ZERO WASTE IS A LOCAL SOLUTION TO CLIMATE CHANGE

We use a LOT of energy…to heat our homes, to transport ourselves, and to make stuff. Energy went into making the computer you're using right now, the clothes you're wearing, the food you ate for breakfast, and pretty much everything you've ever bought, used, or thrown away.

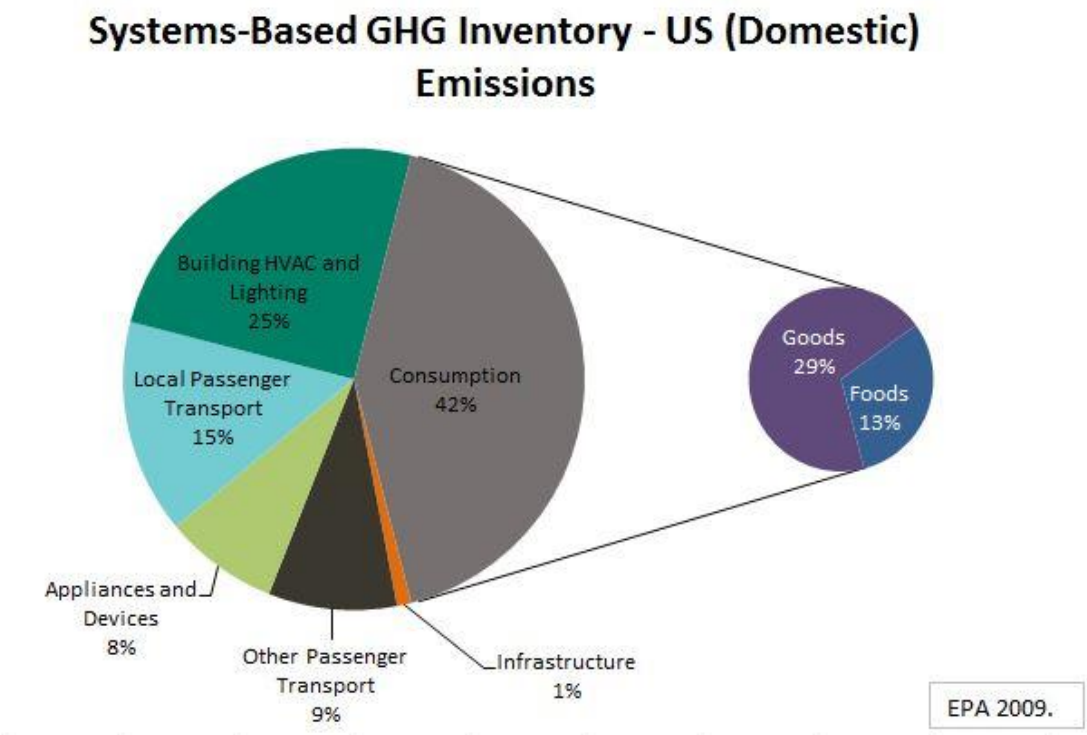
All that energy emits a lot of greenhouse gases (GHG), contributing to our climate problem.

We hear a lot about changing our energy systems to tackle climate change, how energy and transportation are the two biggest culprits — the smokestacks and the tailpipes.

But if a lot of those smokestack and tailpipe emissions come from making all our stuff, shouldn't we be talking about HOW our stuff is made, too?

SMOKESTACKS, TAILPIPES AND TRASH CANS

More than 40% of our climate impact in the U.S. comes from our stuff and our food — how we make it, haul it, use it and throw it away. It's called our consumption emissions.



The more we buy and throw away stuff, the more energy it takes to make new stuff, and the faster climate change accelerates.

Zero Waste addresses the entire system of our stuff and can substantially reduce climate emissions by changing what and how much we buy, what resources went into making it, how long it's designed to last, how much gets reused, recycled or composted, and what we throw away.

ZERO WASTE IS ONE OF THE FASTEST, EASIEST, MOST COST-EFFECTIVE SHORT-TERM CLIMATE SOLUTIONS

We need time to solve our long-term energy and transportation problems. Zero Waste strategies can be implemented TODAY, using existing technologies and proven programs, and produce immediate results. Zero Waste can help buy us some time to develop more complex energy and transportation solutions.

By 2030, Zero Waste strategies could reduce GHG emissions by more than 400 million metric tons CO_2 per year, the equivalent of taking more than 20% of U.S. coal-fired powered plants off the grid. This means Zero Waste offers greater annual GHG savings than expanding nuclear power, significantly improving vehicle efficiency, carbon capture projects, and many other prominent climate strategies.

Zero Waste strategies are also cost-effective climate solutions. ICLEI calls out recycling and composting as some of the most cost-effective actions local governments can take to reduce community GHG emissions.

Communities around the world are investing in Zero Waste as a priority climate action. One of California's first actions in its landmark climate change policy was to require businesses and apartments to recycle, a move that will reduce GHG emissions by five million metric tons.

Leading experts support Zero Waste as a climate solution:

"Recycling is already making a major contribution to keeping down emissions. Indeed, its scale is so little appreciated that it might be described as one of the 'best kept secrets' in energy and climate change…"

-Renowned Economist Lord Nicholas Stern, Blueprint for a Safer Planet

ZERO WASTE SAVES ENERGY

The immediate climate savings from Zero Waste come in large part from the energy savings from recycling. Using recycled materials to make new products requires less energy than making products from trees, fossil fuels, or metal ores. This means we burn fewer fossil fuels — including oil, natural gas, and coal — and produce fewer GHG emissions.

The energy savings happen when the paper, glass, metal, and plastic you and I recycled make their way back to a manufacturer to make new products.

Instead of using trees, oil, natural gas, and raw minerals to make new products, the manufacturers use our recycled products and save 30-90% of the energy they would use to manufacture from new feedstock.

See how much energy you save every time you recycle. And, see how much your community can reduce energy use and greenhouse gases through Zero Waste.

ZERO WASTE IS A PRIORITY SHORT-TERM ACTION TO REDUCE GHG EMISSIONS

Landfills produce methane. Or rather, throwing away your biodegradable materials in the landfill (leftover food, cardboard boxes and grass clippings) causes methane. That's because there is no oxygen in the landfill, so when biodegradable materials decompose, they do so anaerobically. That makes landfills a leading source of methane emissions.

Methane is not just a greenhouse gas; it's a climate powerhouse. Methane traps 84 times more heat in our atmosphere than carbon dioxide over the short term. That can really heat up the room, and fast.

But here's the good news:

Methane only kicks around in our atmosphere for about 10-12 years. So if we reduce methane now, we'll see pretty immediate climate benefits. That's got national and global experts clamoring to slash methane emissions:

"Cutting methane 40% buys us 15 years of breathing space."

–Peter Cox, University of Exeter, UK, May 2012

COMPOSTING FIGHTS CLIMATE CHANGE

It's not just recycling that's good for our climate. Composting can substantially reduce GHG emissions, too, by storing carbon in our soils.

You've heard that planting a tree can reduce your climate footprint because trees pull carbon dioxide out of the atmosphere.

But soil stores carbon too, and it turns out, a lot more. Soils store three times more carbon than plants or our atmosphere.

That means applying compost to our soils can help pull carbon out of the atmosphere and fight climate change. So instead of just working to put less CO_2 emissions into our atmosphere, with composting we can actually pull down what's already been emitted and store it in our soil.

Exciting new research out of Marin County, California shows that widespread compost use could make a big dent in our carbon emissions: Applying less than a half-inch of compost to 5% of California's rangelands would sequester 28 million tons of carbon from the atmosphere — equivalent to taking 6 million cars off the road each year.

From Ecocycle Solutions: http://ecocyclesolutionshub.org/about-zero-waste/climate-change/