

CCNZ Track'r Tool Guide for Subcontractors: Tracking Fuel Use and Carbon Emissions

1 Introduction

Welcome to CCNZ Track'r, a tool for tracking fuel use and carbon emissions. The tool is intended to be used by small contractors who may be required to report their carbon emissions from fuel use to clients or lead contractors.

Calculations are based on current New Zealand default emissions factors¹ and intended to provide main contractors with Scope 3 emissions reporting.

Track'r is not a certified product, has limitations in its use and is aimed at small-scale businesses that need to get started on carbon reporting. It is focussed on freight/transport and on-site plant/machinery fuel use and can record fuel use on a site-by-site basis, as well as per vehicle, per transport category or company-wide over a given period.

This guide will walk you through the process step by step.

2 Access

Access to Track'r is currently available to CCNZ members through the link below. Login using your membership login details.

<https://civilcontractors.co.nz/trackr/21289/>

Data is contained within your logged in account only and is not available to share either within organisations or within CCNZ. It is assumed that one person (or at least one account) will be utilised to input data. However, records can be exported into an Excel spreadsheet for sharing and further use.

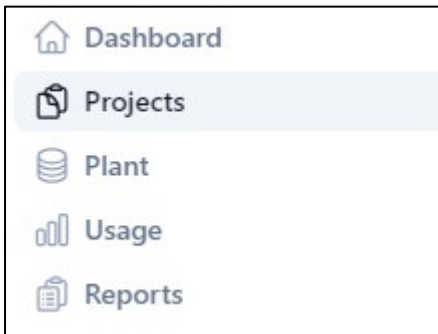
3 Data input

- Data source examples:
 - Fuel card records
 - Tank readings at start and end of measure period
 - Freight provider annual activity report
 - Online consumption report
- Examples of assumptions to be made:
 - It is assumed the data source is an appropriate representation of activity
 - Assumptions are made on vehicle type and approximate travel distance from site locations
 - It is assumed the supplier reports are complete and accurate
 - A small amount of fuel purchases are done via credit card but in the base year this was deemed to be minimal based on estimation methods

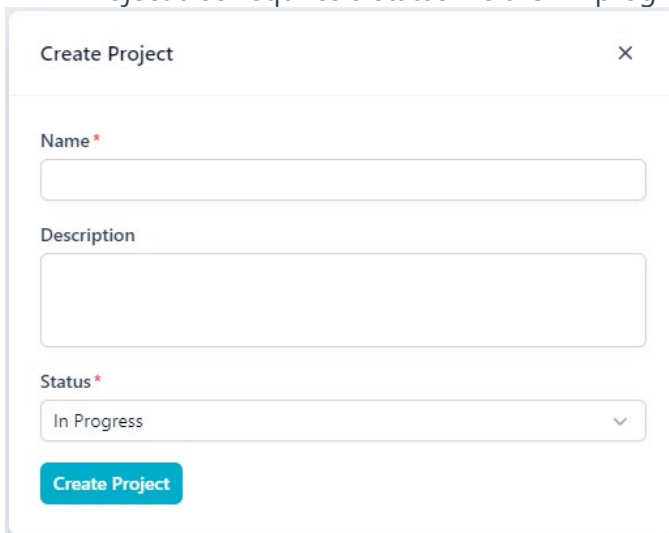
¹ Ministry for the Environment 2023 guidance (note Track'r to be updated to 2024 factors in first revision) <https://environment.govt.nz/publications/measuring-emissions-a-guide-for-organisations-2023-detailed-guide/>

3.1 Data entry

3.1.1 Projects

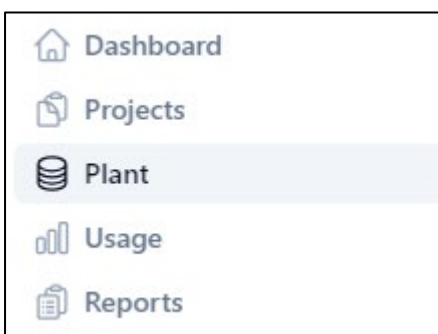


- Enter any projects/sites that your company has in construction. These will then be available in the dropdown menu in 'Usage' to allocate plant against.
- A Project also requires a status – either in progress or complete.



A screenshot of the 'Create Project' form. The form has a title bar 'Create Project' with a close button (X). It contains three input fields: 'Name *' (required), 'Description', and 'Status *' (required). The 'Status' dropdown menu is currently set to 'In Progress'. A blue 'Create Project' button is at the bottom.

3.1.2 Plant and machinery



- Enter the plant name, which could be its registration or vehicle number. Then add a description for recognition (e.g. PlantName: TR03, Description: Transporter #3)
- Fields with an asterisk (*) are required. See Table 1 for Class descriptions and snips below for the for Class and Fuel Type options.
- If you want to add more details such as engine size, feel free, they will be stored against the record. Future versions may use these details to determine specific fuel efficiency.
- For heavy goods vehicles, choose the tare weight of the truck in the GVM (gross vehicle mass) dropdown, which important for further steps.

TABLE 1 - Class descriptions

Fixed plant	Generators
Mobile plant	Diggers, rollers, loaders
Light fleet	Utes, cars, vans (used to travel between jobs)
Heavy fleet	Trucks (big and small) including transporters and cartage (importing material and exporting waste)

Create Plant ✕

Name *

Description

Class *

Fixed Plant
▼

Fuel Type *

Diesel
▼

Vehicle Age

Choose Vehicle Age
▼

GVM

Choose GVM
▼

Engine Size

Choose Engine Size
▼

Create Plant

Class *

Fixed Plant
▼

Choose Plant Class
▼

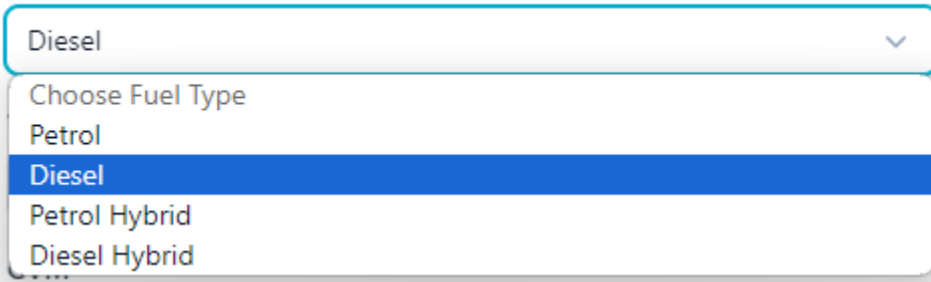
Fixed Plant
▼

Mobile Plant
▼

Light Fleet
▼

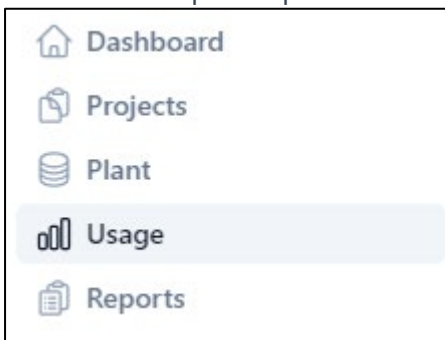
Heavy Fleet
▼

Fuel Type *



3.1.3 Usage

- Once the relevant Project and Plant information has been entered, go to the "Usage" page to record fuel use for a specific period.



- The Plant and Project dropdown menus contain all previously saved plant and project records.
- Start by selecting the plant which you have fuel records for. Each Usage record saves one Plant against one Project for a given period of time.
- Select the project the data relates to from the dropdown menu.
- Choose the period that the fuel data relates to
- Choose the transport category for the plant used on the project. See Table 2 for Transport Category options and descriptions.
- To record fuel use for the plant and project, enter in either litres (petrol or diesel) or kilometres, depending on records available. If using kilometres, choose the appropriate category – light fleet diesel or heavy fleet diesel.
- If its heavy fleet (or HGV – heavy goods vehicles) record whether it's less or more than 7 tonnes GVM. If it's more than 7 tonnes, choose the vehicle type – longhaul, urban delivery or all trucks. Both distance in kms and load weight in tonnes must be entered. See Table 2 below for the dropdown menu for Vehicle Type.
- Note:** longhaul delivery factors assume that the load is delivered to site and returns empty. Therefore, the load entered for this category should be *half* the actual load carted – assuming it's carting empty on the return trip. Loads can have a pro rata applied for the portion of the trip that the load travels.
- Click "Create Usage" and repeat for all relevant plants and projects you wish to report on
- See Figure 1 below for a decision tree to work out which units to use for the records you have available**

Create Usage
×

Details

Project *

↻

▼

Plant *

↻

▼

Usage Period *

📅

Transport Category *

▼

Usage

How would you like to log usage? *

Distance (km)

Fuel (L)

Distance Usage (km) *

KM

Create Usage

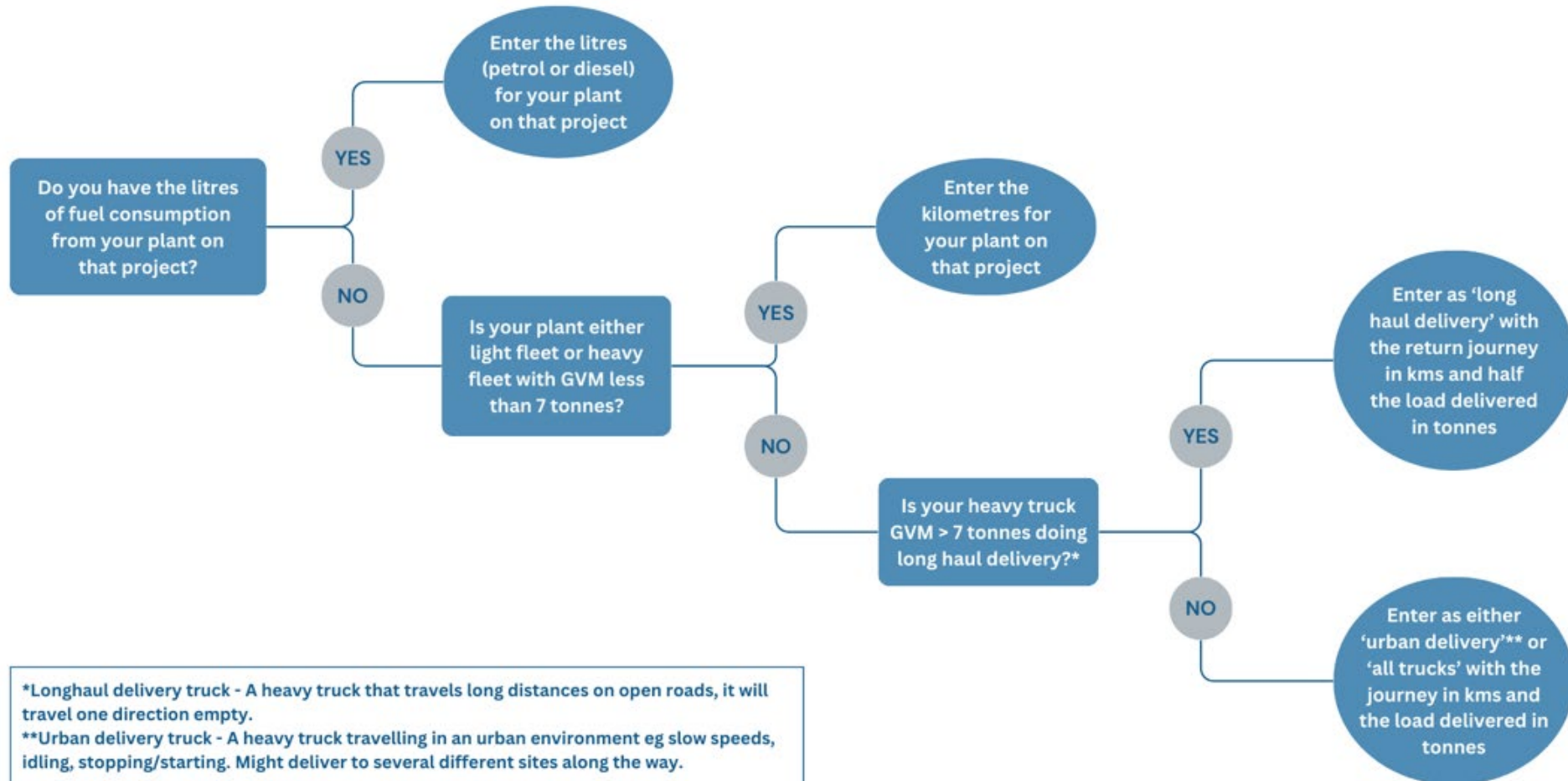
TABLE 2 - Transport Category

Cartage (materials/products)	Use HGV kms (if GVM < 7T or HGV tkms)
Cartage (waste)	Use HGV kms (if GVM < 7T or HGV tkms)
Freight (products) by van	If diesel kms, use Light fleet Diesel kms (& hybrid)
Transporter	Use HGV kms (if GVM < 7T or HGV tkms)
Fixed Plant (generator)	Enter litres
Mobile plant	Enter litres
Travel for work	If diesel kms, use Light fleet Diesel kms (& hybrid)

TABLE 3 - Vehicle Type

Long haul delivery truck	A heavy truck that travels long distances on open roads, it will travel one direction empty.
Urban delivery truck	A heavy truck travelling in an urban environment e.g. slow speeds, idling, stopping/starting. Might deliver to several different sites along the way.
All trucks (ie other)	Default option if unsure whether trip is long haul or urban.

FIGURE 1 – Decision Tree



3.1.4 Reports

When you're ready to produce a report, go to the reports page and enter the time period you want to report on. Columns can be sorted to group categories (such as by Plant or by Transport Category).

All Usage

Project	Plant	Period	Category	Distance (km)	Fuel (L)	Usage (CO ₂ e kg)	
Test Project	HGV10	27 Jul 2024 - 10 Aug 2024	Cartage (Waste)	250		263	Edit Delete
Test Project	Plant Three	8 Jul 2024 - 22 Jul 2024	Cartage (Waste)		120	325	Edit Delete
Test Project	Plant Three	8 Jul 2024 - 22 Jul 2024	Cartage (General)	100		780	Edit Delete
Test Project	Plant Two	8 Jul 2024 - 22 Jul 2024	Fixed Plant		34	92	Edit Delete
Test Project	Plant Two	8 Jul 2024 - 22 Jul 2024	Fixed Plant		2,000	5,420	Edit Delete
Test Project	Plant One	8 Jul 2024 - 22 Jul 2024	Travel for work	123		37	Edit Delete

3.2 Tips for using Track'r

- **Entering litres or kilometres:**
 - Use Figure 1 – Decision Tree to decide which is the appropriate cell to enter your data into.
 - It is best to add the fuel consumption in litres (petrol or diesel), regardless of whether the vehicle is hybrid, HGV, etc - as long as the transport category is allocated correctly.
 - If only kilometres are known for a plant/project (not litres), enter this information into Usage
 - Be aware of the potential to double-up on records – ie do not enter kilometres if litres have already been recorded for that plant on that project.
- **Multiple transport categories:**
 - If the same plant is used for more than one of the transport categories in the same period on the same project – e.g. a truck used to both cart materials into site and dispose of waste from the site – enter separate records, with different Transport Categories if possible.
- **Heavy Goods Vehicles (HGV):**
 - Distinguish HGVs based on Gross Vehicle Mass (GVM) – either GVM < 7 tonnes or GVM > 7 tonnes.
 - If GVM > 7 tonnes, choose a "Vehicle Type" i.e. "long haul delivery" (open road transport, inter-city), "urban delivery" (around town) or if unknown, select "all trucks". Fuel efficiency changes depending on the type of journey.
 - The weight of the load in tonnes and the kilometres travelled must be entered.

- Calculation for longhaul delivery HGVs:
 - For longhaul delivery HGVs, the calculation assumes the truck travels one way empty. Therefore, **enter half the weight of the load carted (in tonnes), into the “longhaul tonnes” cell.**
- Gross Vehicle Mass (GVM) measurement:
 - GVM is the maximum permissible weight of a vehicle when fully loaded, including the weight of the vehicle itself, any passengers or cargo, fuel, and any other equipment or accessories that may be on board.
- Use “Mobile Plant – Generic” for unclear allocations:
 - If it’s unclear how much fuel individual mobile plants on your site used, consider adding a “mobile plant – generic” Plant record and apply all the fuel litres used by mobile plants for that period on that site/project to this generic plant. Note that this will affect the ability to track fuel usage for individual plant over the year.
 - Note the difference between Scope 3 - Categories 3 and 4 below:

Scope 3	Category 3	Indirect GHG emissions from transportation	Business travel
			Employee commute (travel)
			Freight transport
			Refrigerant use (from chilled transport or air conditioner)
			Working from home
Category 4	Indirect GHG emissions from products an organisation uses	Transmission and distribution losses	
		Water supply and wastewater	
		Materials and waste	