NRSPP

NATIONAL ROAD SAFETY

PARTNERSHIP

PROGRAM

USER DOCUMENTATION

Brought to you by

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Date 26/05/2020

1) Table of Content

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As part of

Industry Project 2020

Department of Information Technology

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A) Introduction

This document contains the user documentation of the web application NRSPP National Road Safety Partnership Program.

1) Audience Description:

The audience of this document is client from different ages and backgrounds who they are interested in getting general knowledge about comparing cars' environment affections, fuel costs and safety rate. This includes user information about how to interact with the web application and also technical information, which requires some specific knowledge that will be detailed further in the relevant section.

2) Applicability Statement:

This web application has been developed to work independently, or to be integrated with other service. Until the date of this document, the application right now considers as an independent web application that works in independent platform.

3) Purpose Statement:

This web application aims to help and encourage people to by new car instead of having an old cars, and the purpose can be achieved by providing the best information that can make them able to take a clear decision in regards. The web application provide information about cars like fuel efficiency, CO2 Emissions and safety rate, And by making the users able to comparing old cars with a new cars costs and affection.

4) Document Usage Description:

This document is to help normal user how to use the web application, another document for admin users is provided separately.

B) Introductory Kit:

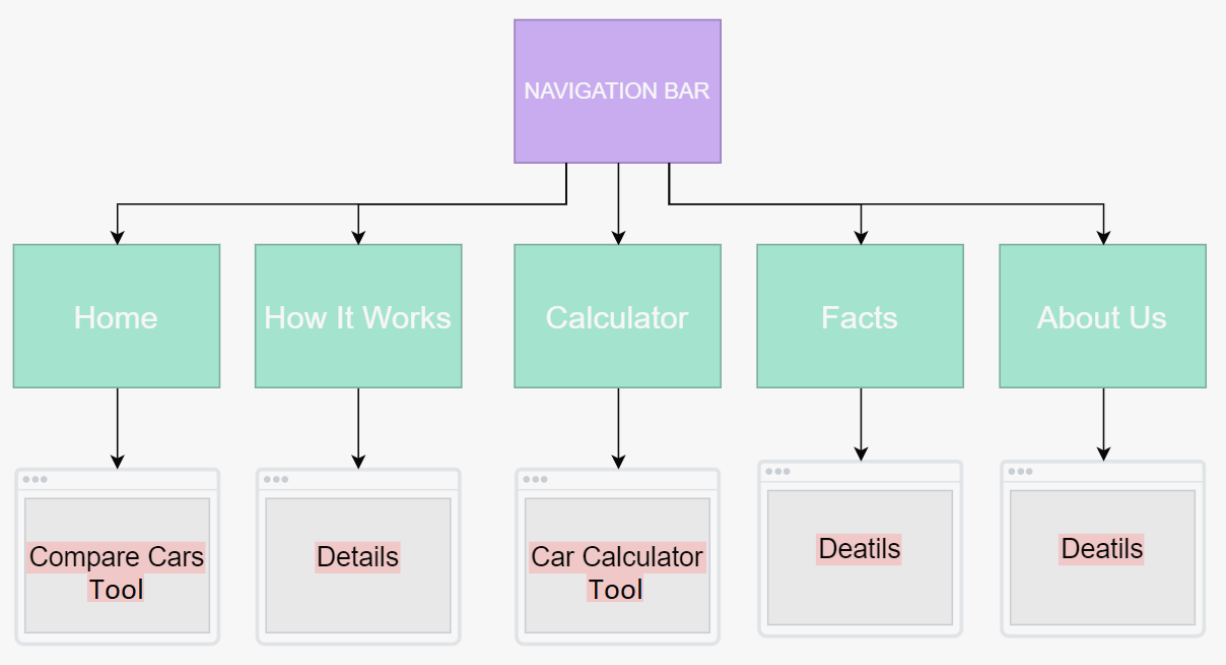


Figure 1 "Site map"

1) Summary of system features:

The idea of this application is to provide valued information for users who looking for replacing their new cars with a new one. On the other hands this web application encourage people to by new car by providing information and tools for that purpose like "Cars Comparing" and "Car Calculator " tools

All the web application's pages and function can be reached from the navigation bar Figure 1 "Site map". There are five main pages for the web application: Home, how it works, Calculator, Facts and about us.

2) Getting Started Guide.

i) Where do I start?

The Home page of this web application is the best page to start. The web application has divided into small components that allow you to easy interact with the whole functions and surfing the information provided in this website easily. You can go back to Figure 1 "Site map" to have a look about the website components. Navigation bar has been provided in both PC and Mobile versions to make you able to reach easily any part of the website.

ii) Community Environment Module Overview

The web application allow people to get details about car by getting one car information (cars' environment affections, fuel costs and safety rate), or by comparing these information for up to five cars at the same time and last one it to calculate one car's fuel efficiency and CO2 Emissions depends on the distance and fuel cost.

There is Two main function provided by the web Application:

#	Functionalities / Actions
1	Search for one or more car.
2	Car Fuel and CO2 Emissions Calculator

C) Component Detail:

1) Cars comparing and details page (Home page):

I. Page component information:

In this page you can getting a details for specific car model and you can compare these details for many cars together, and the result viewed with Graph Table as it is easy way to translate the data results into seen results.

II. Accessing this component:

This page is the default page in the web application but it can be reached from any page in the website by clicking home from navigation bar Figure 2 "Home page" PC view and Figure 3 "Home page" Mobile page:

- ***PC view:***

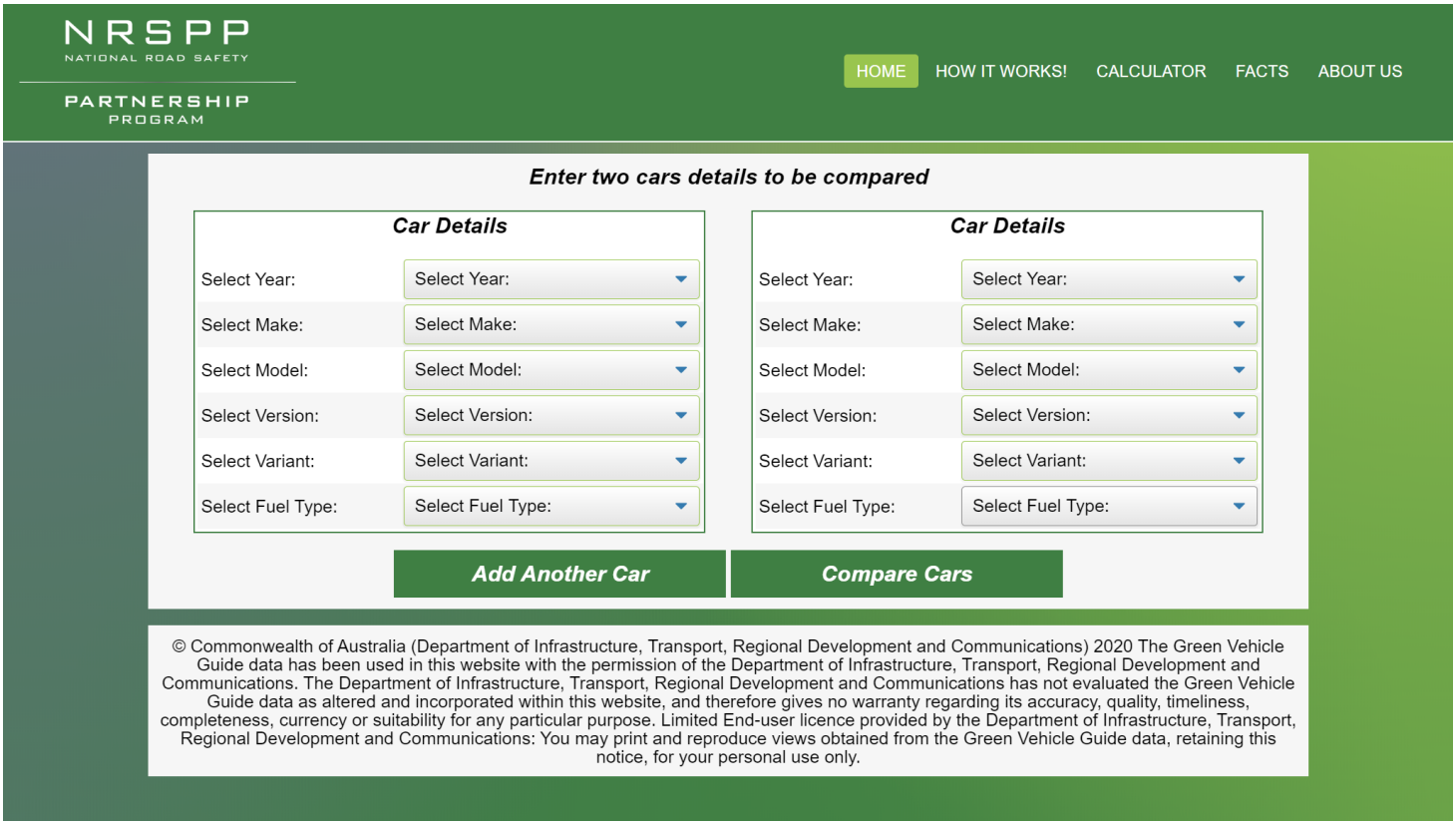


Figure 2 "Home page" PC view

- ***Mobile View:***

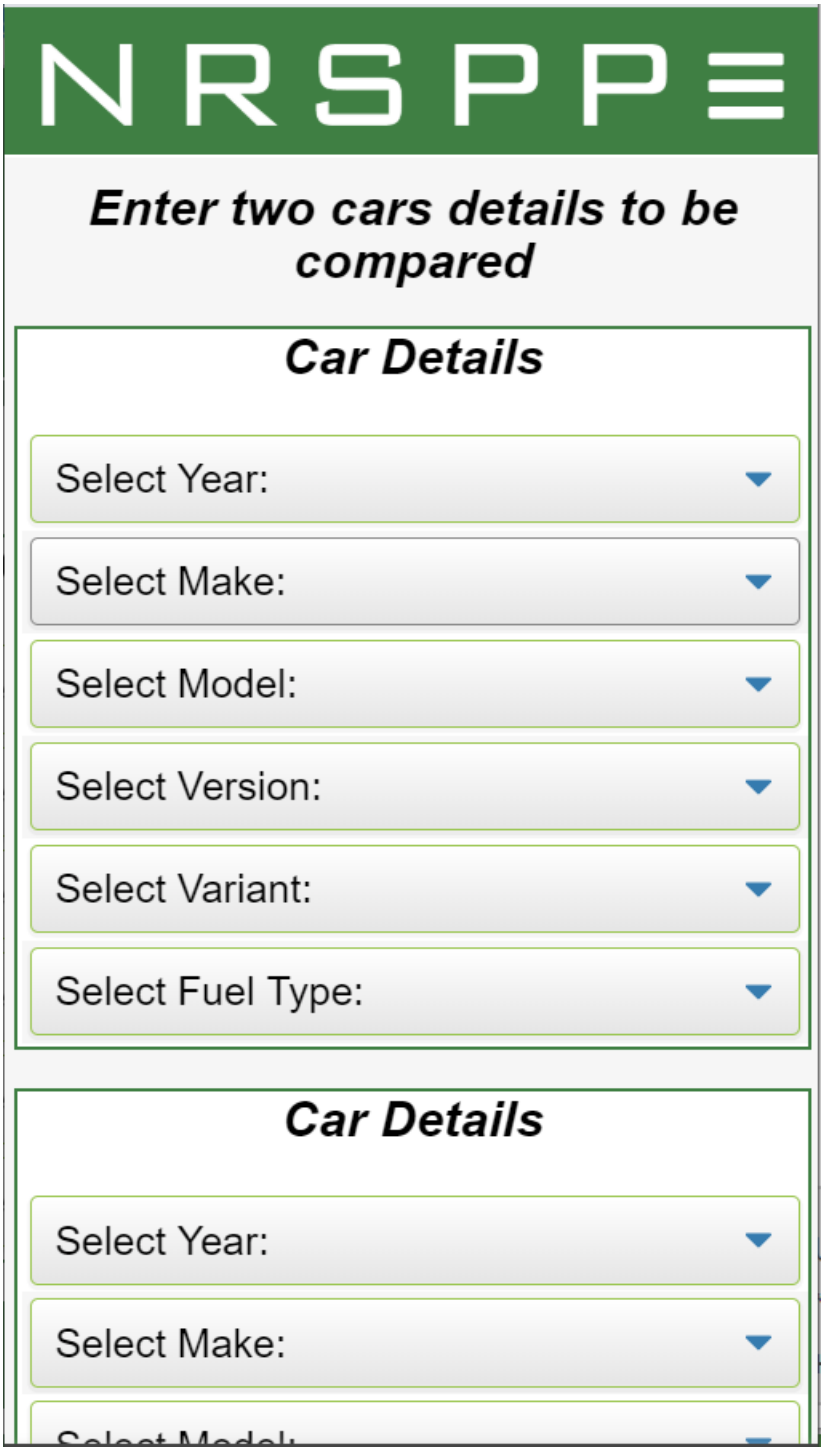


Figure 3 "Home page" Mobile page

III. Possible Actions

- Compare two cars details:
  1) Start by entering two or more different cars details in each box (Car Details) like the example below Figure 4:

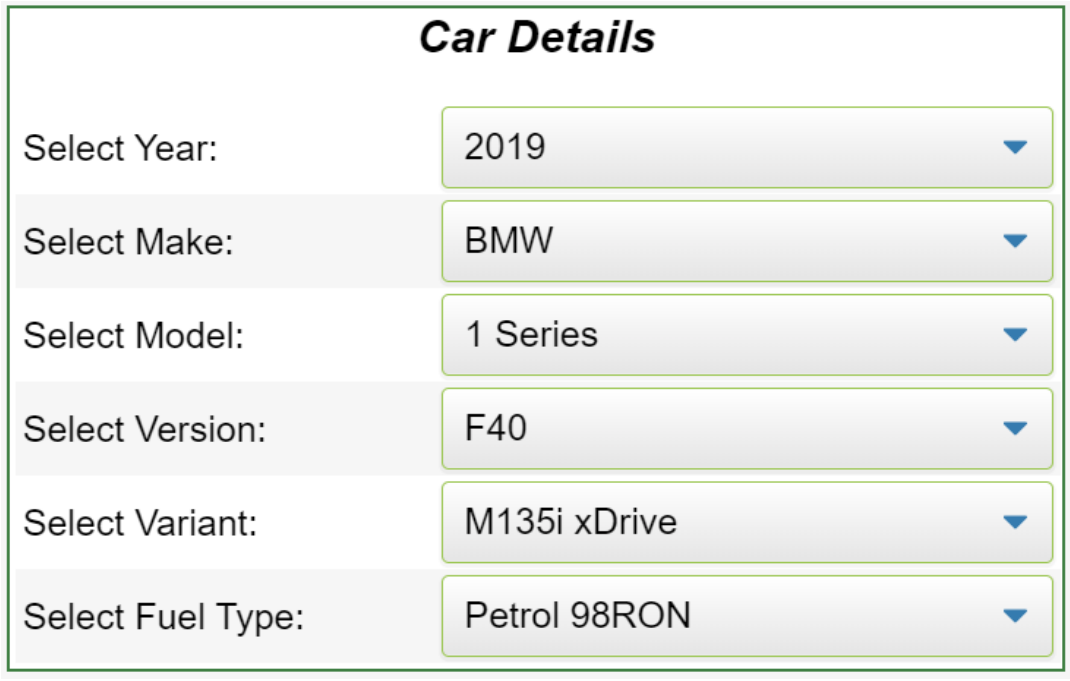


Figure 4 "Car details box"

Be aware that the each drop box is related with the previous drop box so you must start by Select Year, make, model, version, variant and fuel type all in order, so if you change one drop box selection that will delete all the lower drop boxes and you should continue select the underneath drop boxes again.

2) After that press "Compare cars" button so you will get the comparing results like the screen shoot example below Figure 5 "CO2 Emissions Result" and Figure 6 "Fuel Consumption Results":

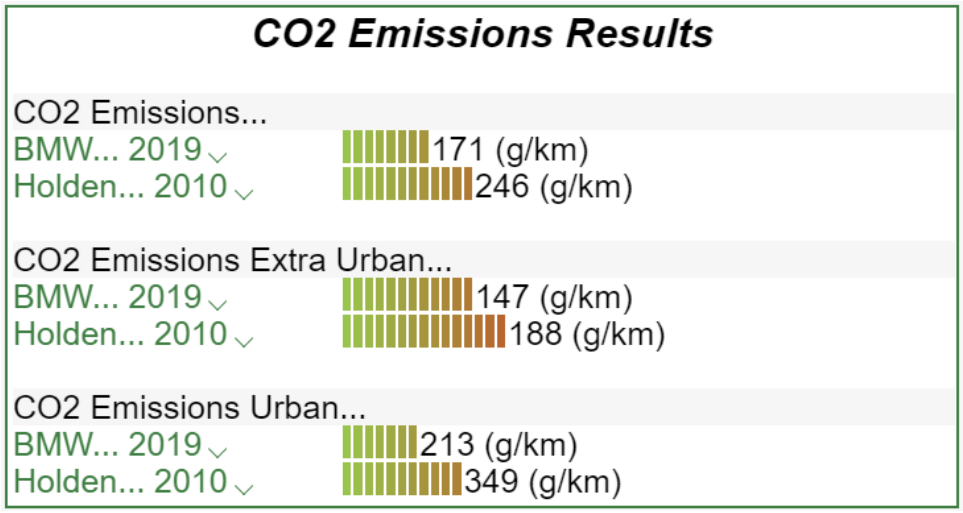


Figure 5 "CO2 Emissions Result"

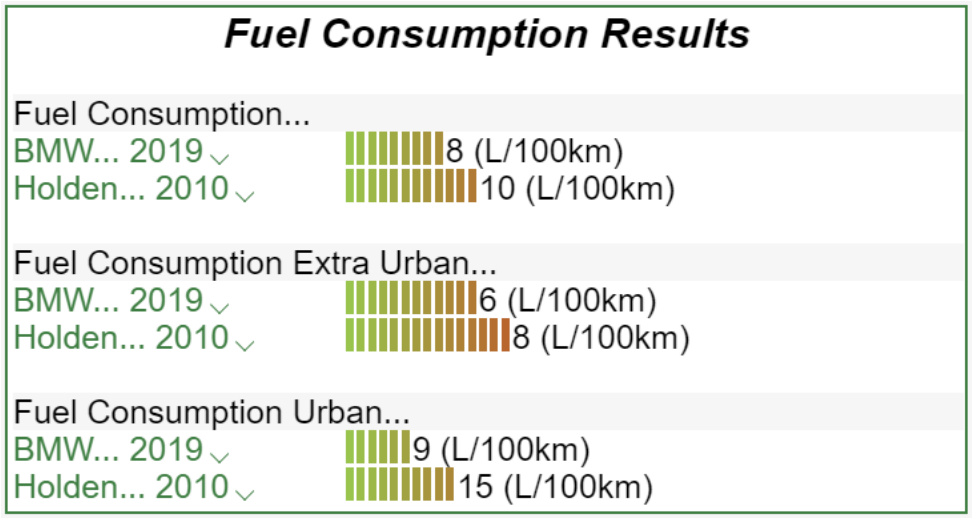


Figure 6 "Fuel Consumption Results"

As you see tow graph boxes will be generated with details about fuel consumption and CO2 emissions, with a three different driving areas (Normal Area, Extra Urban Area and Consumption Area).

- Compare more than two cars details:

  If you want to compare more than two cars all you have to do is to press “Add Car” button and a new car details box will be generated. Than you can redo the steps as with select two cars details. Than the results will be shown as the screen shoot bellows Figure 7 "CO2 Emissions Result" for more than two cars and Figure 8 "Fuel consumption Result" for more than two cars:

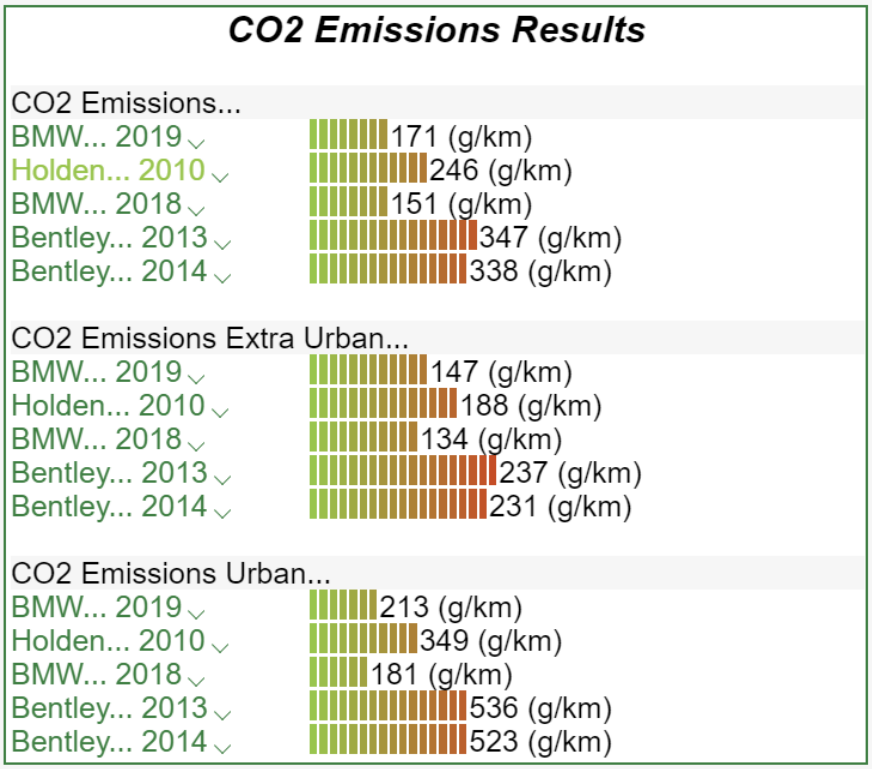


Figure 7 "CO2 Emissions Result" for more than two cars

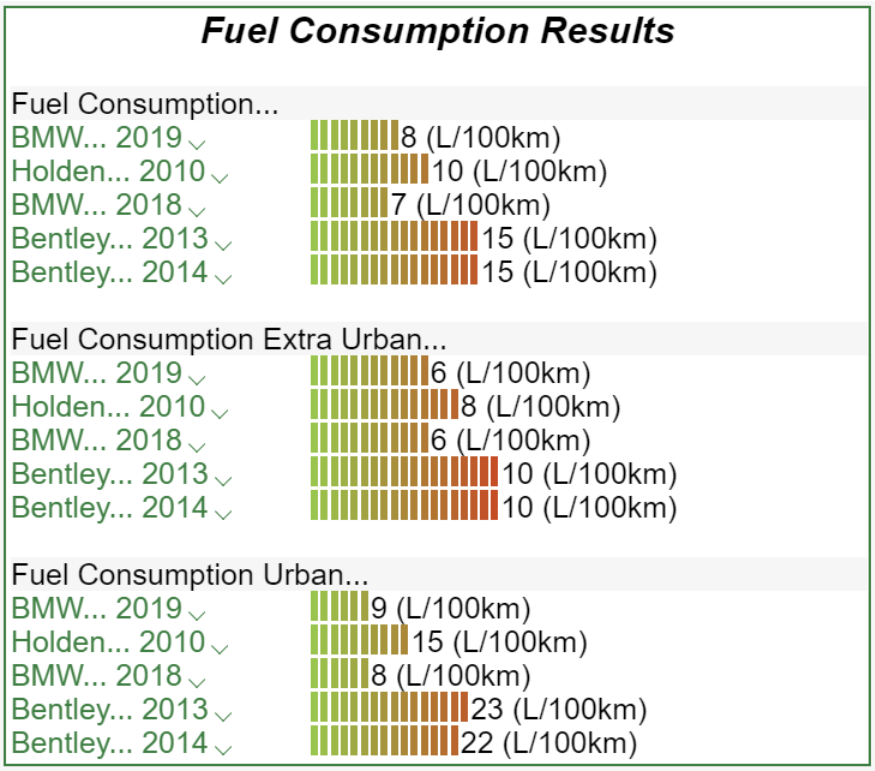


Figure 8 "Fuel consumption Result" for more than two cars

- Extend more cars details:
  At any time after getting cars results you can scroll the page down or click on the result row header to extend more data like that Figure 9 "CO2 Emission Results" extends more data:

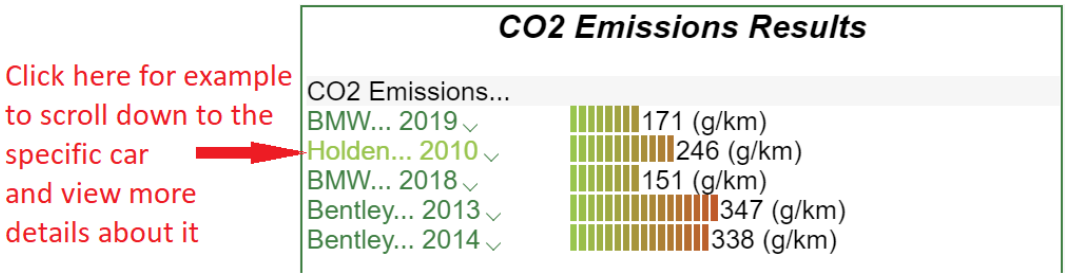
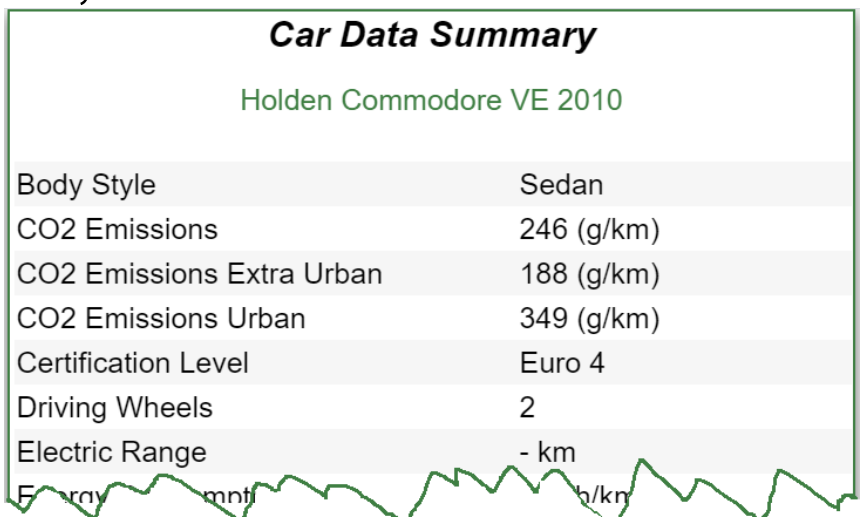


Figure 9 "CO2 Emission Results" extends more data

Than you will see a result viewed like this:



IV. Possible errors:

- Car comparing number limits:
  This error shows when you try to add more than five cars in totals, but you can ignore it as it tend to be warning more than error Figure 10 "error".

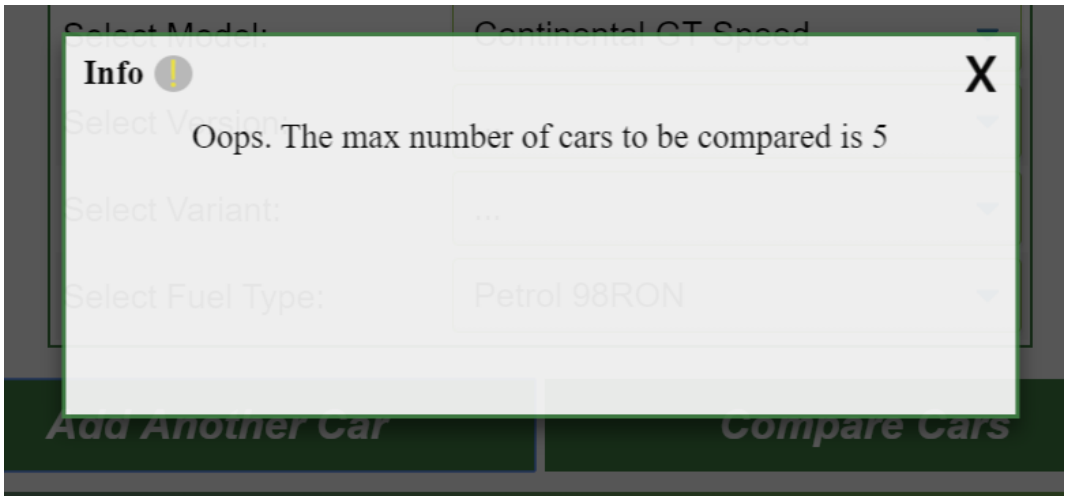


Figure 10 "error"

- Other error could be related for losing internet connection or server errors, but whatever the error details is it will be shown on the screen with brief details about it like a previous screen shoot Figure 11 "error".

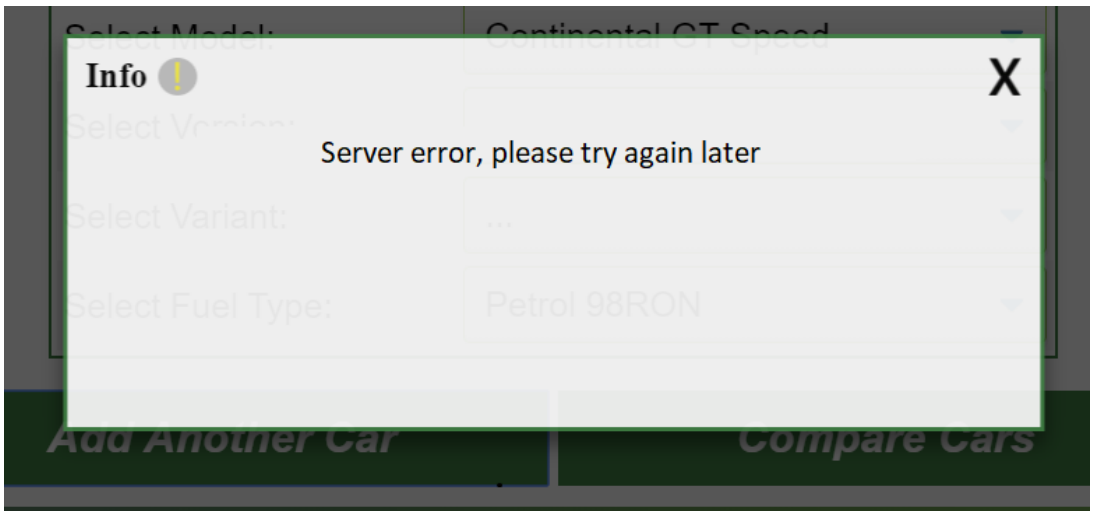


Figure 11 "error"

2) How it works page:

This page is to provide information about the web application, so the visitors for the website from different sources on the internet can get an idea about this website.
The user manual document will be able to download through this page too.
The content of this page could be updated anytime but here is a screen shoot Figure 12 "How it works page" for that page on the date of writing this document.

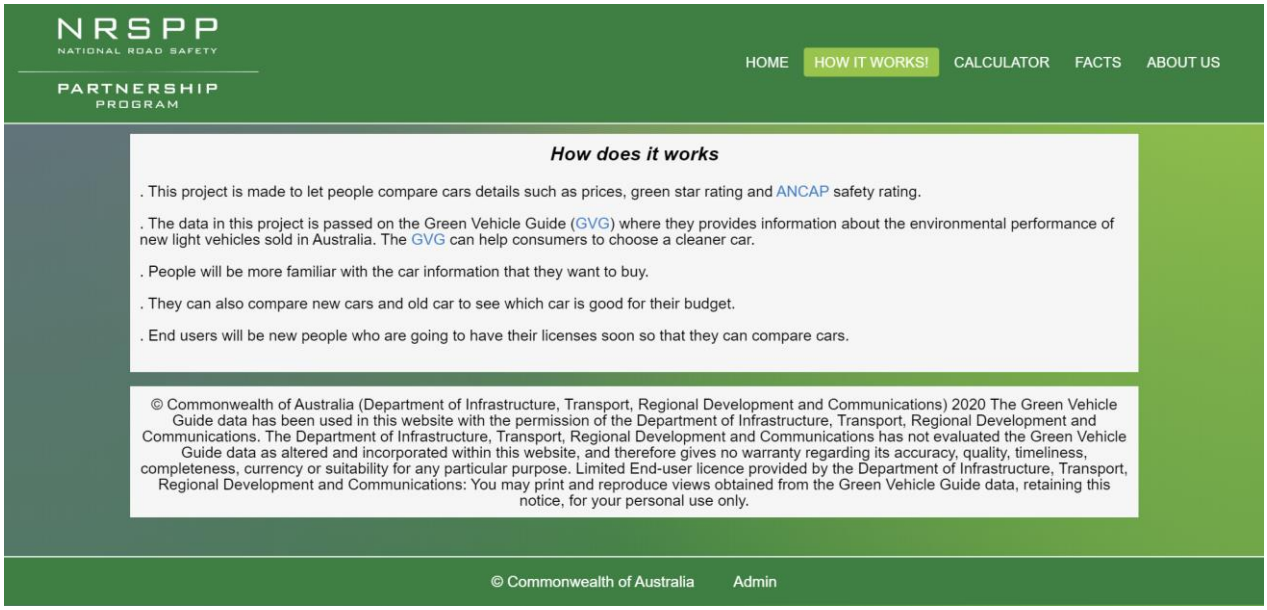


Figure 12 "How it works page"

3) Calculator page:

I. Page component information:

In this page you can use the calculator tool which allow you to calculate the fuel efficiency and CO2 Emissions for specific car model, or you can use it manually by entering all the data manually.

II. Accessing this component:

This page can be reached from any page in the website by clicking 'Calculator' tab from the navigation bar Figure 13 "Calculator page" and Figure 14 "Calculator page" mobile view":

- ***PC view:***

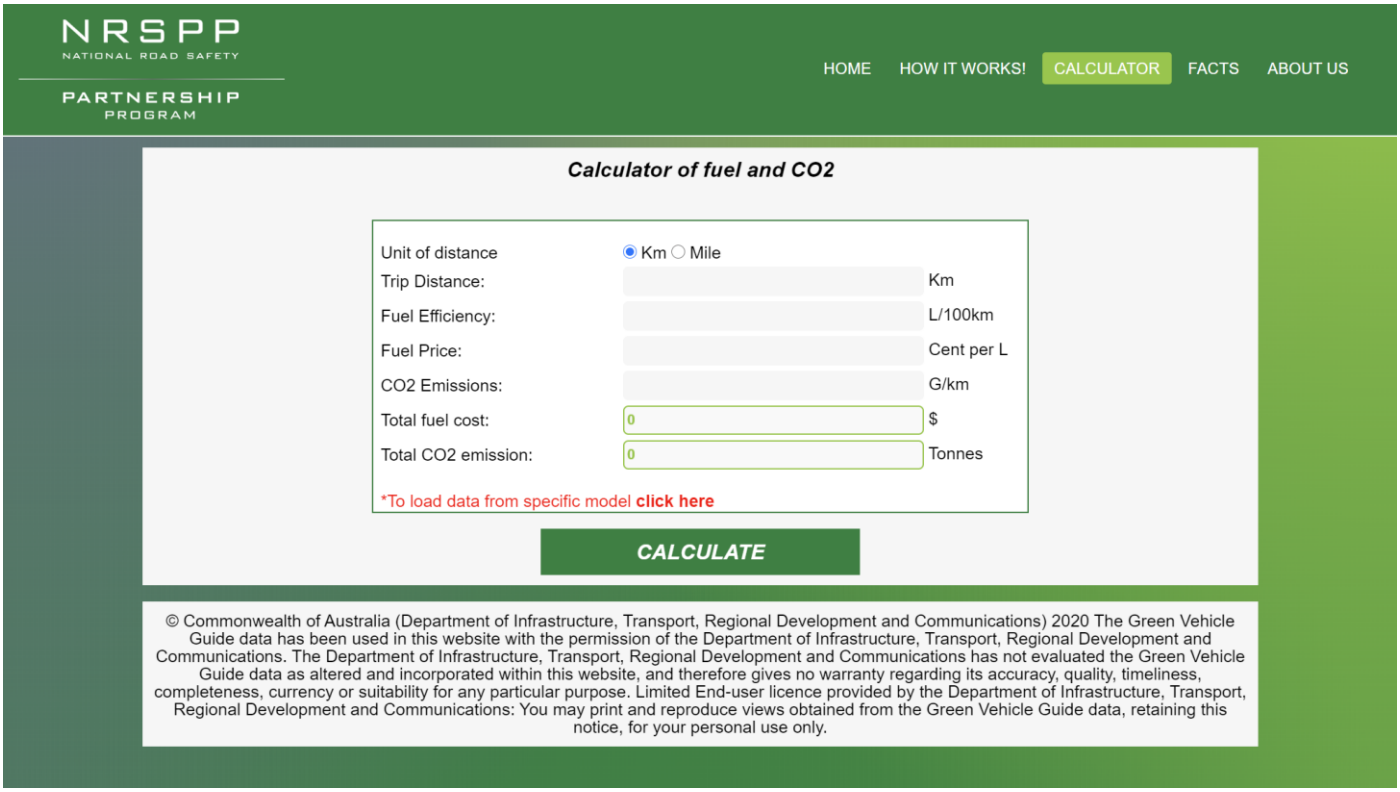


Figure 13 "Calculator page"

- ***Mobile view:***

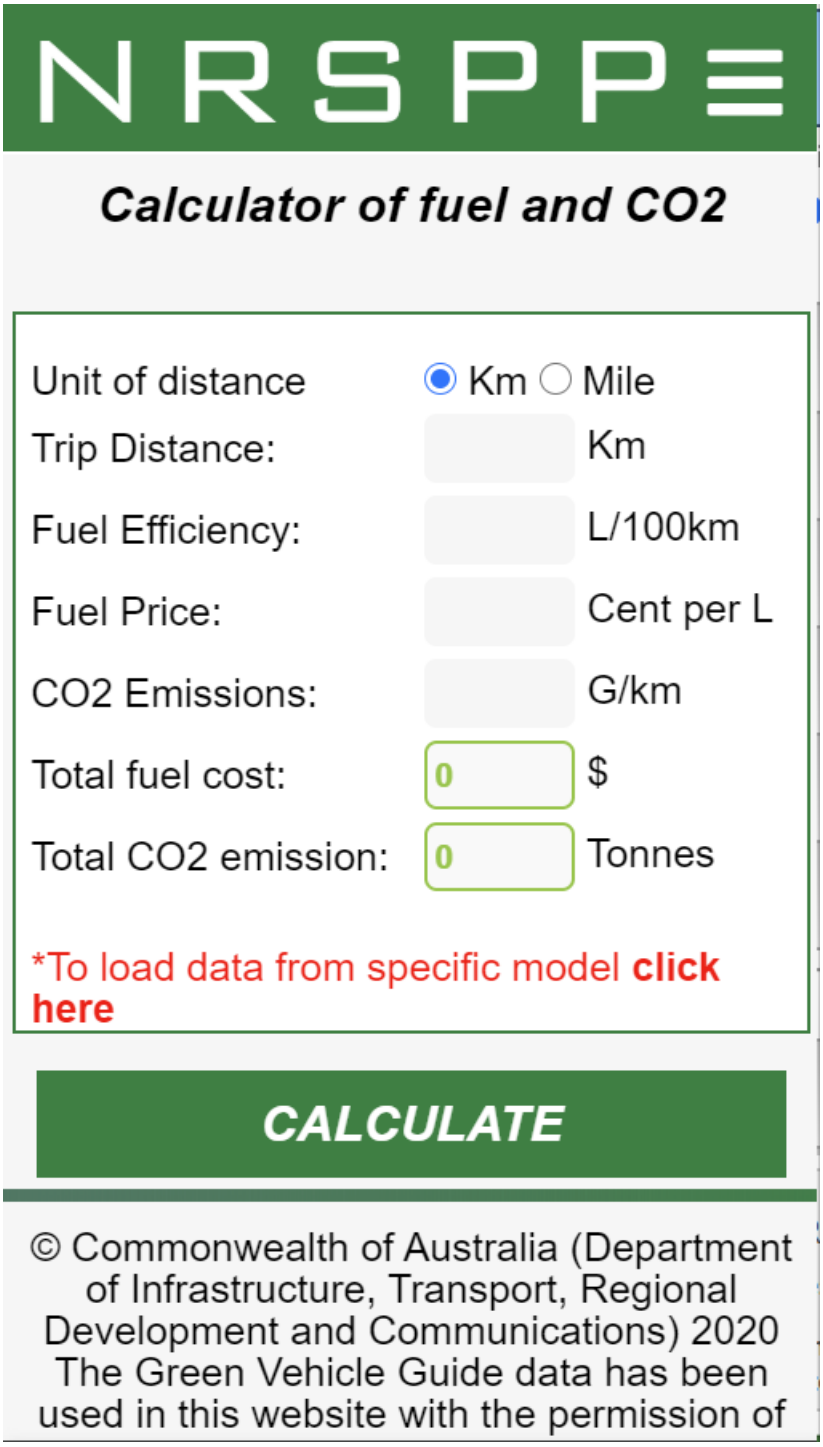


Figure 14 "Calculator page" mobile view"

III. Possible Actions:

- Enter a car details manually:

Follow the steps below to calculate car details:

1- At first start by choosing whatever you want to use units with Km or Miles as it shown in (8) Figure 15 "Calculator function".

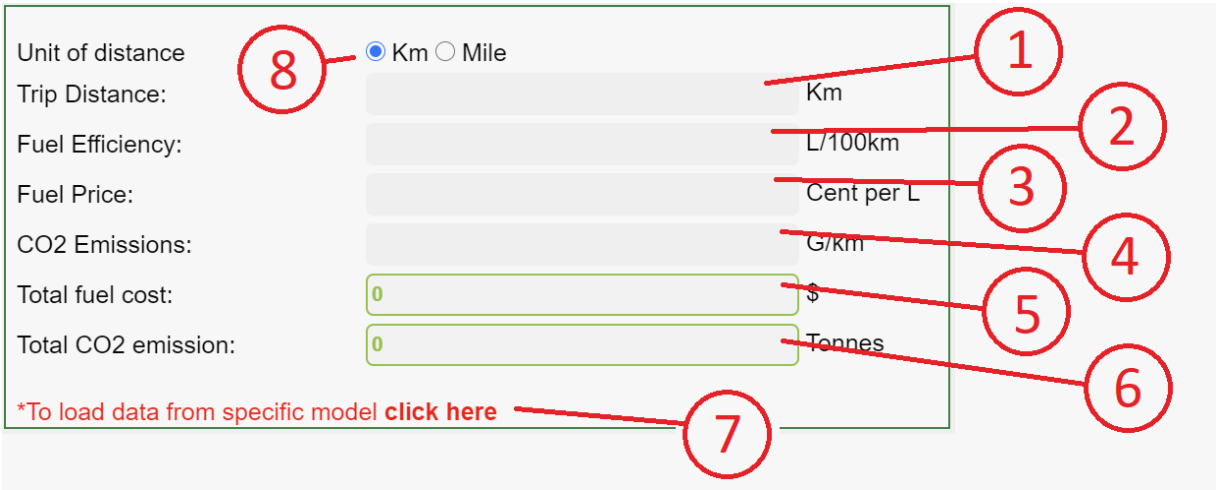


Figure 15 "Calculator function"

2- Enter trip distance as a numbers in Km or in miles (1).
3- Enter Fuel efficiency rate (2) which it one litter for each 100Km or One Litter for each 100Mile depends on the unit you has chosen on step 1.
4- Enter fuel price rate (3) which it is one Cent per one Litter.
5- Enter CO2 Emissions rate (4) which it is one Gram per one Km or One Gram per one Mile depends on the unit you has chosen on step 1.
6- The results in the two green boxes shows the fuel cost for your trip in dollars (5), and the CO2 emission in Tonnes (6).

- Enter a car details by chosen a specific car model:

Follow the steps below to calculate car details:

1- Start by pressing "click here" (7) so a drop box will come up to choose a specific model like on page 8 Figure 4 "Car details box".
2- After choose your car model you will see that two boxes will be auto filled in (Fuel efficiency rate (2) and CO2 Emissions rate (4))
3- Enter trip distance as a numbers in Km or in miles (1).
4- Enter fuel price rate (3) which it is one Cent per one Litter.
5- The results in the two green boxes shows the fuel cost for your trip in dollars (5), and the CO2 emission in Tonnes (6).

- Example: let us assume that you have a Holden commodore 2010 VE Omega International, and now you it is the time to do service for your car, that you have reached a 3000 km from your last time you have did service for your car. This model is using E10 as a type of fuel and recently the fuel price was approximately 1.21 Cent per Letter.
  Let us use the calculator to calculate how much you spend on your car fuel from last service, and how much the CO2 Emissions is:

  First click on the button "Click here" Figure 13 "Calculator page" on page 14.
  Than fill in the drop boxes as the screen shoot below Figure 16 "Example":

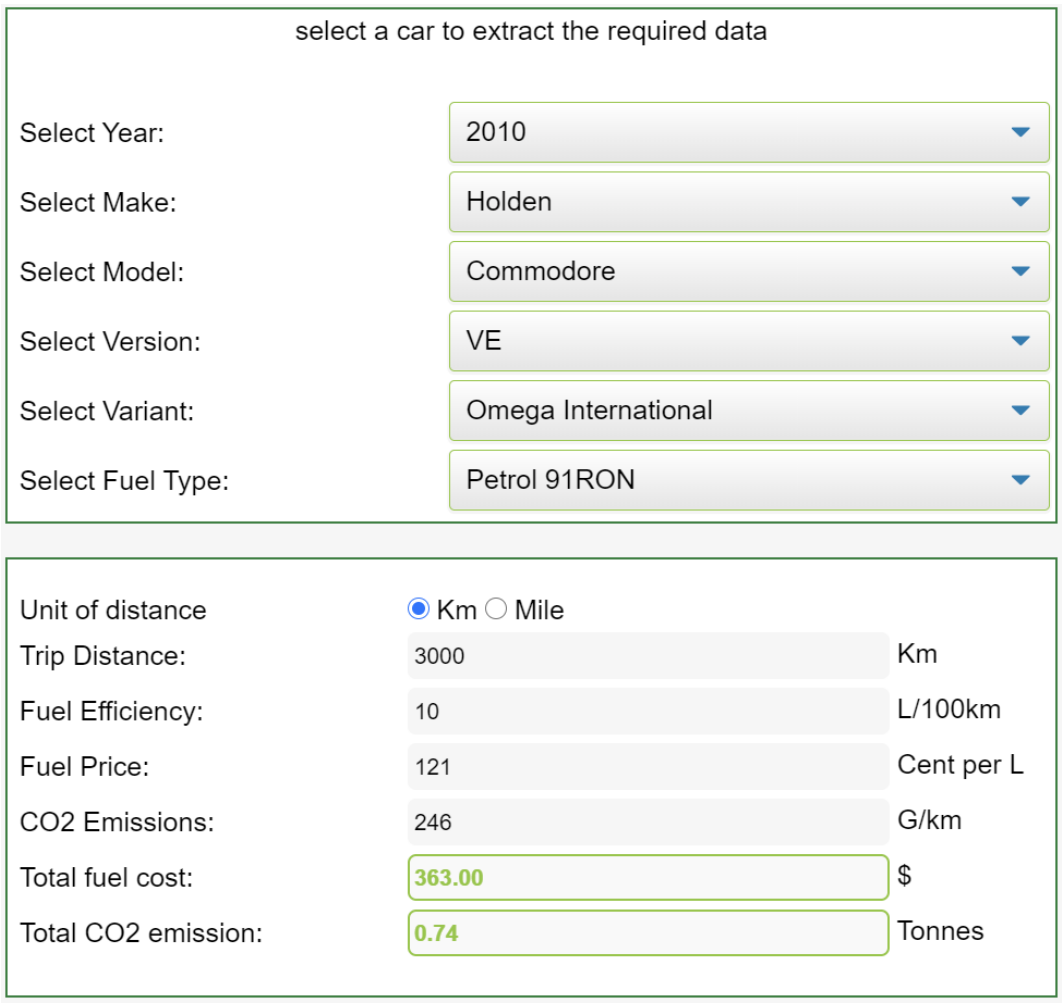


Figure 16 "Example"

As you see the results will show that you have spent around $363, and your car has dropped out about 0.75 Tonnes of CO2 in the atmosphere.

IV. Possible errors:

This calculator can works offline without needs to any server connection. So by validation function provided on this tool you are not allowed to enter any letters or symbols in the boxes or doing any wrong inserting which could lead for serial errors.

Until the date of writing this documents there is no errors has discovered for calculator function.

4) Facts page:

This page providing a generals information, facts, statistics, graphs and go on about comparing the old cars models with a new one.
The content of this page could be changed on time by adding, editing or deleting some parts of the contents.
Below is a screen shoot Figure 17 "Facts page" for this page on the time of writing this documents:

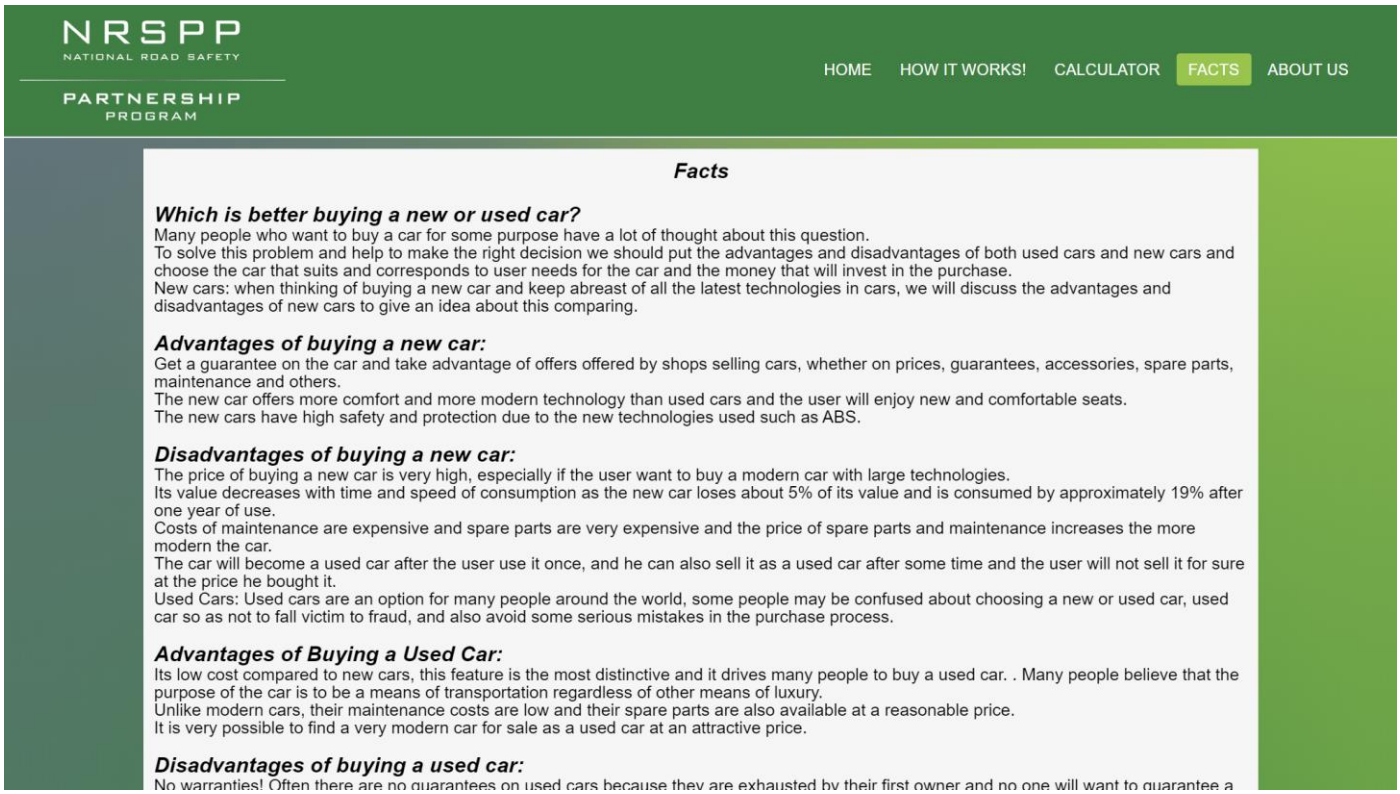


Figure 17 "Facts page"

5) About us page:

This is providing information about how to contact the web application's administrator.
The content of this page could update any time but here is a screen shoot for this page until the time of writing this document Figure 18 "About us page":

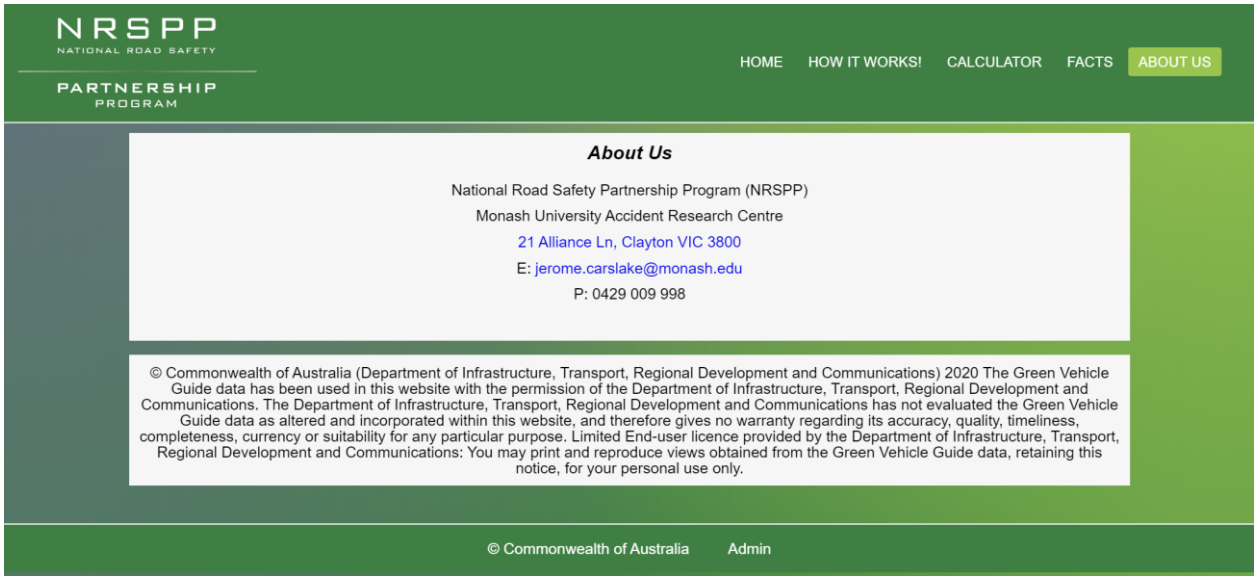


Figure 18 "About us page"