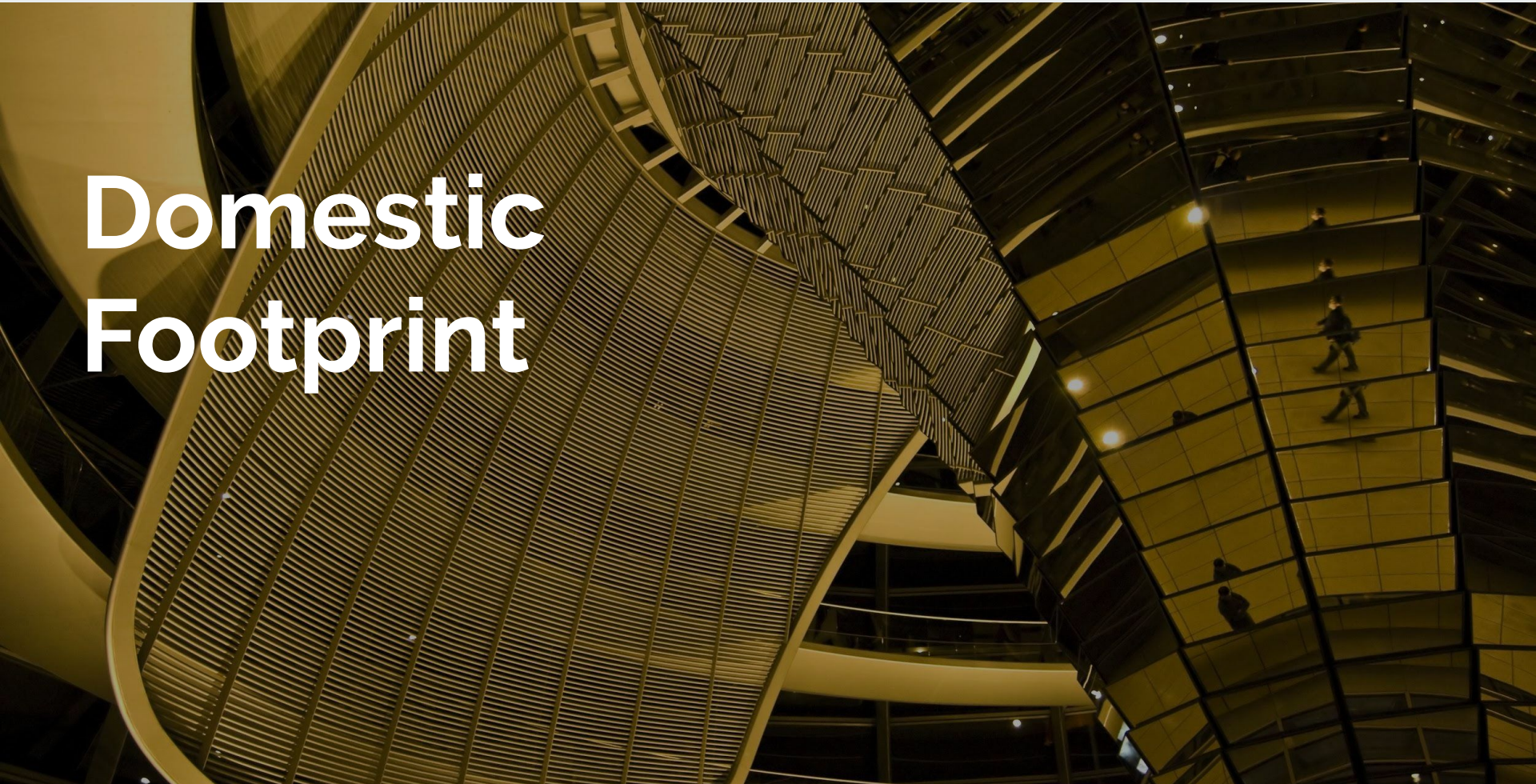
What is your Ocean Footprint?

How your daily routine could be affecting the ocean

TOC

Overview

“80% of marine pollution comes from land-based sources”

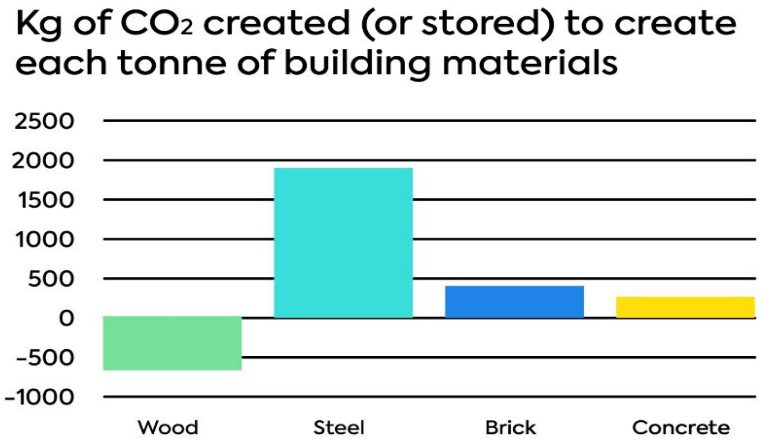


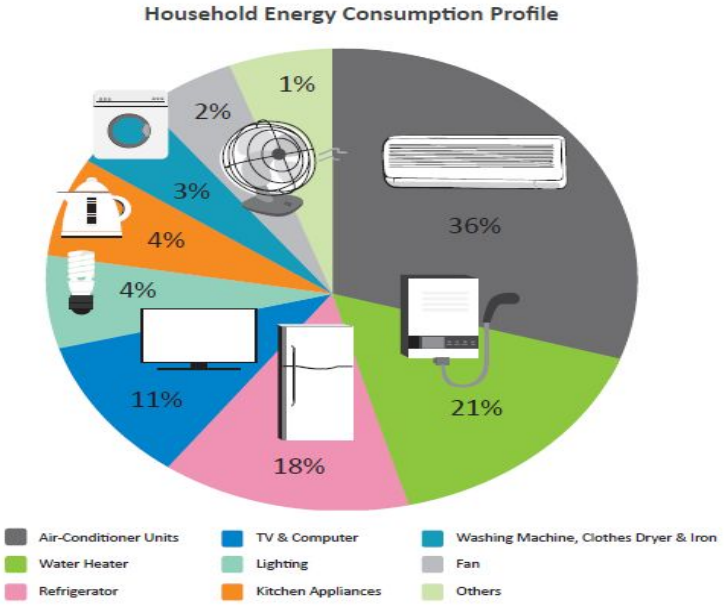
Domestic Footprint

What's Going On In Your House?

1. **Marine Litter:** Our personal waste such as, but not limited to, plastics, glasses, microplastic fibers, etc.

2. **Energy Consumption due to Materials and Sizes**



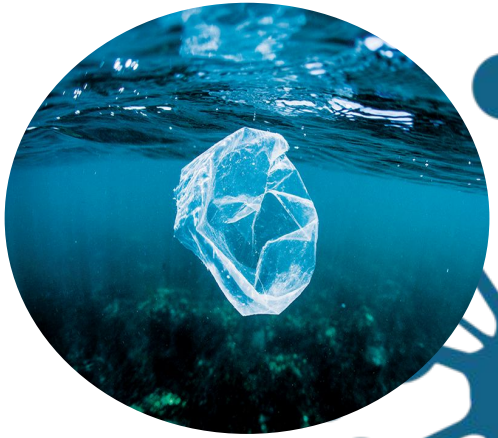


FACTS

6.5 million tons of litter enter the world's Ocean each year. **50%** is long-lasting plastic that will drift for hundreds of years before it is degraded.

Effects

Plastic Pollution



Residential Runoff

Excessive Energy Consumption

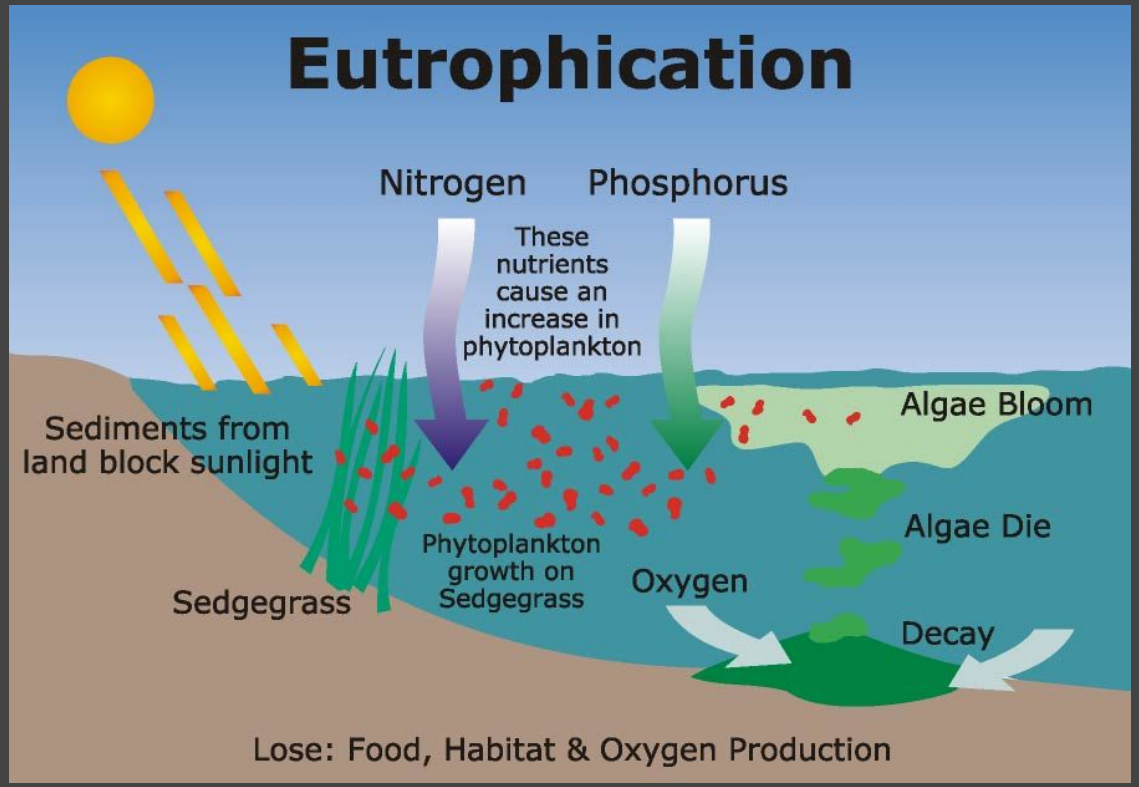
Agricultural Pollution (Food)

Nitrogen and Phosphorus Pollution

101 (aka Nutrient Pollution)

“In the USA diffuse inputs of nitrogen and phosphorus pollution have increased, causing eutrophication, harmful algal blooms, **dead zones**, **coral reef destruction**, loss of sea-grass and kelp beds, fish kills, shellfish poisoning and seabird and **marine mammal deaths**. "

FACTS



The nitrogen and phosphorus in **animal manure** and **chemical fertilizers** are necessary to grow crops. However, when these nutrients are not fully utilized by plants they can be lost from the farm fields and negatively impact air and downstream water quality.

(AKA Agricultural Runoff)

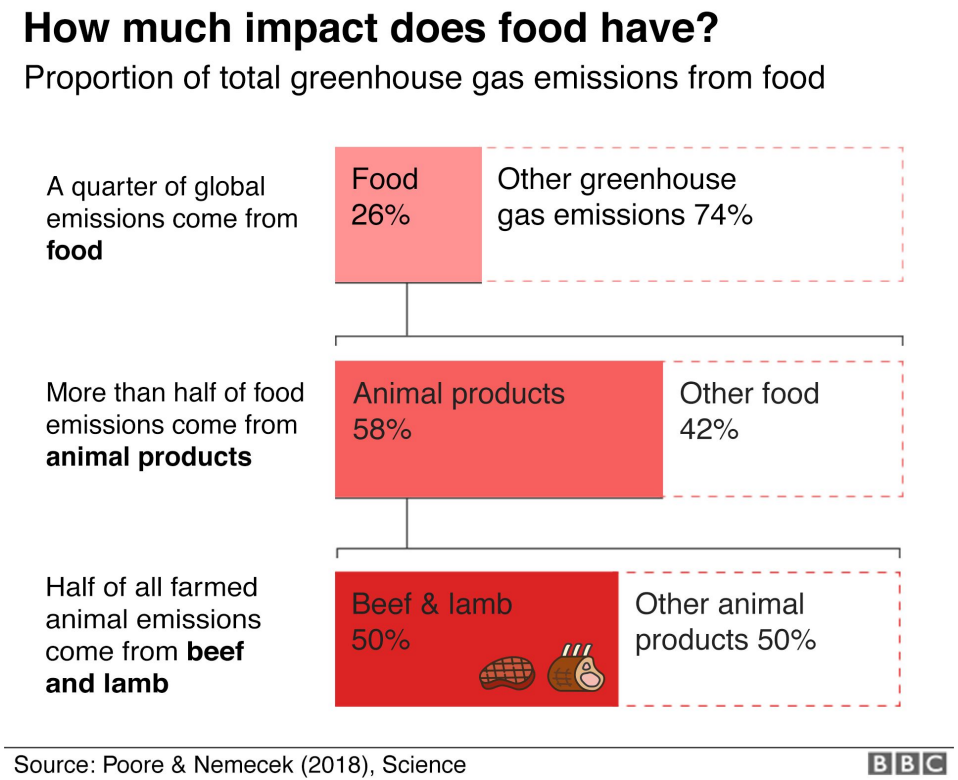
Carbon Footprint From Your Food

101

Factors affecting carbon footprint:

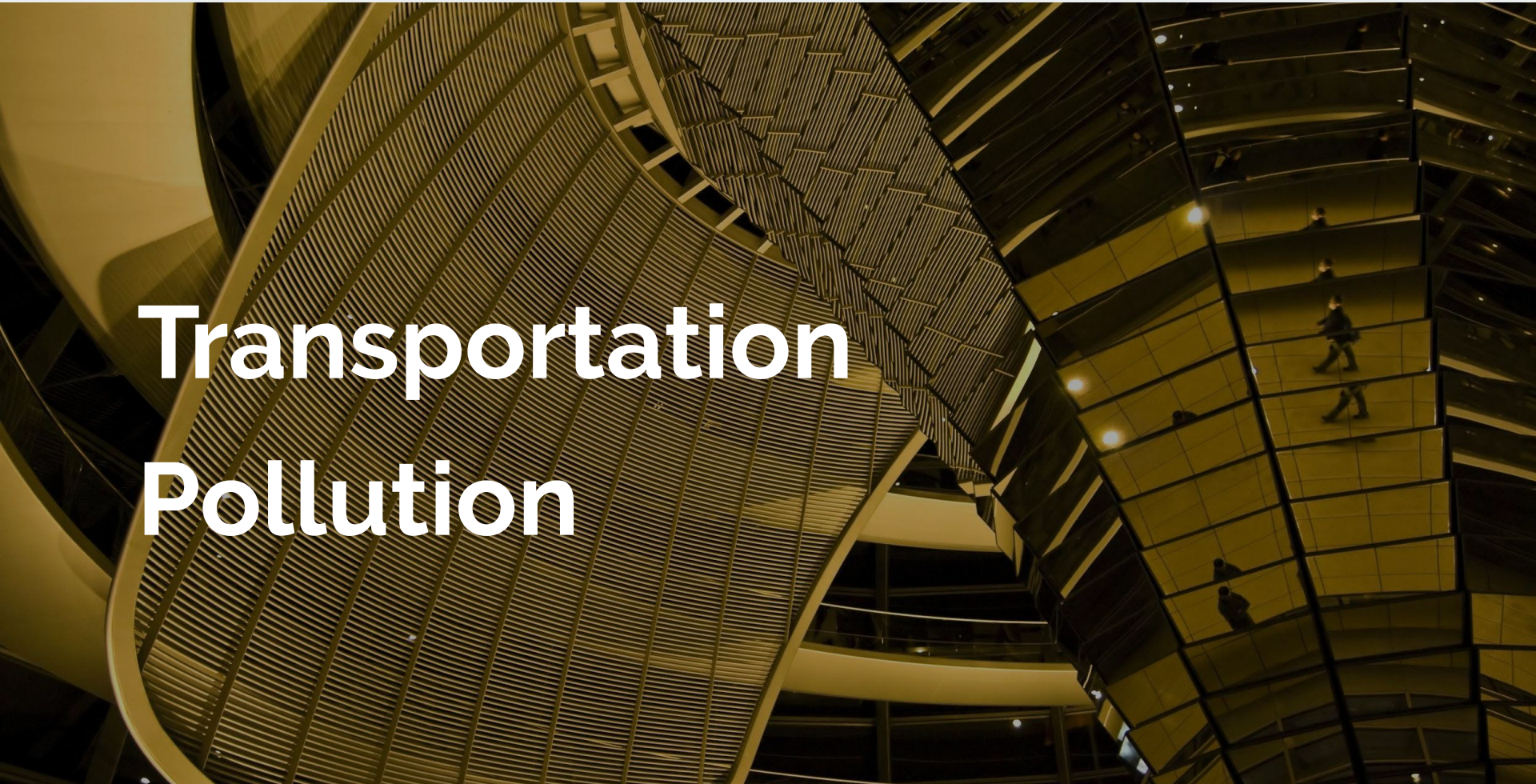
- Fuel consumption (shipping via air, type of boats used to catch, tools used to catch)
- Abundance

If we collectively adopt a more plant-based diet we could reduce the equivalent of up to 8 gigatons of carbon dioxide per year. Factory farms feed cattle grain. Without their natural grass-fed diets, cattle produce the greenhouse gas methane through their manure and gases.



FACTS

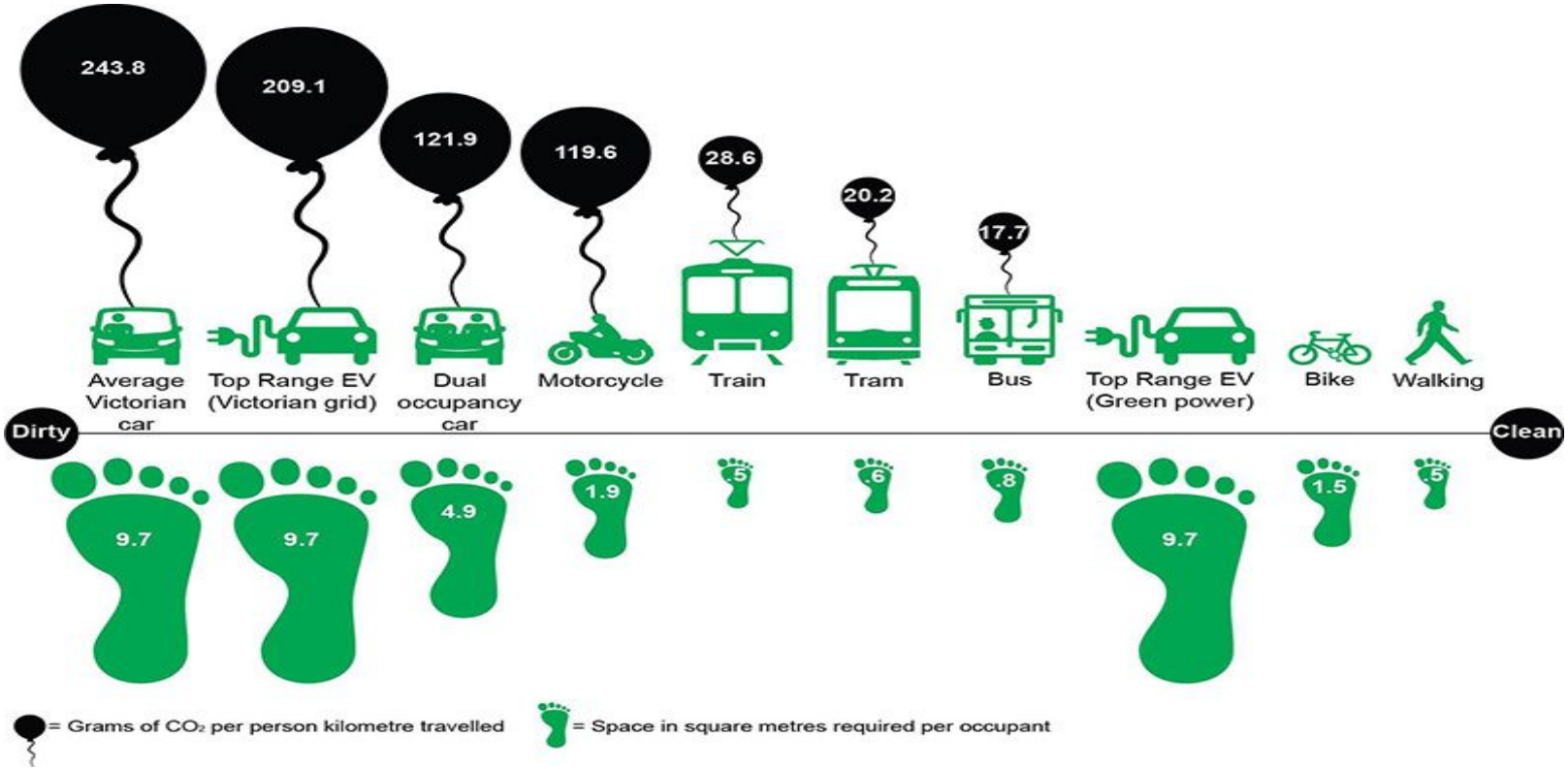
Demand for soy is driving deforestation, but think again before you put all the blame onto tofu eaters or the vegan movement. Around 70% of the global soy production is fed directly to livestock.



Transportation Pollution

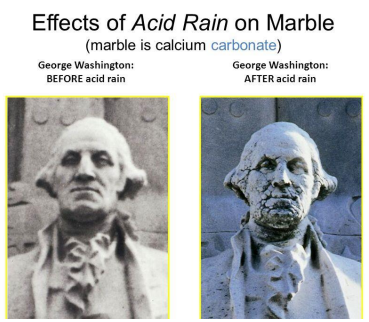
https://calculator.carbonfootprint.com/calculator.aspx?tab=6

Carbon Footprint of Vehicles



Effects

The rise of CO2 equivalent to the increase of ocean acidity. This would create an enormous impact on both the ocean ecology and human's natural resources.



01 | Ocean deoxygenation

02 | Coral bleaching

03 | Acid rain

04 | Ocean ecology being damaged as some species are more vulnerable to the increase of ocean acidity

05 | Some algae and seagrass may benefit from higher CO2 concentrations in the ocean, as they may increase their photosynthetic and growth rates.

FACTS

Ocean acidity has increased by 30% since the beginning of the Industrial Revolution. This increase is 100 times faster than any change in acidity experienced by marine organisms for at least the last 20 million years.

Industrial Pollution (Goods and Services)

Industrial-caused Pollution

Chemical Runoff

Hundreds of these companies have been contaminating drinking water throughout the country for decades with everything from arsenic and lead, to mercury and chromium – most coming from improper dumping and waste disposal, according to EPA data.

Outdated Technology

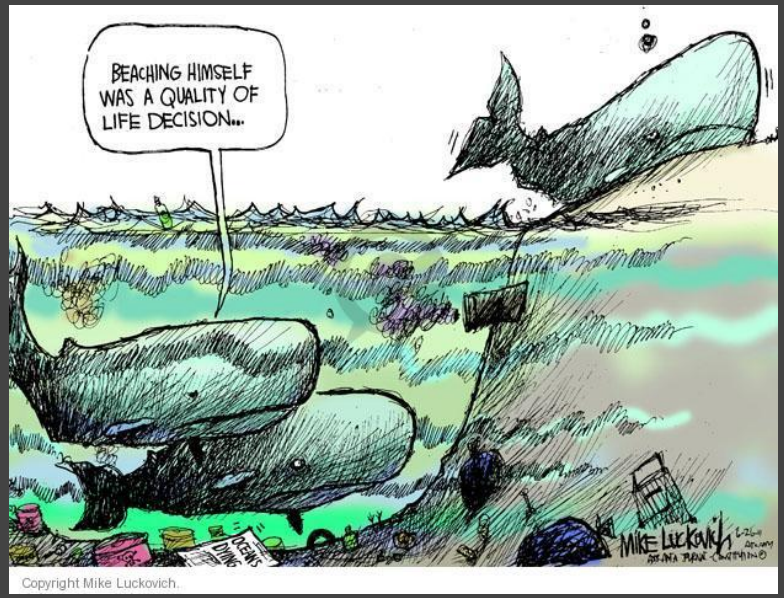
More and more technologies were invented to minimize the amount of pollutants release to the environment, but along with those advance technologies are expensive cost. Therefore, many companies refuse to update their technologies to protect the environment.

Burning Greenhouse Gases

Demands for energy drive emission of greenhouse gases like carbon, nitrogen, sulfur dioxide, etc. into the atmosphere that contribute to global warming, rising temperature, rising sea level, and extreme weather patterns such as hurricanes and acid rain.

FACTS

According to the Environmental Protection Agency (EPA), 44% of assessed stream miles, 64% of lakes and 30% of bay and estuarine areas are not clean enough for fishing and swimming. The EPA also states that the United State's most common contaminants are bacteria, mercury, phosphorus and nitrogen.



What Can You Do?

Change Your Diet

1.
Choose Sustainable Food

Check out farmers' market and look up apps that tell you the sustainability of the food. If not, find organic food. They tend to produce less carbon emission.

2.
More Veggie, Less Meat

Smart substitutions of meat-based products can reduce 19% of carbon emission from food and agriculture. Eating in-season to avoid hothouse and freight

3.
Don't Waste Food!

Reducing food waste by finish all you buy can reduce 25% of carbon emission for food. Avoid processed and packaged food.

Conserve Energy

1.
Reduce Heating Expenses

Consider insulating your houses (lower bills+environmental-friendly), reduce water heating expenses (use less hot water, install thermostats etc.)

2.
Take Short Showers

Take quick 10-minute showers at most. Conserve both water and heating expenses!

3.
Purchase Energy Efficient Appliances

When purchasing an energy efficient appliance, you should look for appliances with the ENERGY STAR label, which is a federal guarantee that the appliance will consume less energy during use and when on standby than standard non-energy efficient models.

Sustainable Transportation

1.

Carpool if possible

Recent advances in car sharing technologies and the potential for self driving vehicles underline a much more sustainable usage of car assets that could remove up to 90% of the vehicles from the streets.

2.

Walk, Bicycle, Bus

Take advantage of public transit system like buses and subways when can. Walk to local places or use bicycles instead of relying on cars.

3.

Take care of your car!

Regular maintenance of your car not only means it lasts longer, it will also save money on fuel. This means you should make sure your car tires are always inflated properly, you should change the oil regularly, and you should take unnecessary loads out of the car to ensure fuel efficiency. Change to more fuel-efficient car!

Thank you.