

Reducing your Carbon Footprint



What is a carbon footprint?

"Carbon footprints" are the total amount of greenhouse gases generated by human actions.

Greenhouses gasses (such as carbon dioxide) contribute to the "greenhouse effect", which is the process where molecules trap heat from the sun. This results in climate change.

How are carbon footprints distributed by income and country?

Sub-Saharan Africa



About **1.6** tons of CO₂*

Europe



About **10** tons of CO₂*

North America



About **20** tons of CO₂*

*per person per year

The wealthiest 10% of North Americans → **68.8** tons of CO₂*

The middle 40% of North Americans → **21.3** tons of CO₂*

The poorest 50% of North Americans → **10.8** tons of CO₂*

What actions can I take to reduce my carbon footprint?

Large effect

- Eating a vegan diet
- Avoiding a long flights
- Using renewable energy
- Living car-free

Moderate effect

- Eating organic food
- Eating a vegetarian diet
- Installing heat pumps

Low effect

- Buying fewer things
- Lowering room temperature
- Using energy efficient appliances
- Carpooling
- Recycling

What are common misconceptions about carbon emissions and greenhouse gasses?

Reducing waste vs. preventing climate change

- Preventing climate change is directly related to the greenhouse effect. Efforts to prevent climate change focus on reducing the production and release of greenhouse gases into the atmosphere.
- Pollution and waste (ie. plastic in the oceans) do not directly cause climate change, although their reduction usually curbs the emission of greenhouse gases.
- The primary benefit of recycling is reducing waste. It does not have a large impact on greenhouse gas emissions.

Air pollution vs. greenhouse gasses

- Not all air pollution is a greenhouse gas. There are many air molecules which harm human health but they do not trap heat from the sun and therefore do not contribute to climate change.



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The M-LEEaD Center's Community Engagement Core (CEC) increases awareness and understanding of environmental health research.

Stakeholder Advocacy Board members include:

- Community Health and Social Services
- Detroit Health Department
- Detroit Hispanic Development Corporation
- Detroiters Working for Environmental Justice
- Eastside Community Network
- Ecology Center
- Green Door Initiative
- Henry Ford Health System
- MDHHS
- Michigan Environmental Justice Coalition
- Sierra Club
- We the People of Detroit

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Will my personal actions and choices be impactful?

Yes! Individual choices have the potential to reduce carbon footprints by 25%. But climate policy at all levels of government is also required to achieve significant, long-term reductions in greenhouse gasses.

Why is collective action important?

Collective action refers to the collaborations between people to achieve a common objective. It can be used to implement social change and encourage corporations and governments to enact meaningful climate policy.

How can I engage in collective action for climate change?

① Vote

Voting for climate-dedicated candidates at all levels of government increases the chances of impactful policy. Voting resource guides from climate organizations can help inform your decisions. Research local candidates and referendums, as many climate policies are enacted at the local level.

② Use your voice

Raise awareness on climate change and take part in conversations about climate change with your friends and family. Check out "[Let's Talk Climate Change](#)" by the Nature Conservancy to learn more.

③ Dedicate Time

Volunteer your time and skills to local efforts on climate change. Support climate oriented non-profits of all sizes by starting a local chapter, offering support in your neighborhood, or providing financial contributions.

Please see http://mleead.umich.edu/Coec_Fact_Sheets.php for the citations included in this factsheet.

The University of Michigan Lifestage Environmental Exposures and Disease Center (M-LEEaD) Community Engagement Core (CEC) promotes collaboration among UM environmental health researchers and communities to advance knowledge of environmental health issues that affect community members in Detroit and Southeast Michigan.

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