

Last Lecture, November 8, 2022, John E. Sohl: “Can one person save Earth?”

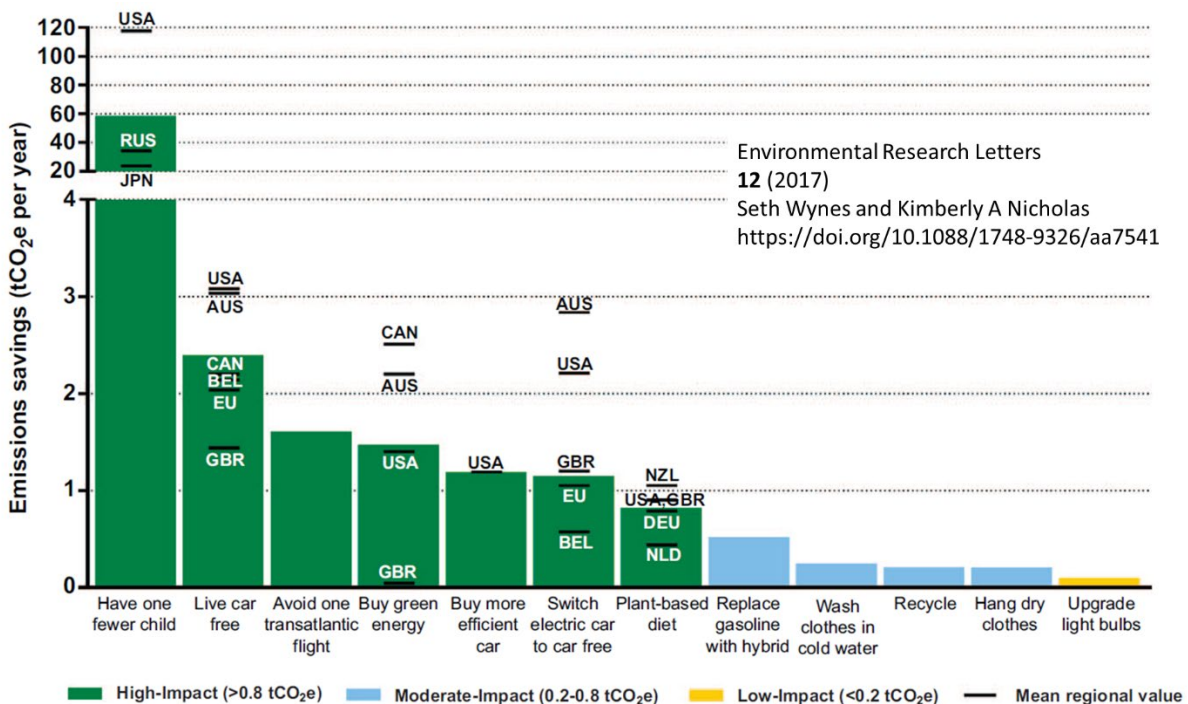
What **you** can do:

Vote

- Vote like your life and future depends on it! It does.
  - National elections have global impacts. Empowerment trickles down.
  - State and Local elections support those higher up. Empowerment also trickles up.
- Call and Pester
  - Presidents and Governors
  - Senators
  - Representatives
  - Any leaders you have access to
    - Political leaders
    - Business leaders
    - Academic leaders
    - Social and religious leaders
- Tell and teach your friends to do the same thing.

Take Action Yourself

1. Do your part.
2. Set an example for others.
3. Support others doing whatever they can at whatever level they can muster.
4. Encourage others, be an example, but do not shame them!



### Transportation actions you can take

1. Use your vehicle less. Reduce unnecessary trips, combine errands whenever possible.
2. Change to a more efficient vehicle. A high efficiency vehicle will be free in 5 years just in fuel savings alone vs. a heavy truck or van.
3. Carpool when you can.
4. Vote for politicians that support improved mass transit options.
5. Reduce airline flights. When flying, spend more time at the destination. Your job will survive without you for two weeks.
6. Electric vehicles are fun to drive. EVs are proven to have a significantly lower total impact on the environment cradle to grave including mining, batteries, etc.
7. Need your giant truck for your job and lifestyle? Fine, work to make it easier for others to offset that by encouraging EV infrastructure and walkable cities.
8. Walk and/or ride a bike. Don't like to sweat? Buy an electric bike.
9. If nothing else, maintain your vehicle in top condition and keep the tires properly inflated. Remove unnecessary roof racks and storage boxes except when you need them.

### Daily life actions you can do

1. Reduce your carbon footprint whenever it is easy to do so and even when it is hard.
2. Turn down your thermostat in the winter, turn it up in the summer.
3. Reduce your water use. Turn off the faucet when washing your hands and brushing your teeth. At home "if it is yellow, let it mellow; if it is brown, flush it down." Reduce shower time.
4. Use less hot water.
5. Change your lightbulbs, reduce unnecessary lighting, install motion sensor lighting outside.
6. Unplug anything that doesn't need to be plugged in. Power vampires are everywhere.
7. Hang dry your clothes, even if that is inside on the shower curtain rod.
8. Fix leaky doors and windows with good weather stripping.
9. Pay attention to your window blinds. In the winter, let the sun in. In the summer block the sun. Change to insulating blinds in the winter, which can even help in the summer as well.
10. Teach your children by both words and actions.
11. Reduce your meat consumption.
  - a. Consider the Mediterranean Diet, even if only some of the time.
  - b. Become mostly vegetarian.
  - c. Become completely vegetarian.
12. Reduce your purchases and buy less "stuff." You don't need all that stuff anyway. Cut consumption and cut waste.
13. Be willing to pay a little bit more for sustainable brands and responsible companies.
14. Use less plastic.
15. Recycle. Encourage local leaders to institute functional recycling programs. Learn about then educate others about HOW to recycle and what items ruin the recycling process.
16. Going up one floor or down two? Take the stairs rather than the 1-ton elevator.

## Bigger Steps

1. Power your home with renewable energy.
2. Weatherize your home for both winter and summer.
3. When you need new appliances, purchase the most energy (and water) efficient appliances on the market. It will cost you a bit more and might never pay back, but it is the right thing to do. Try fixing your old appliance before junking it, you have nothing to lose.
4. Don't overbuy food. Actually eat the food you purchase and compost what you can't.

## Empower others

1. Donate to politicians and organizations that are fighting for a better future.
2. Join in protests. You don't need a sign or poster, just show up and be counted. This will empower the organizers of the protest.
3. Defend with words (and money) those who are being attacked because of their climate friendly policies.

## Misinformation and Disinformation

1. Don't repeat it!
2. Personalized stories relating true facts are more powerful than a stream of statistics.
3. Name names. Call out those people, companies, organizations that create and spread disinformation for their own profit or gain.
4. Counter with truth, don't exaggerate, and do not repeat the false claim as part of that.

## A few random thoughts

1. Humans are smart and can do hard things.
  - a. We have nearly repaired the ozone hole.
  - b. We have nearly eliminated lead in our air, soil, and water.
  - c. Our rivers no longer catch fire.
2. We have a vast untapped potential of underappreciated brains. Support
  - a. Women and girls
  - b. People of Color
3. It is NOT too late, but not by much. The longer we wait, the more expensive it will be.
4. Population numbers impact every aspect of life on this planet. Support responsible family planning.
5. Earth is our only spaceship. There are no other viable options.
  - a. Only 24 humans have been further than 350 miles from Earth. None of them for more than two weeks.
  - b. Where do we go? *Permanent* space stations? Moon? Mars? Venus? Other stars?
  - c. Biosphere II didn't work so well but might be solvable.
  - d. How many humans do we need to send to space to be viable without inbreeding? The answer is orders of magnitude more than we have ever sent to space in the last half century of space travel.
6. There is no "away" for our waste. Everything goes *\*somewhere\** nothing goes "away."

## REALLY GOOD RESOURCES:

Taking personal action:

<https://yaleclimateconnections.org/2022/10/what-can-you-do-about-climate-change-take-this-quiz-to-find-out/>

Scientists Warning Film: <https://scientistswarning.forestry.oregonstate.edu/>

Media toolkit: [https://scientistswarning.forestry.oregonstate.edu/social\\_media\\_toolkit](https://scientistswarning.forestry.oregonstate.edu/social_media_toolkit)

World Scientists Warning, 2022: <https://academic.oup.com/bioscience/advance-article/doi/10.1093/biosci/biac083/6764747>

Curious about our options? Try it yourself at

<https://en-roads.climateinteractive.org/scenario.html?v=22.10.0>

Learn how to communicate: <https://theclimatecommsproject.org/climate-communication-in-practice/>

Ten things you can do about climate change:

<https://davidsuzuki.org/what-you-can-do/top-10-ways-can-stop-climate-change/>

Animated climate change video and what YOU can do. Note that there are a huge number of excellent references in the “below the video” area.

<https://youtu.be/RSgXcFdHxFI>

## Misinformation vs. disinformation

<https://www.dictionary.com/e/misinformation-vs-disinformation-get-informed-on-the-difference/>

Disinformation means “false information, ... disseminated by [an] agency in a hostile act of tactical political subversion.” It is also used more generally to mean “deliberately misleading or biased information; manipulated narrative or facts; propaganda.”

Union of Concerned Scientists Disinformation playbook:

<https://www.ucsusa.org/resources/disinformation-playbook>

Oil companies track record of knowledge

<https://www.zmescience.com/science/fossil-fuel-giant-total-knew-about-climate-change-since-1971/>

<https://www.scientificamerican.com/article/exxon-knew-about-climate-change-almost-40-years-ago/>

Authoritarianism and climate change, not a good mix:

<https://theconversation.com/rising-authoritarianism-and-worsening-climate-change-share-a-fossil-fueled-secret-181012>

<https://foreignpolicy.com/2016/06/01/democracy-is-the-answer-to-climate-change/>