Comparing Climate Proposals: A Case Study in Cognitive Policy

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The climate crisis is among the greatest challenges we face. Getting the right policy is critical, requiring expertise in many areas – including public policy, science, economics, planning and development, and more. One area of expertise that has gone unnoticed so far is the application of cognitive science to the political process. Our hope is that this analysis will begin to fill that void.

Note About Scope of this Report

Our goal with this analysis is modest – to demonstrate the importance of human cognition in the policy-making process. We recognize that the proposals considered here do not take into account a number of additional concerns, such as the plurality of "sinks" in the carbon cycle and the need for global solutions beyond the national scale. Our reason for selecting the proposals we have is that they are illustrative of significantly different cognitive foundations that lead to distinct consequences.

Our hope is that this modest beginning is just that, a beginning. It might be helpful to think of this report as the start of a conversation about the ways people think differently about climate policy – and public policy in general. In the coming weeks this conversation will develop on our community blog site, Rockridge Nation. Expanded discussions will unfold as the dialog ensues to address deeper concerns brought to our attention during the review process.

Two Aspects of Public Policy

There are two aspects of policy: cognitive policy and material policy. Material policy consists of the nuts and bolts, what is done in the world to fulfill policy goals. Cognitive policy is about the values and ideas that both motivate the policy goals and that have to be uppermost in the minds of the public and the media in order for the policy to seem so much a matter of common sense that it will be readily accepted.

At the Rockridge Institute we have spent the last several months exploring the cognitive policy behind various proposals for dealing with climate change: the key frames, values, and modes of thought shaping the discourse around climate policy.

This article is intended to reveal the essential role of understanding in the political process. A general overview of the importance of human cognition in climate policy can be found on our website.[1] Here we present the cognitive policies behind two proposals for addressing the climate crisis – a proposal by Peter Barnes in his book *Climate Solutions: A Citizen's Guide* (PDF), what he calls Cap and Dividend,[2] and the Lieberman-Warner "Climate Security" bill. The Lieberman-Warner bill is currently under consideration in Congress. Cap and Dividend is a proposal we believe should be considered because it might gain greater public support and increase understandings of key ideas for addressing the challenges of global warming. Our goal is to demonstrate the importance of taking the mind into account in the policy-making process.

Where We Are Now: Two Current Proposals

For the first time in our nation's history there is a piece of global warming legislation under serious consideration in Congress. While this is a significant step forward, there is reason to be concerned that we might get it wrong. A bad policy will set us back for a decade. We don't have that kind of time. At Rockridge we think it is important not to "surrender in advance" and compromise our goals, but rather start with a cognitive foundation that encourages popular support that will last the long haul.[3]

Cap and Dividend

We will begin with Cap and Dividend, since it is both the less known of the two proposals and the one with an overt cognitive policy. The point of Cap and Dividend is to change the public's understanding of the air so that the new understanding will (1) reflect environmental reality, (2) make climate change not just real but popular, and (3) change the public understanding of wealth so that it both reflects reality and promotes democracy.

The center of the Cap and Dividend cognitive policy is a simple idea: *We all own the air! Equally*. In short, the air becomes visible, tangible, and valuable—more valuable when clean than when polluted. Polluters are understood as dumping poisons into our air—without even paying us, the owners, for dumping permits. We deserve to be paid by polluters for the privilege of dumping poisons into our air. This makes the air a source of wealth.

The material policy goes like this: Carbon pollution is capped where it enters the economy. Any company that wants to sell fossil fuels will have to buy dumping permits. Each year the number of permits made available will go down. After 40 years, by 2050, there will be at least an 80 percent reduction in Co2 emissions. Companies that reduce emissions below the level allowed by their permits can then trade them to other companies, creating a trading market for permits.

A new market will be created for permits, which become quite valuable. The money will go into a trust, and will be distributed every month via bank transfer to all Americans equally. Their shares will be non-transferable. The value of the permits is so great that each American will eventually get over $1,000 a year in dividends from the air they own. As the number of permits goes down, the value of permits will rise and each American will get more money each year. The value of the air will be directly reflected in their bank accounts. The proposal should be popular—akin to the oil dividend in Alaska.

An alternative has, say, 80% as dividends and 20% invested in alternative energy (not nuclear or coal), improved energy efficiency, and land use planning.[4]

Because of the descending cap, the price of carbon-based fuels will go up, and the price increases will be offset by dividends. The dividend policy is progressive: the wealthy use more fuel than the poor and middle class, but everyone gets the same dividend. That means that the less well off get a higher proportion of fuel costs covered as a dividend than the rich. In addition, those who use less carbon-based fuel, can spend more of their dividends on whatever they like. An additional benefit is that a huge amount of money will go to help the economy and create jobs all over the country.

Incidentally, the proposal is entirely capitalistic: it makes everyone a capitalist, equally. Finally, the idea that we all own the air can spread to, say, the airwaves, or the rivers. The idea is that a commons — common property — can be a source of wealth, cleaned up, and sustained.

Lieberman-Warner

The Lieberman-Warner bill has no overt cognitive policy. It is presented as a typical material policy. Though this bill is the only proposal enjoying any support in Congress at the moment, without a stronger cognitive policy behind it there is a lesser chance of it ever getting passed and having lasting popular support if it becomes law. Its central component is a cap-and-trade system that places a cap on the amount of CO_2 generated each year that decreases with time. It has permits to pollute which can be traded or sold. Polluting industries must have permits to pollute or to sell polluting fuels.

The number of permits is capped and reduced each year, which increases the value of the permits. Polluting thus gets more expensive over time and provides an incentive to stop.

Lieberman-Warner starts by giving a large proportion of the valuable permits away free to those companies who pollute the most. The biggest polluters can use the permits to go on polluting at slightly decreasing levels each year or they could make a fortune by selling the permits. That is, the money goes to the polluters—the bigger the polluters, the more they get. Only a small percentage would be auctioned at first, with money going to public projects. The auctioned percentage would gradually increase until it is 100% after 24 years.[5]

The idea is that polluters have an implicit right to go on doing business just as they were—with pollution as a by-product external to the business—and that they require, and deserve, a financial incentive to stop.

Comparing The Cognitive Policies

Lieberman-Warner has no explicit cognitive dimension. But it does have an implicit cognitive policy. That is, it is based on and supports a set of ideas without conscious discussion. Since most thought is unconscious, the cognitive policy behind Lieberman-Warner functions below our mental radar screens, but it nonetheless functions quite effectively there.

If one looks only at the material policies, the two proposals may seem similar. Both introduce a cap on carbon emissions that goes down each year. Both use an auction to distribute permits – all the permits for Cap and Dividend and a gradually increasing percentage of the permits for Lieberman-Warner. Both create permit trading markets. On the surface, they may seem more alike than different. This impression is false.

Profound differences do exist in the cognitive policies behind these mechanisms. The differences can be seen in the ideas each proposal promotes. The key concepts we'll focus on are air, wealth, markets, authority, people, and the policy itself. How each of these concepts is understood shapes the consequences of the policy.

How Is Air Conceptualized?

A major consideration for climate policy is how the air is conceptualized. Is it a substance, or a void—a nothingness? If it is a substance, then does it have a causal effect and does it have a value, and if so, what kind of effect and what kind of value. And if it has a value, then it is owned, and if so, who owns it?

Lieberman-Warner supports the traditional idea that air is a void—external to business— and that when it is dumping pollution in it, the business is not liable for any harm to people or to property or to "the earth," which has no legal status. The right to pollute becomes a new commodity for business as usual. Only it is a commodity that is made rarer each year.

Cap and Dividend promotes the idea that air is valuable in many ways, that is it owned by all, and that businesses are liable for harm—at least to property, namely our air, when they pollute. The air, once made property by law, is placed on a business footing. The air is no longer a void external to business, but property that business must respect—financially.

The huge difference is in how the public understands the air, pollution reduction, and the climate crisis. Under Lieberman-Warner, the air remains a void. Pollution reduction is costly to the public, since prices for carbon fuels go up. The more the public pays year by year, the less popular pollution reduction becomes. The climate crisis remains distant, as do the profits reaped by the largest polluting corporations. The more unhappy the public gets, the more pressure there will be to stop dealing with the climate crisis and to opt out of Lieberman-Warner.

Under Cap and Dividend, the opposite is the case. Year by year, as the air becomes cleaner and the climate crisis is addressed, their bank accounts get bigger not smaller. This makes the policy popular in the short run, and well as important in the long run.

How Is Wealth Understood?

The worth of air is a specific example of something more general – the concept of wealth. The two proposals express different understandings of what wealth is and where it comes from.

Lieberman-Warner expresses the idea of private wealth, where wealth is (1) money accumulated by corporations and their investors; (2) "created" through resource extraction and labor; and (3) owned by whomever controls it. People are thought of as actors who seek to maximize their profit. It follows that the financial implications of a policy are considered primarily with respect to industry – where assets are controlled. It is industry that is seen as creating wealth through the process of production. Wealth created by industry will "trickle down" to the people. There is no need to protect the common wealth – shared resources of general benefit to society – because there is no concept for common wealth in the proposal. The central consideration is protecting the profits of corporations—especially those who make those profits via polluting.

Cap and Dividend expresses ideas of both individual and common wealth. Wealth is seen as the well-being of individuals, society, and the earth. Wealth is already present in nature; it is not "created." Clean air, drinkable water, and fertile soils are inherently valuable because our well-being depends on them – independent of markets. A consequence of this meaning is that *resource preservation is wealth creation*. The logic works like this:

- Wealth is anything that increases well-being.
- Clean air increases well-being, so it is a form of wealth.
- Dirtying the air reduces well-being, so it is a loss of wealth.
- Keeping the air clean is *preserving* wealth.

How Are Markets Understood?

Lieberman-Warner takes the current situation as a reference point in the definition of a fair market: Pollution is external to the market. Simply dumping pollution into the air (a void) is the norm of fair market practice. Profits made on this basis are fair, moral, and deserved. If corporate profits are adversely affected by climate legislation, then those corporations deserve to be compensated financially for the financial harm done to them.

We see this is in the two stated purposes of Lieberman-Warner:

1. To avert the long-term catastrophic impacts of global climate change.
2. To accomplish that purpose while "preserving robust growth in the U.S. economy" and "avoiding the imposition of hardship on U.S. citizens."

The key idea advanced by Lieberman-Warner is that *industry will be harmed by capping carbon dioxide*, leading to the conclusion that we must compensate corporations for the damages they would incur from cooperation with climate legislation. Put another way, *addressing the climate crisis is harmful to the economy*. So we must 'protect' industry during the transition. This leads to giving away permits worth billions to the worst polluting companies.

This is a specific example of the more general theme promoted by conservative think tanks for decades that the environment and economy compete with each other. It is also an expression of the mythical "free market" – where any constraints placed on business are understood as unnatural, immoral, and harmful to the spread of prosperity.

Understanding markets in this way has an important conclusion that doesn't get talked about nearly enough, namely, that the only purpose of markets is to maximize profits. These profits are assumed to then "trickle down" to the poor or lift society up with an "invisible hand." This is why any effort to shape markets for other purposes are thought of as *constraints*.

This view of markets is false, disastrously false. Markets are constructed with the purpose of serving the public good. Regulation to guarantee the public good is part of the definition of a market. Industry-wide standards are also needed to protect the ability to compete. Public investments guide the direction of the economy. Every business depends upon public infrastructure – roads, courts, banks, regulated stock exchanges, etc.—infrastructure that makes markets possible.

Lieberman-Warner ignores the fundamental truths that markets exist to serve the public good, not just investor profits, that regulation is inherent in the definition of markets, and that in efficient fair markets, businesses are expected to bear all their costs and not to externalize them.

Cap and Dividend has a different set of stated purposes:

1. To establish a concrete understanding of the commons – in this case, the air.
2. To expand the meaning of wealth to include common wealth.
3. To transform the meaning of markets so they reflect key truths about reality.

These are all *cognitive* goals that make possible a pathway to addressing the climate crisis.

A key idea advanced by Cap and Dividend is that *keeping our air clean is good for the economy*. The costs of environmental harm already exist. They have just been excluded from the accounting. Polluting companies have been free-riders and are not paying the full cost of doing business. Now those costs are being borne by people the world over. Global warming is a market failure – because a vital cost has been left out!

This is an expression of a different meaning of markets. Markets are seen as tools for achieving various purposes, including protecting the commons. Relevant to this discussion is the idea that markets can be constructed to promote clean energy. To be successful, these markets need to be profitable and competitive, to be sure. But they must also take into account important features of the world, including the inherent worth of nature for our survival, and create incentives that promote a transition away from harmful energy sources like fossil fuels.

How Is Authority Understood?

Does the government set the course or must we wait for the market? Are benchmarks set by corporations or scientists or someone else? Do people have any control in the process or are we left on the sidelines? How should we understand the balances of power between governments, markets, and individual people?

The answers lie in the way we understand authority.

Lieberman-Warner distributes authority in this way:

- Government has authority to set the broad agenda by creating public policy. Its role is limited thereafter.
- Markets have authority to set the course of action. Corporate leaders determine what is the "best" technology – motivated by concerns about profitability.
- Corporations have authority to modify the policy through a "carbon market efficiency board" that determines if the economy is being harmed by the policy and "borrows" future permits to reduce harm in any given year.
- Individuals have no authority in the policy.

The central player in this scenario is corporations. Markets are granted maximal autonomy, while government and individual power is limited. Profit-driven corporations control implementation of the policy. People are treated as consumers and workers who serve these corporations.

Cap and Dividend distributes authority in a very different way:

- Government has authority to set the broad agenda and establish a public trust.
- People have authority over our air. Those who damage our air must compensate us.
- Markets serve people.

The central player in this scenario is the citizen. Each person is a citizen who holds the government accountable, contributes to the construction of markets for social benefit, and gets paid by corporations for damages to our common wealth – the air.

How Is the Policy Understood?

At the Rockridge Institute we have identified a guiding principle behind any robust public policy, what we call the Cognitive Criterion for Public Support:

An effective policy must be popular if it is to stand the test of time and it must be popular for the right reasons, namely because it promotes the right long-term values in the minds of citizens.

This criterion is cognitive in nature. That is, it is a criterion based on how the policy affects the minds — and hence, the brains — of the public.

How does Lieberman-Warner hold up to this standard? Not very well at all. It is bureaucratic and complex, making it very difficult to decipher. Its overarching themes focus on industry and fail to engage citizens directly. This promotes an understanding that the policy has to do with industry, not with me. Furthermore, as energy prices rise, it leads to the "hidden tax" scenario: *The price increase is a "hidden tax" on consumers.* People understand that higher prices come from charging companies more for carbon emissions, reinforcing the idea that climate legislation harms the economy. They infer that the cost is naturally passed on to them, with no blame to the corporations. The policy will be seen as faulty. Government will be blamed as prices go up and nothing compensates citizens for the price rise.

Cap and Dividend was created with certain cognitive goals in mind. It holds up much better. First off, it is easily understood. Companies have not been paying the full cost of doing business. Now they must pay a dumping cost for damage to our air. We, the citizens, are compensated for damages through recurring payments. This leads to the "dumping cost" scenario: *The price increase is a "dumping cost" for businesses who pollute.*

If people receive recurring payments from carbon dumping permits sold to polluters, they will see a correlation as their returns grow with rising energy prices. This allows them to understand that companies are paying to dump carbon into our air and each person receives compensation for this damage. The polluting companies are to blame. The policy helps by providing dividends.

Cap and Dividend also leads to the idea that *we all own the air* – a concrete understanding of the commons. Citizens have a clear and active role in the process via support for addressing the climate crisis. Each of us benefits directly from doing what is socially responsible by coming together to clean up our air.

What Are the Consequences?

A cursory glance at both proposals gives the false impression that they are similar. Both have many mechanisms in common. The profound differences arise through the power of ideas. The strategic consequences emerge through the cognitive dimension of the policy.

Lieberman-Warner advances a number of strategic goals:

- Reinforce the idea that companies deserve the profits they are now making by polluting our air and not paying the cost.
- Reinforce a "free market" ideology – a false view of markets that leads to disaster.
- Reinforce the false view that the environment and economy are opposed. The truth is that both provide for our well-being and are sources of wealth.
- Reinforce the view that government is bad and should be minimized. This ignores the central role of government in protecting and empowering both businesses and individuals.
- Give away billions to polluting companies.
- Allow industry to set its own course – motivated by profits. A catastrophe waiting to happen is the further entrenchment in coal power plants as industry "knows best" and selects investment pathways.

All of this, together with the "hidden tax" scenario guaranteed to emerge from conservative think tanks, leads to weak public support and eventual backlash.

Cap and Dividend advances very different strategic goals:

- Establish a concrete understanding of the commons – we all own the air.
- Create a new understanding of markets and wealth that reflects reality.
- Create a new understanding that what is good for the environment is good for the economy.
- Promote a view of positive government serving the moral mission to protect and empower its citizens.
- Make polluters pay the full cost of doing business.
- Extend capitalism to all, equally.

All of this, together with the "dumping cost" scenario that is easy to communicate to the public, should lead to strong public support. It also introduces a set of ideas that shift the political landscape of possibilities. The critical strategic advance is the understanding of the commons. This is an important idea. The citizens of the U.S. not only own the air, but also the airwaves, the internet, the ocean out to two hundred miles, the rivers and bays, the national forests, parks, and other public land, and so on. Private interests who have been piling up wealth at our expense — fouling our air, dominating our airwaves, getting bargains on our resources — should be paying all U.S. citizens their fair share. Our environment is ours, it is valuable, and it needs to be maintained. Capitalism extended equally to all can be an instrument for achieving that.

Dealing with the climate crisis requires a policy that can last decades and withstand attack by conservatives. We cannot afford to get it wrong, especially the cognitive policy. The viability of our civilization depends upon us getting this one right.

Footnotes

[1] The Rockridge Institute's *Cognitive Dimension of Climate Policy* report is forthcoming.

[2] For another comparison of these proposals see Peter Barnes' report Carbon Capping: A Citizen's Guide.

[3] The surrender-in-advance trap is discussed in the Rockridge Institute report The Logic of the Health Care Debate.

[4] Funds can be allocated to serve these purposes from other sources as well, such as by reallocating funds from the massive subsidies currently given to coal and oil companies.

[5] This discussion is based on the form of the Lieberman-Warner bill as of December 1, 2007. It may take a different form as it moves through the legislative process.