

Introduction:

Hello, everyone. This is the user manual for Tower Hill's carbon footprint assessment tool. This will dive into how to operate the tool and how to add new parameters to the tool.

Within this series, we will address the following:

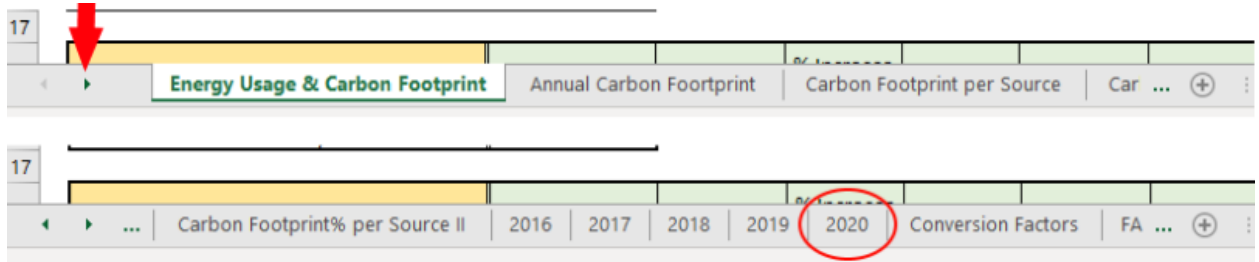
1. **Entering Data for a Year** (starting on page 1)
2. **Creating a New Year** (starting on page 5)
3. **Incorporating a New Year into Graphs** (starting on page 12)
4. **Adding New Types of Consumption Data** (starting on page 24)

Every subsection will assume that you have the tool opened and are on the first tab and all tabs are unprotected as necessary.

Entering data for a year

This section is for help on entering data for a year tab that already exists.

1. Find and click on the year for which you want to add data. If the year is not visible, press the left or right facing arrows on the bottom left until it is visible. (Ex. 2020)



2. Find the cell in that that corresponds to the month and consumption data you would like to add data for. (Ex. Gasoline for March)

The screenshot shows an Excel spreadsheet with a table of monthly energy usage and carbon footprint data. A red arrow points to the 'Gasoline' column header, and another red arrow points to the 'March' row header. The cell for 'March' under 'Gasoline' is highlighted with a green border.

Month	Oil	Gasoline	Propane	Diesel	Water	Electricity
January	3563.30	59.08	1701.80	31.92	0.00	29119.00
February	1822.60	0.00	804.80	0.00	0.00	0.00
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTALS	5385.90	59.08	2506.60	31.92	0.00	29119.00
CARBON	114186.47	1104.72	31608.23	734.80	0.00	16254.23
TOTAL CF	163888.44					

- Enter in the data in the correct units (gallons for oil, gasoline, propane, diesel, and water; kilowatt hours for electricity) and press enter.. (Ex. 16.47 gallons)

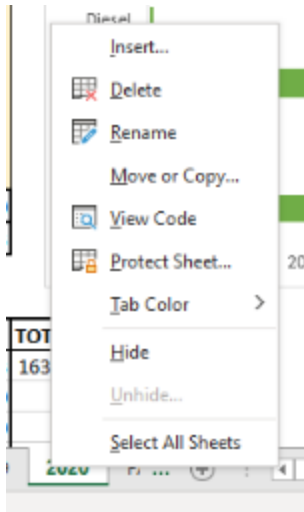
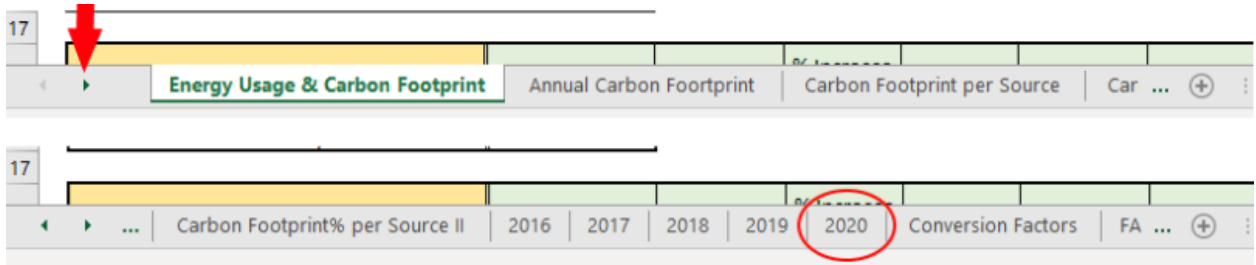
	A	B	C	D	E	F	G	H
1								
2		Month	Oil	Gasoline	Propane	Diesel	Water	Electricity
3		January	3563.30	59.08	1701.80	31.92	0.00	29119.00
4		February	1822.60	0.00	804.80	0.00	0.00	0.00
5		March		16.47				
6		April						
7		May						
8		June						
9		July						
10		August						
11		September						
12		October						
13		November						
14		December						
15		TOTALS	5385.90	59.08	2506.60	31.92	0.00	29119.00
16		CARBON	114186.47	1104.72	31608.23	734.80	0.00	16254.23
17		TOTAL CF	163888.44					

- You have successfully input data.

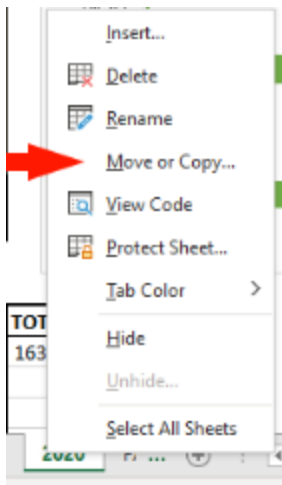
Creating a new year

This section is for help on creating a new tab for a new year that is after the ones appearing on the table.

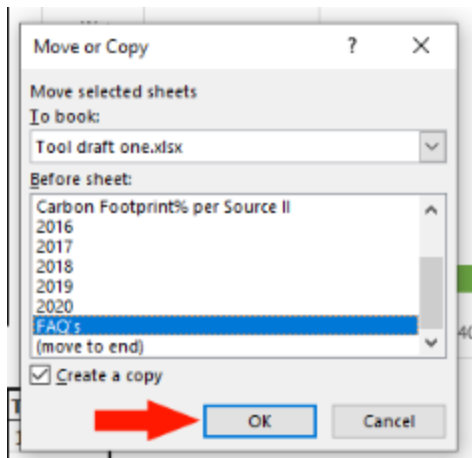
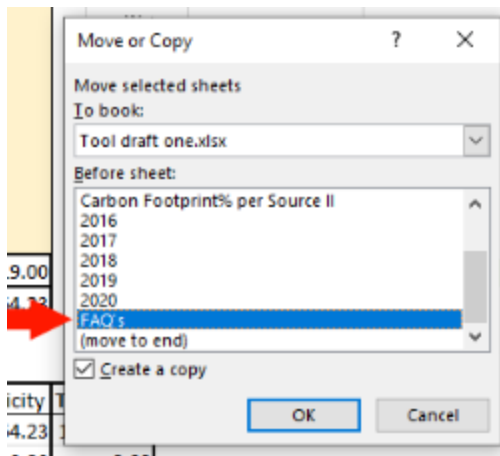
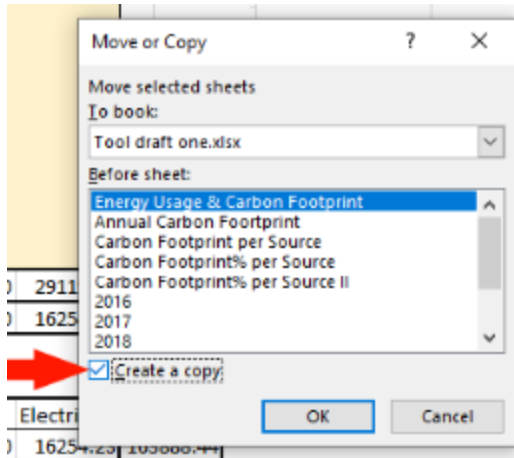
1. Find the tab for the year closest to the one you want to add and right click on the tab.. If the year is not visible, press the left or right facing arrows on the bottom left until it is visible. (Ex. 2021)



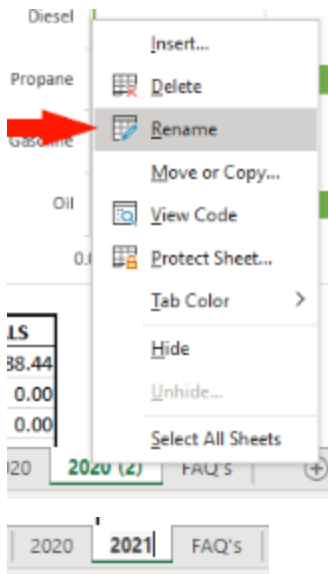
2. Click on “Move or Copy...”



3. Click on “Create of Copy” and select the item on the list right below the item that corresponds to the tab you are copying, then click on “OK”. (Ex. I am copying the tab named “2020” so I find the item that is right after “2020” on the list, which is “FAQ’s”)



4. You should immediately be brought to the new tab, which should be the name of the tab you duplicated with “(2)” after it. (Ex. 2020 (2)) Right click on the tab you are on, click on “Rename”, and rename the tab to the year you want to add. (Ex. 2021)



5. Select all the tan cells towards the top left of the sheet, then press the “delete” key on your keyboard. (Ex. The cells in the square between C3 and H14)

Month	Oil	Gasoline	Propane	Diesel	Water	Electricity
January	3563.30	59.08	1701.80	31.92	0.00	29119.00
February	1822.60	0.00	804.80	0.00	0.00	0.00
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTALS	5385.90	59.08	2506.60	31.92	0.00	29119.00
CARBON	114186.47	1104.72	31608.23	734.80	0.00	16254.23

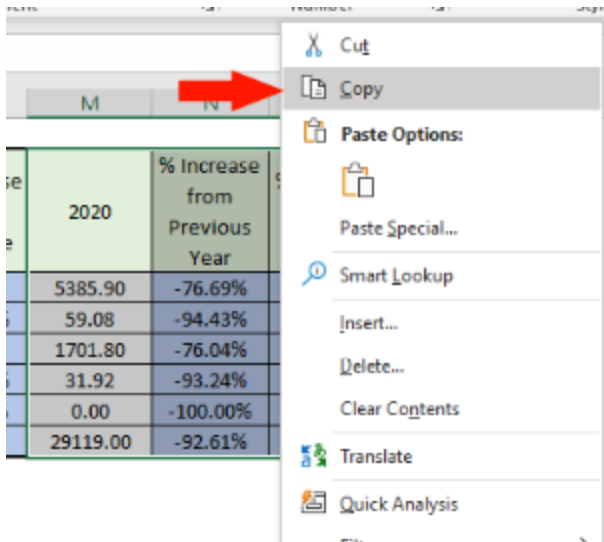
Month	Oil	Gasoline	Propane	Diesel	Water	Electricity
January						
February						
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00
CARBON	0.00	0.00	0.00	0.00	0.00	0.00

6. Go back to the first tab. Click on the left arrow if it is not visible.

The screenshot shows a software interface with a table and a navigation bar. The table has columns for Winter, Spring, and Summer, with values of 0.00 for each. The navigation bar has tabs for Carbon Footprint% per Source II, 2016, 2017, 2018, 2019, 2020, 2021, and FAQ's. A red arrow points to the left arrow in the navigation bar. Below the table, a red arrow points to a bar chart showing Energy Usage & Carbon Footprint.

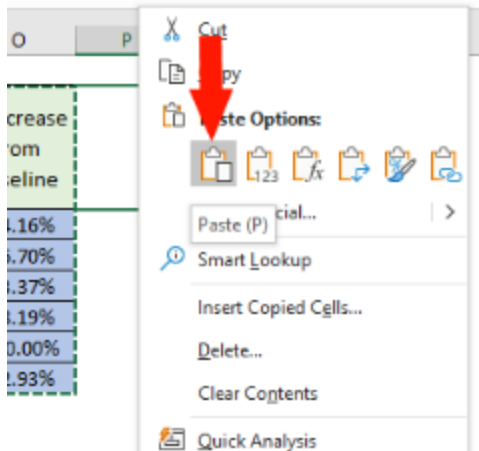
7. Go to the end of the first table on the first tab, and select the last 3 columns. Right click and press “Copy”.

	H	I	J	K	L	M	N	O	P
1									
2		% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline
3		0.62%	8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%	-74.16%
4		4.89%	14.09%	1061.23	109.49%	139.00%	59.08	-94.43%	-86.70%
5		13.63%	68.24%	7103.70	-9.13%	52.89%	1701.80	-76.04%	-63.37%
6		84.28%	16.11%	472.57	305.64%	370.97%	31.92	-93.24%	-68.19%
7		3.16%	-23.49%	2420900.01	-3.46%	-26.14%	0.00	-100.00%	-100.00%
8		5.04%	-0.45%	394010.00	-3.95%	-4.38%	29119.00	-92.61%	-92.93%
9									



8. Select the cell right after the end of the top row of the table. (Ex. O2 is the cell at the end of the top row of the table, so I select P2.) Right click and press “Paste”.

	H	I	J	K	L	M	N	O	P	
1										
2		% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline	
3		0.62%	8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%	-74.16%	
4		4.89%	14.09%	1061.23	109.49%	139.00%	59.08	-94.43%	-86.70%	
5		13.63%	68.24%	7103.70	-9.13%	52.89%	1701.80	-76.04%	-63.37%	

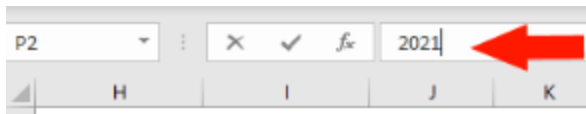


	M	N	O	P	Q	R
--	---	---	---	---	---	---

Baseline	2020	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline
%	5385.90	-76.69%	-74.16%	31.92	-99.41%	-99.85%
%	59.08	-94.43%	-86.70%	0.00	-100.00%	-100.00%
%	1701.80	-76.04%	-63.37%	29119.00	1611.07%	526.70%
%	31.92	-93.24%	-68.19%	0.00	-100.00%	-100.00%
%	0.00	-100.00%	-100.00%	0.00	#DIV/0!	-100.00%
%	29119.00	-92.61%	-92.93%	0.00	-100.00%	-100.00%

- Select the top cell of the first column of the three you just pasted and type in the year you are adding on the top bar. (Ex. The top cell of the first column I pasted is cell P2, and I am renaming it to be 2021)

	M	N	O	P	Q	R
e	2020	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline
	5385.90	-76.69%	-74.16%	31.92	-99.41%	-99.85%
	59.08	-94.43%	-86.70%	0.00	-100.00%	-100.00%
	1701.80	-76.04%	-63.37%	29119.00	1611.07%	526.70%
	31.92	-93.24%	-68.19%	0.00	-100.00%	-100.00%
	0.00	-100.00%	-100.00%	0.00	#DIV/0!	-100.00%
	29119.00	-92.61%	-92.93%	0.00	-100.00%	-100.00%



10. In the next cells in that same column underneath the top row, replace all instances in the top bar of the old year with the new year. (Ex. I am replacing “2020” with “2021” in these cells.)

='2020'!F15

	I	J	K	L	M	N	O	P
Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline	2021	Pr
8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%	-74.1%	31.92	
14.09%	1061.23	109.49%	139.00%	59.08	-94.43%	-86.1%	0.00	
68.24%	7103.70	-9.13%	52.89%	1701.80	-76.04%	-63.1%	29119.00	
16.11%	472.57	305.64%	370.97%	31.92	-93.24%	-68.1%	0.00	
-23.49%	2420900.01	-3.46%	-26.14%	0.00	-100.00%	-100.00%	0.00	
-0.45%	394010.00	-3.95%	-4.38%	29119.00	-92.61%	-92.61%	0.00	

='2021'!F15

	I	J	K	L	M	N	O	P
Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline	2021	F
8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%	-74.1%	0.00	
14.09%	1061.23	109.49%	139.00%	59.08	-94.43%	-86.1%	0.00	
68.24%	7103.70	-9.13%	52.89%	1701.80	-76.04%	-63.1%	0.00	
16.11%	472.57	305.64%	370.97%	31.92	-93.24%	-68.1%	0.00	
-23.49%	2420900.01	-3.46%	-26.14%	0.00	-100.00%	-100.00%	0.00	
-0.45%	394010.00	-3.95%	-4.38%	29119.00	-92.61%	-92.61%	0.00	

11. Repeat steps 7, 8, and 9 for the third and fourth tables with the last 3 columns.

	M	N	O	P	Q	R
18	2020	% Increase from Previous Year	% Increase from Baseline	2021	% Increase from Previous Year	% Increase from Baseline
19	114186.47	-329.05%	-74.16%	0.00	#DIV/0!	-100.00%
20	1104.72	-1696.38%	-86.70%	0.00	#DIV/0!	-100.00%
21	21459.70	-317.42%	-63.37%	0.00	#DIV/0!	-100.00%
22	734.80	-1380.34%	-68.19%	0.00	#DIV/0!	-100.00%
23	0.00	#DIV/0!	-100.00%	0.00	#DIV/0!	-100.00%
24	16254.23	-1253.10%	-92.93%	0.00	#DIV/0!	-100.00%
25	153739.91	-444.49%	-79.51%	0.00	#DIV/0!	-100.00%
26	69.74	-444.49%	-79.51%	0.00	#DIV/0!	-100.00%
27	20%	-444.49%	-79.51%	0%	#DIV/0!	-100.00%

	M	N	O	P	Q	R
30	2020	% Increase from Previous Year	% Increase from Baseline	2021	% Increase from Previous Year	% Increase from Baseline
31	15%	-50.07%	-43.66%	0%	-15.22%	-58.88%
32	0%	-2.50%	-0.96%	0%	-0.15%	-1.11%
33	3%	-9.08%	-4.95%	0%	-2.86%	-7.81%
34	0%	-1.35%	-0.21%	0%	-0.10%	-0.31%
35	0%	-0.93%	-1.25%	0%	0.00%	-1.25%
36	2%	-27.14%	-28.48%	0%	-2.17%	-30.65%

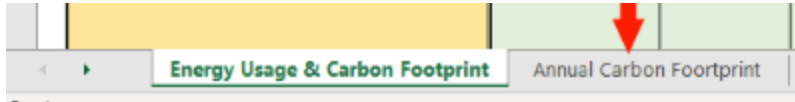
12. Repeat steps 7, 8, 9, and 10 for the fifth (and last) table with the last 2 columns.

	J	K	L	M
38	2020	% Increase	2021	% Increase
39	163888.44	-48.07%	0.00	-100.00%
40	0.00	-100.00%	0.00	#DIV/0!
41	0.00	-100.00%	0.00	#DIV/0!
42	0.00	-100.00%	0.00	#DIV/0!

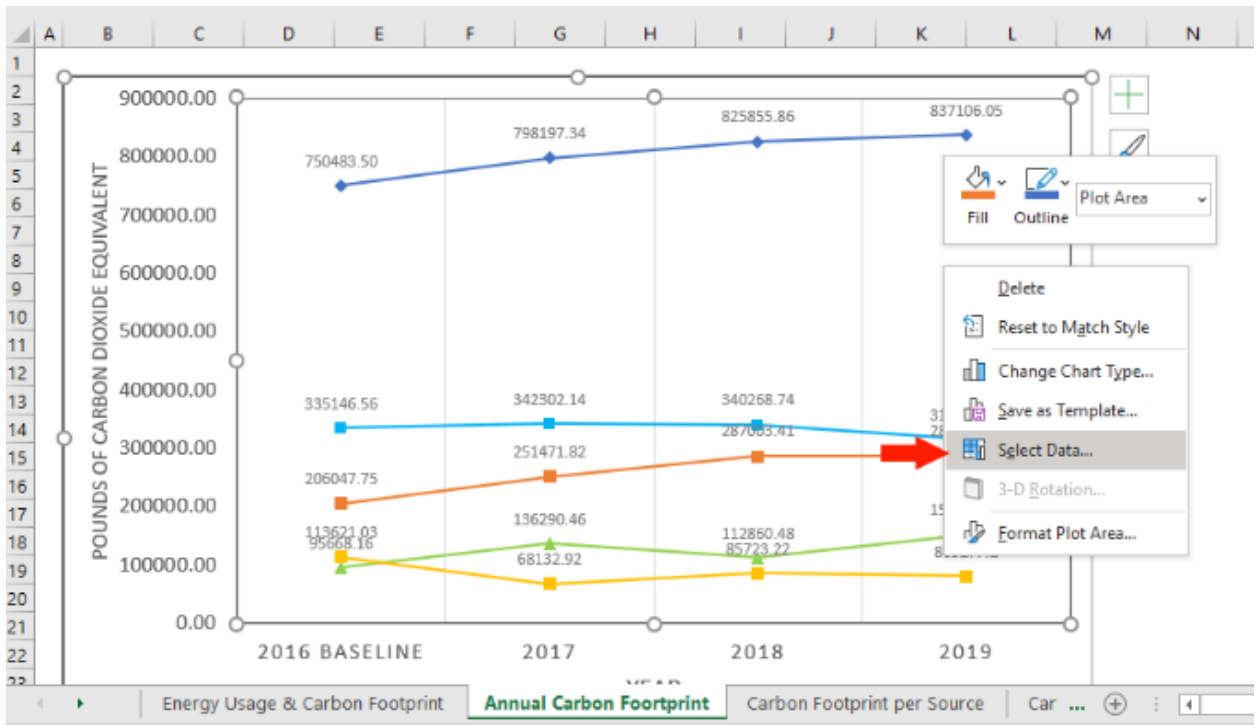
Incorporating a new year into graphs

This section is for help on adding more years into the graphs on the first few tabs of the tool.

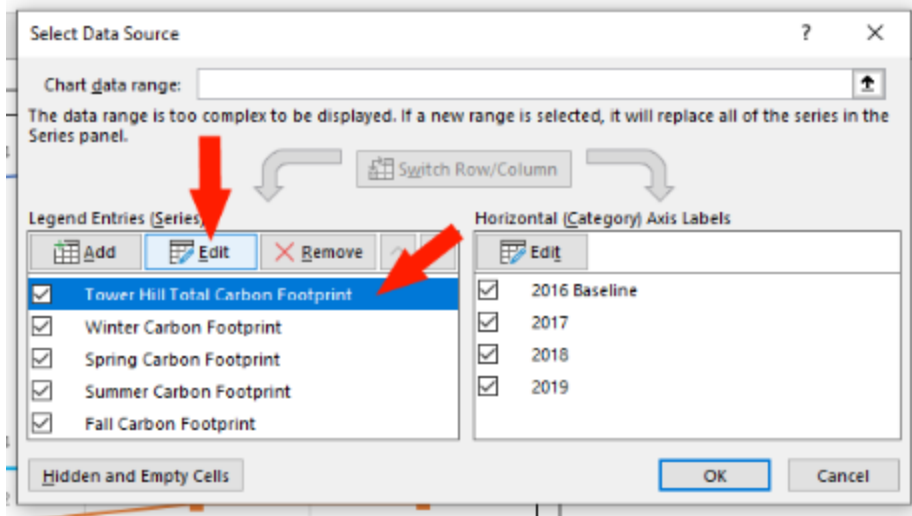
1. Find the tab labelled “Annual Carbon Footprint”, which should be the second tab.



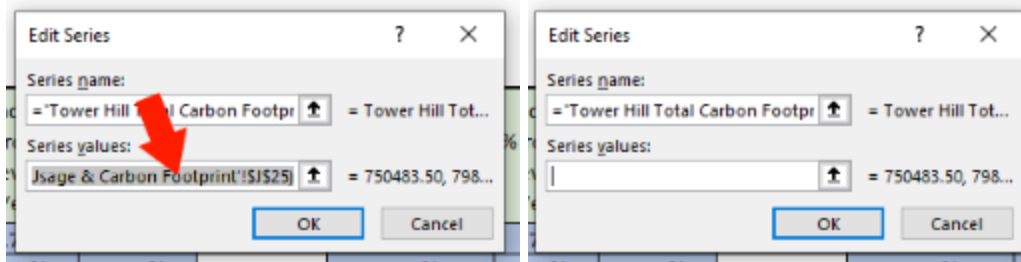
2. Right click on the graph and select “Select Data...”.



- Select the first item on the left-hand list (labelled “Tower Hill Total Carbon Footprint”) and click “Edit”.



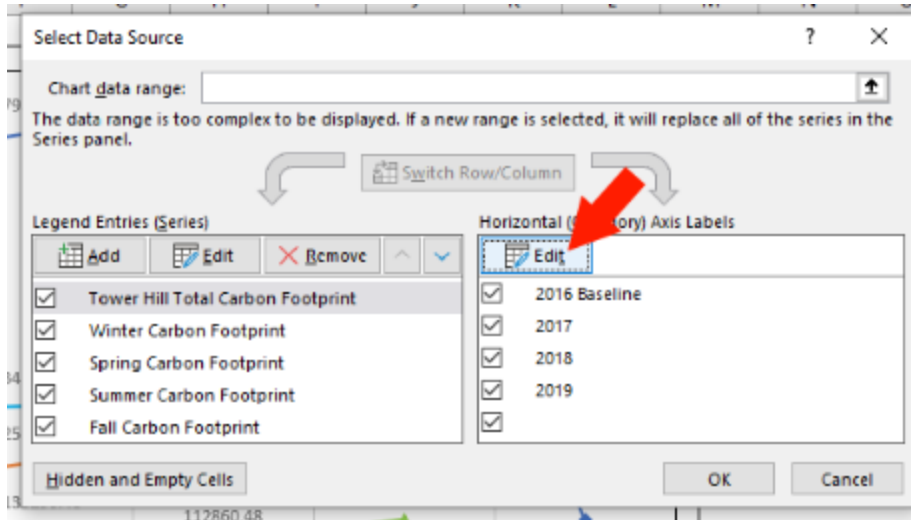
- Select everything in the text box underneath “Series values:” and press “backspace” or “delete” on your keyboard.



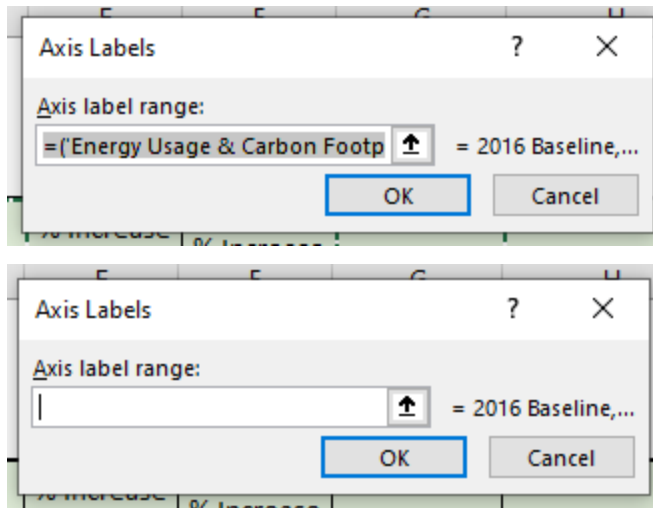
- If you were not taken to the first sheet, go to it, and find the third table. While holding the “ctrl” key on your keyboard, select each cell in the row labelled “Total (Pounds)” only for columns that correspond to years (white columns) up to and including the year you want to add and press “OK”. (Ex. Up to 2020)

Carbon Footprint in lbs of CO2	2016 Baseline	2017	Previous Year	from Baseline	2018	Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Incr fro Previ Ye
Oil	441847.92	476001.25	7.73%	7.73%	478951.79	0.62%	8.40%	489919.07	2.24%	10.88%	114186.47	-329
Gasoline	8303.17	9031.35	8.77%	8.77%	9473.03	4.66%	14.09%	19844.96	52.26%	139.00%	1104.72	-1696
Propane	58591.10	86749.23	48.06%	48.06%	98574.89	12.00%	68.24%	89577.66	-10.04%	52.89%	21459.70	-317
Diesel	2309.63	1455.20	-36.99%	-36.99%	2681.60	45.73%	16.11%	10877.57	75.35%	370.97%	734.80	-1380
Water	9410.85	6979.31	-25.84%	-25.84%	7199.80	3.06%	-23.49%	6950.40	-3.59%	-26.14%	0.00	#DIV
Electricity	230020.82	7981.01	-5.23%	-5.23%	8974.76	4.80%	-0.45%	19936.38	-4.11%	-4.38%	254.23	-1253
Total (Pounds)	750483.50	798197.34	6.36%	6.36%	825855.86	3.35%	10.04%	837106.05	1.34%	11.54%	153739.91	-444
Metric Tons	340.41	362.06	6.36%	6.36%	374.60	3.35%	10.04%	379.70	1.34%	11.54%	69.74	-444
Percent of Baseline	100%	106%	6.36%	6.36%	110%	3.35%	10.04%	112%	1.34%	11.54%	20%	-444

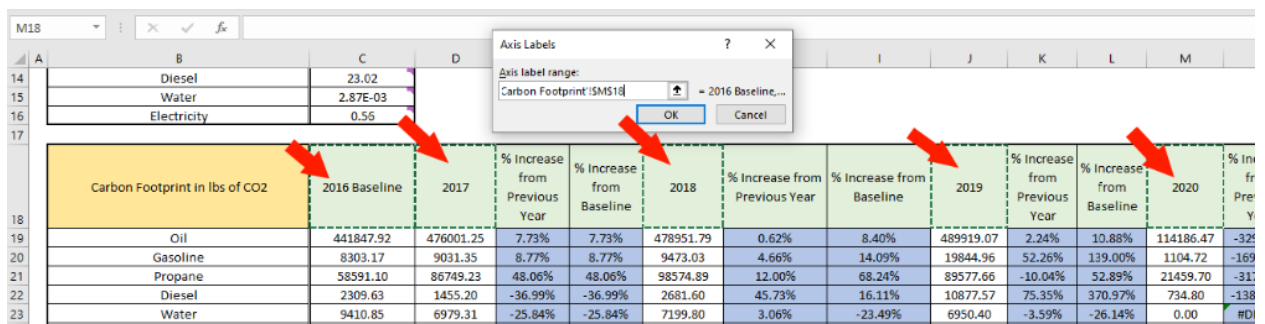
- Select "Edit" above the right-hand list.



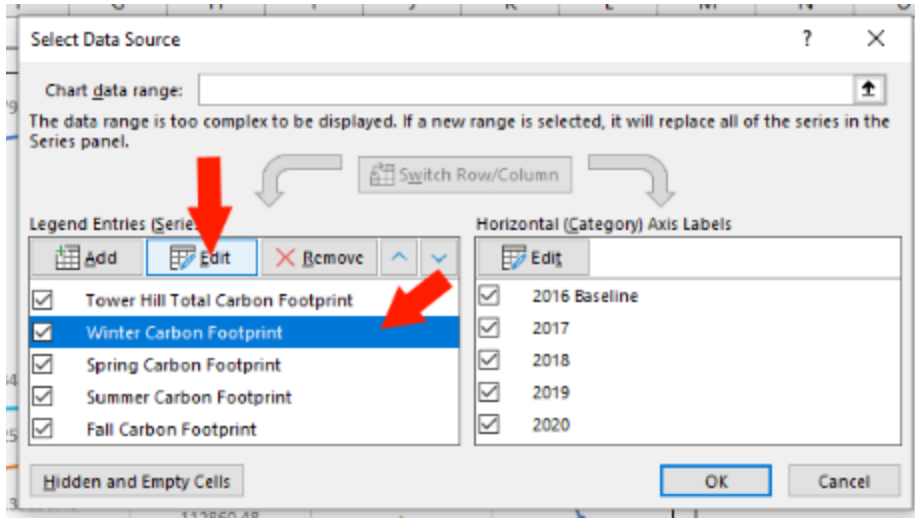
- Select everything in the text box and press "backspace" or "delete" on your keyboard.



- If you were not taken to the first sheet, go to it, and find the third table. While holding the "ctrl" key on your keyboard, select each cell in the top row corresponding to each year up to and including the year you want to add and press "OK".



9. Select the next item on the left-hand list (it will be a season) and repeat step 4.

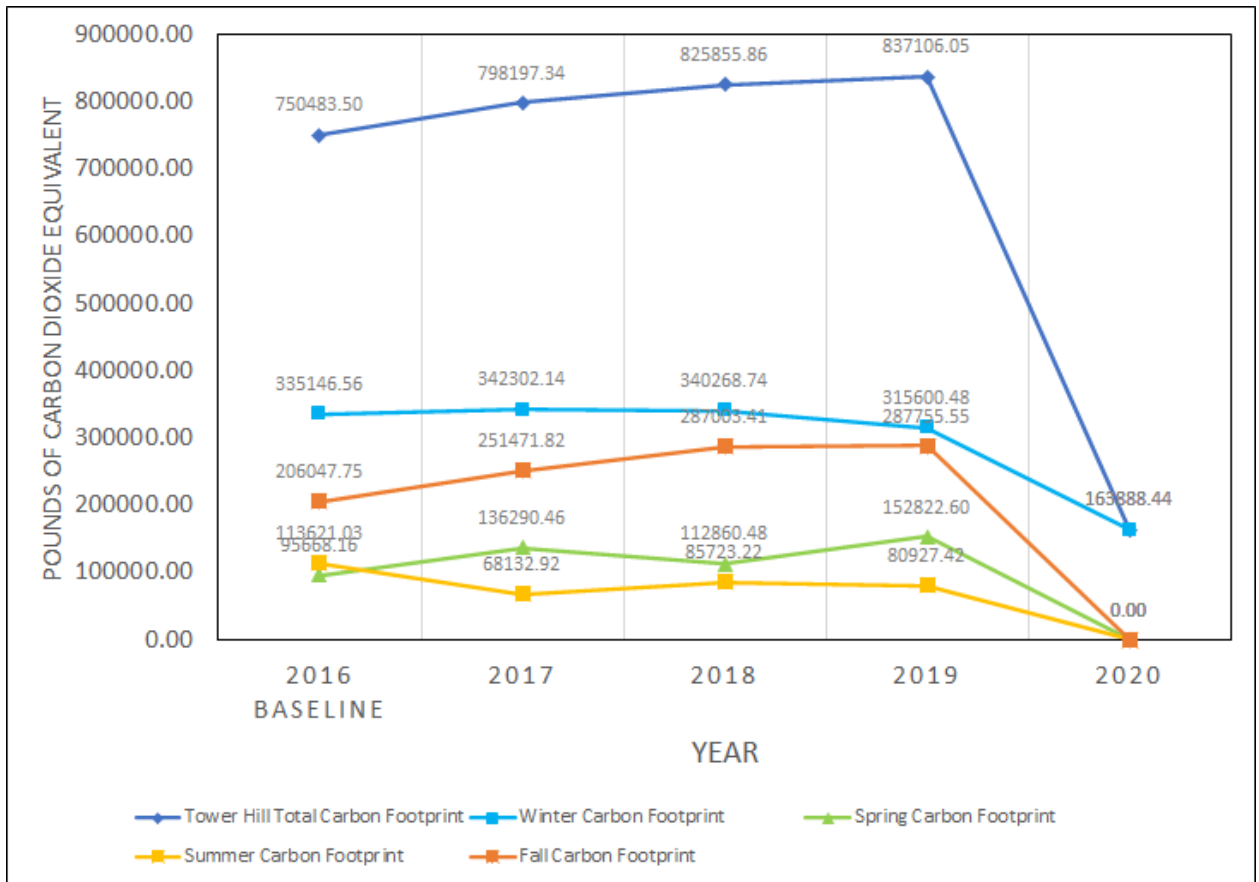
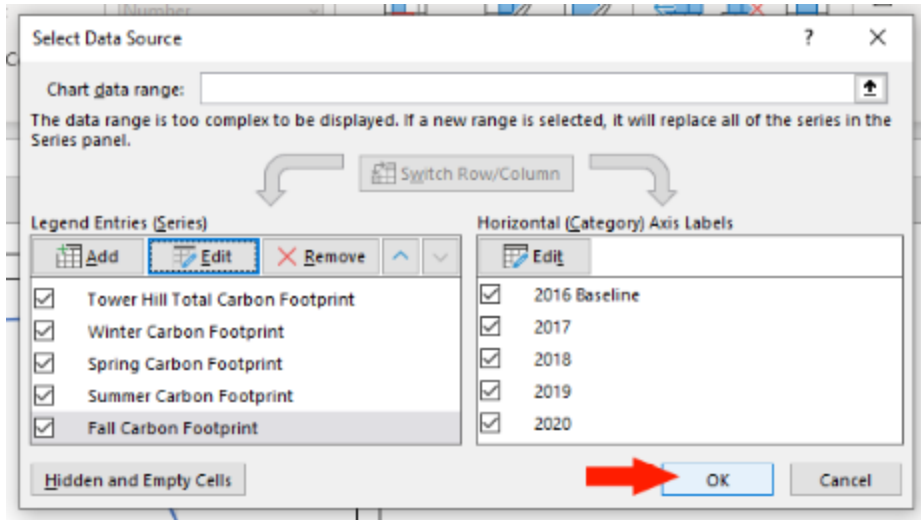


10. If you were not taken to the first sheet, go to it, and find the fifth table. While holding the “ctrl” key on your keyboard, select each cell in the row corresponding to the season in the column corresponding to years up to and including the year you want to add and press “OK”.

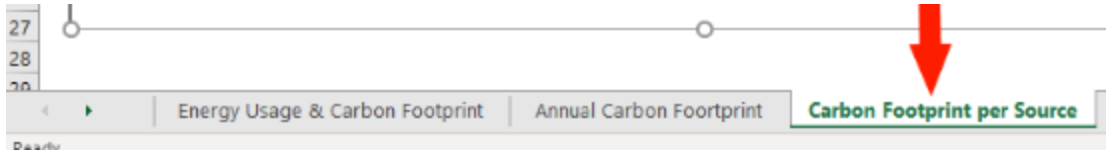
Consumption by % of carbon footprint	2016 Baseline		from		% Increase from Previous Year	% Increase from Baseline	2019	from Previous Year	
Oil	59%				0.39%	4.94%	65%	1.46%	
Gasoline	1%				0.06%	0.16%	3%	1.38%	
Propane	8%				1.58%	5.33%	12%	-1.20%	
Diesel	0%				0.16%	0.05%	1%	1.09%	
Water	1%				0.03%	-0.29%	1%	-0.03%	
Electricity	31%	29%	-1.00%	-1.60%	31%	1.46%	-0.14%	29%	-1.20%

Carbon Footprint in lbs of CO2 by season	2016 Baseline	2017	% Increase	2018	% Increase	2019	% Increase	2020	% Increase
Winter	335146.56	342302.14	2.14%	340268.74	-0.59%	315600.48	-7.25%	163388.44	-48.07%
Spring	95668.16	136290.46	42.46%	112860.48	-17.19%	152822.60	35.41%	0.00	-100.00%
Summer	113621.03	68132.92	-40.03%	85723.22	25.82%	80927.42	-5.59%	0.00	-100.00%
Fall	206047.75	251471.82	22.05%	287003.41	14.13%	287755.55	0.26%	0.00	-100.00%

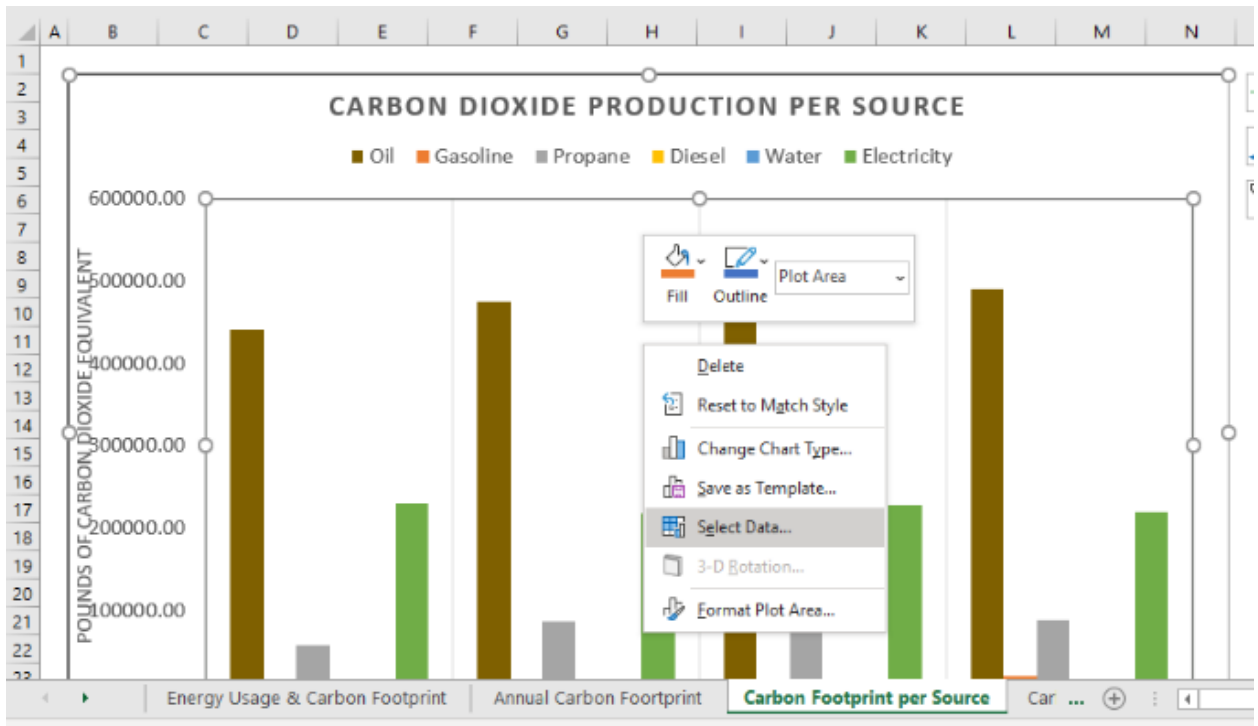
11. Repeat steps 9 and 10 for the remaining 3 seasons. Press “OK” once you are done.



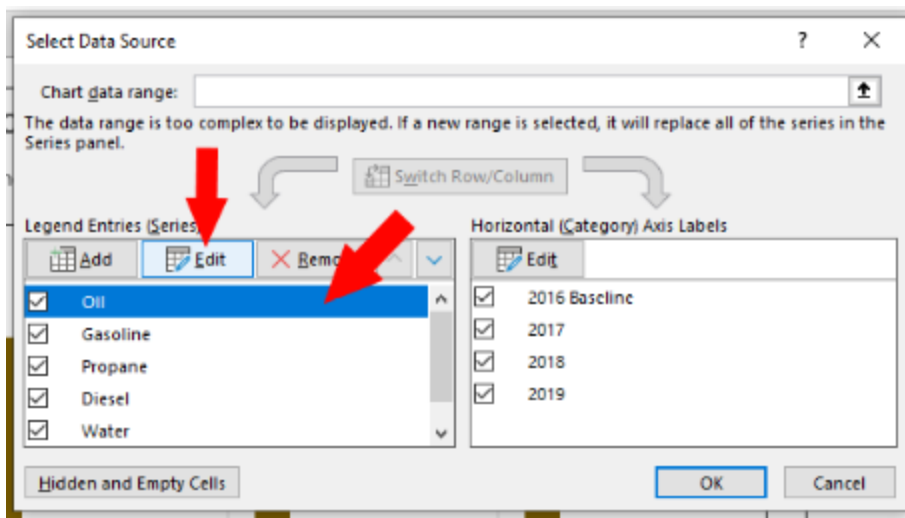
12. You have added a new year to one graph, but there are 3 more graphs. Find the third sheet labelled “Carbon Footprint per Source”.



13. Right click on the graph and select “Select Data...”.



14. Select the first item on the left-hand list (labelled “Oil”) and click “Edit”.



15. Repeat step 4.

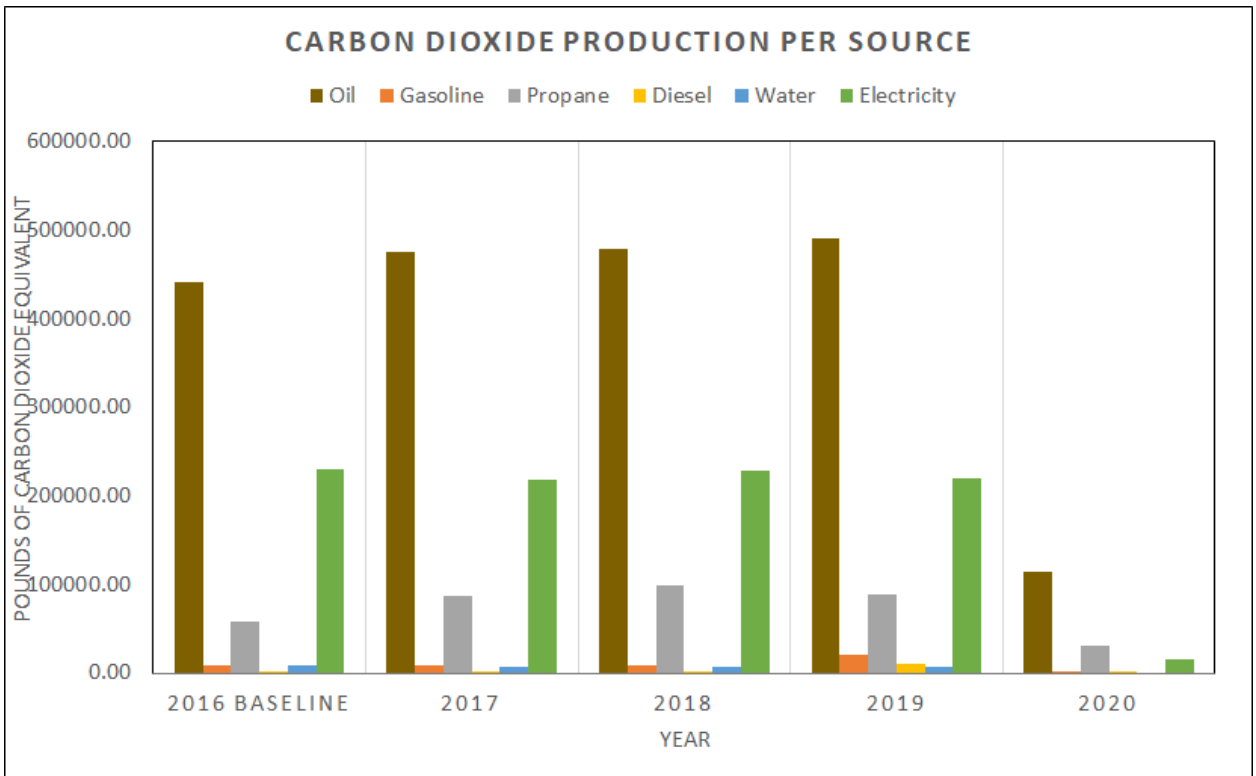
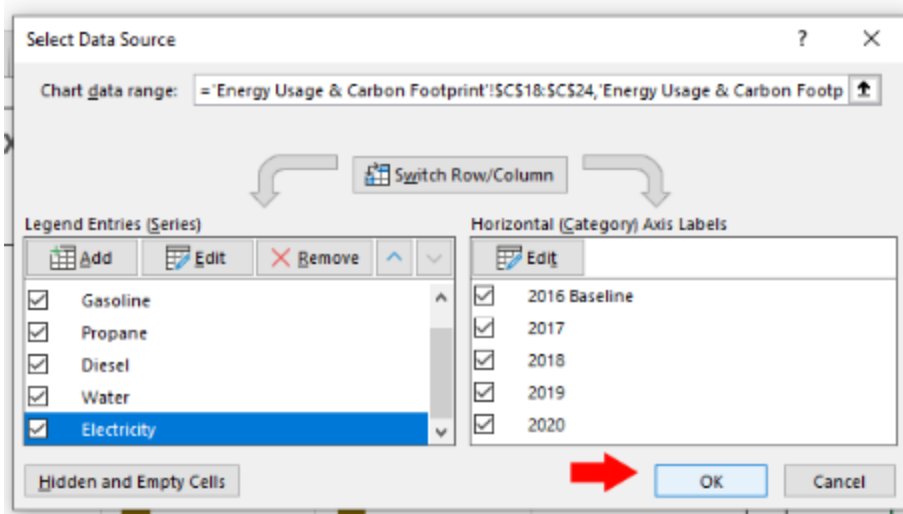
16. If you were not taken to the first sheet, go to it, and find the third table. While holding the “ctrl” key on your keyboard, select each cell in the row corresponding to the series you are editing (“Oil” should be the first one) only for columns that correspond to years

(white columns) up to and including the year you want to add and press “OK”. (Ex. Up to 2020)

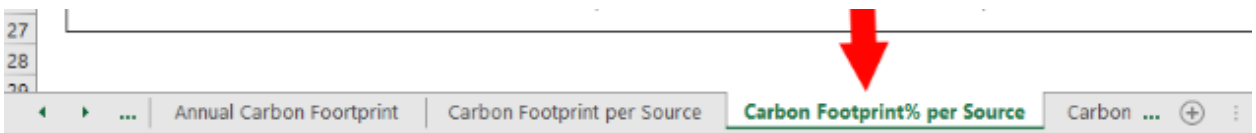
Carbon Footprint in lbs of CO2	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020
Oil	441847.92	476001.25	7.73%	7.73%	478951.79	0.62%	8.40%	489719.07	2.24%	10.88%	112186.47
Gasoline	8303.17	9031.35	8.77%	8.77%	9473.03	4.66%	14.09%	19844.96	52.26%	139.00%	1104.72
Propane	58591.10	86749.23	48.06%	48.06%	98574.89	12.00%	68.24%	89577.66	-10.04%	52.89%	31608.23
Diesel	2309.63	1455.20	-36.99%	-36.99%	2681.60	45.73%	16.11%	10877.57	75.35%	370.97%	734.80
Water	9410.85	6979.31	-25.84%	-25.84%	7199.80	3.06%	-23.49%	6950.40	-2.59%	-26.14%	0.00

17. Repeat steps 6, 7, & 8.

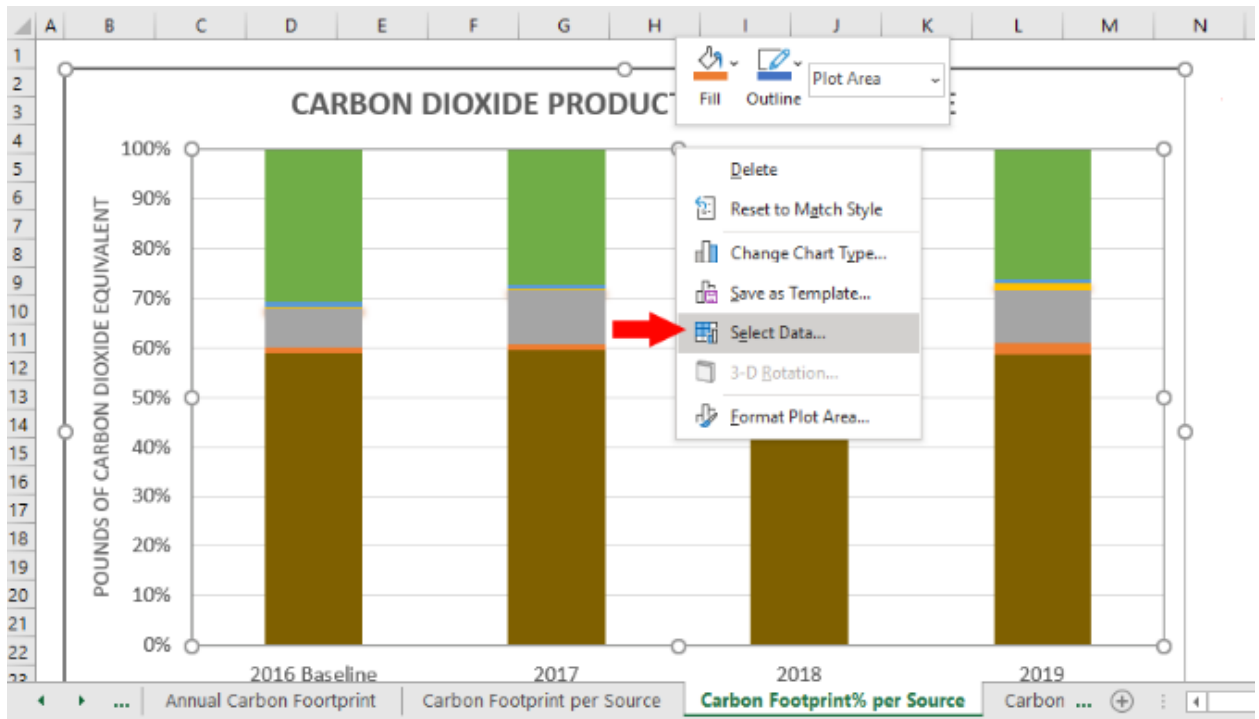
18. Repeat steps 14, 15, & 16 for the remaining items on the left-hand side list. Press “OK” once you are done.



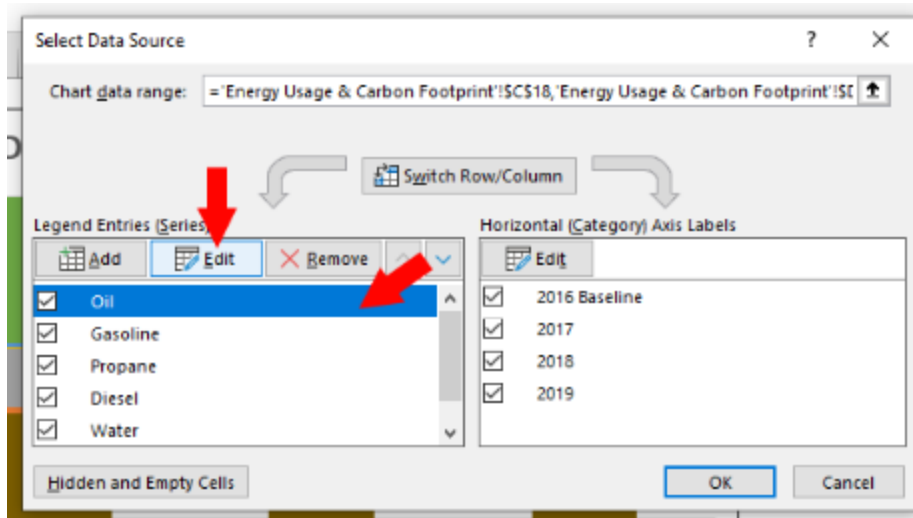
19. Find the third sheet labelled “Carbon Footprint% per Source”.



20. Right click on the graph and select “Select Data...”.

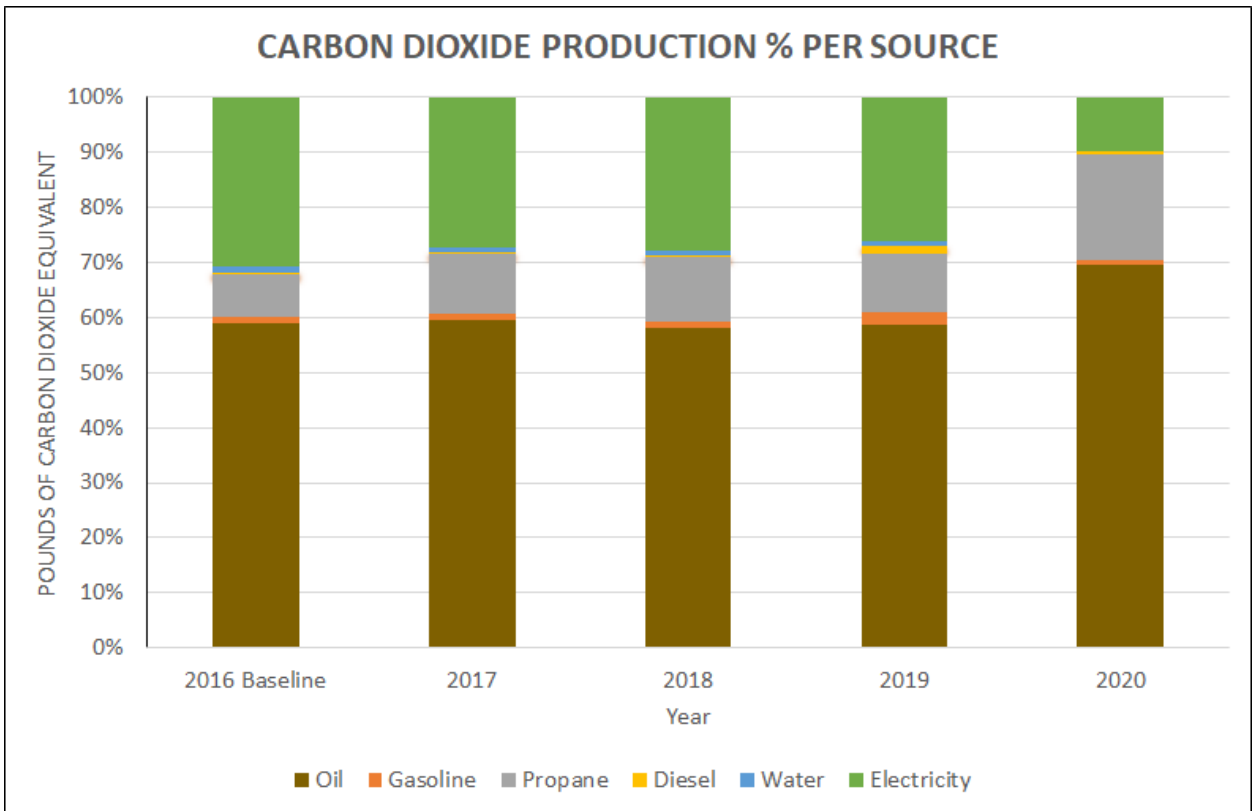
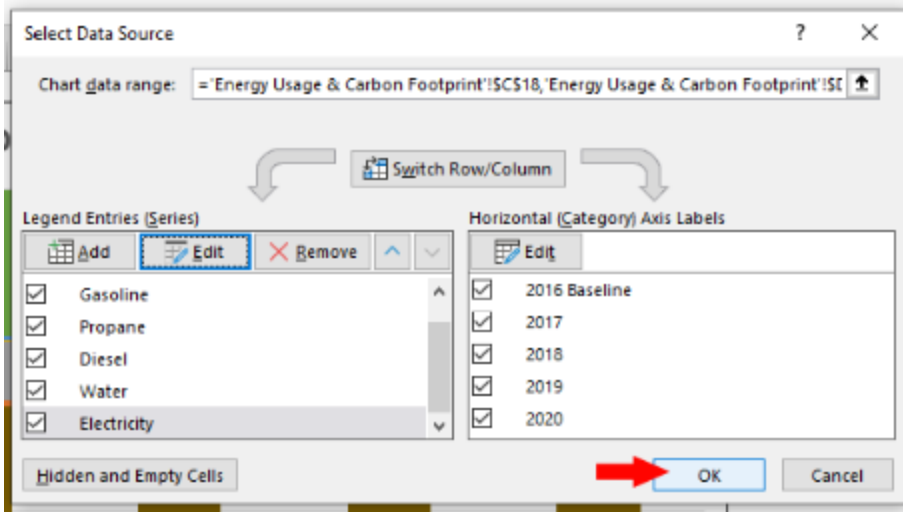


21. Select the first item on the left-hand list (labelled “Oil”) and click “Edit”.

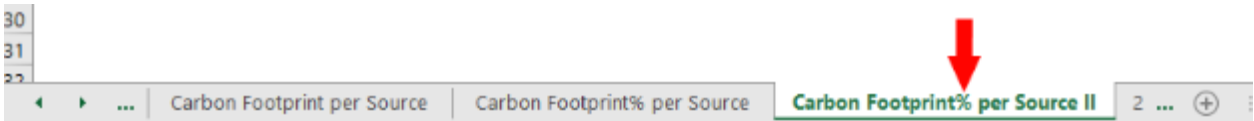


22. Repeat step 4.

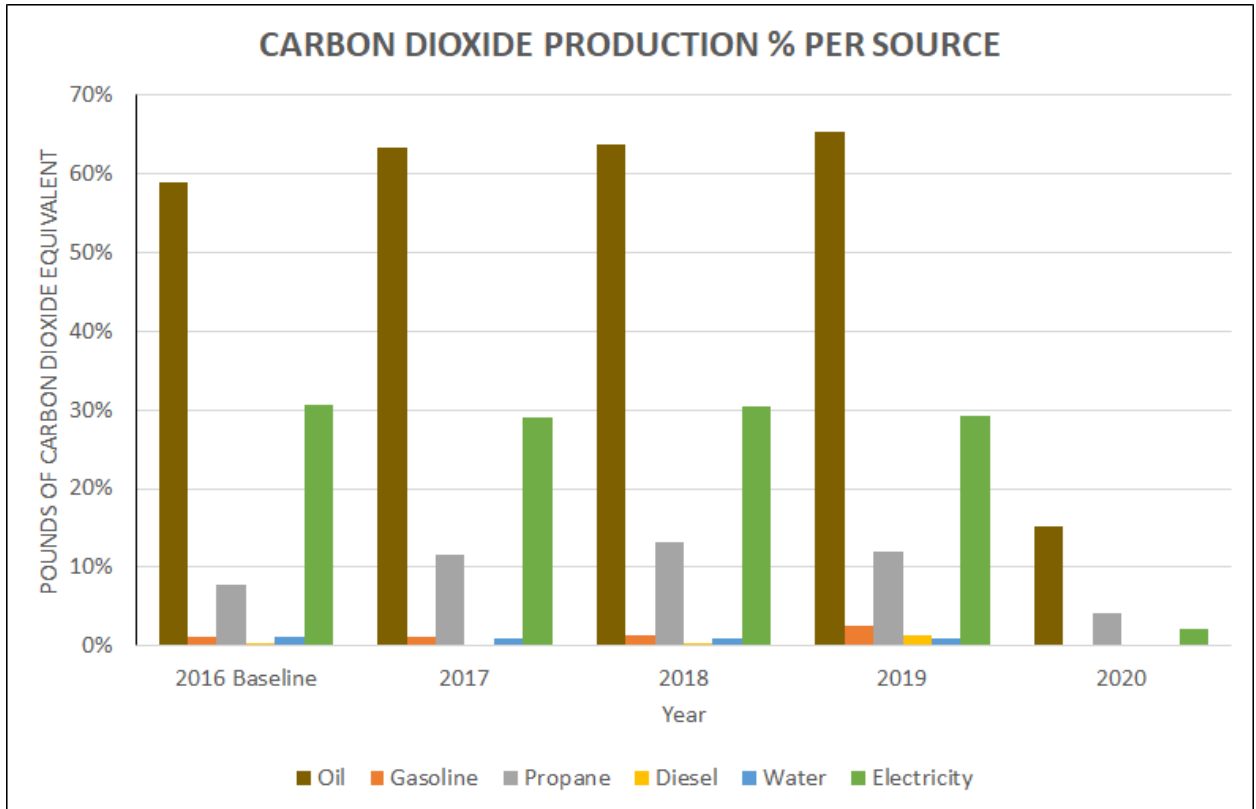
23. If you were not taken to the first sheet, go to it, and find the fourth table. While holding the “ctrl” key on your keyboard, select each cell in the row corresponding to the series you are editing (“Oil” should be the first one) only for columns that correspond to years (white columns) up to and including the year you want to add and press “OK”. (Ex. Up to



26. Find the fourth sheet labelled “Carbon Footprint% per Source II”.



27. Repeat steps 21, 22, 23, 24, & 25.

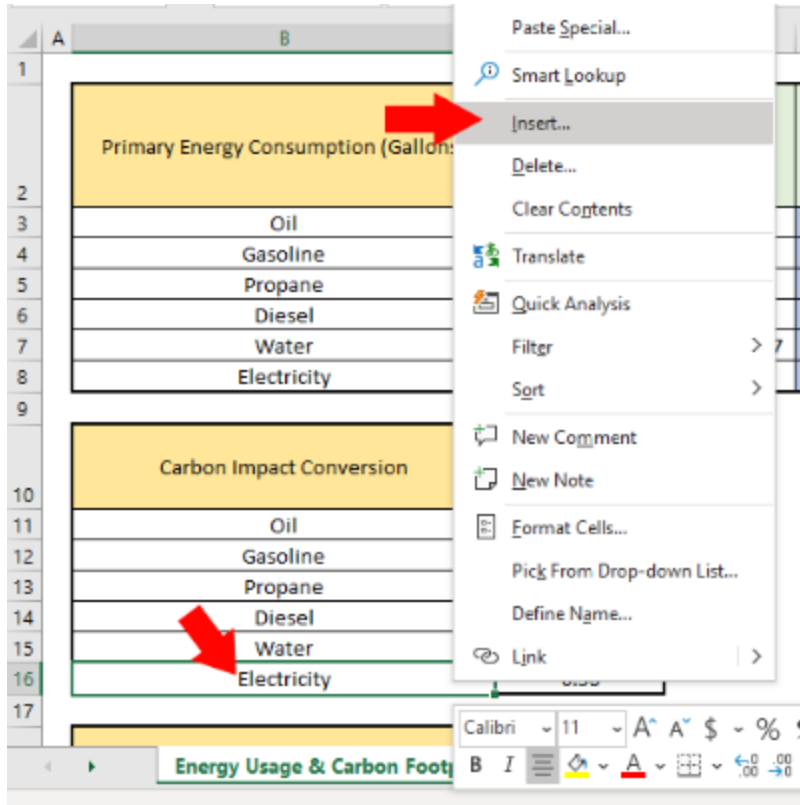


28. You have successfully added a new year into all of the graphs.

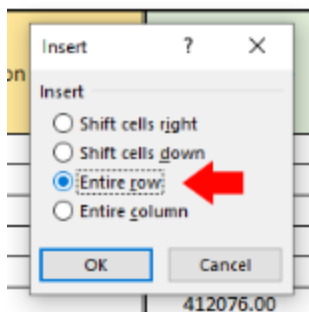
Adding new types of consumption data

This section is for help on adding new types of consumption data to be used in carbon footprint calculation.

1. Obtain the carbon dioxide conversion factor in units of pounds per unit of the data.
2. On the first sheet, locate the second table. Right click on the bottom cell in the first column and select “Insert...”.



3. Select “Entire row” and press “OK”.



4. In the newly created blank cell in the first column, type in the name of the type of consumption data (Ex. Example), and in the second column type in the conversion factor.

(ex. 1 pound of CO2 per 1 unit of Example)

Carbon Impact Conversion	Pounds of CO2 per desired unit
Oil	21.20
Gasoline	18.70
Propane	12.61
Diesel	23.02
Water	2.87E-03
Example	1.00
Electricity	0.56

- Go to the sheet corresponding to the year(s) you would like to add the consumption data for. (Ex. 2020)
- In the last column of the first table, right click the top cell and select “Insert...”.

Month	Oil	Gasoline	Propane	Diesel	Water	Electricity
January	3563.30	59.08	1701.80	31.92	0.00	29119.00
February	1822.60	0.00	804.80	0.00	0.00	0.00
March						
April						
May						
June						
July						
August						
September						
October						
November						
December						
TOTALS	5385.90	59.08	2506.60	31.92	0.00	29119.00
CARBON	114186.47	1104.72	31608.23	734.80	0.00	16254.23
TOTAL CF	163888.44					

- Select “Entire column” and press “OK”.

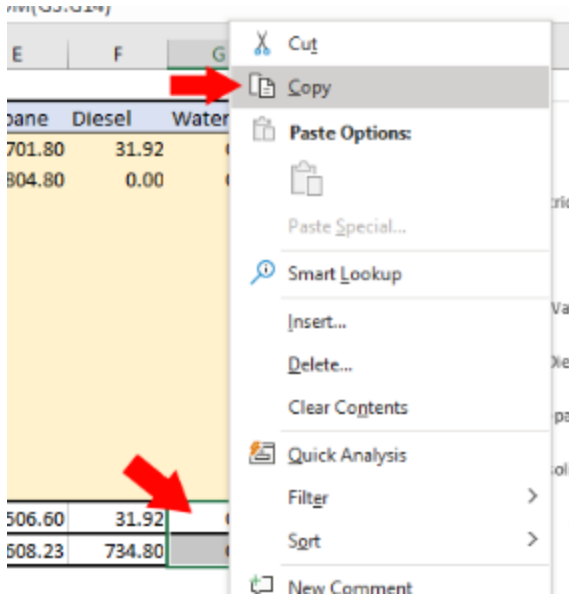
Insert

Insert

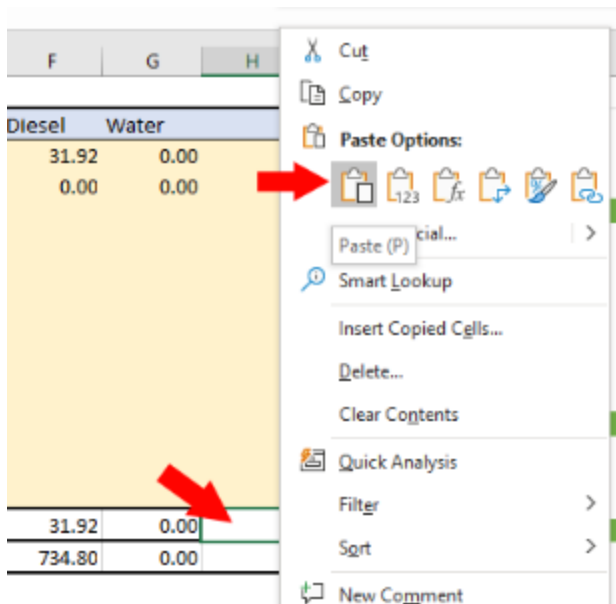
Shift cells right
 Shift cells down
 Entire row
 Entire column

OK Cancel

- In the third to last column of the first table, select the last two cells in the table, right click on one, and select “Copy”.



- Select the second to last cell in the new column (second to last), right click, and select “Paste”.



- Select the last cell in the new column, and remove the text after the asterisk in the text box at the top.

SUM X ✓ f_x =H15*Energy Usage & Carbon Footprint'!B17

Month	Oil	Gasoline	Propane	Diesel	Water	Electricity	
January	3563.30	59.08	1701.80	31.92	0.00	29119.00	
February	1822.60	0.00	804.80	0.00	0.00	0.00	
March							
April							
May							
June							
July							
August							
September							
October							
November							
December							
TOTALS	5385.90	59.08	2506.60	31.92	0.00	0.00	29119.00
CARBON	114186.47	1104.72	31608.23	734.80	0.00	1817	16254.23
TOTAL CF	#VALUE!						

X ✓ f_x =H15*

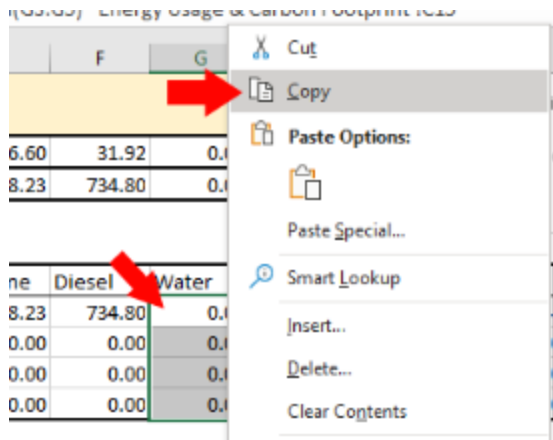
11. Without clicking on any other cell, go to the first sheet, and locate the second column. Click on the cell corresponding to the conversion factor for the type of data you are adding, and press enter.

C16 X ✓ f_x =H15*Energy Usage & Carbon Footprint'!C16

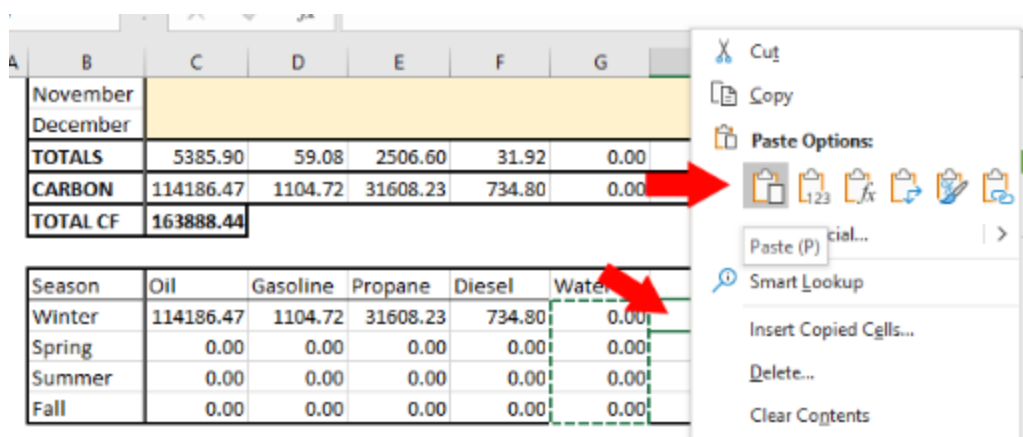
	B	C	D	E
4	Gasoline	444.02	482.96	8.7
5	Propane	4646.40	6879.40	48.0
6	Diesel	100.34	63.22	-36.0
7	Water	3277899.97	2430966.67	-25.0
8	Electricity	412076.00	390507.00	-5.0

Carbon Impact Conversion	Pounds of CO2 per desired unit
Oil	21.20
Gasoline	18.70
Propane	12.61
Diesel	23.02
Water	2.87E-03
Example	1.00
Electricity	0.55

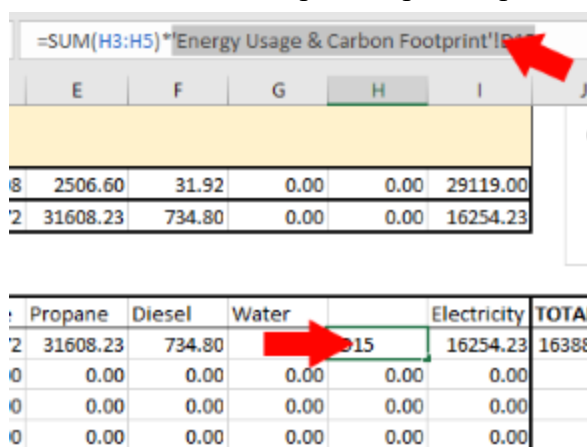
12. In the second table, select the last 4 cells in the third to last row, right click, and select “Copy”.



13. Select the second cell in the second to last column of the second table, right click, and select “Paste”.



14. For each of the 4 last cells in that row, select it and remove all of the text after the asterisk in the text box at the top and repeat step 11.



15. For the top cells in the new rows in both the first and the second tables, type in the name of the new type of data you are adding. (Ex. Example)

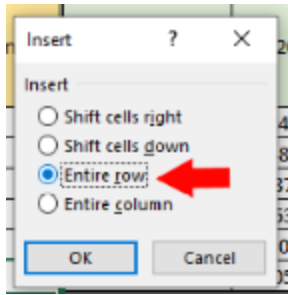
	Diesel	Water	Example	Electricity
1.80	31.92	0.00		29119.00
1.80	0.00	0.00		0.00
3.60	31.92	0.00	0.00	29119.00
3.23	734.80	0.00	0.00	16254.23

	Diesel	Water	Example	Electricity	TC
3.23	734.80	0.00	0.00	16254.23	16
1.00	0.00	0.00	0.00	0.00	
1.00	0.00	0.00	0.00	0.00	
2016	2017	2018	2019	2020	

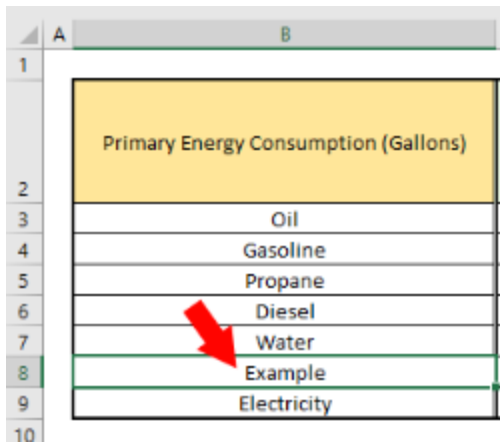
16. Go back to the first sheet. In the last row of the first table, right click the first cell and select “Insert...”.

A	B
	Primary Energy Consumption (C
	Oil
	Gasoline
	Propane
	Diesel
	Water
	Electricity

17. Select “Entire row” and press “OK”.



18. In the first cell of the row you created, type in the name of the type of data you are adding.



19. For the columns corresponding to the years that you are **NOT** adding data, enter a 0 in the row for the data type you are adding.

	B	C	D	E	F	G	H	I	J	K	L	M
1												
2	Primary Energy Consumption (Gallons)	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020
3	Oil	20840.90	22451.83	7.73%	7.73%	22591.00	0.62%	8.40%	23108.30	2.29%	10.88%	5385.90
4	Gasoline	444.02	482.96	8.77%	8.77%	506.58	4.89%	14.09%	1061.23	109.49%	139.00%	59.08
5	Propane	4646.40	6879.40	48.06%	48.06%	7817.20	13.63%	68.24%	7103.70	-9.13%	52.89%	2506.60
6	Diesel	100.34	63.22	-36.99%	-36.99%	116.50	84.28%	16.11%	472.57	305.64%	370.97%	31.92
7	Water	77859.97	966.67	-25.84%	-25.84%	7766.63	3.16%	-23.49%	20900.01	-3.46%	-26.14%	0.00
8	Example	0.00	0.00			0.00			0.00			
9	Electricity	412076.00	390507.00	-5.23%	-5.23%	410202.00	5.04%	-0.45%	394010.00	-3.95%	-4.38%	29119.00

20. For the columns corresponding to the year(s) for which you are adding the data type, click in the text box at the top and type in “=” and, without clicking on any other cells or pressing any keys, go to the sheet corresponding to the year you are doing this for, and selecting the second to last cell of the column corresponding to the data type you are

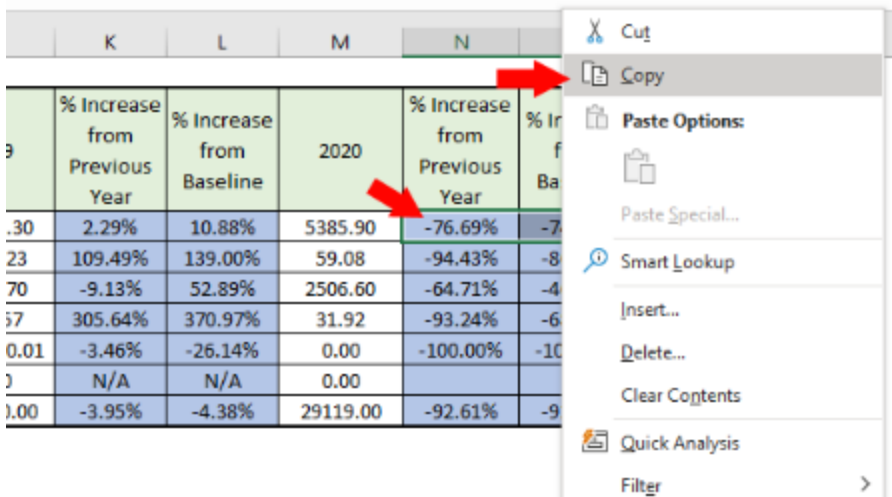
adding, then press enter.

Energy Consumption (Gallons)	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year
Oil	20840.90	22451.83	7.73%	7.73%	22591.00	0.62%	8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%
Gasoline	444.02	482.96	8.77%	8.77%	506.58	4.89%	14.09%	1061.23	109.49%	139.00%	59.08	-94.43%
Propane	4646.40	6879.40	48.06%	48.06%	7817.20	13.63%	68.24%	7103.70	-9.13%	52.89%	2506.60	-64.71%
Diesel	100.34	63.22	-36.99%	-36.99%	116.50	84.28%	16.11%	472.57	305.64%	370.97%	31.92	-93.24%
Water	3277899.97	2430966.67	-25.84%	-25.84%	2507766.63	3.16%	-23.49%	2420900.01	-3.46%	-26.14%	0.00	-100.00%
Example	0.00	0.00			0.00			0.00				
Electricity	412076.00	390507.00	-5.23%	-5.23%	410202.00	5.04%	-0.45%	394010.00	-3.95%	-4.38%	29119.00	-92.61%

21. For the columns corresponding to “% Increase from Baseline” and “% Increase from Previous Year” for the years that you are NOT adding a new data type for, type in “N/A” in the cells in the row for the new data type.

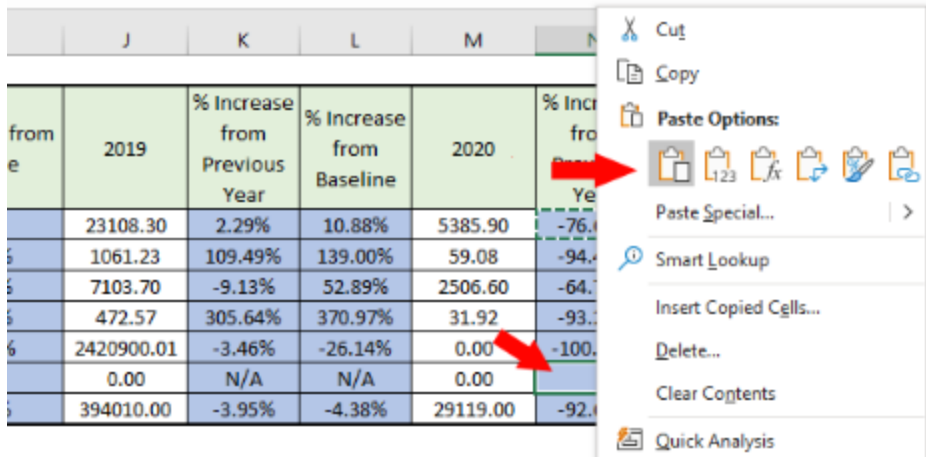
Energy Consumption (Gallons)	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year
Oil	20840.90	22451.83	7.73%	7.73%	22591.00	0.62%	8.40%	23108.30	2.29%	10.88%	5385.90	-76.69%
Gasoline	444.02	482.96	8.77%	8.77%	506.58	4.89%	14.09%	1061.23	109.49%	139.00%	59.08	-94.43%
Propane	4646.40	6879.40	48.06%	48.06%	7817.20	13.63%	68.24%	7103.70	-9.13%	52.89%	2506.60	-64.71%
Diesel	100.34	63.22	-36.99%	-36.99%	116.50	84.28%	16.11%	472.57	305.64%	370.97%	31.92	-93.24%
Water	3277899.97	2430966.67	-25.84%	-25.84%	2507766.63	3.16%	-23.49%	2420900.01	-3.46%	-26.14%	0.00	-100.00%
Example	0.00	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	
Electricity	412076.00	390507.00	-5.23%	-5.23%	410202.00	5.04%	-0.45%	394010.00	-3.95%	-4.38%	29119.00	-92.61%

22. Select the second cells in the last two columns of the first table, right click, and select “Copy”.

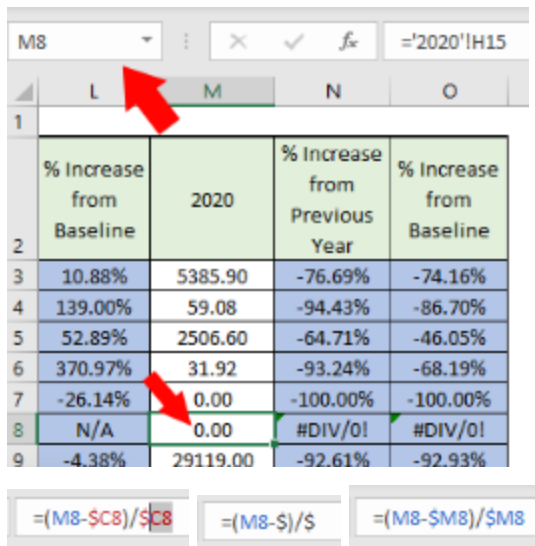


23. For the columns corresponding to the “% Increase from Previous Year” for the year(s) for which you are adding the data type in, select the cell corresponding to the data type, right

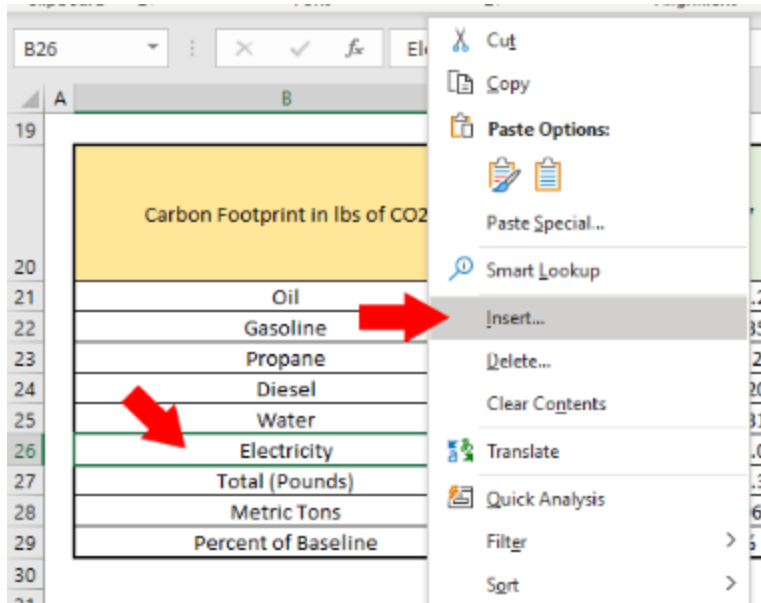
click, and select “Paste”.



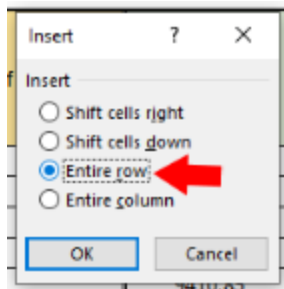
24. For the columns corresponding to the “% Increase from Baseline” for the year(s) for which you are adding the data type in select the cell corresponding the the data type and replace the cell after the “\$” sign with the cell that corresponds to the first year that you have data for, in the row corresponding to that data type, then press enter. (Ex. I am only adding in the new data type for 2020, so that will be the new baseline year for that data type.)



25. Select the first cell in the fourth to last row of the second table. Right click and select “Insert...”.



26. Select “Entire row” and press “OK”.



27. Type in the name of the data type you are adding in the first cell of the new row.

28. For the remaining cells in the row corresponding to a year (the white cells) select the cell directly above the empty cell, right click and select “Copy”. Select the empty cell right below, right click, and select “Paste”. In the text box at the top of the screen, change the number after the second “\$” sign to the number of the row corresponding to the conversion factor in the second column of the second table for the data type you are adding. (Ex. 2016)

B	C
Carbon Footprint in lbs of CO2	2016 Baseline
Oil	441847.92
Gasoline	8303.17
Propane	58591.10
Diesel	2309.63
Water	9410.85
Example	
Electricity	230020.82

- Cut
- Copy
- Paste Options:
 - Paste Special...
- Smart Lookup
- Insert...
- Delete...
- Clear Contents

A	B	C
	Carbon Footprint in lbs of CO2	2016 Baseline
	Oil	441847.92
	Gasoline	8303.17
	Propane	58591.10
	Diesel	2309.63
	Water	9410.85
	Example	
	Electricity	230020.82
	Total (Pounds)	750483.50
	Metric Tons	340.41
	Percent of Baseline	100%

- Cut
- Copy
- Paste Options:
 - Paste Special...
 - Smart Lookup
 - Insert Copied Cells...
 - Delete...
 - Clear Contents
 - Quick Analysis
 - Filter

SUM X ✓ fx =C8*\$C\$17

	A	B	C
10			
11		Carbon Impact Conversion	Pounds of CO2 per desired unit
12		Oil	21.20
13		Gasoline	18.70
14		Propane	12.61
15		Diesel	23.02
16		Water	2.87E-03
17		Example	1.00
18		Electricity	0.55
19			
20		Carbon Footprint in lbs of CO2	2016 Baseline
21		Oil	441847.92
22		Gasoline	8303.17
23		Propane	58591.10
24		Diesel	2309.63
25		Water	9410.85
26		Example	=C8*\$C\$17

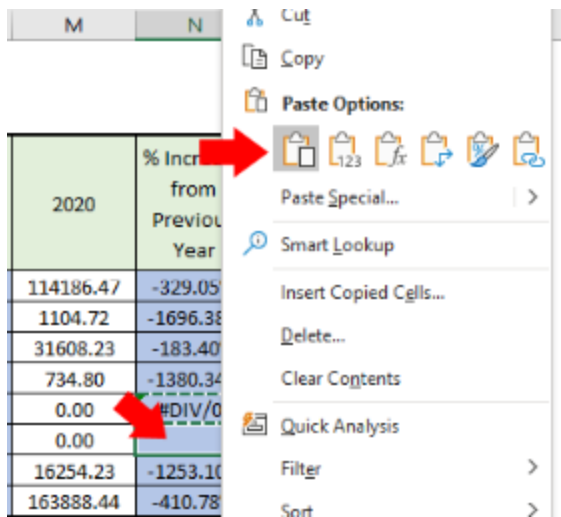
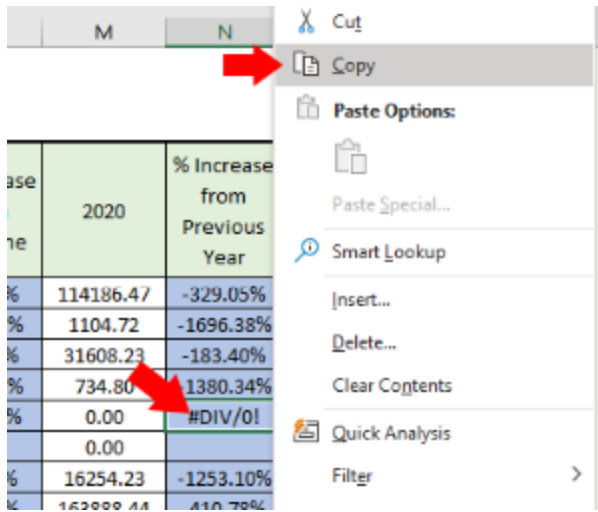
Energy Usage & Carbon Footprint Annual Carbon Fi

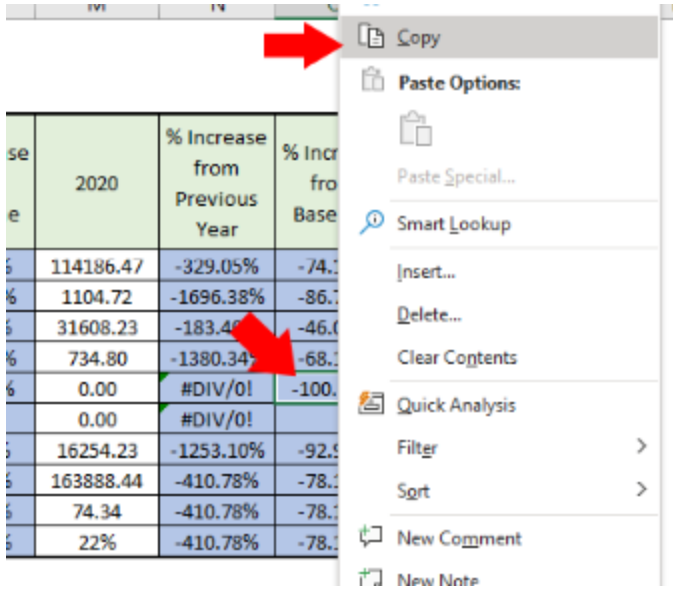
Electricity 0.55

Carbon Footprint in lbs of CO2	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year
Oil	441847.92	476001.25	7.73%	7.73%	478951.79	0.62%	8.40%	489919.07	2.24%	10.88%	114186.47	-32.2%
Gasoline	8303.17	9031.35	8.77%	8.77%	9473.03	4.66%	14.09%	19844.96	52.26%	139.00%	1104.72	-165.8%
Propane	58591.10	86749.23	48.06%	48.06%	98574.89	12.00%	68.24%	89577.66	-10.04%	52.89%	31608.23	-18.1%
Diesel	2309.63	1455.20	-36.99%	-36.99%	1681.60	45.73%	16.11%	10877.57	75.35%	370.97%	734.80	-138.4%
Water	110.85	979.31	-25.84%	-25.84%	199.80	3.06%	-23.49%	950.40	-3.59%	-26.14%	0.00	#D
Example	0.00	0.00			0.00			0.00			0.00	
Electricity	230020.82	217981.01	-5.23%	-5.23%	228974.76	4.80%	-0.45%	219936.38	-4.11%	-4.38%	16254.23	-125.4%
Total (Pounds)	750483.50	798197.34	6.36%	6.36%	825855.86	3.35%	10.04%	837106.05	1.34%	11.54%	163888.44	-41.1%
Metric Tons	340.41	362.06	6.36%	6.36%	374.60	3.35%	10.04%	379.70	1.34%	11.54%	74.34	-41.1%
Percent of Baseline	100%	106%	6.36%	6.36%	110%	3.35%	10.04%	112%	1.34%	11.54%	22%	-41.1%

29. For the cells in the new row corresponding to “% Increase from Previous Year” and “% Increase from Baseline” corresponding to years to which you are **NOT** adding the new data type, type in N/A.
30. For the cells in the new row corresponding to “% Increase from Previous Year” corresponding to years to which you are adding the new data type, select the cell directly above the empty cell, right click, select “Copy”. Select the empty cell, right click, and select “Paste”.
31. For the cells in the new row corresponding to “% Increase from Baseline” corresponding to years to which you are adding the new data type, select the cell directly above the empty cell, right click, select “Copy”. Select the empty cell, right click, and select “Paste”. In the text box at the top, replace the cell after the “\$” symbol with the cell for

the first year that you have data for the new data type. (Ex. 2020)





SUM X ✓ ✖ = (M26-\$M26)/\$M26

	D	E	F	G	I	J	K	L	M	N	O		
17													
18													
19													
20		2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline
21		476001.25	7.73%	7.73%	478951.79	0.62%	8.40%	489919.07	2.24%	10.88%	114186.47	-329.05%	-74.16%
22		9031.35	8.77%	8.77%	9473.03	4.66%	14.09%	19844.96	52.26%	139.00%	1104.72	-1696.38%	-86.70%
23		86749.23	48.06%	48.06%	98574.89	12.00%	68.24%	89577.66	-10.04%	52.89%	31608.23	-183.40%	-46.05%
24		1455.20	-36.99%	-36.99%	2681.60	45.73%	16.11%	10877.57	75.35%	370.97%	734.80	-1380.34%	-68.19%
25		6979.31	-25.84%	-25.84%	7199.80	3.06%	-23.49%	6950.40	-3.59%	-26.14%	0.00	#DIV/0!	-100.00%
26		0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00	#DIV/0!	\$M26
27		217981.01	-5.23%	-5.23%	228974.76	4.80%	-0.45%	219936.38	-4.11%	-4.38%	16254.23	-1253.10%	-92.93%
28		798197.34	6.36%	6.36%	825855.86	3.35%	10.04%	837106.05	1.34%	11.54%	163888.44	-410.78%	-78.16%
29		362.06	6.36%	6.36%	374.60	3.35%	10.04%	379.70	1.34%	11.54%	74.34	-410.78%	-78.16%
30		106%	6.36%	6.36%	110%	3.35%	10.04%	112%	1.34%	11.54%	22%	-410.78%	-78.16%

32. Select the last cell in the first column of the fourth table. Right click, and select “Insert...”, then select “Entire row” and press “OK”.

	A	B	C	D	E	F	G	H	I	J	K	L	M
26		Example	0.00	0.00	N/A	N/A	0.00	N/A	N/A	0.00	N/A	N/A	0.00
27		Electricity	230020.82	217981.01	-5.23%	-5.23%	228974.76	4.80%	-0.45%	219936.38	-4.11%	-4.38%	16254.23
28		Total (Pounds)	750483.50	798197.34	6.36%	6.36%	825855.86	3.35%	10.04%	837106.05	1.34%	11.54%	163888.44
29		Metric Tons	340.41	362.06	6.36%	6.36%	374.60	3.35%	10.04%	379.70	1.34%	11.54%	74.34
30		Percent of Baseline	100%	106%	6.36%	6.36%	110%	3.35%	10.04%	112%	1.34%	11.54%	22%

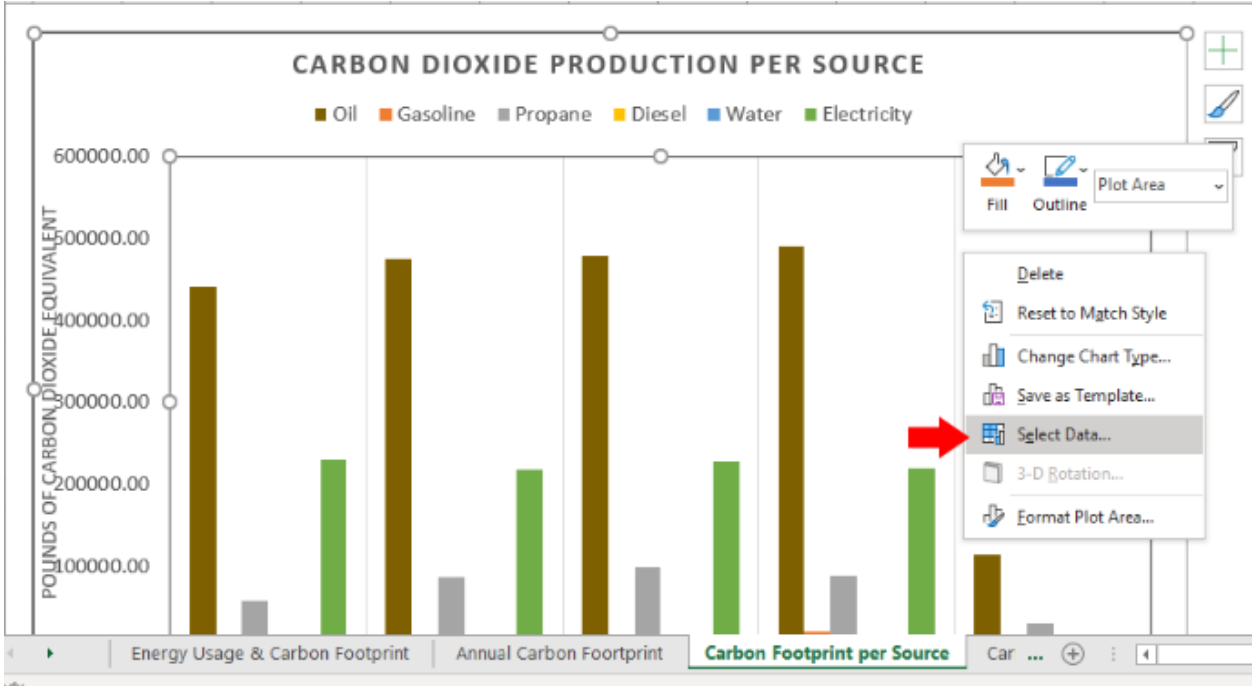
		2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Baseline
33	Consumption by % of carbon footprint												
34	Oil	59%	63%	4.55%	4.55%	64%	0.39%	4.94%	65%	1.46%	6.41%	15%	
35	Gasoline	1%	1%	0.10%	0.10%	1%	0.06%	0.16%	3%	1.38%	1.54%	0%	
36	Propane	8%	12%	3.75%	3.75%	13%	1.58%	5.33%	12%	-1.20%	4.13%	4%	
37	Diesel	0%	0%	-0.11%	-0.11%	0%	0.16%	0.05%	1%	1.09%	1.14%	0%	
38	Water	1%	1%	-0.32%	-0.32%	1%	0.03%	-0.29%	1%	-0.03%	-0.33%	0%	
39													
40	Electricity	31%	29%	-1.60%	-1.60%	31%	1.46%	-0.14%	29%	-1.20%	-1.34%	2%	

33. In the first cell in the new row, type in the name of the new data type you are adding.

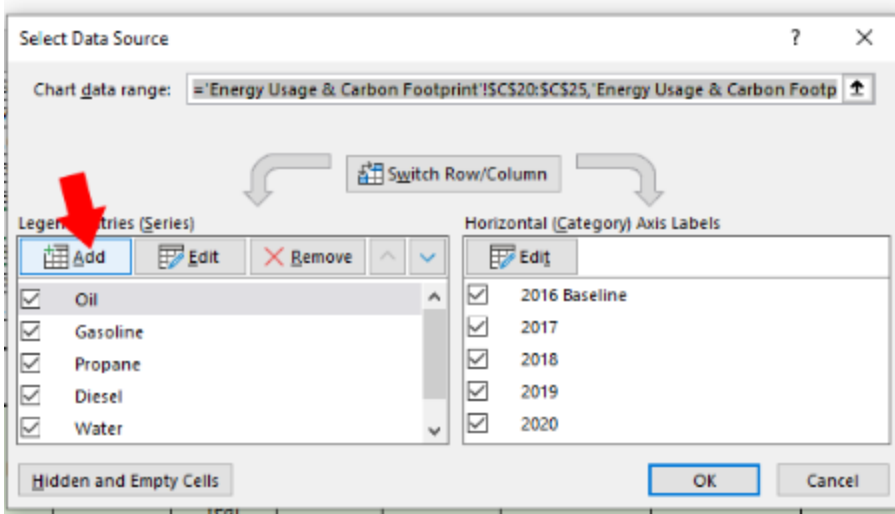
34. For every remaining cell in the new row, select the cell directly above it, right click and select “Copy”. Select the cell right below it, right click, and select “Paste”.

Consumption by % of carbon footprint	2016 Baseline	2017	% Increase from Previous Year	% Increase from Baseline	2018	% Increase from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	% Increase from Previous Year	% Increase from Baseline
Oil	59%	63%	4.55%	4.55%	64%	0.39%	4.94%	65%	1.46%	6.41%	15%	-50.07%	-43.66%
Gasoline	1%	1%	0.10%	0.10%	1%	0.06%	0.16%	3%	1.38%	1.54%	0%	-2.50%	-0.96%
Propane	8%	12%	3.75%	3.75%	13%	1.58%	5.33%	12%	-1.20%	4.13%	4%	-7.72%	-3.60%
Diesel	0%	0%	-0.11%	-0.11%	0%	0.16%	0.05%	1%	1.09%	1.14%	0%	-1.35%	-0.21%
Water	1%	1%	0.32%	0.32%	1%	0.03%	-0.29%	1%	0.03%	0.33%	0%	0.93%	1.25%
Example	0%	0%	0.00%	0.00%	0%	0.00%	0.00%	0%	0.00%	0.00%	0%	0.00%	0.00%
Electricity	31%	29%	-1.60%	-1.60%	31%	1.46%	-0.14%	29%	-1.20%	-1.34%	2%	-27.14%	-28.48%

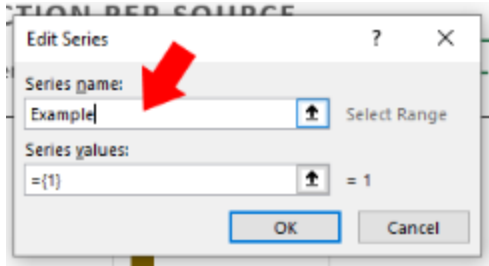
35. Go to the third sheet. Right click the graph and select “Select Data...”.



36. Select “Add” above the left-hand side list.



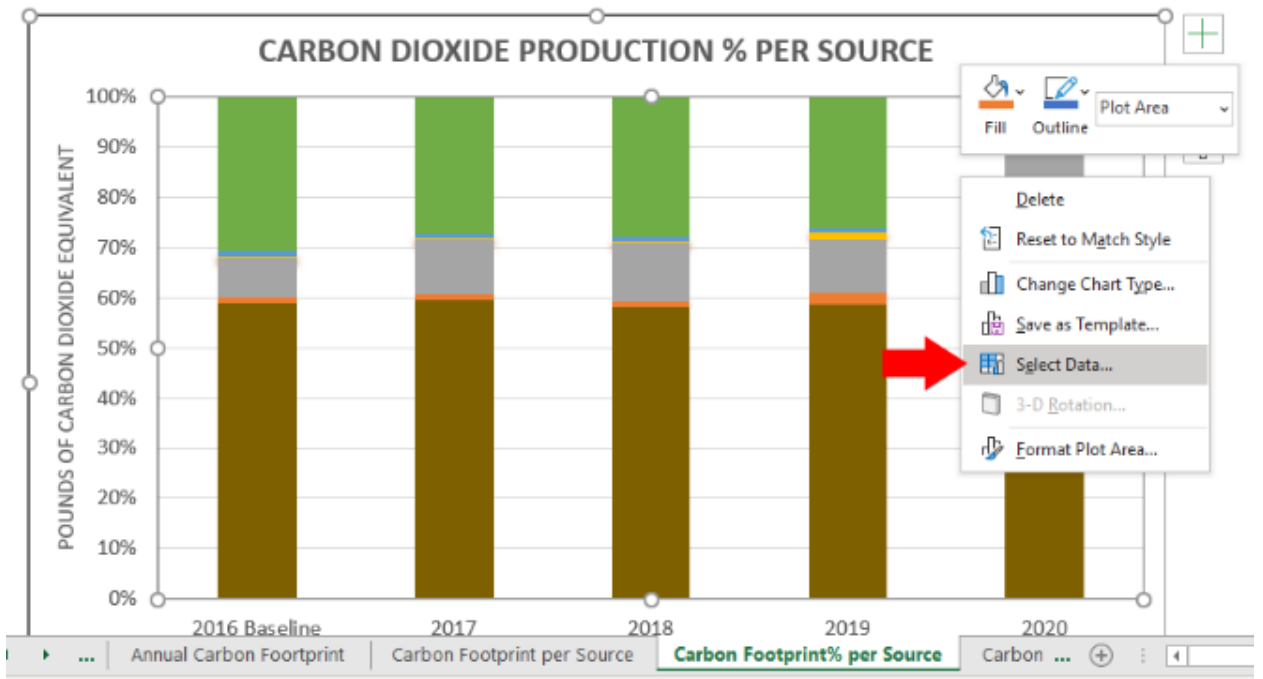
37. In the first box, type in the name of the data type you are adding.



38. In the second text box, delete all the text. Go to the first sheet. While holding control, select only the cells in the third table in the row corresponding to the data type you are adding, corresponding to years. Press “OK”, and then “OK” again.

Carbon Footprint in lbs of CO2	2016 Baseline	2017	% Change from Previous Year	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020
Oil	441847.92	476001.25	7.73%	7.73%	478951.79	0.62%	8.40%	489919.07
Gasoline	8303.17	9031.35	8.77%	8.77%	9473.03	4.66%	14.09%	19844.96
Propane	58591.10	86749.23	48.06%	48.06%	98574.89	12.00%	68.24%	89577.66
Diesel	2309.63	1455.20	-36.99%	-36.99%	2681.60	45.73%	16.11%	10877.57
Water	410.85	79.31	-25.84%	-25.84%	99.80	3.06%	-23.49%	50.40
Example	0.00	0.00	N/A	N/A	0.00	N/A	N/A	N/A
Electricity	230020.82	217981.01	-5.23%	-5.23%	228974.76	4.80%	-0.45%	219936.38
Total (Pounds)	750483.50	798197.34	6.36%	6.36%	825855.86	3.35%	10.04%	837106.05
Metric Tons	340.41	362.06	6.36%	6.36%	374.60	3.35%	10.04%	379.70

39. Go to the fourth sheet. Right click the graph and select “Select Data...”.



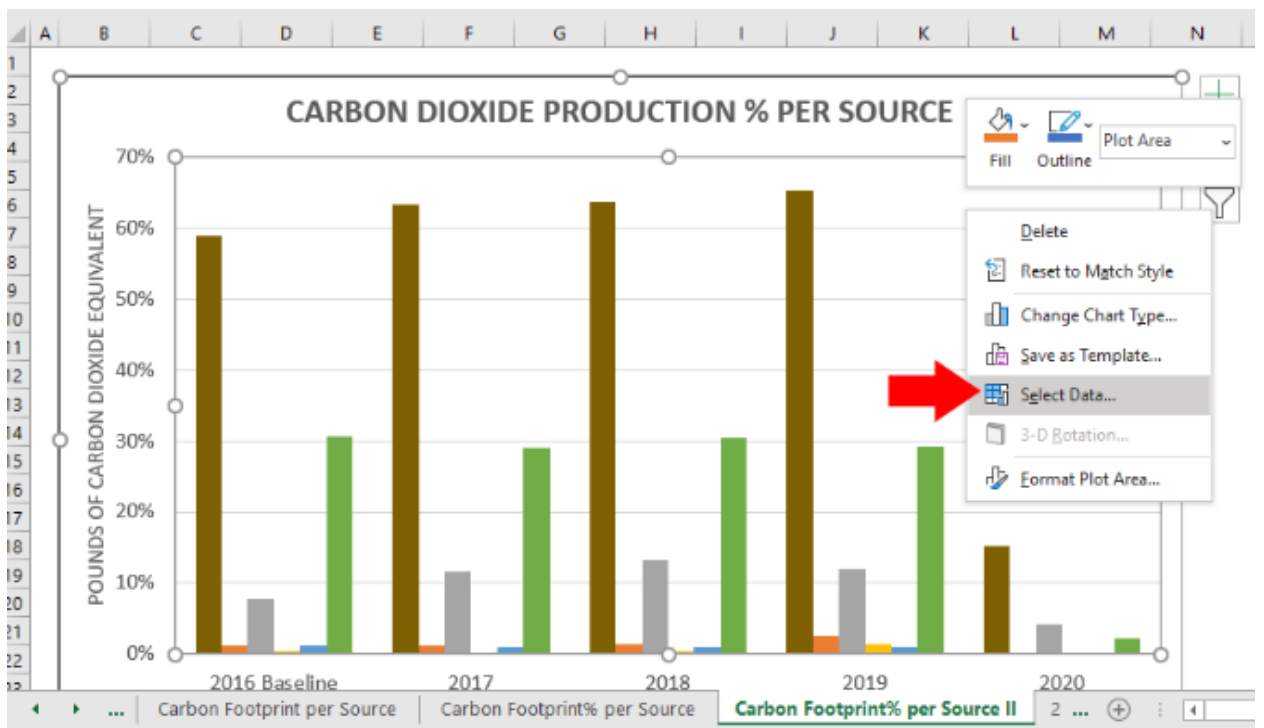
40. Select “Add” above the left-hand side list.

41. In the first box, type in the name of the data type you are adding.

42. In the second text box, delete all the text. Go to the first sheet. While holding control, select only the cells in the fourth table in the row corresponding to the data type you are adding, corresponding to years. Press “OK”, and then “OK” again.

Consumption by % of carbon footprint	2016 Baseline	2017	2019	% Increase from Baseline	2019	% Increase from Previous Year	% Increase from Baseline	2020	%
Oil	59%	63%	65%	4.94%	65%	1.46%	6.41%	15%	
Gasoline	1%	1%	3%	0.16%	3%	1.38%	1.54%	0%	
Propane	8%	12%	12%	5.33%	12%	-1.20%	4.13%	4%	
Diesel	0%	0%	0%	0.05%	1%	1.09%	1.14%	0%	
Water	1%	1%	0%	-0.29%	1%	-0.03%	-0.33%	0%	
Example	0%	0%	0%	0.00%	0%	0.00%	0.00%	0%	
Electricity	31%	29%	29%	-0.14%	29%	-1.20%	-1.34%	2%	

43. Go to the fifth sheet. Right click the graph and select “Select Data...”.



44. Select “Add” above the left-hand side list.

45. In the first box, type in the name of the data type you are adding.

46. In the second text box, delete all the text. Go to the first sheet. While holding control, select only the cells in the fourth table in the row corresponding to the data type you are

adding, corresponding to years. Press “OK”, and then “OK” again.

	2016 Baseline	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Consumption by % of carbon footprint															
Oil	59%	63%													
Gasoline	1%	1%	0.10%	0.10%	1%	0.00%									
Propane	8%	12%	3.75%	3.75%	13%	1.58%	5.33%								
Diesel	0%	0%	-0.11%	-0.11%	0%	0.16%	0.05%	1%	1.09%	1.14%					
Water	1%	1%	-0.32%	-0.32%	1%	0.03%	-0.29%	1%	-0.03%	-0.33%					
Example	0%	0%	0.00%	0.00%	0%	0.00%	0.00%	0%	0.00%	0.00%					
Electricity	31%	29%	-1.60%	-1.60%	31%	1.46%	-0.14%	29%	-1.20%	-1.34%					

Series name: Example

Series values: Carbon Footprint!\$M\$3\$ = 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%, 0%

OK Cancel