

# Testing: EnergyCalc

J Jandrell

26 May 2022

Module tested	energyCalc
Version	v0.2.1
File Path	CODE/Energy_Calculations
Last written by	K Ngwenya
Tested by	J. Jandrell

## 1 Results

### 1.1 Previously run tests

No.	Input	Expected output	Output given	Punch list
1	distanceTraveled(1320, 125)	65		
2	distanceTraveled(11987, 10241)	1746		
3	distanceTraveled(1027, 1027)	0		
4	fuelUsed(142, 8.2)	$\simeq 11.644$		
5	fuelUsed(301, 6.3)	$\simeq 18.963$		

### 1.2 New tests

No.	Input	Expected output	Output given	Punch list
6	fuelEnergy("petrol", 32.1)	$\simeq 304.95$		
7	fuelEnergy("diesel", 32.1)	$\simeq 344.11$		
8	energyUsed(1012.6, 1000.1, 6.2, "petrol")	$\simeq 7.362$		
9	energyUsed(3421, 3386.2, 7.82, "diesel")	$\simeq 29.17$		

Note: if a cell is left blank that implies that no issues occurred during the test and thus no comment or action is required.

## 2 Punch list

No.	Description	resolved	Developer
1	Previous edits overwritten in commit of new file	22-26-05	J Jandrell
2	Ambiguous and non-descriptive function names	22-05-26	J Jandrell

## 3 Concerns and future considerations

### 3.1 No defensive coding

The code does not have any protection against illogical user inputs, negative distances or other issues that could arise from human error. Will we check for these errors before we reach this point?

### 3.2 Different fuel strings are not needed

Case sensitivi should not matter. This string will be saved by us - not the user. We can control its format so this should not be a problem