

Our Children's Right to a Viable Future

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Our nation's Founders, in the U.S. Constitution, elected not to restrict its fundamental guarantees to the present generation.

Washington, Madison, Jefferson, Hamilton, Franklin, and the other Architects of our democracy, instead, aimed to "establish Justice, insure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves **and our Posterity.**" They thus took account of future generations by establishing an enduring guide to those principles most relevant to just resolution of our nation's fundamental challenges, including those arising centuries after the Constitution's signing.

Our nation's manifestly outsized role in causing dangerous climate change presents such a fundamental problem. Though we compose less than 5% of the world population, cumulative fossil fuel emissions from the U.S. exceed 25% of the world total, far outstripping contributions from China, Russia, Germany, or Britain over time. In light of the long atmospheric residence time of carbon dioxide (CO₂), America bears a heavy measure of responsibility for present and future climate damages. There is no climate-related impact to persons or other living things for which our nation is not substantially liable.

A judge in the U.S. District Court in Oregon, on March 9, 2016, will consider whether a constitutional challenge to federal actions that underwrite fossil fuel emissions may proceed. Brought by youth plaintiffs, and by me on behalf of future generations, the lawsuit alleges that by permitting, authorizing, and subsidizing the exploitation, production, transport, and burning of fossil fuels, our government has caused or substantially contributed to the present emergency in which the very viability of a hospitable climate system is at stake. We argue that such federal actions infringe upon the fundamental guarantees of the 5th Amendment, including the rights to life, liberty, property, and equal protection of the law.

Industry intervenors and the government urge the court to duck the fundamental issues, alleging they are "political" or encroach on Executive prerogatives now that the President has begun to act, however inadequately. But our nation would be more riven with turmoil and injustice had our courts failed to rise, at critical junctures, to defend our fundamental constitutional rights against legalized segregation and other forms of officially sanctioned abuse.

Our courts face such a challenge now, with global warming, an issue on which our federal government has to date dithered, and worse, in the face of the gathering storm.

Because of the buildup of CO₂ in the atmosphere, stemming mainly from the burning of fossil fuel, Earth is in a state of significant energy imbalance. That imbalance now averages about 0.6 Watts/m² over the entire planet – equivalent to exploding more than 400,000 Hiroshima-sized atomic bombs per day, 365 days per year.

This imbalance, more energy coming in than going out, means that additional warming of terrestrial and ocean systems remains "in the pipeline," to be felt by future generations. Already, based on modern instrumental and paleoclimate records, Earth's surface temperature is rising out of the range of the Holocene, the current 10,000 year geological period characterized by a relatively stable climate and coastlines that enabled civilization to develop.

Continued failure to phase out fossil fuel emissions will consign our children and our Posterity to a diminishing existence. Their compromised prospects are described in reviews of national and international scientific bodies – including the Intergovernmental Panel on Climate Change and the U.S. National Academy of Sciences. They include deteriorating food security, soil desiccation and groundwater depletion, shrinking snowpack and consequential reduced freshwater supplies, recurrent superstorms, ocean acidification, increasing wildfires, worsened air pollution, a host of assaults on human health, and widespread species extinction.

Perhaps worst of all – as colleagues and I describe in a [paper](#) now in press – our planet’s major ice sheets are likely subject to disintegration if the buildup of atmospheric CO₂ is not soon abated. This would raise sea levels several meters, jeopardizing the functionality of coastal cities. There is no prospect of economical adaptation to this looming catastrophe, if it is not averted.

Our case will show that federal officials have been aware for decades of the major risks even as they approved or underwrote fossil fuel project after project without CO₂ controls. A 1965 White House report, for instance, warned that continued CO₂ addition to the atmosphere by the burning of coal, oil, and natural gas “will modify the heat balance of the atmosphere to such an extent that marked changes in climate, not controllable though local or even national efforts, could occur.” Similarly, a 1991 Congressional Office of Technology Assessment report observed that “the decision to limit emissions cannot await the time when the full impacts are evident. The lag time between emission of the gases and their full impact is on the order of decades to centuries; so too is the time needed to reverse any effects.”

In over forty-years of service at NASA’s Goddard Institute for Space Studies – as its Director from 1981-2013 – I provided federal officials climate data and testimony warning of our progressively worsening situation of atmospheric CO₂ build-up and the need for effective, prompt action to reduce fossil fuel emissions.

There is, then, no excuse. Continued delay in implementing serious climate remedies challenges the vision of our Founders, eviscerating fundamental constitutional guarantees.

Congress and the President manifestly lack the requisite resolve. Accordingly, the Court should immediately order the government to develop and implement a climate recovery plan. Effective measures, in my view, should include a rising fee on carbon emissions to ensure that fossil fuel industry costs now imposed on our health and our children’s future are accounted for in energy purchase and investment decisions. Such a plan could pave the way for deep decarbonization of our industrial system, and guide effective international action.

It will take such a court order to extricate our nation from the looming danger that our government’s actions have done so much to bring about. Our children’s lives, their prospects, and the Blessings of Liberty we are obliged to secure for them, hang in the balance.