Day 1				Day 2				Day 3				Day 4				Day 5				Day 6				Day 7			
Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units	Date and time	Activity	Duration (time) or	Duration units
##########	*Computer*	*21600*	*seconds*	##########	*Computer*	*7200*	*seconds*	##########	Microwave	120	seconds	##########	Cooking	1200	seconds	2/1/2024 8:45	Cooking	900	seconds	2/2/2024 7:00	Cooking	1200	seconds	##########	Cooking	1800	seconds
##########	*Cooking*	*1800*	*sconds*	##########	Scooter	600	*seconds*	##########	Heater	1500	seconds	##########	scooter	900	seconds	2/1/2024 9:00	Scooter	600	seconds	2/2/2024 7:40	Scooter	300	seconds	##########	Dish Washer	3600	seconds
##########	*Scooter*	*720*	*seconds*	##########	Microwave	120	seconds	##########	Refrigerator	86400	seconds	##########	Computer	1800	seconds	##########	Computer	3600	seconds	##########	Computer	10800	seconds	##########	Shower	1200	seconds
##########	Shower	900	seconds	##########	Shower	900	seconds	##########	Lighting	18000	seconds	##########	Scooter	780	seconds	##########	Computer	2400	seconds	##########	Scooter	480	seconds	##########	Laudry	7200	seconds
##########	Microwave	180	seconds	##########	lighting	25200	seconds	##########	Shower	780	seconds	##########	lighting	36000	seconds	##########	Computer	7200	seconds	##########	Scooter	800	seconds	##########	Computer	10800	seconds
##########	Lighting	14400	seconds	##########	Refrigerator	86400	seconds	##########	Computer	21600	seconds	##########	Computer	25200	seconds	##########	Scooter	840	seconds	##########	Computer	32400	seconds	##########	Driving	5	miles
##########	Heater	1200	seconds	##########	Heater	2100	seconds	##########	Scooter	660	seconds	##########	Cooking	3600	seconds	##########	Cooking	5400	seconds	##########	Cooking	5400	seconds	##########	Drviing	5	miles
##########	Laudry	7200	seconds	##########	Cooking	3600	seconds	##########	Scooter	780	seconds	##########	Heater	1920	seconds	##########	Phone	4320	seconds	##########	Heater	10800	seconds	##########	Computer	7200	seconds
##########	Refrigerator	86400	seconds	##########	Dish Washer	7200	seconds	##########	Driving	10	miles	##########	Shower	900	seconds	##########	Computer	14400	seconds	##########	Dish washer	7200	seconds	##########	Heater	1500	seconds
##########	Scooter	900	seconds	##########	Computer	21600	seconds	##########	Computer	25200	seconds	##########	Phone	7200	seconds	##########	Heater	7200	seconds	##########	Microwave	180	seconds	##########	Microwave	120	seconds
##########	Cooking	7200	seconds	##########	Phone	7200	seconds	##########	Phone	3600	seconds	##########	Microwave	120	seconds	##########	Lighting	32400	seconds	##########	Lighting	25200	seconds	##########	Lighting	25200	seconds
##########	Phone	4824	seconds	##########	Microwave	200	seconds	##########	Cooking	840	seconds	##########	Refrigerator	86400	seconds	##########	Dish washer	10800	seconds	2/2/2024 0:00	Refrigerator	86400	seconds	2/3/2024 0:00	Refrigerator	86400	seconds
																##########	Refrigerator	86400	seconds	##########	Phone	4140	seconds	##########	Phone	4680	seconds
																##########	Laudry	14400	seconds								

Summarize the "All Activities" worksheet here by activity type

Activity Number	Activity Type	Duration of Distance (per	Units	Rate of Fuel/Product	Units of rate of consumption (e.g.	Energy content OR	Units (kJ/gal, Btu/gal	Total energy consumption	Units (kJ)	Emissions factor	Units	Total CO2 (kg)	Sources	Assumptions/Notes
Example	*Driving*	*210*	*mi*	*0.045454545*	*gal/mi*	*132000*	*kJ/gal*	*1260000*	*kJ*	*0.00006656*	*kgCO2/kJ*	*83.8656*	*EPA energy intensity and emissions factor for gasoline*	*I assumed that my car gets an average of 22 mpg*
1	Computer	213000	seconds	NA	NA	0.1	kJ/sec	*21300*	kJ	*0.000067*	*kgCO2/kJ*	*1.4271*	Energy and Emission Reference Note	My computer's adaptor is 100 W.
2	Cooking	9.15	hours	NA	NA	7000	BTU/hour	*60707.67808*	kJ	53.06	*kgCO2/mmBTU*	*3.221149399*	The Average BTU of a Home Oven or St	Original cooking time in seconds is 32940. I use gas to cook
3	Scooter	2.32	hours	NA	NA	0.4	kJ/sec	*3344*	kJ	0.000067	kgCO2/kJ	0.224048	EPA energy intensity and emissions facto	I assume that my scooter 400 watts.
4	Driving	20	mi	0.045	gal/mile	132000	kJ/gallon	*118800*	kJ	0.00006656	kgCO2/kJ	7.907328	Energy and Emission Reference note	I assume that my car is 22 mpg
5	Shower	4680	seconds	0.0417	gallons/sec	15.2	kJ/sec	*71136*	kJ	0.0000502	kgCO2/kJ	3.5710272	EPA emission factor of natural gas	Convert the emission factor 53.06kgCO2/mmBTU into 5.02*10^-5kgCO2/kJ
6	Microwave	0.29	hours	NA	NA	1.2	kJ/sec	*1248*	kJ	0.000067	kgCO2/kJ	0.083616	EPA energy intensity and emissions facto	I assume that my microwave is 1200 watts.
7	Lighting	176400	seconds	NA	NA	0.041	kJ/sec	*7232.4*	kJ	0.000065	kgCO2/kJ	0.470106	EPA energy intensity and emissions facto	The emission factor is 513.5lbCO2/MWh which converts to about 6.5*10^-5 kgCO2/kJ
8	Heater	7.28	hours	NA	NA	1.5	kJ/sec	*39330*	kJ	0.000067	kgCO2/kJ	2.63511	EPA energy intensity and emissions facto	I convert 26220 seconds into about 7.28hours and assume that the heater is 1500 watts.
9	Laudry	8	hours	NA	NA	0.85	kJ/sec	24480	kJ	0.000067	kgCO2/kJ	1.64016	Energy and Emission Reference note	I assume that my washing machine's wattage is around 850W.
10*	Long Trip	7150	mi	0.015	gal/mile	142000	kJ/gal	15229500	kJ	0.00006845	kgCO2/kJ	1042.459275	Ranking the Airlines by Fuel Efficiency -V	I assume that my plane's fuel consumption is 0.015 gal/mile

Weekly Total (kg CO2)	21.1796446
Annual Total (kg CO2)	2143.800794

1) What surprised you?

My international travel's energy consumption surprised me the most. It is a huge number:152

2) Which activity consumed the most energy?

The airplane travel consumed about 15229500 kJ.

3) Where do you see opportunities to reduce your carbon impact?

I could use less computer for saving energy as I find my computer charging occupy lots of ener

4) Which activity was responsible for the highest emissions?

Still air-plane travel is my highest carbon emissions which is about 1042 kJ of carbon.

Resources

Emissions factors for fuels (including electricity)	EPA
Flight emissions	https://www.icao.int/environmental-protection/Carbonoffset/Pages/default.aspx
Showering Emissions Factor	See Reference Note: Energy and Emissions
EPA GHG Calculations/References	EPA

Notes

not CH4, NOx, SOx

lighting, phone charging, microwave etc, look for factors in different units than those provided in your location, as the carbon intensity of grid will