

### There is no Planet B

By Mike Berners-Lee

# Agenda

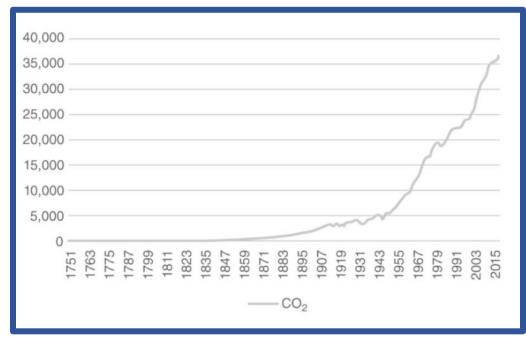
- I. Environmental Degradation Erik
- II. Recycling and Waste Dayna
- III. Benefits of Naturalizing Lawns Eric
- IV. Pollution and Recycling Ryan
- V. Conclusion

## The Decline of Biodiversity

Emissions of carbon dioxide, the most important greenhouse gas have grown exponentially for 160 years with an annual growth rate of 1.8%.

There are around 7.5 million different species. Sadly, we are losing some of these types at a rate of 0.01% to 0.1% per year. This means that we are losing between 750 to 7,500 species every year.





### Your Carbon Footprint

"The average person travels 3,921 miles per year: 57% of these are by road, 23% on foot, 7% by rail and 13% by plane." (pg. 115)

Planes emit the most carbon dioxide compared to any other mode of transport, with petrol cars being second. Burning fossil fuels is the largest emission of carbon dioxide, so it is important to be aware and try to use other forms of transportation when possible.











#### Act

It is important that people do more to fight against climate change.

There are tons of things that you can do that promote a healthy Earth.

### Waste

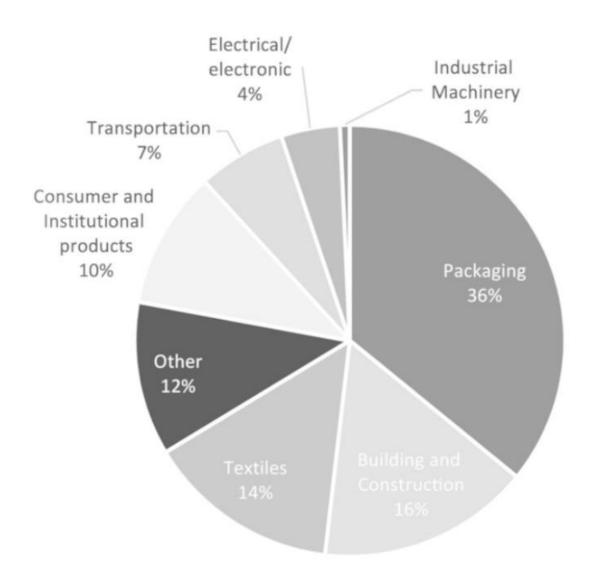
"...households waste a good chunk more.... the average human eats 2,350 [calories], which is 180 [calories] more than the average person needs for a healthy diet." (p.16)

"Give your food to a friend or a neighbor if you can't get through it yourself." (p.49)

Emissions mitigation (%)	Bread	Cheese	Fruit and veg	Fish	Meat	Average food
Donated	100%	100%	100%	100%	100%	100%
Fed to animals	24%	7%	1%	41%	5%	6%
Anaerobic digestion	20%	4%	5%	19%	4%	6%
Composted	3%	1%	-1%	5%	1%	1%
Incinerated	11%	2%	-2%	1%	1%	1%
Landfill (gas captured for electricity) <sup>36</sup>	-44%	-7%	-12%	-26%	-7%	-10%
Landfill (gas cap- tured but flared)	-61%	-10%	-16%	-36%	10%	-14%
Landfill (no gas capture)	-227%	-37%	-61%	-136%	-36%	-53%

#### Recycling

"Over a third of all our plastic is used for disposable packaging. To look on the plus side, recycling rates have gone from an all-time average of just 9% to nearly 20% [as of 2021]. But to look on the negative side, this is still pitiful and the growth in recycling rates has been dwarfed by the overall growth in plastic production, so that the amount getting chucked out every year is going up not down." (p. 65)



#### What can we do?



Save leftover food for later



Donate leftovers to someone else



Recycle when possible



Buy things made from recycled materials



If given the option, opt for less packaging



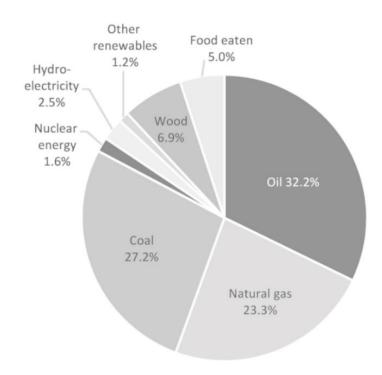
Buy items in stores, rather than online

## Energy

- Fossil fuels account for 83% percent of energy used, and this number needs to be zero or as close to zero as possible
- Renewable sources are more efficient for most things, but can't replace aviation fuels (need to grow biofuel)
- Solar is the most efficient and best choice of all renewable sources. Most countries have enough land to supply the world, sharing is the major issue
- Carbon must be taken out of the air (biomass).
  - Insect diversity is highest in lawns mown monthly (Smith et al.)

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This graph represents the energy used by humans in 2017, including food eaten. The percentage from solar is so small it is lumped into other sources. Ideally, solar would replace the 83% made of fossil fuels.



# Appendix

- 14 points for politicians to understand
- We have not dented the carbon emission curve
- The world needs to use less energy
- The global deal must work for everyone
- We need to take carbon out of the atmosphere

### Pollution

- "Current science tells us that global temperature rise of 2° C looks very risky but 1.5° much less so".(Page 58)
- "An estimated 4-12 million tonnes per year end up in the sea...make its way back into our food chain where it can be found, for example in a third of the UK's caught fish". (Page 64)



# Recycling



- "The world is now producing over 400 million tonnes of the stuff every year. Of all the plastic ever made, less than a third is still in use, less than a tenth has been burned, and only 7% has been recycled". (Page 63-64)
- "An estimated 9 billion tonnes has been produced so far. Of this, 5.4 billion tonnes been chucked into landfill or scattered onto land and sea. If all of it were cling fit, it would be more than enough to wrap the whole planet." (Page 63)

#### What can we do?

- "Find ways to consume less but appreciate more". (Page 226)
- "Get to know your supply chains and try to push all your spending power towards organizations that are pushing for a better world ". (Page 226)



#### Works Cited

Berners-Lee, Mike, and Paul Cureton. *There Is No Planet B: A Handbook for the Make or Break Years*. Cambridge University Press, 2021.

"Act Now." United Nations, www.un.org/actnow. Accessed 8 May 2023.

# Quizizz

