



www.EnergyJustice.net

*...helping communities protect
themselves from polluting energy
and waste technologies*

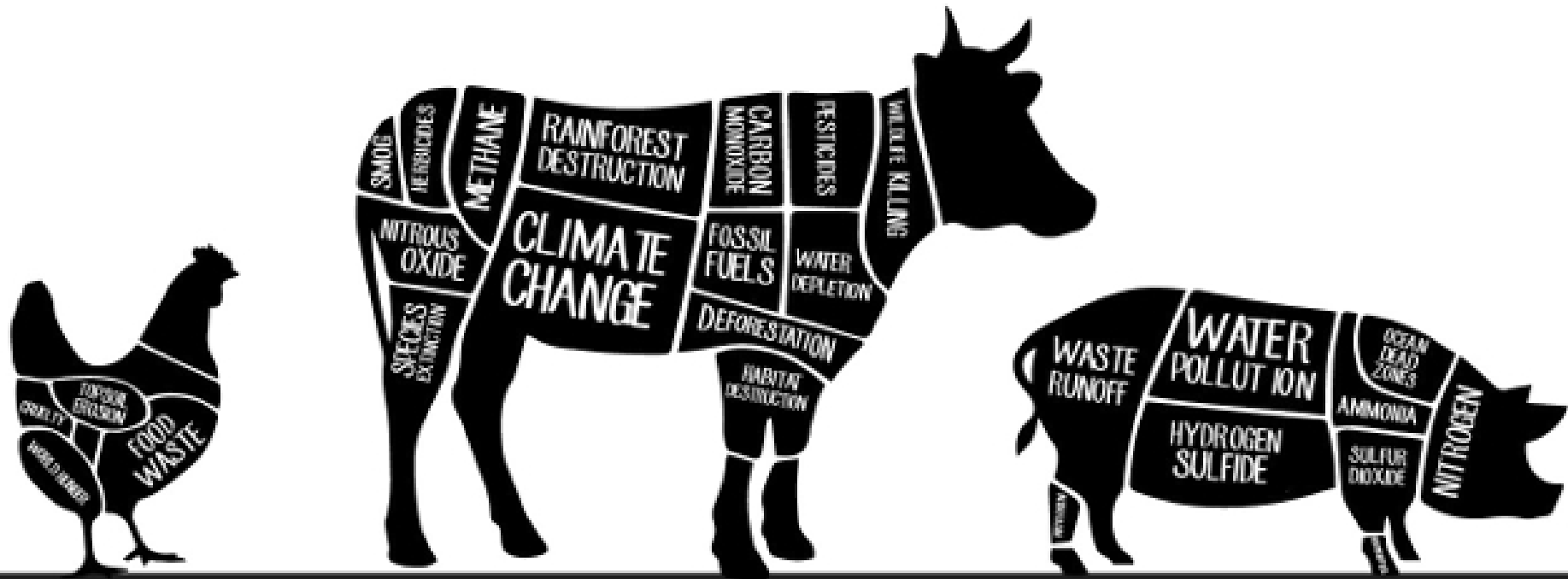
The McDonaldization of Society



New Century Edition

GEORGE RITZER

Animal Agriculture is Hell on our Environment



COWSPIRACY

cowspiracy.com

Animal Agriculture is Hell on our Environment

DEFORESTATION

1-2 ACRES RAINFOREST
ARE CLEARED
EVERY MINUTE

ANIMAL AGRICULTURE
IS RESPONSIBLE FOR

91%

OF AMAZON DESTRUCTION



CLIMATE CHANGE

GLOBAL
GREENHOUSE
GAS EMISSIONS

51%  DUE TO LIVESTOCK AND
THEIR BYPRODUCTS

13%  DUE TO TRANSPORT (ROAD,
RAIL, AIR & MARINE)

WATER USE



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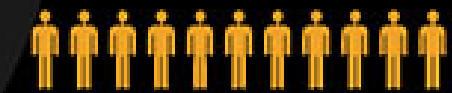
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EQUIVALENT TO
SHOWERING FOR
2 MONTHS



WASTE FROM A FARM
OF 2500 DAIRY COWS



WASTE FROM A CITY
OF 411000 PEOPLE



WASTE

Global Warming

Animal agriculture is responsible for 18-51% of greenhouse gas emissions. Global transportation exhaust is responsible for just 13%.

U.S. methane emissions from livestock and natural gas are nearly equal.

Methane is 86 times more potent a greenhouse gas than CO₂ over a 20-year time frame.

Livestock are responsible for 65% of all human-related emissions of nitrous oxide – a greenhouse gas 268 times as potent as carbon dioxide.

Even without fossil fuels, we will exceed our 565 gigatonnes CO₂e limit by 2030, all from raising animals.

Source: www.cowspiracy.com/facts

Water Use

Fracking water use ranges from 70-140 billion gallons annually.

Animal agriculture uses 34-76 trillion gallons of water annually.

Growing feed crops for livestock consumes 56% of water in the U.S.

Nearly half of the water used by Californians is from meat and dairy.

1,000 gallons of water needed to produce 1 gallon of milk.

2,500 gallons of water needed to produce 1 pound of beef. [442 - 8,000 gal range]

5% of U.S. water consumed is by private homes. 55% is for animal ag.

Animal Agriculture is responsible for 20%-33% of all fresh water consumption in the world today.

Source: www.cowspiracy.com/facts



Land

Livestock and livestock feed occupies 33-45% of the earth's land, including nearly half of the contiguous U.S.

Animal agriculture is the leading cause of species extinction, ocean dead zones, water pollution, and habitat destruction.

Livestock operations on land have created more than 500 nitrogen flooded deadzones around the world in our oceans.

Largest mass extinction in 65 million years.

2-5 acres of land are used per cow.

1/3 of the planet is desertified, with livestock as the leading driver.

Source: www.cowspiracy.com/facts



Wildlife

USDA predator killing of wild animals to protect livestock.

Washington state killed the wedge pack of wolves to protect the beef industry.

More wild horses and burros in government holding facilities than are free on the range.

Ten thousand years ago, 99% of biomass (i.e. zoomass) was wild animals. Today, humans and the animals that we raise as food make up 98% of the zoomass.

Waste

Every minute, 7 million pounds of excrement are produced by animals raised for food in the U.S.

This doesn't include animals raised outside of USDA jurisdiction, in backyards, or the billions of fish raised in aquaculture settings in the U.S.

A farm with 2,500 dairy cows produces the same amount of waste as a city of 411,000 people.

130 times more animal waste than human waste is produced in the U.S. – 1.4 billion tons from the meat industry annually. 5 tons per year of animal waste is produced per person in the U.S.

Oceans

3/4 of the world's fisheries are exploited or depleted. We could see fishless oceans by 2048.

90-100 million tons of fish (as many as 2.7 trillion animals) are pulled from our oceans each year.

For every 1 pound of fish caught, up to 5 pounds of unintended marine species are caught and discarded as by-kill.

Scientists estimate as many as 650,000 whales, dolphins and seals are killed every year by fishing vessels, plus 40-50 million sharks killed in fishing lines and nets.

Half of the plastic in the oceans is from the fishing industry. By 2050, there could be more plastic in the oceans than fish.

Source: www.cowspiracy.com/facts; www.livekindly.co/fishing-nets-not-plastic-straws-make-up-nearly-half-of-ocean-plastic-pollution; www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

Rainforests

Animal agriculture is responsible for up to 91% of Amazon destruction.

The leading causes of rainforest destruction are livestock and feedcrops.

Up to 137 plant, animal and insect species are lost every day due to rainforest destruction.

26 million rainforest acres (10.8m hectares) have been cleared for palm oil production.

136 million rainforest acres cleared for animal agriculture.

1,100 Land activists have been killed in Brazil in the past 20 years.

Humanity & World Hunger

80% of antibiotics sold in the U.S. are for livestock.

Worldwide, cows consume 9 times as much water as humans...
...and over 6 times as much food.

We're currently growing enough food to feed 10 billion people. At least 50% of grain is fed to livestock.

82% of starving children live in countries where food is fed to animals, and the animals are eaten by western countries.

15x more protein on any given area of land with plants, rather than cows.

Source: www.cowspiracy.com/facts

Humanity & World Hunger

Land required to feed 1 person for 1 year:

- Vegan: 1/6th acre
- Vegetarian: 3x as much as a vegan
- Meat Eater: 18x as much as a vegan

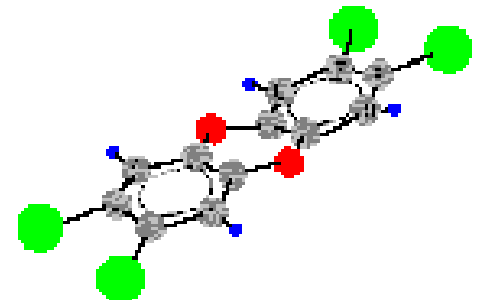
A person who follows a vegan diet produces the equivalent of 50% less carbon dioxide, uses 1/11th oil, 1/13th water, and 1/18th land compared to a meat-lover for their food.

Each day, a person who eats a vegan diet saves 1,100 gallons of water, 45 pounds of grain, 30 sq ft of forested land, 20 lbs CO₂ equivalent, and one animal's life.

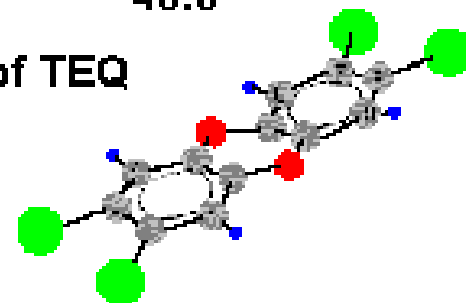
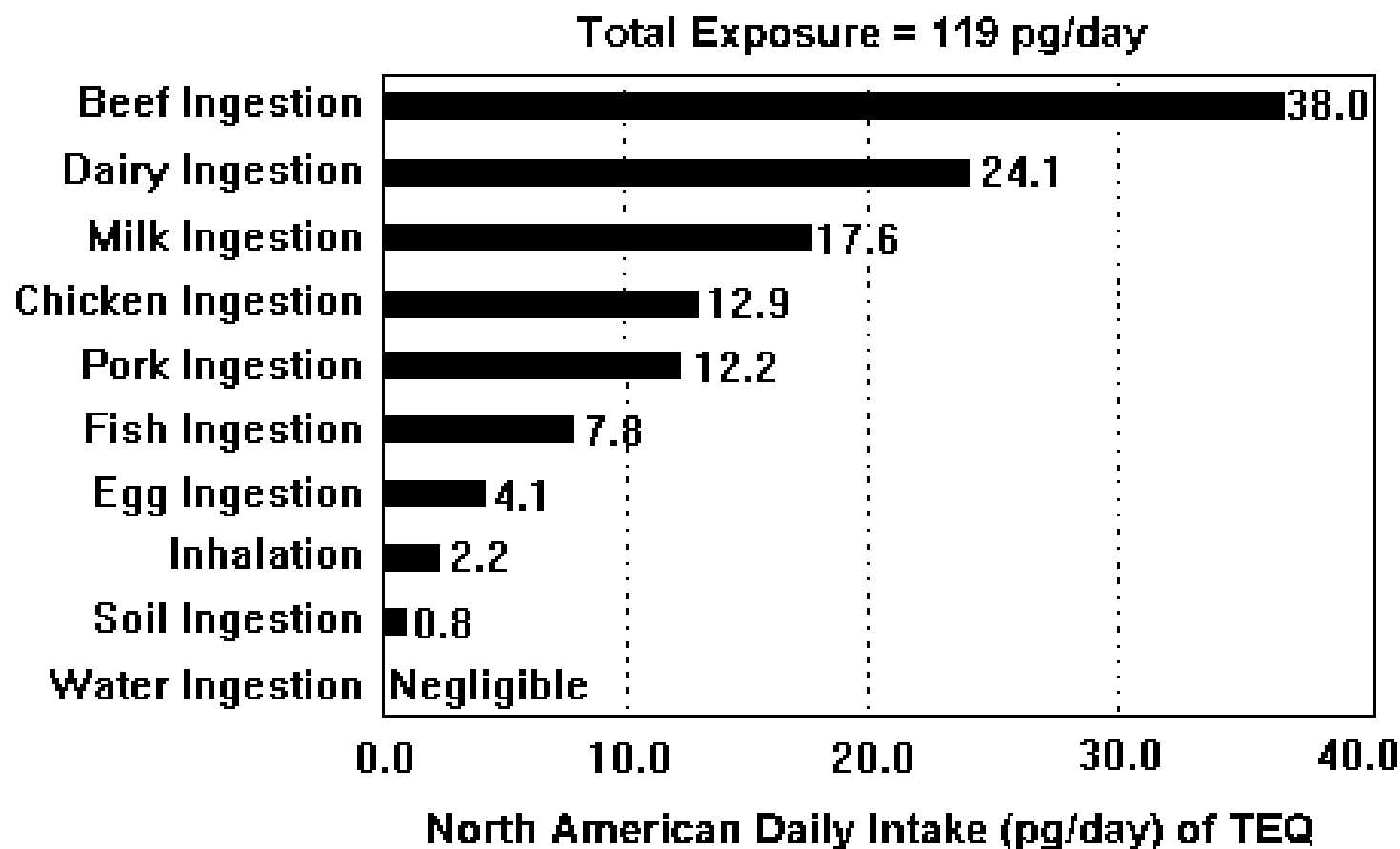
Dioxin Facts

- Dioxins and furans are the most toxic chemicals known to science. They are highly toxic even in miniscule amounts.
- Dioxins cause infertility, learning disabilities, endometriosis, birth defects, sexual reproductive disorders, damage to the immune system, cancer and more.
- 93% of dioxin exposure is from eating meat and dairy products.

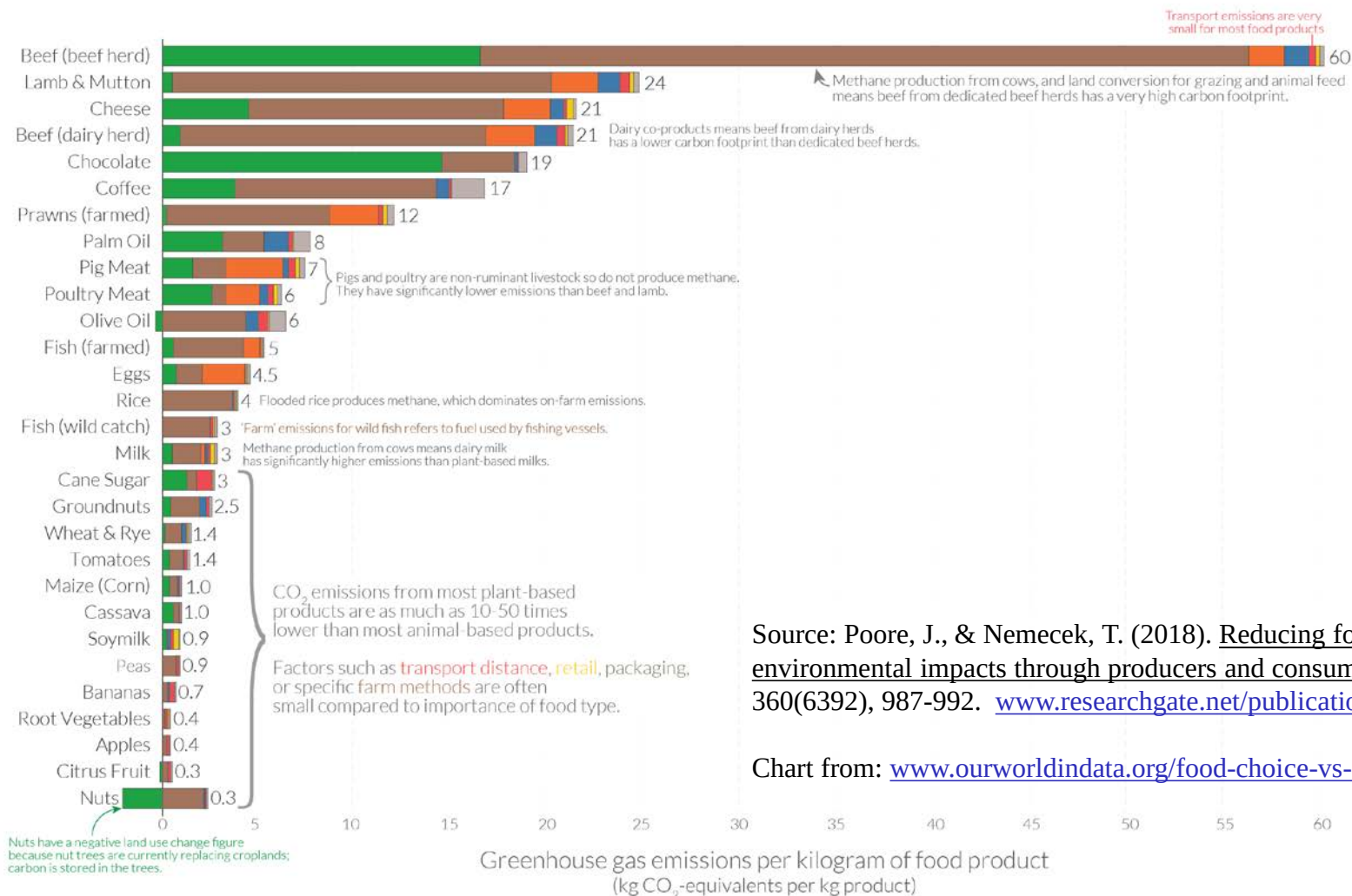
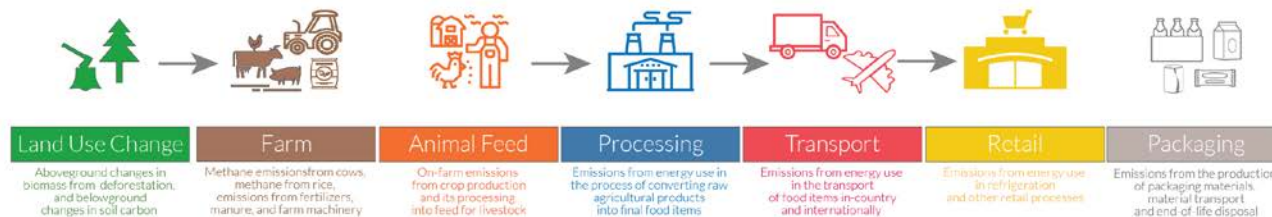
www.ejnet.org/dioxin/



Exposure to Dioxins



Food: greenhouse gas emissions across the supply chain



Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987-992. www.researchgate.net/publication/325532198

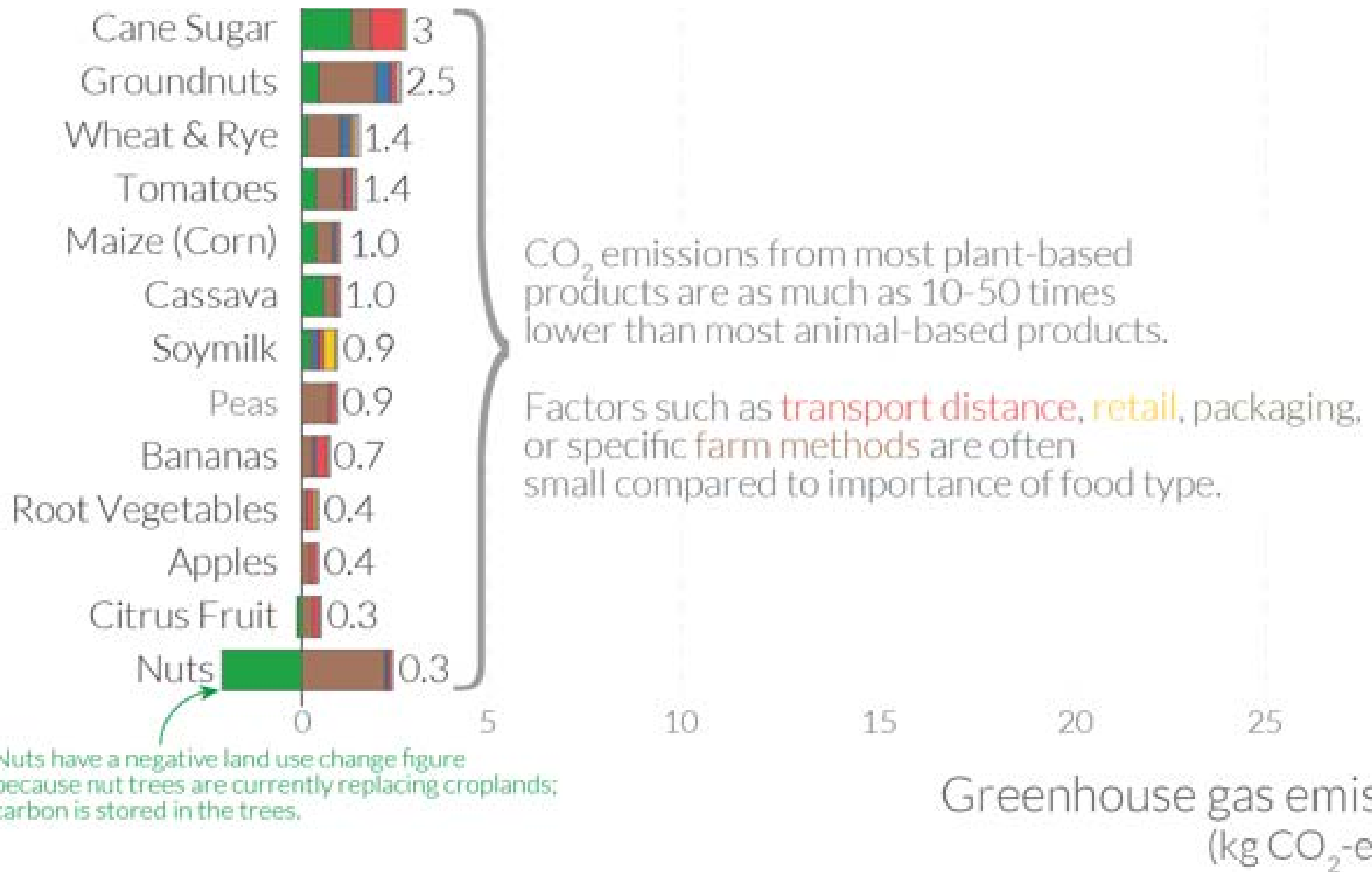
Chart from: www.ourworldindata.org/food-choice-vs-eating-local

Note: Greenhouse gas emissions are given as global average values based on data across 38,700 commercially viable farms in 119 countries.

Data source: Poore and Nemecek (2018). Reducing food's environmental impacts through producers and consumers. *Science*. Images sourced from the Noun Project.

OurWorldinData.org – Research and data to make progress against the world's largest problems.

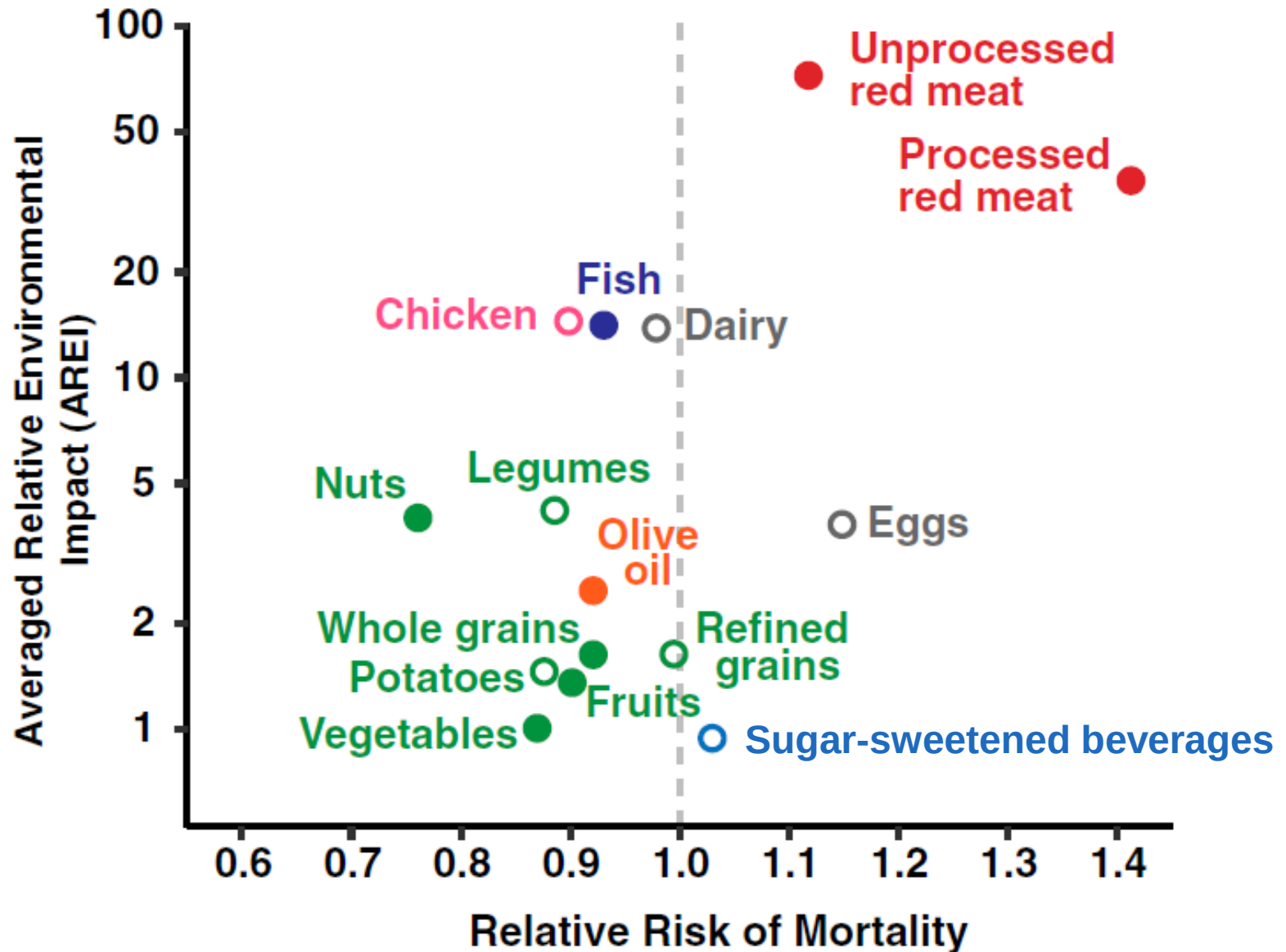
Licensed under CC-BY by the author Hannah Ritchie.



Source: Poore, J., & Nemecek, T. (2018). Reducing food's environmental impacts through producers and consumers. *Science*, 360(6392), 987-992. www.researchgate.net/publication/325532198

Chart from: www.ourworldindata.org/food-choice-vs-eating-local

Meat / dairy worst for health & environment



Source: "Multiple health and environmental impacts of foods," National Academy of Sciences, Nov. 2019.

www.pnas.org/content/116/46/23357

What are the most effective individual actions to reduce climate impacts?

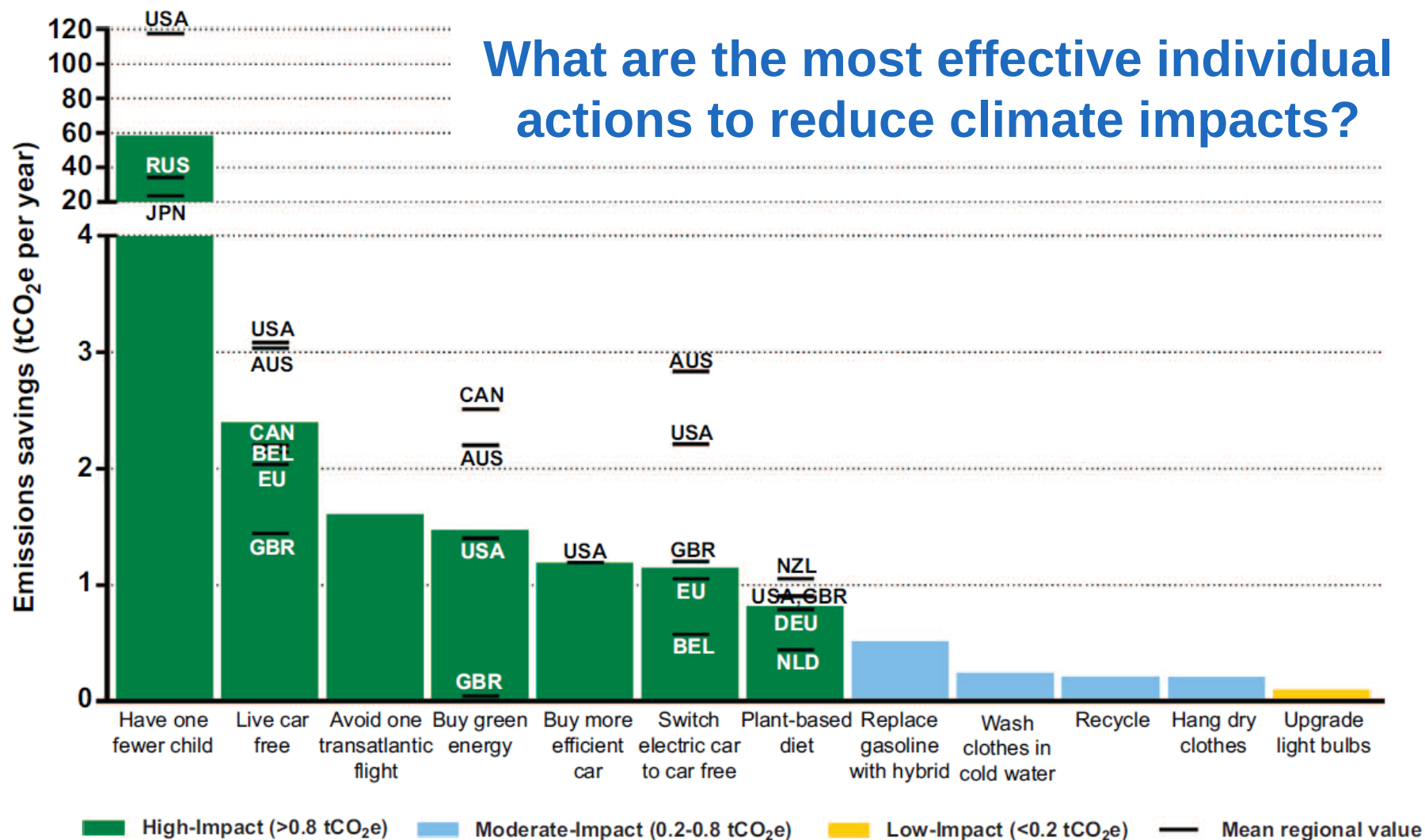
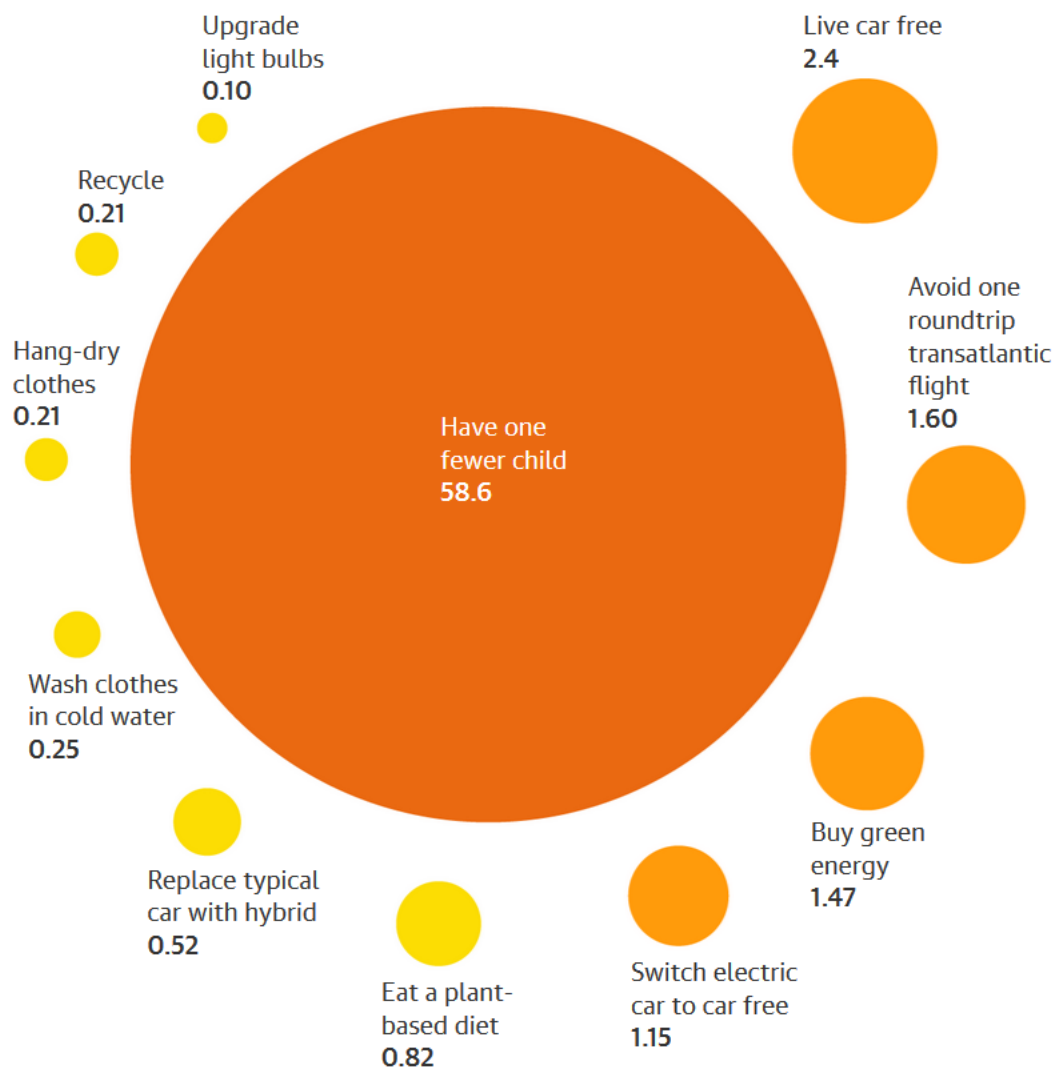


Figure 1. A comparison of the emissions reductions from various individual actions. The height of the bar represents the mean of all studies identified in developed nations, while black lines indicate mean values for selected countries or regions (identified by ISO codes) where data were available from specific studies. We have classified actions as high (green), moderate (blue), and low (yellow) impact in terms of greenhouse gas emissions reductions. Note the break in the y-axis. See supplementary materials 5 for details.

Having one fewer child will save 58.6 tonnes of CO2-equivalent per year

Tonnes of CO2-equivalent per year for one person undertaking each action



Guardian graphic | Source: Wynes & Nicholas, Environmental Research Letters

The graphic shows how much CO2 can be saved through a range of different actions.

The most effective actions are not being taught in school...

Source: Wynes, Seth & Nicholas, Kimberly. (2017). The climate mitigation gap: Education and government recommendations miss the most effective individual actions. Environmental Research Letters. 12. 074024. <https://iopscience.iop.org/article/10.1088/1748-9326/aa7541>

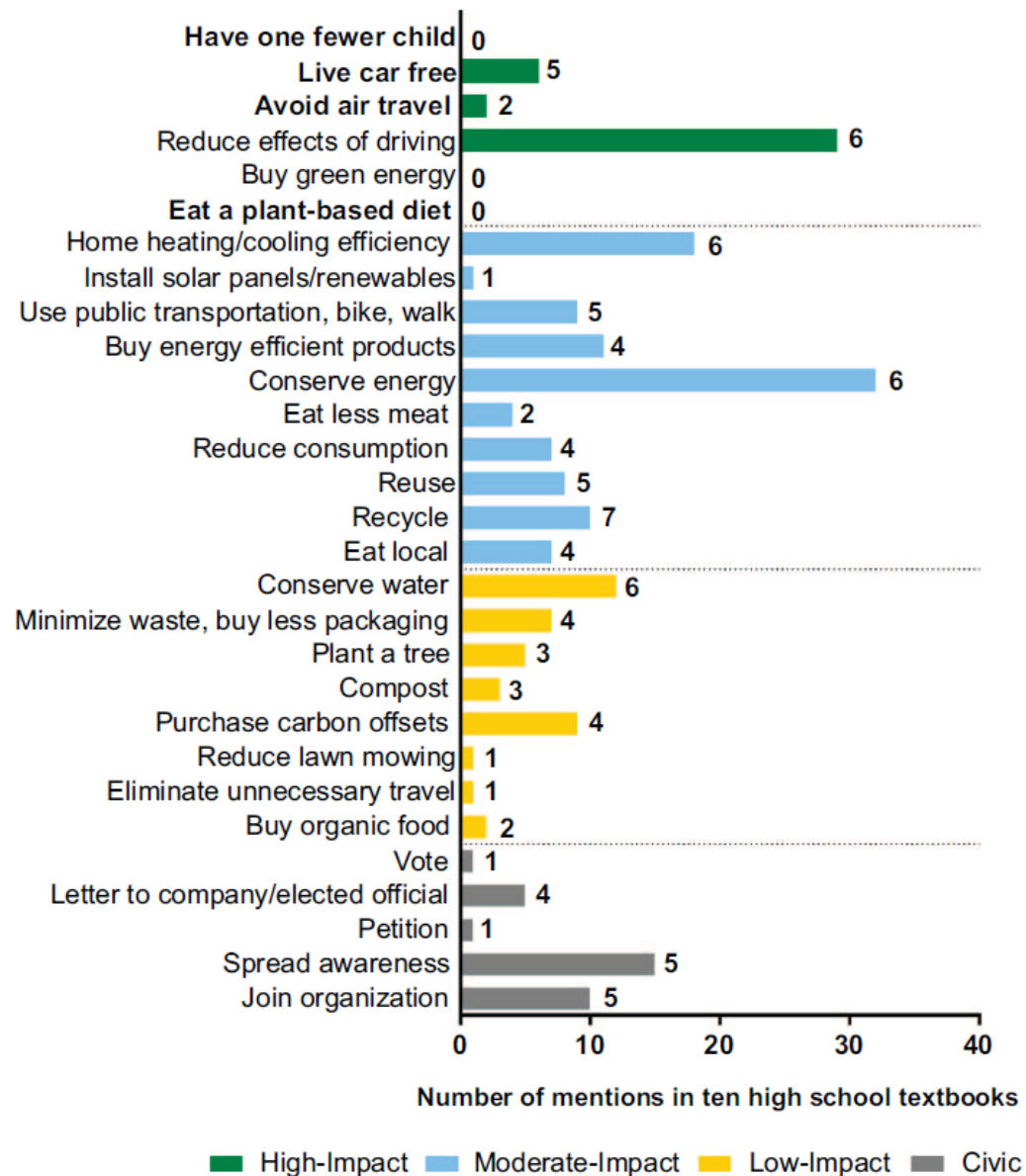


Figure 2. An analysis of individual actions recommended for mitigating climate change in ten Canadian high school science textbooks. The number of unique textbooks making each recommendation is shown at the end of each bar. Recommendations are approximately ranked from most effective at reducing greenhouse gas emissions at the top to least effective at the bottom, following data in figure 1 (we have not quantified the emissions reductions from civic actions). Recommended actions (based on emissions savings in figure 1) are in bold. See supplementary materials 3 for full breakdown and list of textbooks.

Climate change: focusing on how individuals can help is very convenient for corporations

January 10, 2019 6.06am EST

A 2017 [report](#) found that just 100 companies are responsible for 71% of global emissions since 1988. Incredibly, a mere 25 corporations and state-owned entities were responsible for more than half of global industrial emissions in that same period.



Citing: The Carbon Majors Report, 2017: <https://b8f65cb373b1b7b15feb-c70d8ead6ced550b4d987d7c03fcdd1d.ssl.cf3.rackcdn.com/cms/reports/documents/000/002/327/original/Carbon-Majors-Report-2017.pdf>



The logo for the Ad Council, featuring the word "Ad" in a large, bold, black serif font, and the word "Council" in a smaller, white, bold, sans-serif font positioned directly below it. The text is centered within a white rounded square, which is itself centered on a solid black rectangular background.

Ad
Council

**Occupy Earth Day:
An Expose of the Corporate Propaganda
Systems that Undermine Systemic Change
Activism**

www.corporations.org/occupyearthday.html



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