FTC Report***

74. The FTC solution provides a summary and detailed fuel apportionment reports for clients to review and use that data to submit a fuel tax credit claim for a specified period. Clients can search for a particular vehicle activity or can filter by business department activity (organisation level data).

75. The FTC Report displays the company name and address, reporting period selected and date when the report was generated. The FTC Report shows the summary of each fuel type used in all vehicles for the reporting period. Clients can select either PDF or CSV format when exporting the FTC Report.

76. The auxiliary equipment consumption rate per hour is done per vehicle and per auxiliary equipment that is to be included in the FTC Report. If a client has not named the type of auxiliary equipment of a vehicle, it will not be included in the FTC Report. There is a prompt message that notifies the client if the calculation method was not set.

77. The FTC Report can only be processed once fuel acquisition data has been entered into the system. Depot produces the FTC Report in English.

78. The FTC solution uses the off-road travel percentage (distance), on-road travel percentage (distance), off-road idle hours (time) and auxiliary equipment hours (time) that has been calculated within the system.

79. The FTC Report provides the information listed in paragraph 9 of this Ruling.

---

**Commissioner of Taxation**

8 December 2021

---

---

Status: **not legally binding**

---

## References

---

*Previous draft:*

Not previously issued as a draft

*Related Rulings/Determinations:*

TR 2006/10; CR 2019/54

*Legislative references:*

- FTA 2006
- TAA 1953
- TAA 1953 Sch 1 382-5
- TAA 1953 Sch 1 382-5(1)
- TAA 1953 Sch 1 382-5(8)

---

ATO references

NO: 1-RUZLQPV  
ISSN: 2205-5517  
BSL: PW  
ATOlaw topic: Excise ~~ Fuel tax credits ~~ Reporting

---

**© AUSTRALIAN TAXATION OFFICE FOR THE COMMONWEALTH OF AUSTRALIA**

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