ENVIRONMENTAL JUSTICE

Environmental and climate justice is complex, impacting racial justice, economic inequality, food insecurity, and more, presenting opportunities for impactful action in local communities and through collective policy change at every level of government.

Environmental and Climate Justice: Definition and Impacts

Climate and environmental justice is a very broad category of policy and action that encompasses all aspects of climate policy and environmental policy, including protections of land, water, and air; protecting endangered species; promoting renewable energy; and more.

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Climate Change

Climate change, <u>as defined by NASA</u>, is the "global phenomena created predominantly by burning fossil fuels, which add heat-trapping gases to Earth's atmosphere." Leading climate scientists believe that the safe level of atmospheric carbon dioxide (CO_2) is around 350 parts per million (ppm). <u>The current level</u> is over 410 parts per million and rising at a rate of 2 to 3 ppm per year. This is the highest concentration of atmospheric CO_2 in the past 800,000 years.

Since 1880, the global average temperature has risen more than <u>.8 degrees Celsius</u> (1.4 degrees Fahrenheit), and the Arctic warmed about twice as much. The oceans have also warmed, especially within 1,000 feet of the surface. 2015, 2016 and 2017 were the hottest years on record, and 2018 was the fourth hottest. The international community has set 2 degrees Celsius (3.6 degrees Fahrenheit) as the maximum 'safe' amount of warming before we experience irreversible damage, but even 2 degrees could see island nations underwater.



The <u>evidence and impact of climate change</u> extends beyond rising global temperatures; these impacts include sea level rise, melting glaciers, droughts, floods, and increasingly severe natural disasters such as the California wildfires or Hurricanes Maria (2017), Harvey (2017) and Florence (2018). Furthermore, since climate change may cause temperatures to decrease in some places even as the Earth's average temperature rises, many scientists and environmentalists prefer to use the term "climate change" compared to "global warming."

In 2018, <u>the Intergovernmental Panel on Climate Change (IPCC) predicted</u> that current greenhouse gas emissions levels are not sustainable to stay under the limit and that the world will reach 1.5 degrees of warming since the Industrial Revolution between 2030 and 2052 unless drastic actions are taken. Their warning highlights the urgency of immediate action to prevent the worst impacts of climate change from taking place.

Climate Justice

Not all countries bear equal responsibility for climate change. Though the United States is home to only 5 percent of the world's population, the <u>U.S. has emitted almost one-third</u> of the world's total greenhouse gas emissions since the start of the Industrial Revolution. The U.S. joins Canada, China, India, Russia and Japan among the top greenhouse gas emitting nations.

Unfortunately, the nations around the world that contribute the least to the problem of climate change suffer first and most severely from its consequences because of their dependence on natural resources and ecosystems for daily survival. One international report estimates that climate change causes an average of 400,000 deaths per year, 83 percent of which are in developing countries. Subsistence farmers, who grow just enough to feed themselves and their families, are particularly vulnerable to changes in the land, and urban-dwellers in coastal areas or floodplains are least able to relocate. Developing communities and nations that lack an adequate public health infrastructure are least able to prevent the spread of infectious disease or to deal with disease outbreaks when they do occur.

In the U.S., a similar dynamic exists. Low-income communities and communities of color bear a disproportionate burden of the effects of climate change. Race, even more than socioeconomic status, is the top predictor of one's proximity to toxic waste and polluting facilities in the U.S. This means that the developed world—and especially the U.S.—have a great responsibility to tackle climate change, and that these countries have tremendous opportunities and capacity to lead international efforts to meet the climate challenge.

Solutions

The solutions to these issues are equally numerous as the problems of environmental destruction. They include both personal action and systemic change. A few of the personal actions can include



increasing the energy efficiency of homes, synagogues, and work places, using more public transportation, recycling, increasing the use of renewable energy, and limiting the number of chemicals that enter the environment.

Additionally, policy changes are necessary to achieve the scale of transformation necessary to prevent these impacts. Renewable energy through tax credits, the implementation of a carbon price, mandated energy efficiency upgrades, grid modernization, land protections, and pollution regulations are all pieces of the solution.

Issues of equity and disproportionate impacts must be central to any solution to these injustices. In the climate world, this is called 'just transition,' which means ensuring that poor and minority communities are not disproportionately burdened with the costs of a carbon-free future and that communities who are especially vulnerable to these impacts are meaningfully involved in the transition. We must also ensure that the millions of Americans who rely on the impacted industries for employment have job security in a green economy.

No one policy solution is a panacea and a variety of tools must be used to solve this problem. These solutions must also recognize the deep interconnections of this work. The burning of fossil fuel impacts both rising CO_2 emissions and the public health issues of asthma, and climate impacts will further exacerbate the lack of access to clean water. A panoply of solutions is necessary, and can be accomplished through sustained, collaborate action.

Environmental Justice

In addition to climate change, it is vitally important to address the multitude of other environmental issues that plague our world. One of the most consequential issues is the pollution of our natural resources, including water, air, and land.

Over 63 million Americans have been <u>exposed to unsafe drinking water</u> in the past decade. This issue is both one of infrastructure (i.e. deteriorating pipes in places like Flint, Michigan) and draining aquifers too much, such as during the drought in California. Other water pollution can be caused by chemical runoff from farms and lawns. Air pollution, caused largely by the burning of fossil fuels, causes an increase of asthma, lung disease, and other health conditions in addition to contributing to climate change. These impacts <u>disproportionately impact</u> communities of color.

The production of trash around the world poses a threat to human life, animal life, and the entire ecosystem. The pollution of oceans, public lands, and landfills threatens animal habitats and increases the possibility of hazardous chemicals leaking into the water and food. Environmental justice for land also includes protecting public lands, reforestation, ending the shrinking of national parks, and preventing public and protected lands from oil and gas exploration, which threatens all aspects of natural life.



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