REDEFINING PROGRESS

FOR PEOPLE, NATURE, AND THE ECONOMY

CLIMATE CHANGE ISSUE BRIEF
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A FAIR CLIMATE FOR ALL

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INTRODUCTION

Climate change is a life and death issue for the poor and communities of color. Such communities will suffer the most from the impacts of uncontrolled climate change with serious social, health, economic, and cultural effects. Choosing the wrong climate policies will also harm low-income people. People can be protected from both harms if policymakers charge polluters and return the bulk of the revenue to people, while using the rest to ease the transition to a clean energy economy.

As the Environmental Justice movement of the past 11 years has demonstrated, the effects of pollution often fall disproportionately on the health of minority and low-income communities. Climate change, which is caused in large part by emissions from fossil fuel burning, is no exception and could even have broader and more severe impacts. This paper describes some of the climate change and mitigation policies that would fall most heavily on low-income and people of color communities. Other research from Redefining Progress delves more deeply into the impacts on consumers in general and other vulnerable groups such as those in coastal regions, urban and rural areas, as well as the youngest and oldest people.[1]

CLIMATE CHANGE IMPACTS

Climate change will affect minority communities' overall health and reduce discretionary spending in two critical ways: by compromising health and imposing financial burdens. Minority communities—already burdened with poor air quality and half as likely to be insured as whites—are more vulnerable to climate-change related respiratory ailments, heat-related illness and death, and illness from insect-borne diseases. Climate change will likely raise food and energy prices, which already represent a large proportion of a low-income family's budget.

HEALTH

Climate change is expected to affect human health in three major ways: new and increased rates of infectious diseases from insects and rodents, respiratory illnesses related to increased air pollution, and deaths and illnesses related to thermal extremes. The poor and communities of color will feel all of these impacts disproportionately because of the distribution of impacts and access to healthcare.

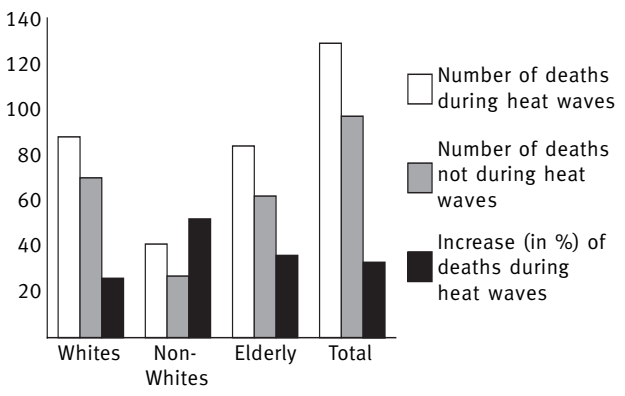
Ground-level ozone is associated with respiratory illnesses such as asthma, reduced lung function, and respiratory inflammation,[2] which hit low-income and minority communities the hardest.[3] The Environmental Protection Agency (EPA) estimates that the rise in temperature expected for the United States would increase peak ozone concentrations by 10 percent, doubling the number of cities that now violate air quality standards. Moreover, minorities are more susceptible to respiratory ailments. Twenty-two percent of all asthma deaths occur among African Americans, who represent only 12.7 percent of the U.S. population.

Studies show that climate change could bring about a 90-540 percent increase in total heat-related deaths, depending upon how well people acclimate to the heat. As *Figure 1* demonstrates, heat-related deaths and illnesses may affect non-whites much more than whites. In St. Louis, non-whites were twice as likely to die as a result of heat waves as whites.

Second, low-income and minority households are less likely to have access to healthcare, which is critical in coping with the effects of climate change. Minorities are twice as likely to be uninsured as whites; poor and near-poor adults are six to seven times as likely to be uninsured as higher income adults.

FIGURE 1

DEATHS PER DAY IN ST. LOUIS



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People with greater access to health care will be more able to avert serious illness by getting preventive care and earlier treatment. Better access to health care can significantly reduce the spread of infectious diseases such as malaria and Lyme disease, the seriousness of respiratory ailments due to climate-related air pollution, and the incidents of heat-related mortality (all expected to increase with climate change). For diseases such as asthma, access to health care and to early treatment significantly decreases the risks of acute illness, while diseases such as malaria, easily managed with timely treatment, can be fatal without that treatment.

ECONOMIC

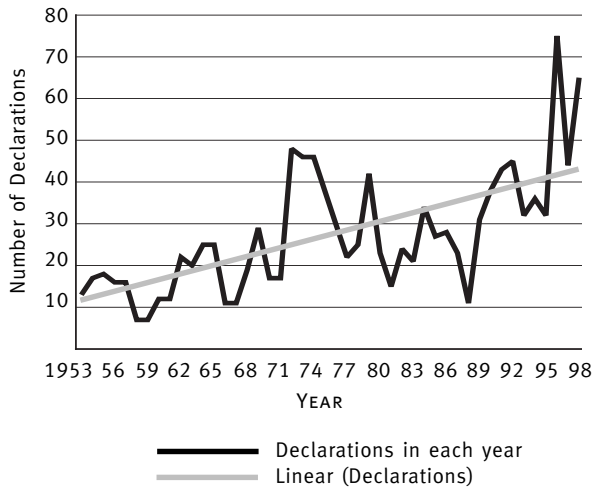
Most studies suggest that prices are likely to rise across all sectors due to climate change. The most significant increases in prices will derive from changes to agriculture, due to changing and unpredictable growing conditions;[4] increased demand for and costs of electricity generation; and the effects of sea level rise (for example, increased costs of insurance and infrastructure). The cost of electricity, for example, will likely increase almost 13 percent.[5] Since low-income households spend a greater proportion of their income on these necessities, they will bear the greatest burden.

A changing climate would mean a changing economy and employment patterns. Economic changes often cause layoffs among the lowest paid and most recently hired. Furthermore, low-skilled workers in affected industries like tourism would have a more difficult time finding new employment.

Low-income people typically rent housing. Renters are particularly vulnerable, in financial terms, to natural disasters. Scientists document that warming temperatures have already increased the frequency of extreme weather events. The Federal Emergency Management Agency (FEMA) declared fewer than twenty natural disasters per year in the 1950s and 1960s, but more than 40 per year in the 1990s *(see Figure 2)*. While 95 percent of homeowners have insurance to cover their economic losses, only 22 percent of renters have property insurance.[6]

FIGURE 2

FEMA DISASTER DECLARATIONS



CULTURAL

Climate change will also have less quantifiable, but equally real, social and cultural effects on consumers. Changing ecosystems will displace people from their homes. Extreme weather events such as hurricanes, flooding, landslides, and wildfires are expected to disrupt an increasing number of lives, as would periods of drought punctuated by heavy rains. Changing agriculture and industries could force large numbers of people to abandon their homes in search of employment. In 1998, there were 25 million environmental refugees, more than caused by war and conflict. Climate change is expected to increase this number.[7]

People in the far northern areas and Native Americans will suffer most from cultural changes. Changes in water resources and the disappearance of medicinal plants could affect the practice of Native American spirituality and culture. Northern climates like Alaska, now sparsely populated, in part because of weather, may grow in population. This would not only alter the unique way of life for many "old-timers" and Native Americans, but could increase pressure to develop mineral, oil, and land resources to the detriment of humans, and other species for which these areas are a last refuge. While some people might see these changes as benefits rather than costs, in terms of cultural preservation and natural resource conservation, these changes would impose new dangers.

JUST CLIMATE CHANGE POLICIES

Climate change endangers low-income people and minority communities, and is a serious issue for everyone because of its health and economic impacts. However, increased fuel prices stemming from climate protection strategies will also hurt low income and minority communities. Fortunately, government can reduce the risk of climate change without harming the people and the economy. To do so policymakers must choose policies that protect the most vulnerable communities.

A just transition to a clean energy economy can be achieved if decision-makers choose a mix of policies that employ revenue-generating market mechanisms in conjunction with incentives, research, and public investments. Requisite parts of a just climate protection strategy will be revenue raising polices, such as emission fees or auctioned tradable emissions permits, combined with using some of the revenue to help workers and consumers make the transition to a clean energy economy. Pollution charges, used in conjunction with research, incentives, and government investment can provide affordable alternatives to fossil fuels and generate ample additional revenue to help workers, consumers, and industry make the transition.

HEALTH

Reducing fossil fuel burning will also reduce air pollution-related health problems. A recent Resolution on Sustainable Energy and Low-Income and Minority Communities, signed by more than 50 environmental justice and utility advocacy groups, stresses that low income, minority, and tribal communities suffer disproportionate health impacts from current fossil fuel use and from activities such as coal and uranium mining, oil extraction,

oil refining, power plant siting, and auto emissions. A transition to a clean energy economy, which would include increased energy efficiency and increased use of renewable energy sources such as solar and wind, will combat global warming, protect these communities' health, foster energy independence, create new jobs, and ensure an affordable energy future.[8]

As described previously, access to healthcare is key to helping people adapt to climate change. Providing healthcare may be a cost-effective investment in reducing the costs of climate change effects. Covering the eight million Americans who cannot afford healthcare would cost $41.2 billion.[9]

A less expensive option might cover only health problems related to climate change, such as malaria, health effects of thermal extremes, and respiratory problems related to air pollution. This coverage could function like Medicare, offering reimbursement at usual and customary rates for any qualifying American citizen visiting any physician or medical facility in the United States. Or one might selectively invest in existing public health systems in the geographic areas that are most likely to experience these problems (poor urban centers and rural areas, especially in the South).

ECONOMIC WELL BEING

Protecting the economic well being of low-income and minority communities requires policies that avoid harming the national economy, protect individual consumers from fossil fuel price increases, and protect those people most burdened by price increases—the poor, people on fixed incomes, and workers in fossil fuel dependent industries, such as coal miners.

Over 2,500 economists, including eight Nobel laureates, have stated that market mechanisms such as tradable emissions permits can reduce greenhouse gas emissions without lowering U.S. living standards and may even improve productivity in the long run.[10] If the right steps are taken to slow climate change, jobs can be created and wages increased. One study found that using market mechanisms and a mix of other policies to improve energy efficiency and increase renewable energy production could create 800,000 new jobs and increase wages and salaries by $14 billion:[11] a clear benefit to low income communities.

Charging polluters for greenhouse gas emissions and returning part of the revenue to citizens will protect minority communities' incomes and discretionary funds. Increased fossil fuel costs further increase the costs of other goods, reducing people's purchasing power. Decreasing taxes, or returning the revenue to people through tax reductions or direct rebates, replaces some of this lost purchasing power and offsets part of the fossil fuel price increase. Charging polluters $25 per ton of carbon could cost the average household about $196 per year in increased fossil fuel prices. However, that same household could receive $262 through a direct rebate program or $285 each year if payroll taxes were reduced.[12] Low-income households in particular could end up at least as well off because their annual fossil fuel expenditure is likely to be lower than their annual rebate or tax reduction. More energy-efficient households would gain because they would have lower fossil fuel costs, while receiving the same rebate.

Requiring polluters to pay for greenhouse gas emissions creates revenue to compensate those hurt by policies to slow global warming, thus helping ease the transition to clean energy. Some workers and consumers will need help during the transition to an economy powered by clean energy as fossil fuel prices increase and some industries, such as coal and petroleum, change. Fossil fuel price increases will affect some consumers, industries and workers more than others, because they cannot afford higher prices. If pollution revenue is raised, then part of the money can be used to protect those most vulnerable by offering transition assistance and funding adaptation measures.

In fact, less than five percent of the pollution revenue could provide home energy assistance to every low-income household in the U.S. One such program, the Weatherization Assistance Program (WAP), could be expanded. WAP trains and employs local residents to weatherize homes, creating jobs, training, and energy savings for low-income households. On average, a weatherized residence saved 23 percent on heating costs. Even using the most pessimistic estimates of the impacts of fossil fuel price increases, about two-thirds of the pollution revenue could completely compensate and retrain displaced workers, balance declines in wage growth, and recoup investor loss.[13]

Besides making sure that people are not penalized financially, some pollution revenue could be used to fund household investments in renewable energy and greater energy efficiency, thus enhancing people's ability to adapt and reducing overall dependence on fossil fuels. Conceivably, some households could be improved in the short as well as long run. Since successfully dealing with the effects of climate change is really a question of adaptation, the fairest and most efficient way to help households is to use some of the revenue to help them get ready for these changes. The typical policy response is through emergency relief—compensating households after the damage has been done. However, since we can anticipate some of these effects, we should be thinking ahead about reducing damages.

Using the pollution revenue, policymakers could facilitate installation of energy efficient lighting and appliances, perhaps even reducing low-income households electric bills well below current levels.

CONCLUSION

Because climate change and climate policies will disproportionately affect poor and minority communities, policymakers must address these differential impacts. Representatives from these communities must be involved in climate policy discussions. RP's research and that of other groups finds that we can best achieve social equity in the long run by stabilizing the climate system by replacing fossil fuels with other, safe sources of energy. This is the most fundamental step in terms of the well being of our children, future generations, the poor, society as a whole, and other species. We cannot have a just society in a world of ever rising food and energy costs, shifting and severe weather patterns, rising sea levels, species extinctions, and emerging diseases.

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NOTES

[1] Miller, K.A., G. Sethi, and G. Wolff. 2000. "What's Fair? Consumers and Climate Change."; Wolff, G., and G. Sethi. 2000. "What's Fair? Workers, Investors, and Climate Change." Brown, P. 1999. "Fair and Low Cost Climate Protection." All San Francisco: Redefining Progress.

[2] U.S. Environmental Protection Agency. 1999. "Global Warming: Impacts – Health." [WWW Document]. Accessed 6 July 1999: http://www.epa.gov/globalwarming/impacts/health/index.html.

[3] Gelobter, Michel. 1993. "Race, Class, and Outdoor Air Pollution: The Dynamics of Environmental Discrimination from 1970-1990." Ph.D. dissertation, Department of Energy and Resources, University of California, Berkeley.

[4] Adams, Richard M., Brian H. Hurd, and John Reilly. 1999. *A Review of Impacts to U.S. Agricultural Resources.* Washington, D.C.: Pew Center on Global Climate Change; Rosenzweig, Cynthia, and Daniel Hillel. 1995. "Potential Impacts of Climate Change on Agriculture and Food Supply." *Consequences*. [WWW Document]. Accessed 14 July 1999: http://www.gcrio.org/CONSEQUENCES/summer95/agriculture.html.

[5] Environmental Defense Fund (EDF), Natural Resources Defense Council, Pacific Institute for Studies in Development, Environment and Security, Union of Concerned Scientists, and U.S. Climate Action Network. 1998. *Global Climate Change: U.S. Impacts & Solutions.* Washington, D.C.: U.S. Climate Action Network. Available on the Web: http://www.climatenetwork.org/USCAN/index.html.

[6] Insurance Information Institute. 1999. *The I.I.I. Insurance Fact Book 2000.* New York: Insurance Information Institute.

[7] International Federation of Red Cross and Red Crescent Societies. 1999. *World Disaster Report.* Geneva: IFRCRCS

[8] "Resolution on Sustainable Energy and Low-Income and Minority Communities." 2000. [WWW Document]. Accessed 12 November, 2000: http://repp.org/articles/ej/resolution.html.

[9] Weinick, R.M., S.H. Zuvekas, and S.K. Drilea. 1997. *Access to Health Care–Sources and Barriers.* MEPS Research Findings no. 3, AHCPR Pub. No. 98-0001. Rockville, Md: Agency for Health Care Policy and Research. The cost estimate is based on an average cost of $2,290 per person.

[10] *Economists Statement on Climate Change*. 1997. San Francisco: Redefining Progress.

[11] Energy Innovations. 1997. *Energy Innovations: A Prosperous Path to a Clean Environment*, Alliance to Save Energy, American Council for an Energy-Efficient Economy, Natural Resources Defense Council, Tellus Institute, and Union of Concerned Scientists, Washington DC.

[12] Brown, P. 2000. *Priming the Pump: How Pollution Charges Combined with Revenue Recycling Help the U.S. Economy and Individuals.* San Francisco: Redefining Progress.

[13] Wolff, G., and G. Sethi. 2000. "What's Fair? Workers, Investors and Climate Change."

ABOUT REDEFINING PROGRESS

REDEFINING PROGRESS is a nonprofit organization that develops policies and tools that reorient the economy to value people and nature first.

RP does this by developing policies and tools to internalize the economy's hidden social and environmental costs (the Accurate Prices Program), to transform the human use and distribution of the Earth's natural resources (the Sustainability Program), and to restore the value of shared social and natural assets (the Common Assets Program).

These three goals come together in RP's advocacy of fair and low-cost policies to reverse climate change (the Climate Change Program).

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