Eric Holthaus
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Web site analysis project
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**Analysis of the climate change policy websites of The Rocky Mountain Institute (www.rmi.org) and The Heritage Foundation (www.heritage.org)**

This project will evaluate the scientific accuracy of the claims made both in support of action on the topic of global climate change (www.rmi.org) and the skeptical view (www.heritage.org).

The Rocky Mountain Institute (RMI) is a "green" energy policy thinktank located in Snowmass, Colorado. They advocate market-oriented solutions of environmental problems, centered on the thesis of "natural capitalism" – a business model that acknowledges environmental resources as finite and believes that energy efficiency can be profitable. Their climate change website is located at: www.rmi.org/sitepages/pid16.php.

The Heritage Foundation (HF) is a conservative policy research group based in Washington, DC whose mission is to "formulate and promote conservative public policies based on the principles of free enterprise, limited government, individual freedom, traditional American values, and a strong national defense". Their energy and environment website is located at: www.heritage.org/Research/EnergyandEnvironment/.

I will first present the arguments and recommendations from each website, comment on them, and then attempt to compare the relative scientific accuracy of the sites – making my recommendation on which one is more sound.

To begin, the HF website is a collection of essays and reports written on the topic of energy and the environment. I will only attempt to analyze those relevant to the climate change debate. In their "Issue in Brief" section, HF provides a number of talking points and three bulleted policy recommendations on the subject. Three particularly poignant talking points are:

- "The Bush administration and Congress need to steadfastly resist alarmist calls to drastically reduce carbon dioxide—a clear, odorless gas and a fundamental nutrient of the planetary food chain. Curbing carbon dioxide would cause a major change in the electricity-generation fuel mix and would adversely affect the nation's energy supply and economic strength."
- "The only way to reduce carbon dioxide - which is not a pollutant - is to reduce overall energy use or dramatically reduce the amount of domestic coal used to generate electricity. The latter measure could force the premature closure of many coal-fired steam-generating plants in states such as Illinois, Ohio, Pennsylvania, and West Virginia - affecting employment, the economy, and energy supplies significantly."
- "Trying to reduce energy consumption by rules can have damaging unintended consequences. The government's corporate average fuel economy (CAFE) standards are designed to improve mileage but they raise safety risks and have perverse effects. For example, between 1975 and 1999 (following

implementation of CAFE standards), at least 46,000 people died in car crashes that would have survived if they had been traveling in bigger, heavier cars, according to government and insurance industry statistics."

There are a number of one-sided arguments presented here. First, little to nothing is said of the negative impacts that an increasing atmospheric concentration of carbon dioxide can have on the climate system, such as an increase in global mean temperatures or an increase in the intensity of droughts and intense precipitation events (IPCC, SPM I, pg. 4). These factors could cause increased stress on the biosphere. Instead, HF emphasizes only that carbon dioxide is "a fundamental nutrient of the planetary food chain". In fact, the word 'climate' does not even appear one time on this page.

Second, there are more than two ways to "reduce carbon dioxide", whether that means reduce emissions or reduce atmospheric concentrations. In addition to reducing overall energy use or reducing the amount of domestic coal used to generate electricity – the two reasons HF gives – there could be a greater investment into renewable energy sources, more focus on energy efficiency through hybrid, biomass, and fuel cell automobiles, and increased direct sequestration of carbon dioxide from factory smokestacks (IPCC, SPM III, pg. 5). In fact, there are many options available to accomplish the goal of transitioning to a less carbon-intensive economy.

Although the transition away from coal (and other forms of fossil fuels) could cost jobs in traditional mining and drilling industries, jobs could also be created in the fields of 'alternative' renewable technologies, such as wind, solar, and biomass. Some of these Midwestern states that are mentioned by HF as being vulnerable to job loss also have some of the greatest natural resources for windy, sunny, biomass-growing days.

According to a five-year average from the US Department of Transportation, (hazmat.dot.gov/riskmgmt/riskcompare.htm) an average of nearly 41,616 people die each year in automobile accidents. According to HF, on average 1,917 of these (46,000/24 years) would have been preventable if they were traveling in "bigger, heavier cars". While significant, this is less than a 5% increase. They do bring up a good point that there can be unintended consequences of increased fuel efficiency. However with safety technology always advancing, a balance of fuel economy and safety should continue to be considered when automakers design future vehicles.

Based on these and other, more economic arguments focusing on the projected costs of cutting fossil fuel usage assuming higher consumer energy prices, lost jobs, and lost economic world standing, HF makes the following policy recommendations:

- "The United States must increase domestic supplies of energy. Current law prohibits exploration in the eastern Gulf of Mexico and in the Outer Continental Shelf as well as restricts access to resources in the Rocky Mountains. Overly restrictive leases and difficulties in acquiring permits to drill wells on government land also limit production. Congress should open up access to these untapped domestic resources and lessen the nation's dependence on imports and vulnerability to disruptions in supply."
- "Federal policy should promote fuel diversity, so that the market—not government regulations and taxpayer subsidies—determine the nation's energy winners and losers. Coal, natural gas, nuclear power, oil, and renewable energy

sources should all be included in the mix of fuel resources. To encourage diversity and a vibrant market, Congress should stop giving taxpayer handouts to the special interests representing these fuel sources and let market signals determine the nation's energy winners and losers."

- "Congress should reject calls to drastically reduce air emissions. Such demands are nothing more than veiled schemes to implement a domestic version of the fatally flawed Kyoto Treaty, which would suppress needed energy production under the guise of seeking 'clean air.' "

Here, HF fails to acknowledge the finite supply of fossil fuels by calling for an increase in domestic drilling and mining. Simple economics states that as the supply goes down, prices go up. By using up remaining domestic reserves now, it decreases the likelihood of a 'smooth' transition to other alternative energy sources in which energy prices stay relatively low throughout the transition. By increasing efficiency and focusing on the development of alternative energy sources sooner rather than later, the remaining finite supply of oil can be "stretched" further. HF also recommends a market-based approach to determining national fuel resources.

HF recommends that Congress reject calls to "drastically reduce air emissions". In this statement they equate reducing emissions with suppressing energy production, which is not necessarily the case. As previously presented, there are many alternative energy sources which would maintain energy supply with demand, but produce much less emissions.

Finally, HF implies that the Kyoto Treaty was seeking "clean air". In truth, Kyoto was seeking to reduce greenhouse gas emissions which lead to an increase in global mean temperatures, and did little to address pollution or "clean air". HF previously stated that carbon dioxide was "not a pollutant".

In all fairness to HF, their website is focused primarily on energy policy and the economic repercussions of energy dependence. However, they have issued a few reports on climate change (both by Charli E. Coon), most notably one that was issued May 11, 2001 entitled "Why President Bush is right to abandon the Kyoto Treaty" and more recently a memo attacking the McCain-Lieberman Climate Stewardship Act. They seem to have an agenda in mind, which is of primary importance in their recommendations over sound scientific reasoning. In fact, according to sourcewatch.org, a project of the liberal Center for Media and Democracy, one of the Heritage Foundation's main sources of funding is the Koch Family Foundation, and Charles and David Koch are co-owners of Koch Industries, the nation's largest privately held energy company. This gives reservations as to the motive of the HF's repeated calls to increase domestic energy supplies, especially since upon further examination, I found that there was no specific disclosure of their funding sources in their latest annual report or financial statements. To me, this decreases the credibility of their arguments and policy recommendations.

The Rocky Mountain Institute on the other hand has disclosed a variety of environmental and "green business" foundations as their primary contributors in their 2004 Annual Report. With that in mind, I will begin to analyze their climate change website. From their "Climate" section:

> "There is now overwhelming evidence that human activities are changing the world's climate. Indeed, there is reason to fear that the environmental and societal impacts of climate change are coming faster and more furiously than previously thought. Meanwhile, political action to address the problem is severely delayed by concerns about the supposed costs."
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> "Rocky Mountain Institute's position is that, far from being costly, protecting the climate is actually *good* for the economy. Greenhouse-gas emissions are simply the byproduct of the uneconomically wasteful use of resources. The obvious solution, then, is increased efficiency. Being more efficient not only reduces emissions, it also saves money and increases economic competitiveness. In fact, it doesn't even matter whether global warming is happening or not, because the most effective climate-protection measures are things we should be doing for economic reasons anyhow."
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> "RMI's approach to climate therefore focuses on market-based, *profitable* measures to reduce greenhouse-gas emissions. Since most emissions are linked to energy use, our climate work is closely allied with our efforts to promote energy efficiency."

This statement is followed by a number of links to popular and academic climate change and climate change science websites such as Greenpeace, Climate Ark, the EPA and the IPCC, as well as links to further information on the research, consulting, and information services that RMI provides to business, communities, and individuals.

As you can see, RMI believes that not only is cutting greenhouse gas emissions a responsible course of action, it is also profitable through reduced energy costs. It claims greenhouse gas emissions as a "byproduct of the uneconomically wasteful use of resources". Actually, to be precise, greenhouse gas emissions are the byproduct of the simple *use* of fossil fuel resources, no matter how efficient. As long as fossil fuels are being combusted for energy production, there will be greenhouse gases emitted in the process. Being more efficient will only allow a decrease in emissions to a certain degree.

RMI makes another interesting claim here when they say it doesn't matter if global warming is happening or not (which they have already purported to have "overwhelming evidence" for), the solutions to the problem are actions we should be taking anyway for economic reasons. I am not an economist, but it makes sense that energy efficiency has the potential to reduce energy costs, depending on the initial infrastructure investment necessary.

I would now like to analyze RMI's claim that there is now "overwhelming evidence that human activities are changing the world's climate". In fact, the IPCC is less bold with their statement saying only that "most of the observed warming over the last 50 years is likely to have been due to the (anthropogenic) increase in greenhouse gas concentrations" (IPCC, SPM I, pg. 10). Some people may call that 'overwhelming', others may not.

Under the link given under the words "overwhelming evidence", RMI presents a wealth of negative impacts of climate change in a page entitled "Climate: The Bad News". Among the evidence presented are that data suggests that the 1990s were the

warmest decade of the millennium, Arctic sea ice is reducing in thickness and glaciers are receding worldwide, and the rate of warming is now accelerating – leading to dangerous implications in the salinity balance affecting ocean currents. All of these impacts are mentioned in the IPCC assessment, and are relatively accurate. At the top of the page, RMI again claims that there is "absolutely no scientific doubt that the atmosphere is warming, and almost no dispute among serious scientists that human activities—chiefly fossil-fuel burning, deforestation, and soil-depleting farming practices—are at least partly to blame." Again, this is a fairly bold statement, much more so than the IPCC is willing to put forth. However, by providing links to other sites on climate change science, they let their website visitor determine for themselves the degree to which the scientific community believes climate change is occurring.

On their pages calling for action, RMI divides their potential "customers" into three groups: corporations, communities, and citizens. Under their site for corporations they again stress the profitability of increased energy efficiency, and try to compel companies to act as if Kyoto has already been ratified by the United States. They list six bulleted reasons why companies should take early action on reducing their greenhouse gas emissions, and sum by saying that although "once considered the domain of do-gooders, climate protection is now becoming part of corporations' fiduciary responsibility."

Under their second section, RMI again lists nine bulleted suggestions for communities and municipalities to decrease their greenhouse gas emissions, summing that, "best of all, these efforts can also create jobs and climate-friendly new industries, keep more money in the local economy, and reap additional benefits such as cleaner air and water."

For the third section, they provide an overview of "Greenhouse Gases and Where They Come From" to connect the average consumer with the scale of the climate change problem. In fact, they conclude this page by saying that "the average American consumes as much energy as a sperm whale". To reduce this consumption will provide more resources for our grandchildren, they say.

In all, RMI takes a very active approach in convincing individuals and groups to reduce their personal greenhouse gas emissions, by appealing to the issue those people are most concerned with: profit for corporations, public image for communities and cities, and the future quality of life for individuals. The best part is that they support their arguments with sound science, if a bit alarmist at times.

Where HF and RMI agree is on a "no-regrets" market-based approach to reducing carbon emissions rather than regulatory mandates, such as those in the Kyoto Treaty. "No regrets" implies that increased efficiency and economic profit are the main goals of the strategy, with any emissions reductions as a by-product. In this sense, profit drives the emissions reductions, not the emissions reductions themselves. Where they disagree is the costs (or profits) associated with the implementation of that approach. HF claims that the cost of transitioning away from fossil fuel use is too expensive, RMI claims that the cost of continuing to use fossil fuels is too expensive. Where HF fails and RMI succeeds, I believe, is in acknowledging the ingenuity and ability for creative solutions to solve the problem of global warming while maintaining the quality of life that Americans are used to.

Sources:

The Heritage Foundation: Energy and Environment, http://www.heritage.org/Research/EnergyandEnvironment/index.cfm.

IPCC Summary for Policy Makers, Working Group I: The Scientific Basis, 2001.

IPCC Summary for Policy Makers, Working Group III: Mitigation, 2001.

The Rocky Mountain Institute: Climate Change Page, http://www.rmi.org/sitepages/pid16.php.

Sourcewatch, www.sourcewatch.org.