



*Note: As part of their contributions to the RECLAIM POWER global days of action in October 2016 for energy transformation, several Reclaim Power organizations collaborated on these series of briefing papers on dirty, harmful energy sources and false energy solutions that contribute to climate change and endanger people's lives and welfare.*

### RESIST DIRTY HARMFUL ENERGY AND FALSE ENERGY SOLUTIONS

# WASTE INCINERATION

## What is waste incineration?

A number of industries burn waste to create a small amount of energy, producing greenhouse gases and toxic pollution as side products. Burning waste is called incineration, although waste incinerator industry euphemisms for burning include **Waste to Energy**, **Energy from Waste**, **gasification**, **plasma arc**, and **pyrolysis**.

Almost all municipal waste is made up of recyclable items like paper, plastic, and metals, or from organic materials that should be returned to the soil. Many of these materials come from finite natural resources (such as forests) that are being severely depleted, and plastics and tires are fossil fuels.

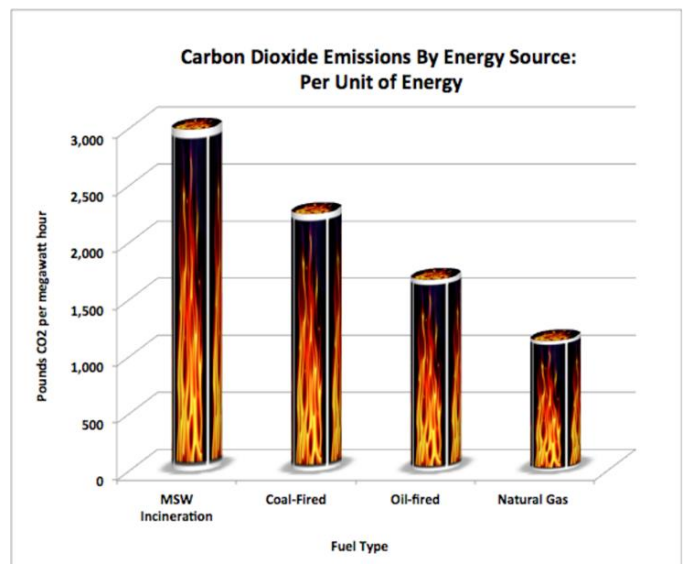
## A false solution that causes more climate change

"Waste-to-energy" has been promoted by the industry as an alternative to conventional fossil fuels and as a source of renewable energy – but that's far from the truth.

Burning waste contributes to climate change. Incinerators emit more carbon dioxide (CO<sub>2</sub>) per unit of electricity (2988 lbs/MWh) than coal-fired power plants (2249 lbs/MWh). According to the U.S. EPA, "waste to energy" incinerators and landfills contribute far higher levels of greenhouse gas emissions and overall energy throughout their lifecycles than waste reduction, reuse, and recycling of the same materials.

The climate impacts of waste are also tied to the climate impacts of the systems to extract, produce, distribute, and dispose of materials, or "stuff." A U.S. EPA analysis found that food and goods systems contribute to 42% of U.S. greenhouse gas emissions. Burning recyclable or

reusable resources drives a climate-changing cycle of new resources pulled out of the earth, processed in factories, shipped around the world, and then wasted in incinerators and landfills.



*This chart was created using EPA data which account for combustion emissions only. These figures do not include the emissions from the extraction or processing of these fuels. Source: US EPA 2014.*

## Destroying Communities

In addition to polluting the climate, even the most technologically advanced incinerators release thousands of pollutants that contaminate our local air, soil and water. Pollutants like dioxin and mercury enter the food supply and concentrate up through the food chain. Incinerators emit up to 14 times more mercury as coal-fired power plants per unit of energy. In newer incinerators, air pollution control devices such as air filters capture and concentrate *some* of the pollutants; but the captured pollutants are merely transferred to other by-products that are then released into the environment.

Incinerator workers and people living near incinerators are particularly at high risk of exposure meaning that in many countries, it is communities of color, low-income communities, and indigenous communities that are exposed to a disproportionate burden of such toxins.

## Who benefits from this dirty energy?

The conventional waste incinerator industry includes major players like Suez, Waste Management, and Covanta. Cement companies including Cemex and Holcim also burn waste in many of their cement facilities, and frequently claim climate subsidies for using “alternative” fuels. Many smaller companies operate in this sector as well.

In addition to the waste and cement industries, the plastics industry also heavily promotes waste burning, in order to avoid responsibility for surge in plastic garbage that pollutes oceans, land, and wildlife, as well as the growing amount of plastics in garbage.

## How we are fighting back – Zero Waste means more jobs, less pollution

In contrast to the outdated idea of burning our garbage, Zero Waste is an achievable goal that is being successfully implemented in cities around the world. Reducing, reusing, recycling and composting create livelihoods, save money, and protect the environment and public health. These efforts go hand-in-hand with

clean production, producer responsibility, and waste minimization programs for dangerous and hard-to-recycle materials. Together, these practical, bottom-up strategies also provide some of the best decentralized urban solutions for reducing climate pollution and conserving energy and natural resources.

The community of Huichapan, in the central México's state of Hidalgo, achieved a historic victory at the beginning of 2012: after 6 months of peaceful protests and legal actions, the Mexican government closed a facility owned by a subsidiary of CEMEX, a leading multinational cement company.

This facility was responsible for receiving and processing a large portion of the 12,000 tons of solid waste generated daily in Mexico City. Community members living near the CEMEX plant started to feel the negative effects on health and ecosystems and organized themselves in the Citizens United for the Environment (CUMA) movement, to resist this false solution and raise their own alternatives for waste management.

The local community has been supported by Revuelta Verde and the Global Alliance for Incinerator Alternatives (GAIA), and are together committed to enforcing a statewide ban of municipal solid and hazardous waste combustion and promoting Zero Waste laws for the state and its municipalities.

Many communities across the world are joining Huichapan in saying “Don’t Burn our Future!” and calling for Zero Waste strategies to create jobs, strong local economies, and reduce climate pollution and toxic pollution.

