

RESETTING  UR FUTURE

# Cut Super Climate Pollutants Now!

The Ozone Treaty's Urgent Lessons  
for Speeding Up Climate Action



Alan Miller, Durwood Zaelke  
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FOREWORD BY THOMAS LOVEJOY

**Individual Actions to Cut Super Climate Pollutants**

	<b>Big Picture</b>	<b>Supporting Actions</b>	
<b>Black Carbon</b>	<b>Reduce Emissions from Fossil Fuel &amp; Fires</b>	• Electrify appliances that use obsolete solid fuels like coal and biomass.	(1)
		• Take advantage of local, state, and federal incentives available for electric vehicles, alternative low-carbon fuels, and efficient appliances. • Reduce unnecessary idling that emits excess gasoline and diesel. • Carpool, bike, and walk more, and consolidate trips.	(2)
	<b>Debunk the Biomass Myth</b>	• Learn about the ecologically harmful impacts of using wood biomass for energy and support campaigns that spread awareness on this issue.	(3)
		• Use improved clean cookstoves, fireplaces, and charbroilers.	(4)
<b>Methane</b>	<b>Fight Against Big Oil's Lies &amp; Harms</b>	• Learn where methane is in your daily life and how the oil and gas industry slows the transition away from fossil fuel energy, such as falsely promoting natural gas as an alternative clean source.	(5)
		• Reduce use of natural gas and remove subsidies from new oil & gas projects. <ul style="list-style-type: none"> <li>○ Bite the bullet and remove your natural gas appliances and switch to electric appliances for water and space heating with power supplied from low carbon sources.</li> <li>○ Support bans on natural gas line installations in new buildings.</li> </ul>	(6)
	<b>Eat Less Meat &amp; Support Organic Farming</b>	• Buy locally-grown products and learn more about the environmental practices of farms where you buy produce and meat. • Apply best practices to feeding cattle and manure management to reduce methane emissions from enteric fermentation (animal burps) and waste.	(7)
		• Learn about the health and climate benefits of reducing your meat consumption.	(8)
	<b>Reduce Waste</b>	• Implement food rescue and recovery programs in food establishments and support local food banks.	(9)
		• Divert organic materials from landfills through composting or using backyard chickens.	(10)
<b>HFCs</b>	<b>Join the Climate-Friendly Cooling Campaign</b>	• Replace older, inefficient air conditioners and refrigerators with efficient equipment that uses climate-friendly refrigerants and ensure proper destruction of used equipment.	(11)
		• Increase energy efficiency in homes and buildings by buying efficient products and signing green leases.	(12)
		• Persuade family and friends to improve energy efficiency in their homes, such as gifting LED lightbulbs and neighborhood projects that can help lower installation and operating costs.	(13)
<b>Plant Trees &amp; Protect Forests</b>		• Improve soil health and conservation in your own backyard. Never buy manufactured fertilizer. • Plant native trees and plants in urban spaces with edible fruit and vegetables (edible and carbon-sequestering landscapes).	(14)
		• Protect existing old-growth forests by donating to conservation organizations and buying their gear with profits for proforestation efforts.	(15)

## *Cut Super Climate Pollutants Now!*

*Individual Actions to Cut Super Climate Pollutants* is written by Trina Thorbjornsen, Amelia Murphy, and Emma Krasnopoler at the Institute for Governance & Sustainable Development. If you have any questions or suggestions relating to this online accompaniment of *Cut Super Climate Pollutants Now!*, email Trina Thorbjornsen at [tthorbjornsen@igsd.org](mailto:tthorbjornsen@igsd.org).

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### **Further resources and examples**

- (1) Electrifying home appliances with low-carbon electricity sources not only benefits the climate, but your health and wallet too. Energy-efficient appliances can [reduce your energy bill](#), make indoor air [safer to breathe](#), and [prepare your house for extreme events](#) like fires and storms (which are also increasing due to climate change). To learn more about the need to electrify, read [REWIRING AMERICA](#) by Saul Griffith, Sam Calisch, and Laura Fraser.
- (2) Search for [federal state laws and incentives](#) for electric vehicles, alternative fuels, and efficient appliances. (You can also search electric vehicle incentives by zip code with [PlugStar](#).) See the [reduce idling toolkit](#) to learn how to conserve your current fuel emissions.
- (3) [Debunk the biomass myth](#) and keep yourself educated by following watchdog organizations like [Biofuelwatch](#). You can also help take action by [signing petitions](#), staying educated, [joining campaigns](#), and reaching out to local legislators.
- (4) See if you are eligible for the [Burn Cleaner incentive program](#) and find out how to [Check Before You Burn](#).
- (5) Be mindful of gas industry propaganda, such as [this example](#) of the gas industry paying Instagram influencers to promote gas stoves. Emily Atkin, who started the daily climate newsletter [HEATED](#), recently reported on [Big Oil's misleading Twitter ads](#) and also runs an Instagram account that tracks fossil fuel ads ([@fossilfuelads](#)). In addition, subscribe and listen to [Drilled](#), a true-crime podcast about climate change hosted by Amy Westervelt. Tell polluters to pay up so the public doesn't get stuck with the bills—learn more about the damages caused by fossil fuel polluters and how to take action at [payupclimatepolluters.org](#).
- (6) If you rent, talk to your landlord about energy efficiency and green leases. For more on green leases, go to the [Green Lease Library](#) and the [Reference Guide for Tenants](#). See how cities like San Francisco and Berkeley are [starting to ban natural gas lines](#) in new buildings and homes. Also consider [solar energy at home](#), which is becoming increasingly affordable. To learn about the true costs of solar energy, read the Climate Reality Project's [SOLAR ENERGY FACTS](#) e-book.
- (7) See how [ecolabels](#) can help make it easier for you to decide which farms you can support. Learn more about innovative products that can help reduce methane and other greenhouse gas emissions from the agricultural sector. For example, [SOP, a Milan-based sustainable agriculture company](#), creates products for cattle that provide fast benefits for farmers and climate mitigation by eliminating ammonia and nitrous oxide (N<sub>2</sub>O), and reducing methane and carbon dioxide (CO<sub>2</sub>). SOP products can reduce enteric fermentation with their feed supplements and their additives improve crop yields and reduces the need for fertilization.
- (8) Learn about the adverse health effects of too much red meat consumption and how you can reduce your consumption from Harvard University's [science-based guide](#).

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- (9) California has numerous food rescue and food banks programs, including the [California Association of Food Banks](#), [Food Finders](#), and the [Waste Not OC Coalition](#). To learn more, see the Environmental Protection Agency's [food recovery hierarchy](#).
- (10) Vermont has a [universal recycling law](#) that increases the state's recycling and composting rates, as well as conserving resources and reducing energy use. California has an [Organics Grant Program](#), administered by CalRecycle to invest in reducing greenhouse gas emissions. Raising chickens in your backyard is also [great for the environment](#) by minimizing waste, creating compost, and providing locally-sourced eggs. For more on reducing waste, read [ZERO WASTE LIVING, THE 80/20 WAY](#) by Stephanie J. Miller.
- (11) Take the [Climate-Friendly Cooling Pledge](#) and encourage local businesses to join you in taking the pledge. If you own a business, learn more about becoming an [Energy Star partner](#). Demand that your local government follow the [procurement guidelines](#) developed by the Sustainable Purchasing Leadership Council (SPLC) and the Institute for Governance & Sustainable Development.
- (12) Read about the [Energy-Efficient Home Makeover](#) to find out small tweaks that can help improve the efficiency of your home. Learn more about [green leases](#).
- (13) LED lightbulbs last longer, saves money, reduces the likelihood of electrical fires, and is better for the environment. Taking the first step by gifting LED lightbulbs can help initiate a long-term transition for your family and friends to become more energy efficient. [BlocPower](#) is a project that offers air source heat pump systems to multifamily building owners with no up-front costs and lowers operating costs. There are also numerous organizations that help low-income families transition to net-zero energy, such as Third Act's [Elevate America: The West Adams Edition](#).
- (14) California's [Healthy Soils Program](#) brings state agencies and departments together to promote healthy soils on farms. In addition, California has an [Institutional Turf Replacement Program](#), which aims to replace more than 165,000 square feet of turf with California native, water-efficient, and environmentally-friendly plants to increase biodiversity and water savings. In your own home, you can join the "no-mow movement" with [More Sustainable \(and Beautiful\) Alternatives to a Grass Lawn](#).
- (15) Support proforestry, forest restoration, and soil conservation. Proforestation—growing existing forests to their ecological potential—has the potential remove significantly more carbon dioxide from the atmosphere. See W.R. Moomaw, S.A. Masino, & E.K. Faison (2019) [Intact Forests in the United States: Proforestation Mitigates Climate Change and Serves the Greatest Good](#), *FRONTIERS IN FORESTS AND GLOBAL CHANGE* 2(27):1–10; and [Why Keeping Mature Forests Intact is Key to the Climate Fight](#). For supporting national parks, see [10 Ways to Support the National Parks](#).

We have a decade or less to radically slow global warming before we risk hitting irreversible tipping points that will lock in catastrophic climate change. The good news is that we know how to slow global warming enough to avert disaster. *Cut Super Climate Pollutants Now!* explains how a 10-year sprint to cut short-lived “super climate pollutants”—primarily HFC refrigerants, black carbon (soot), and methane—can cut the rate of global warming in half, so we can stay in the race to net zero climate emissions by 2050.

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This book ... sets out an attainable and fast agenda to cut global warming in half ... As a long-time Congressional champion of cutting super climate pollutants, I recommend it.

**Representative Scott Peters**, California’s 52nd Congressional District

What should the Biden Administration's first steps be to give the climate emergency the attention it deserves? This timely new book by three top climate experts lays out an absolutely essential part of initial climate action in the United States and other countries.

**James Gustave Speth**, former Chair, US Council on Environmental Quality

The race to Net Zero by mid-century is on. But it is action this decade that will prove decisive. Here, three stalwarts of climate policy urge us to walk and chew gum this decade: maintaining stringent efforts to cut carbon emissions and staging an all-out effort to reduce super pollutants and wipe out their short-lived contribution to warming. We do well to listen.

**Rachel Kyte**, Dean, The Fletcher School, Tufts University

There is only one way we can reduce enough warming in the near-term to prevent the worst of climate impacts, and that is to cut short-lived climate pollutants now!

**Romina Picolotti**, former Environment Minister for Argentina

Inspired by the Montreal Protocol, the authors present a powerful plan to cut the rate of global warming in half by reducing the short-lived super climate pollutants over the next 10 years.

**Jennifer Haverkamp**, Director, Graham Sustainability Institute

The authors have broken open the revolutionary story on “super pollutants” and how they can avoid ‘three times as much warming by 2050 as cutting CO<sub>2</sub> alone’—the bright light at the end of our dark tunnel.

**Gay Browne**, author, *Living with a Green Heart*, and founder and CEO of Greenopia

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Alan Miller is a former World Bank representative for global climate negotiations; Durwood Zaelke is President and founder of the Institute for Governance & Sustainable Development; and Stephen O. Andersen is a former Director of Strategic Climate Projects at the Environmental Protection Agency.

Resetting Our Future: Will our era be defined by its disaster, the COVID-19 Pandemic, or by our collective response to it: a “Great Reset”? At this critical moment in history we have a rare opportunity to reset our path and avert even bigger disasters: the climate crisis, growing inequality, racial injustice, ecological and economic collapse, and the next pandemic. This series of books provides a platform for pragmatic thought leaders to share their visions for big, paradigm-shifting changes, and to motivate humankind to take the first difficult steps towards a better future.