

The Municipality of Anchorage Climate Action Plan: The Right Step, Right Now

Tom Benson of the Heartland Institute posted a blog entry dated May 16, 2019, intended to cast a pall over the Municipality of Anchorage Climate Action Plan¹. Written by lobbyists rather than by scientists, it is filled with assumptions, inaccuracies, outdated figures, and misleading distractions from the issue at hand. Allow us to set the record straight.

Please note that we are not merely providing a difference of opinion. We are setting the record straight with the best science available. In contrast to Mr. Benson's piece, we offer dozens of endnotes to peer-reviewed, scientific studies. Meanwhile, Mr. Benson's argument is filled with reports from politically-motivated groups like the Manhattan Institute², American Action Forum³, the Texas Public Policy Foundation⁴, the Institute for Energy Research⁵, and more. Like Mr. Benson's Heartland Institute, many of these groups are established and/or funded by the Kochs for the purpose of enhancing their profits from the fossil fuel industry. We observe that, if the Heartland case were strong, they would have no need to resort to politically-motivated sources.

With that prelude, we begin by presenting the scientific underpinnings for the Anchorage Climate Action Plan.

Scientific Agreement: Human Emissions of Greenhouse Gases are Warming the World Dangerously

The scientific community has established a profound level of consensus^{6, 7, 8, 9, 10, 11} that the world is warming¹² due to human emissions of greenhouse gases^{13, 14} such as carbon dioxide, methane, nitrous oxide, and others¹⁵. The primary source of these gases is the burning of fossil fuels, although agricultural practices also contribute¹⁶. Since the Industrial Revolution began, carbon dioxide levels in the atmosphere have risen approximately 48%¹⁷, and global average surface temperatures have risen approximately 1 degree Celsius¹⁸ in response¹⁹. In addition to the global temperature records from thermometers^{20, 21} and satellites²², more than 20,000 datasets in the natural world confirm the warming trend²³.

Scientists are clear that the warming is due to human activity. Many studies^{24, 25, 26, 27} show that human emissions of greenhouse gases are responsible for all or nearly all the observed warming since the 1970s.

Additionally, scientists have determined that the overall impact of current and anticipated warming is negative. Scientists state that unchecked warming will inflict tens of trillions of dollars of damage to the economy²⁸, cause human health problems²⁹ including millions of premature deaths³⁰, force hundreds of millions of people to relocate³¹, cause irreversible harm to ecological frameworks around the world³², threaten an extinction cascade³³, and much more. The differences between 1.5 degree C warming and 2.0 degree C warming are stark, and worse still are the results of 3.0 or more degree C warming³⁴. Taking all effects into account, scientists declare this climate instability will be very harmful.

This harm is avoidable. Because scientists have identified the greenhouse gas emissions that cause global warming, we can reduce, and ultimately end, those emissions. This will mean finding energy efficiency where possible, and it will require ramping up the use of clean energy while ramping down the use of fossil fuel energy. The technological solutions are already market-ready, and the political solutions are known. It is incumbent on this generation to initiate the changes necessary to protect future generations.

It is imperative that Alaska becomes a leader in reducing greenhouse gas emissions. Although every region matters, Alaska's high per capita emissions give us more opportunity - and more responsibility - to effect change. Indeed, if Alaska were a country, it would lead the world in greenhouse gas emissions per capita^{35,36}. In fact, Alaska emits more greenhouse gas than does Switzerland³⁷, even though Switzerland has ten times our population.

The climate action plan for the Municipality of Anchorage adopts the United Nations goal of doing our part to keep global warming "well below 2.0 degrees Celsius"³⁸ as measured against pre-industrial temperatures. While this is an aggressive goal, it also provides many benefits. In addition to avoiding the harms acknowledged above, Anchorage can also avoid tens of billions of dollars for fuel costs over the next few decades. Further, the renewable energy industry provides more jobs per kilowatt-hour than fossil fuel industry does³⁹.

With the scientific understanding firmly established, then, we now turn to some of the more major mistakes within the Heartland opinion piece.

Price on Carbon

The Heartland piece spends a fair bit of time on the assumption that the Municipality of Anchorage Climate Action Plan will establish, in their words, a "carbon tax." This is based on a single phrase in the plan, calling on Anchorage to "evaluate a carbon pricing mechanism to account for the externalities of fossil fuels." As far as the Climate Action Plan is concerned, this is but one arrow in a quiver holding more than 130.

To clarify this particular arrow, the plan calls for an evaluation of a carbon pricing mechanism. There are local considerations that need to be taken into account during that evaluation, of which Mr. Benson appears uninformed, such as our local tax cap. But Mr. Benson's attack on the plan teeter on his assumption that Anchorage will implement a carbon tax without any regard for its effect on the poor. Had he been better informed, he would realize that considerations of fairness and equity permeated every plank in the plan, as directed explicitly from the outset of the process.

So if a carbon pricing mechanism is implemented, it will not be the bludgeon that Mr. Benson says he fears. If implemented, it would most likely be accompanied by a dividend program. This would ensure that (a) the poor are not hit hardest, (b) the size of our municipal government would not grow, and (c) no net money is taken out of the economy. In this vision, carbon pricing would be similar to the Energy Innovation and Carbon Dividend Act in the US House of Representatives this year, and which was also before the US Senate last session.

Curiously, Mr. Benson himself quotes a study that affirms the value of such a pricing mechanism. In its conclusions, it states, "Fourth, a carbon price is far more effective in reducing carbon emissions precisely because it is not biased toward any one technology but rewards any technology that reduces emissions at a reasonable cost."⁴⁰

A carbon pricing mechanism can be very effective, and nearly unnoticed by the public. Indeed, British Columbia had such a mechanism in place for years, and though most of their public was unaware of it⁴¹, the territory still led Canada in both emissions reductions and economic growth⁴².

Renewable Portfolio Standard

A second arrow of more than 130 in the quiver of the Municipality of Anchorage Climate Action Plan is to advocate for a minimum percentage of electricity coming from renewable sources along the Alaska Railbelt. As such, this would be a regionwide or statewide effort largely dependent on the Regulatory Commission of Alaska.

Mr. Benson points to a 2019 study by Greenstone and Nath⁴³ that found states with Renewable Portfolio Standards saw an increase in retail electricity prices of 1.3 cents and 2.0 cents per kilowatt-hour after seven and twelve years, respectively. If that were to hold true for the Alaska Railbelt, that would amount to a 0.9% annual increase, which is slower than the rate of inflation. While preliminary numbers do not show a particular need for concern, the Climate Action Plan under consideration does not propose to establish such a policy without further study and discussion, nor is it even able to do so because the Alaska Railbelt is not under the jurisdiction of the Municipality of Anchorage.

It is noteworthy that Alaska is a world leader in renewable energy capacity. Helpfully, much of that capacity is located along the Railbelt where it can readily be added to the electricity mix. It is also noteworthy that states like Texas have lowered their electricity bills while increasing the percentage of their electricity from renewables⁴⁴, and that four states already generate more than 30% of their electricity from renewables⁴⁵, with Kansas and Iowa at nearly 40%⁴⁶. With its high electricity costs and abundant renewable energy sources, Alaska has plenty of room to improve the percentage of renewables in our electricity mix, which would result in more local employment as compared to relying nearly exclusively on fossil fuels. In fact, a recent study concluded that converting all fossil fuel energy in the US to renewable energy by 2050 would provide a net gain of 2 million American jobs, save every American a net \$260 per year in energy costs, save Americans \$600 billion per year in health care costs (4% of US GDP), eliminate 62,000 premature deaths in the US each year from air pollution, and avoid \$3.3 trillion of global warming costs per year to the world from US emissions⁴⁷. Many studies have arrived at similar conclusions about the economic viability of switching all or nearly all of US electricity to renewables while maintaining electricity costs at rates similar to today's^{48, 49, 50, 51}. Clearly, a transition to clean energy is not to be feared.

Emissions Trends

One of the more egregious errors Mr. Benson makes is in conflating greenhouse gases with carbon monoxide, lead, nitrogen dioxide, ozone, particulate matter, and sulfur dioxide. The latter six are closely tied to human health but are not significant contributors to greenhouse gas warming (with the exception of ozone). Importantly, Mr. Benson glosses over this crucial distinction when he says “emissions” have dropped substantially. The fact is, US “greenhouse gas emissions” have risen, even despite the fact that we have exported our pollution to other countries as factories moved overseas.

When he refers to EPA data, that forces Mr. Benson closer to the truth, but in his efforts to show US emissions are dropping, he fails to mention that US greenhouse gas emissions are essentially unchanged over the past 6 years⁵². Certainly those emissions decreased during our recent recession. Since then, however, greenhouse gas emissions would have risen again if it weren't for the rise of clean energy. Despite Mr. Benson's innuendo to the contrary, greenhouse gas emissions remain a problem to be solved.

Economic Impact

Mr. Benson implies that, because Alaska has a high cost of energy, we should continue with business as usual. However, that high cost has meant that Alaska communities can find cost relief through renewable energy⁵³. In Anchorage, for example, our cheapest electricity comes from hydroelectric.

Mr. Benson completely disregards the bulk of the Municipality of Anchorage Climate Action Plan. He sidesteps its action items that would improve energy efficiency across many sectors, which is by far the most cost-effective way to reduce emissions. He ignores the call for allowing electricity customers to voluntarily request a minimum percentage of their electricity from renewables at an appropriate rate. He doesn't mention the increased system efficiency that would result from an Independent System Operator of the Alaska Railbelt electricity grid.

Further, we have already established that the economic benefits of switching include higher employment. Moreover, and completely unaddressed in the Heartland piece, the world must move away from fossil fuels because of the stunning economic harm they threaten over the long term. In a peer-reviewed study, Economist Marshall Burke found that, if greenhouse gas emissions are allowed to continue rising, world GDP in the year 2100 will be about 23% less than in a world without global warming⁵⁴. If our ancestors had done that to us, the world would now make \$17 trillion less per year. What will our descendants think of us if we knowingly inflict that on them?

Conclusion

The Municipality of Anchorage Climate Action Plan is far from limited to the two items addressed in the Heartland opinion piece. It is robust, presenting more than 130 opportunities to realize significant improvements in our greenhouse gas emissions.

It is imperative that the whole world participate in reducing greenhouse gas emissions. There is no city in the world that has even 1% of the world's population, so we must all contribute to the solution. Indeed, since Alaskans emit so much more greenhouse gas per capita than nearly anyone else, we have that much more responsibility—and that much more opportunity—to make a real difference.

This is the issue by which future generations will judge us. Will we falter? Will we give up before we even try? Or shall we again prove to be the home of the brave?

We've always risen to meet our challenges – and defeat them. This can be our finest hour. Let us rise up with courage and integrity. Let us dust off our common values, and march forward together with conviction into a sustainable world for our grandchildren.

Alaska Climate Action Network
AK CAN!
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² https://www.sourcewatch.org/index.php/Manhattan_Institute_for_Policy_Research

³ <https://mediabiasfactcheck.com/american-action-forum/>

⁴ https://www.sourcewatch.org/index.php/Texas_Public_Policy_Foundation

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