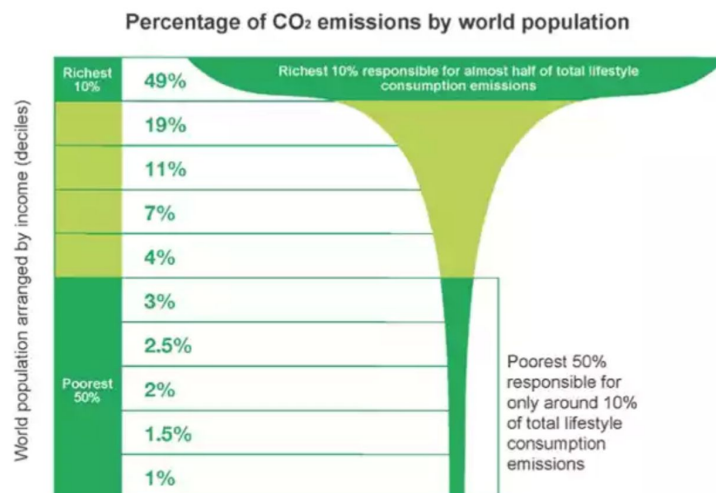


1. Explain two ways that your current level of wealth impacts how much emissions of carbon dioxide that you are responsible for. (25 points)

Ans :



The current level of wealth impacting on carbon dioxide emission. The data shows that half poorest world population (3.5 billion) responsible for only 10% of carbon emission. However 10% richest people responsible for the major portion in CO₂ emission. Someone richest person in the world use 175 times more carbon than the poorest person[1]. For example, The Richest person has a big house with more electronic equipment, heavy engine cars and use more things for their comfort which produce carbon emission. If we take a look at US economy, GDP is growing and average people can afford to buy cars, apartments and the average person is using all of the things which produce carbon. For example electronic devices, cars, hot water and many more small devices.

One major contribution to CO₂ is electricity. I used most of the electricity in extreme summer and winter where air conditioner and heater keep turned on. During usage of heater and air condition, the electricity bill increased 70% more than a normal day. We have a central heater in our apartment which take a long time and more energy to keep the whole apartment warm during the winter. For laundry, I used commercial laundry machine which consumes more power than average house machines. Currently, I enrolled in computer science major so my computer keeps on most of the time. When I was making less money I had only one computer but now I have two computer and three external monitors which consumed more electricity. As we know 85% electricity produced in worldwide by fossil fuel. Currently 29% percent of CO₂ emission coming from fossil fuel which burned during electricity produced.

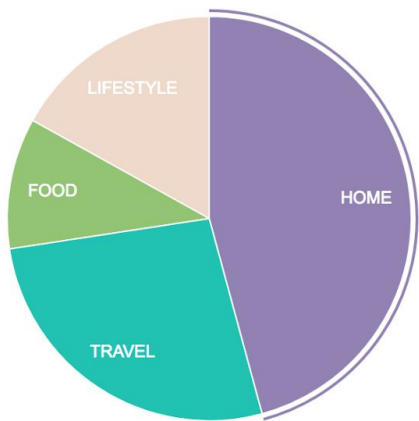
The second major contribution to CO₂ is transportation. I drive car approximately 2000 mile per month. Each gallon of oil produced 24 pounds of CO₂. Mostly I drive alone and faced traffic because public transportation time does not match with my schedule. Transportation responsible for 27% of CO₂ emission in the US. Along with transportation and electricity, dairy and meat product also produced CO₂ emission. I

used meat and dairy product every day. Every morning I drink milk and meat at lunch but mostly chicken. Due to busy with work and study, Mostly I dinner outside and we all know restaurant food consume more resources than average cooking at home. 1kg beef can produce approximately 13kg of CO2 which is equivalent to CO2 produced from 6 liters of petroleum.

Based on my usage, I got following result from carbon emission calculator:

CALCULATE YOUR CARBON FOOTPRINT

Results



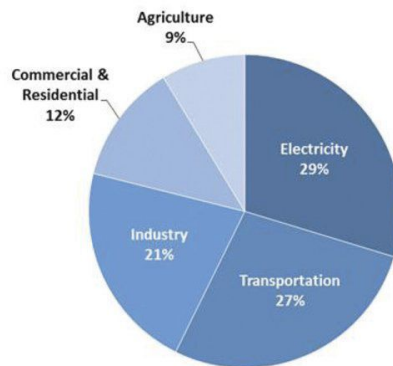
Your calculated score:

Category	Score
HOME	10.00
TRAVEL	5.90
FOOD	2.30
LIFESTYLE	3.70
Score	<div>48,281.18</div> lbs

4. What do you think is the most common-sense solution for cutting GHG emissions as an individual and only one human being? Why? What are the strengths and weaknesses of your choice? (25 points)

Ans: We can cut GHG emission with simple ways and little responsibility. Climate change is real and its happening front of us which is affecting living species on earth.

Total U.S. Greenhouse Gas Emissions
by Economic Sector in 2015



We can use following simple methods to cut GHG emission.

1. Eat less red meat: Red meat comes from sheep and cows which produce a large amount of methane gas. Instead of red meat, chicken and pork meat is good compared to cows and sheep because they produce less emission. So if we cut fewer steak and snags from our daily food that would be great for the environment, ourself and the future generation. There are several pros and cons as following

Pros:

- For medical purposes, Red meat contains high saturated fat which can lead to heart disease.
- Less Methane gas emission.
- Less cost for food because red meat is expensive.

Cons:

- A large population of US eats red meat so it's highly available in the market due to high demand. If demand goes down then others have to pay more for it.

2. Use green electricity: There is no doubt that future of energy is clean energy like solar, wind and wave power because oil, coal and natural gas cannot available forever. we can use hundred percent green electricity for houses however industrial area cannot fulfill 100% demand for electricity from clean energy yet. Here are pros and cons

Pros:

- Save money in long-term
- Eco-friendly energy sources.
- Easily set up in the area where electricity cannot go like jungle or war zone.

Cons:

- High price at front.
- Cannot fulfill industrial electricity requirement.
- Depend on the weather.
- Does not last forever and need to replace after a certain period.

3 Use energy efficient devices for home: We know that energy is a big factor that responsible for GHG emission. There are many types of energy efficient devices we can use to control GHG emission, for example, Led bulb, led tv instead of big old tv, and separate small heater for each room. We should look at energy and water usage before buying washing machine and heater because these are common and most energy consumed devices. Beside buying energy efficient item, if we only change our small habits we can save a lot of energy, for example, turn off the light if not used, switch off electronic devices from plus instead of the remote. Here are pros and cons

Pros:

- Save money in long run and last longer.
- Easily recycled and eco-friendly.

Cons:

- Expensive to buy for example led bulb, led tv and most energy efficient devices are costly to buy.

4. Public transportation and gas saver vehicle: After electricity transportation is a second big factor which effects on GHG emissions. We can easily control by using gas saver cars, for example, 4 cylinder cars instead of big trucks, hybrid or electric cars. All major cities have great public transportation. If we use public transportation or carpool with friends that would be a huge impact on the environment. Beside gas or electric vehicle, the cycle is a great and most eco-friendly vehicle. We can use easily cycle for small commute especially in the crowded city. Here are pros and cons

Pros:

- Good for the environment.
- More public transportation mean less traffic and less accident.
- Save money in gas use hybrid or low power gas engine vehicle.
- Great friend company while carpooling.

Cons:

- Public transportation good in the city areas but not in the countryside.
- Electric and hybrid vehicle are expensive for example Tesla car.

Buy Local produce: Today American food travels from the hundred to thousands of miles before reach to people because mostly largely produced warehouse are far from cities or food comes from out of borders. We should buy foods from local who produced fresh food with less resources and produce less CO2 emission. Here are pros and cons

Pros:

- Fresh and healthy food.
- Help local community.

Cons:

- Expensive due to less demand.
- Spend more time in local food shopping.

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