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# RESEARCH & COMMENTARY: ANCHORAGE CLIMATE ACTION PLAN WOULD BE ECONOMICALLY REGRESSIVE, ENVIRONMENTALLY INEFFECTIVE

MAY 16, 2019  
By [Tim Benson](#)

Per Capita Energy Expenditures In Alaska Are 92 Percent Higher Than U.S.  
Average



The Municipality of Anchorage, working with the University of Alaska, has put together a [Climate Action Plan](#) that seeks to reduce greenhouse gas (GHG) emissions in the city by 40 percent below its 2008 levels by 2040 and 80 percent below its 2008 levels by 2050.

To achieve this goal, the plan recommends the city, among other things, “evaluate a carbon pricing mechanism [aka a carbon dioxide tax] to account for the externalities of fossil fuels,” and “advocate for a Railbelt Renewable Portfolio Standard requiring a certain portion of energy to come from renewable energy sources in Alaska.” However, establishing either of these regressive programs would be a costly mistake that would disproportionately harm low-income Anchorage residents and have minimal effects on air quality.

### **Carbon-Dioxide Tax**

The purpose of the carbon tax is to decrease carbon dioxide emissions by levying a tax based on the amount of emissions produced. The Congressional Budget Office (CBO) found a \$28 per ton carbon dioxide tax would result in energy costs being [250 percent](#) higher for the poorest one-fifth of households than the richest one-fifth of households.

CBO reports the reason for cost discrepancy is “a carbon tax would increase the prices of fossil fuels in direct proportion to their carbon content. Higher fuel prices, in turn, would raise production costs and ultimately drive up prices for goods and services throughout the economy. ... Low-income households spend a larger share of their income on goods and services whose prices would increase the most, such as electricity and transportation.”

A [2013 analysis](#) from the National Association of Manufacturers estimates a \$20-per-ton carbon dioxide tax in Alaska would result in a 40 percent increase in the price of natural gas. The report also estimated gasoline prices would be more than 20 cents per gallon higher and there would be a 12 percent increase in household utility rates in the first year alone. In July 2012, Australia established a [nationwide carbon dioxide tax](#) set at \$23 (Australian dollars) per ton, which was repealed just two years later. The ill-fated tax produced the highest quarterly increase in household electricity prices—15 percent—in the country’s history.

One other substantial problem with the carbon dioxide tax is that it would produce an insignificant environmental benefit, as Oren Cass, senior fellow at the Manhattan Institute, [noted in \*National Affairs\*](#). “The effectiveness of a carbon tax as a matter of environmental policy [depends] not only on how it would directly alter the trajectory of [local] emissions but also on its ability to affect global emissions by driving globally applicable technological innovation or by influencing the behavior of foreign governments,” wrote Cass. “On each of these dimensions, the carbon tax fails.”

## Renewable Energy Mandates

Renewable energy mandates (REMs) such as the proposed Railbelt Renewable Portfolio Standard force expensive, heavily subsidized, and politically favored electricity sources such as wind and solar on ratepayers and taxpayers while providing few, if any, net environmental benefits.

A [2019 working paper](#) from the Energy Policy Institute at the University of Chicago showed REMs are dramatically increasing retail electricity prices and serve as a very expensive way to try to reduce carbon dioxide emissions. According to the study, seven years after REMs are enacted, renewables’ share of electricity generation increases by only 1.8 percent. They also found REMs raise retail electricity prices by 11 percent. After 12 years and a 4.2 percent increase in renewables’ share of generation, these prices rise by 17 percent. Altogether, the total extra electricity costs of REMs to consumers in the states that have enacted an REM are \$125.2 billion.

The study also reveals reducing carbon dioxide emissions through an REM costs between \$130-\$460 per ton of carbon dioxide abated. These increased costs are, at the low end, almost three times higher than the social cost of carbon estimated by the Interagency Working Group set up by the Obama administration, which is roughly \$46 per ton for 2020. (It should be noted that whether there is a “[social cost](#)” to carbon dioxide emissions at all is debatable.)

Unsurprisingly, in states with REMs, energy rates are rising twice as fast as the national average and states with renewable mandates had electricity prices 26 percent higher than those without. The 29 states with renewable energy mandates (plus the District of Columbia) had average retail electricity prices of 11.93 cents per kilowatt hour (cents/kWh), [according to the U.S. Energy Information Administration](#) (EIA). On the other hand, the 21 states without renewable mandates had average retail electricity prices of just 9.38 cents/kWh.

A [study](#) by the left-leaning Brookings Institution found replacing conventional power with wind power raises electricity prices 50 percent and replacing conventional power with solar power triples

electricity costs. In just 12 states, the total net cost of the renewable mandates was \$5.76 billion in 2016 and will rise to \$8.8 billion in 2030, a [2016 study](#) revealed.

The American Action Forum estimates the costs of moving the entire country to 100 percent renewable sources would be around [\\$5.7 trillion](#), and a [2019 brief](#) from the Institute for Energy Research estimates getting to 100 percent renewable generation is “nothing more than a myth,” and that attempting to do so would be a “catastrophe” for the United States.

“Intermittent wind and solar cannot stand on their own,” the brief concludes. “They must have some form of back-up power, from reliable coal, natural gas, nuclear units, storage capability from hydroelectric facilities, and/or batteries. Batteries of the size and scope needed for 100-percent renewables are unproven and not cost effective. Even if a 100 percent renewable future were feasible, the land requirements and costs of transitioning would be enormous and would require subsidies to ease the electricity price increases that would result.”

### **GHG Emissions Already Steadily Declining**

A [Texas Public Policy Foundation report](#) notes in the United States from 1970 to 2017, “the aggregate emissions of the six criteria pollutants identified in the Clean Air Act have declined by 73 percent. This improvement has occurred alongside a 262 percent increase in Gross Domestic Product (GDP), a 189 percent increase in vehicle miles traveled, and rising population and energy consumption. These achievements should be celebrated as a public policy success story, but instead the prevailing narrative among political and environmental leaders is one of environmental decline that can only be reversed with a more stringent regulatory approach.”

The report further stresses, “In contrast to this doomsday narrative, consider the data. Since 1990, the ambient concentrations of these six pollutants—measures of what we inhale with each breath—have decreased by an average of 64 percent. Ambient concentrations of lead, sulfur dioxide, and carbon monoxide have declined by 98 percent, 88 percent, and 77 percent, respectively, since 1990. Airborne emissions of mercury and mercury compounds in the U.S. have declined by 74 percent since 2000. Ambient concentrations of benzene, a well-known carcinogen and the most widespread hazardous pollutant, declined by more than 66 percent from 1994 to 2013.

“What made these achievements possible were advances in emissions control technologies and the economic prosperity that enabled the widespread implementation of those technologies, as well as the means to monitor their effect on air quality,” the report concludes.

The U.S. Environmental Protection Agency’s (EPA) [2018 Greenhouse Gas Inventory](#) (GHGI) was released on April 11. It revealed total GHG emissions in the United States decreased by 35.6 million metric tons of CO<sub>2</sub> equivalent, or 0.5 percent from 2016 to 2017. Indeed, U.S. GHG emissions are now at their lowest levels since 1992 and only 1.3 percent higher than their 1990 levels. Since 2005, GHG emissions are down 12 percent. Over this same period, oil production in the United States has increased by [80 percent](#) and natural gas production has increased by [51 percent](#).

In Alaska itself, carbon dioxide emissions from fossil fuel combustion peaked in 2005 and [decreased by more than 27 percent](#) from 2005 to 2016. In 2016, emissions were only 1.1 percent above their 1990 levels. At [35.1 million metric tons](#), the Last Frontier ranks just 40th among the states for total carbon dioxide emissions.

### **Alaskans' Energy Costs are Already High**

A [2016 investigation](#) of “energy poverty,” where people spend roughly 10 percent of their income on energy-related costs, by *Inside Energy* found Anchorage city residents with income below 50 percent of the federal poverty level are spending 28 percent of their annual income on their energy bills, at an average cost of \$2,674 per year.

At 19.10 cents per kilowatt hour, retail electricity prices in Alaska are already [82 percent higher](#) than the national average and the highest in the United States outside of Hawaii. A [2018 \*Wallet Hub\* study](#) found total energy costs in Alaska are the sixth-highest in the country, while EIA found total per capita energy expenditures in Alaska in 2016 were second-highest, [92 percent higher](#) than the U.S. average.

Therefore, policymakers should not force Anchorage residents to switch from fossil fuels to higher-cost, intermittent “renewable” electricity sources, such as wind or solar. The higher energy costs guaranteed by this switch would lead to slower economic growth, as affordable energy is the key to productivity growth and the production of virtually all goods and services. Therefore, elected officials and agency regulators at all levels of Alaskan government should repeal subsidies, taxes, and regulations that jeopardize the use of fossil fuels.

The following documents provide more information carbon dioxide taxes, renewable energy mandates, and the benefits of fossil fuels.

### **The U.S. Leads the World in Clean Air: The Case for Environmental Optimism**

<https://files.texaspolicy.com/uploads/2018/11/27165514/2018-11-RR-US-Leads-the-World-in-Clean-Air-ACEE-White.pdf>

This paper from the Texas Public Policy Foundation examines how the United States achieved robust economic growth while dramatically reducing emissions of air pollutants. The paper states that these achievements should be celebrated as a public policy success story, but instead the prevailing narrative among political and environmental leaders is one of environmental decline that can only be reversed with a more stringent regulatory approach. The paper urges for the data to be considered and applied to the narrative.

### **Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990-2017**

<https://www.epa.gov/sites/production/files/2019-04/documents/us-ghg-inventory-2019-main-text.pdf>

EPA’s Greenhouse Gas Inventory provides a broad overview of all U.S. greenhouse gas emissions sources and sinks, introduces key concepts, and discusses the primary drivers for changes in greenhouse gas emissions. The 2018 version finds greenhouse gas emissions decreased by 0.5 percent from 2016 to 2017 and are now just 1.3 percent above 1990 levels.

**Do Renewable Portfolio Standards Deliver?**

<https://bfi.uchicago.edu/working-paper/do-renewable-portfolio-standards-deliver/>

This working paper from the Energy Policy Institute at the University of Chicago finds that average retail electricity prices in states after the passage of a renewable energy mandate are 11 percent higher after seven years and 17 percent higher after a dozen years, even though the increase in renewable electricity generation is a minimal 1-4 percent. Reducing carbon dioxide emissions in this fashion costs between \$130 and \$460 per metric ton.

**The 100 Percent Renewable Energy Myth**

<https://www.instituteforenergyresearch.org/wp-content/uploads/2019/02/Renewable-Myth-Policy-Brief219.pdf>

This *Policy Brief* from the Institute for Energy Research argues that a countrywide 100 percent renewable plan would put the U.S. economy in jeopardy. The brief investigates the intermittency, land requirements, capacity factors, and cost of transition and construction materials that limit the ability of the U.S. to adapt to 100 percent renewable energy.

**Legislating Energy Poverty: A Case Study of How California's and New York's Climate Change Policies Are Increasing Energy Costs and Hurting the Economy**

[https://www.pacificresearch.org/wp-content/uploads/2018/12/LegislatingEnergy\\_F\\_Web.pdf](https://www.pacificresearch.org/wp-content/uploads/2018/12/LegislatingEnergy_F_Web.pdf)

This analysis from Wayne Winegarden of the Pacific Research Institute shows the big government approach to fighting climate change taken by California and New York hits working class and minority communities the hardest. The paper reviews the impact of global warming policies adopted in California and New York, such as unrealistic renewable energy goals, strict low carbon fuel standards, and costly subsidies for buying higher-priced electric cars and installing solar panels. The report's authors found that collectively these expensive and burdensome policies are dramatically increasing the energy burdens of their respective state residents.

**Evaluating the Costs and Benefits of Renewable Portfolio Standards**

<https://www.heartland.org/publications-resources/publications/evaluating-the-costs-and-benefits-of-renewable-portfolio-standards?source=policybot>

This paper by Timothy J. Consideine, a distinguished professor of energy economics at the School of Energy Resources and the Department of Economics and Finance at the University of Wyoming, examines the renewable portfolio standards (RPS) of 12 different states and concludes while RPS investments stimulate economic activity, the negative economic impacts associated with higher electricity prices offset the claimed economic advantages of these RPS investments.

**The Case Against a Carbon Tax**

<https://www.instituteforenergyresearch.org/wp-content/uploads/2019/04/Carbon-Tax-Policy-BriefFinalText-1.pdf>

This paper from Jordan MacGillis of the Institute for Energy Research argues carbon dioxide taxes are unjustified and unwise. He contends these taxes have demonstrated themselves to be costly and incapable of constraining governments from implementing and maintaining other burdensome regulations and taxes. He also notes the United States is better off without one.

## The Carbon Tax: Analysis of Six Potential Scenarios

[https://www.instituteforenergyresearch.org/wp-content/uploads/2018/10/The-Carbon-Tax-Analysis-of-Six-Potential-Scenarios\\_Final.pdf](https://www.instituteforenergyresearch.org/wp-content/uploads/2018/10/The-Carbon-Tax-Analysis-of-Six-Potential-Scenarios_Final.pdf)

This study commissioned by the Institute for Energy Research and conducted by Capital Alpha Partners uses standard scoring conventions to evaluate and model the economic impacts of carbon taxes set at a variety of dollar figures, with different phase-in durations, and with an array of revenue-recycling strategies. It finds a carbon dioxide tax will not be pro-growth, is not an efficient revenue raiser for tax reform, depresses GDP and introduces with long-term fiscal challenges playing particular stress on the states, and is inconsistent with meeting the long-term Paris Agreement emissions reduction goals.

## The Carbon Tax Shell Game

<https://www.heartland.org/publications-resources/publications/the-carbon-tax-shell-game>

Oren Cass of the Manhattan Institute argues the carbon dioxide tax is a shell game. The range of designs, prices, rationales, and claimed benefits varies so widely that assessing the validity of most proposals is nearly impossible to accomplish. In this article for *National Affairs*, Cass says the effect of carbon dioxide taxes on emissions has proven to be insubstantial, a fact he says is ignored by the tax's proponents when promoting its purported benefits.

## The Case Against a U.S. Carbon Tax

<https://www.heartland.org/publications-resources/publications/the-case-against-a-us-carbon-tax>

In this paper from the Cato Institute, Robert P. Murphy, Patrick J. Michaels, and Paul C. Knappenberger examine carbon dioxide tax programs in place in Australia and British Columbia and consider whether similar programs would be successful in the United States. They conclude, "In theory and in practice, economic analysis shows that the case for a U.S. carbon tax is weaker than its most vocal supporters have led the public to believe."

## Economic Outcomes of a U.S. Carbon Tax

<https://www.heartland.org/publications-resources/publications/economic-outcomes-of-a-us-carbon-tax>

This report from the National Association of Manufacturers evaluates the potential impacts carbon dioxide taxes whose revenues would be devoted to a combination of debt and tax rate reduction would have on the U.S. economy. The results consider the varied economic effects of fossil-fuel cost increases caused by carbon taxes, as well as the positive economic effects of the assumption that carbon dioxide tax revenues would be used to reduce government debt and federal taxes.

## The Social Benefits of Fossil Fuels

<https://www.heartland.org/publications-resources/publications/the-social-benefits-of-fossil-fuels>

This Heartland *Policy Brief* by Joseph Bast and Peter Ferrara documents the many benefits from the historic and still ongoing use of fossil fuels. Fossil fuels are lifting billions of people out of poverty, reducing all the negative effects of poverty on human health, and vastly improving human well-being and safety by powering labor-saving and life-protecting technologies, such as air conditioning, modern medicine, and cars and trucks. They are dramatically increasing the quantity of food humans produce and improving the reliability of the food supply, directly benefiting human health. Further, fossil fuel

emissions are possibly contributing to a “Greening of the Earth,” benefiting all the plants and wildlife on the planet.

### **Climate Change Reconsidered II: Fossil Fuels – Summary for Policymakers**

<https://www.heartland.org/publications-resources/publications/climate-change-reconsidered-ii-fossil-fuels---summary-for-policymakers>

In this fifth volume of the *Climate Change Reconsidered* series, 117 scientists, economists, and other experts assess the costs and benefits of the use of fossil fuels by reviewing scientific and economic literature on organic chemistry, climate science, public health, economic history, human security, and theoretical studies based on integrated assessment models and cost-benefit analysis.

### **Climate Change Reconsidered II: Physical Science**

<https://www.heartland.org/publications-resources/publications/climate-change-reconsidered-ii-physical-science>

*Climate Change Reconsidered II: Physical Science* is an independent, comprehensive, and authoritative report on the current state of climate science, published in October 2013. It is the fourth in a series of scholarly reports produced by the Nongovernmental International Panel on Climate Change, an international network of climate scientists sponsored by three nonprofit organizations: the Center for the Study of Carbon Dioxide and Global Change, the Science and Environmental Policy Project, and The Heartland Institute. (Also see the executive summary of *Climate Change Reconsidered II: Physical Science*: [https://www.heartland.org/\\_template-assets/documents/CCR/CCR-II/Executive-Summary.pdf](https://www.heartland.org/_template-assets/documents/CCR/CCR-II/Executive-Summary.pdf))

### **Climate Change Reconsidered II: Biological Impacts**

<https://www.heartland.org/publications-resources/publications/climate-change-reconsidered-ii-biological-impacts>

Released on April 9, 2014, *Climate Change Reconsidered II: Biological Impacts* is an independent, comprehensive, and authoritative report on the impacts of climate change on plants, terrestrial animals, aquatic life, and human well-being. (Also see the *Climate Change Reconsidered II: Biological Impacts* “Summary for Policymakers”: [https://www.heartland.org/\\_template-assets/documents/CCR/CCR-IIb/Summary-for-Policymakers.pdf](https://www.heartland.org/_template-assets/documents/CCR/CCR-IIb/Summary-for-Policymakers.pdf))

### **Less Carbon, Higher Prices: How California’s Climate Policies Affect Lower-Income Residents**

<https://www.heartland.org/publications-resources/publications/less-carbon-higher-prices-how-californias-climate-policies-affect-lower-income-residents>

This study from Jonathan Lesser of the Manhattan Institute argues California’s clean power regulations, including the state’s renewable power mandate, is a regressive tax that harms impoverished Californians more than any other group.

Nothing in this *Research & Commentary* is intended to influence the passage of legislation, and it does not necessarily represent the views of The Heartland Institute. For further information on this subject,

visit [Environment & Climate News](#), The Heartland Institute's [website](#), and [PolicyBot](#), Heartland's free online research database.

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