Zero Waste, Organics & Climate Change

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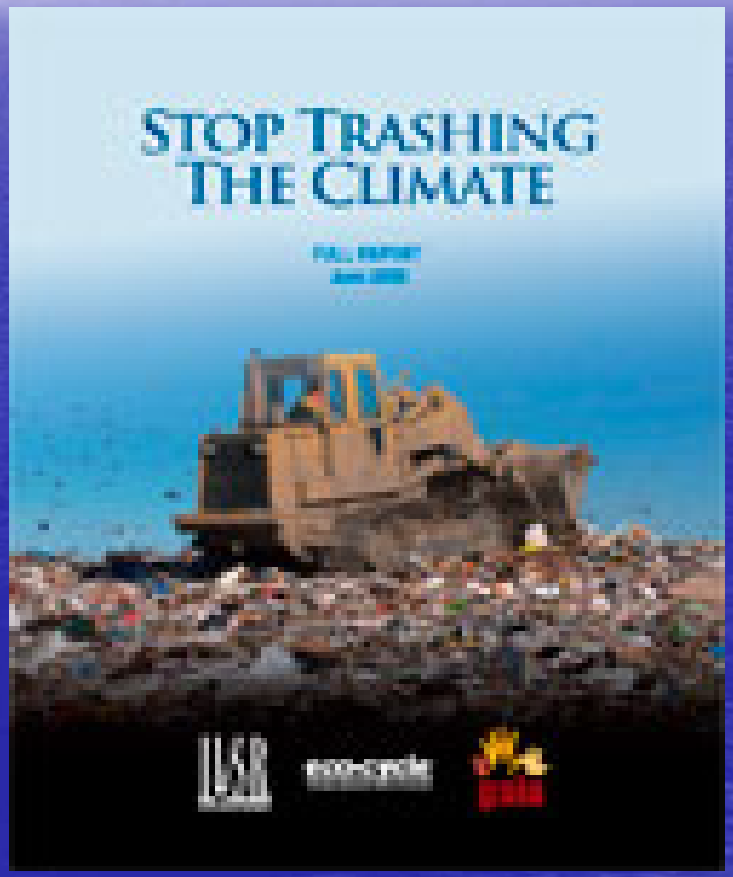
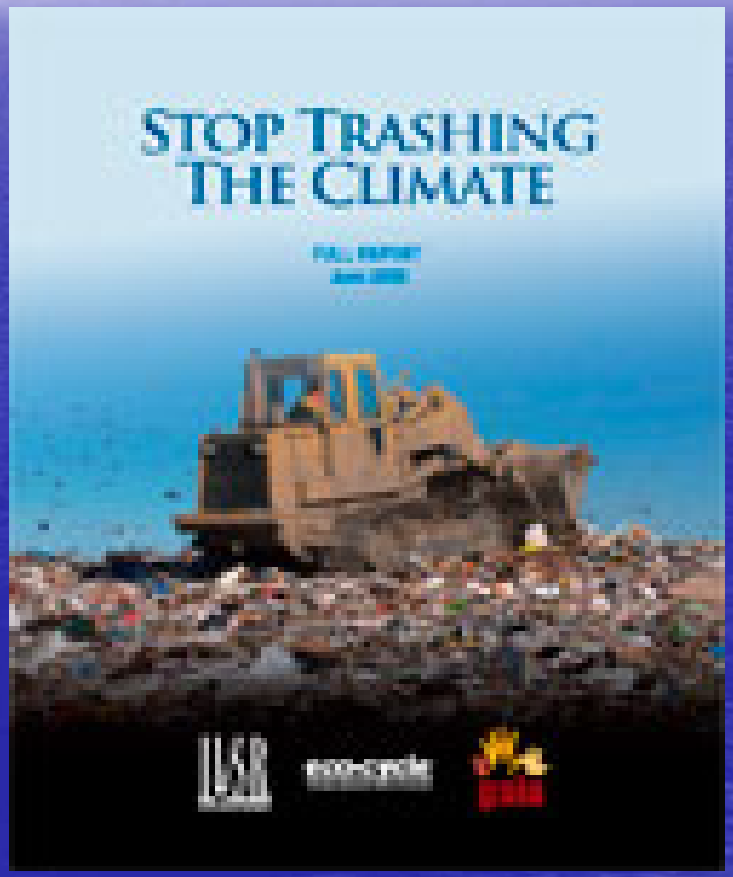
Wasting = Climate Change



Wasting = Climate Change

US consumes 1/3 of the world's timber

Deforestation = 30% GHG emissions

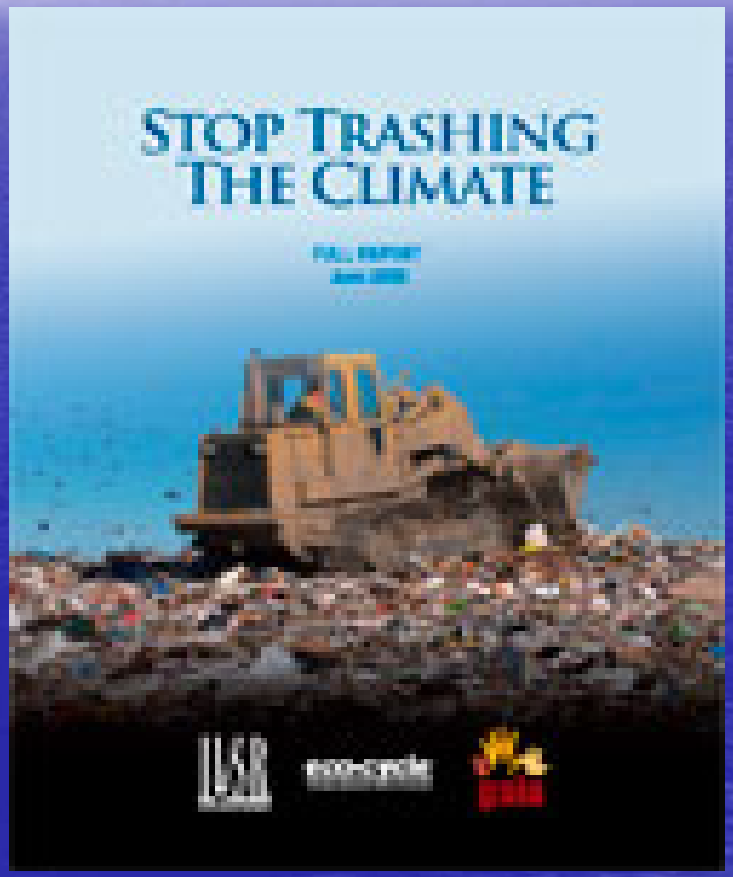


Wasting = Climate Change

US = 5% World Population

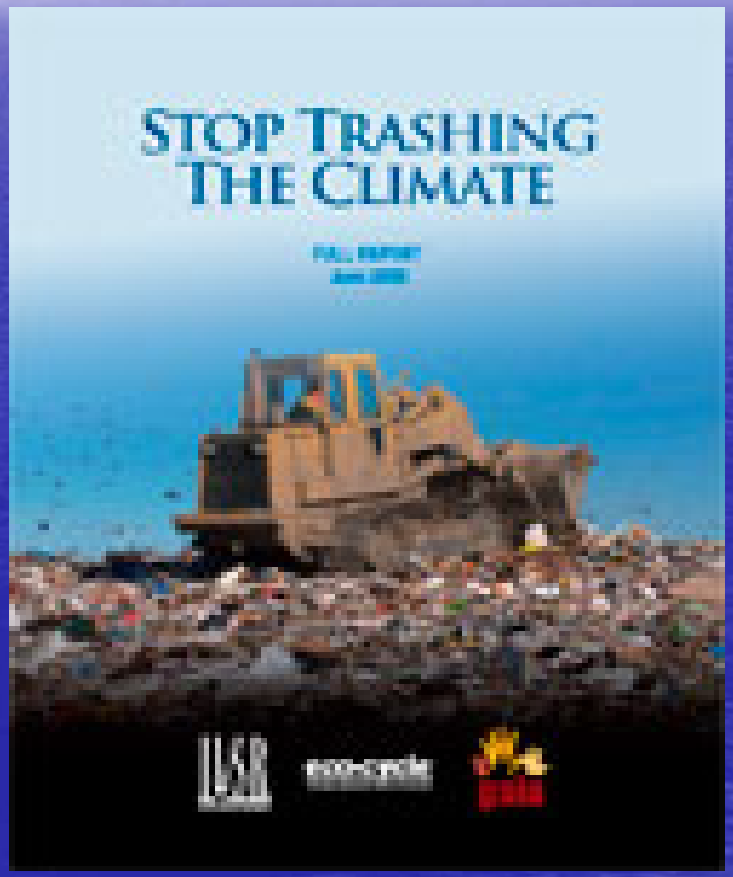
US = 22% GHG

US = 30% World's Waste



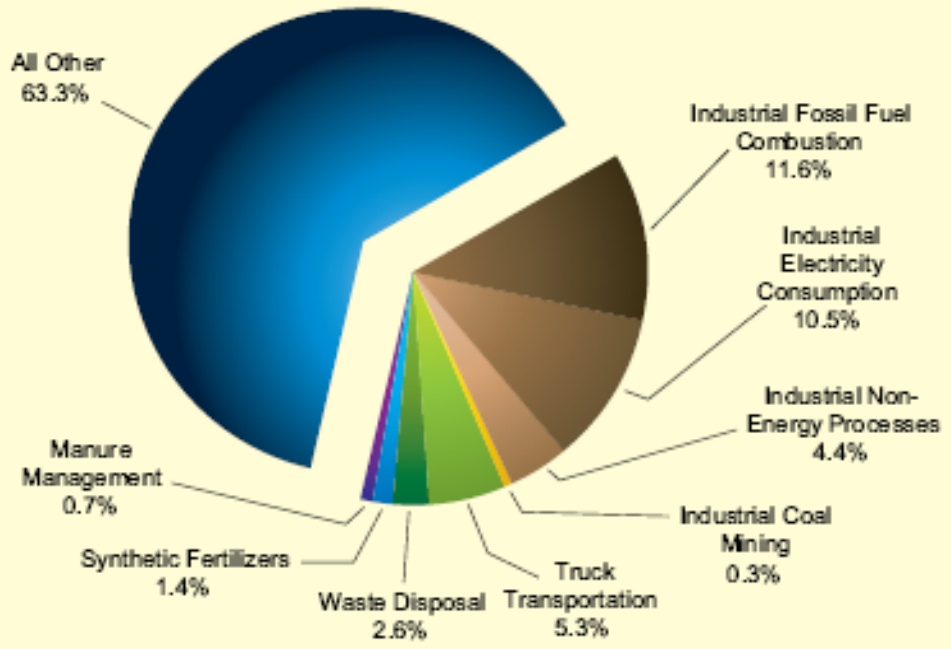
Wasting = Climate Change

- Mining
- Deforestation
- Transportation
- Industrial Processing
- Manufacturing



Wasting = 36.7% U.S. Greenhouse Gas Emissions

Figure ES-3: Wasting Is Linked to 36.7% of Total U.S. Greenhouse Gas Emissions, 2005



Source: Institute for Local Self-Reliance, June 2008. Based on data presented in the *Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2005*, U.S. EPA, Washington, DC, April 15, 2007. Industrial Electricity Consumption is estimated using Energy Information Administration 2004 data on electricity sales to customers. See Table ES-1, Electric Power Annual Summary Statistics for the United States, released October 22, 2007, and available online at: http://www.eia.doe.gov/cneaf/electricity/epa/epates.html. Waste disposal includes landfilling, wastewater treatment, and combustion. Synthetic fertilizers include urea production. All data reflect a 100-year time frame for comparing greenhouse gas emissions.

Source: Stop Trashing the Climate , ILSR, June, 2008

Zero Waste = Climate Protection

Table ES-1: Greenhouse Gas Abatement Strategies: Zero Waste Path Compared to Commonly Considered Options (annual reductions in greenhouse gas emissions by 2030, megatons CO_2 eq.)

Greenhouse Gas Abatement Strategy	Annual Abatement Potential by 2030	% of Total Abatement Needed in 2030 to Stabilize Climate by 2050[1]
ZERO WASTE PATH		
Reducing waste through prevention, reuse, recycling and composting	**406**	**7.0%**
ABATEMENT STRATEGIES CONSIDERED BY McKINSEY REPORT		
Increasing fuel efficiency in cars and reducing fuel carbon intensity	**340**	**5.9%**
Improved fuel efficiency and dieselization in various vehicle classes	195	3.4%
Lower carbon fuels (cellulosic biofuels)	100	1.7%
Hybridization of cars and light trucks	70	1.2%
Expanding & enhancing carbon sinks	**440**	**7.6%**
Afforestation of pastureland and cropland	210	3.6%
Forest management	110	1.9%
Conservation tillage	80	1.4%
Targeting energy-intensive portions of the industrial sector	**620**	**10.7%**
Recovery and destruction of non-CO_2 GHGs	255	4.4%
Carbon capture and storage	95	1.6%
Landfill abatement (focused on methane capture)	65	1.1%
New processes and product innovation (includes recycling)	70	1.2%
Improving energy efficiency in buildings and appliances	**710**	**12.2%**
Lighting retrofits	240	4.1%
Residential lighting retrofits	130	2.2%
Commercial lighting retrofits	110	1.9%
Electronic equipment improvements	120	2.1%
Reducing the carbon intensity of electric power production	**800**	**13.8%**
Carbon capture and storage	290	5.0%
Wind	120	2.1%
Nuclear	70	1.2%

Zero Waste = Climate Stabilization

- Zero Waste Path 7.0%

- Fuel Efficiency 5.9%
- Expanding Carbon Sinks 7.6%
- Industrial Sector 10.7%
- Buildings & Appliances 12.2%
- Electric Power Production 13.8%

Landfills

Landfills = Methane

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Methane = 72x carbon

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Compostable Materials= Methane

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Compostable Materials= Methane

Methane = 72x carbon

Landfill Methane = 21% of US Coal-Fired Plants

Compostable Organics Out of Landfills

Eliminates the largest source of human-produced methane

STOP TRASHING THE CLIMATE

Existing technologies are not enough

Immediate change is needed

This means simple things have added urgency. What could be simpler than composting and organics recycling?

Methane is an excellent target for short-term climate change mitigation:

72x carbon

9-12 years in the atmosphere

STOP TRASHING THE CLIMATE

A Zero Waste Strategy
preventing waste, maximizing reuse, composting, and expanding recycling is the *fastest and easiest way to reduce our carbon footprint and stabilize the climate.*

COOL = Prevent methane

COOL = Healthy Soils

COOL = Prevent methane

COOL = Healthy Soils

Soils = 2x carbon as biomass

STOP TRASHING THE CLIMATE

If we all did the same, greenhouse gas emissions would be reduced the equivalent of shutting down 21% of all U.S. coal-fired power plants.

ZERO WASTE

IT'S HIS FUTURE. IT'S OUR CHOICE.

www.stoptrashingtheclimate.org

Stop Trashing the Climate

Institute for Local Self-Reliance

June, 2008

www.StopTrashingtheClimate.org

Compostable Organics out Landfill by 2012

GRRN and BioCycle Magazine

www.cool2012.org

GrassRoots Recycling Network

www.grrn.org

Zero Waste Community Planning

Zero Waste Business Profiles

Zero Waste Business Principles

GrassRoots Recycling Network

www.grrn.org

- Zero Waste Community Planning

www.zeroheroes.biz

- Zero Waste Business Profiles
- Zero Waste Business Principles

Wasting = Climate Change

One ton at the curb
= 71 tons upstream