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## WHY DO SMART PEOPLE DISAGREE ABOUT FACTS? SOME PERSPECTIVES ON CLIMATE DENIALISM.

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### **(ILAR)**

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The Laboratory is part of School of International Relations and Pacific Studies at University of California, San Diego. ILAR gratefully acknowledges anchor funding from the nonpartisan Electric Power Research Institute, BP, plc, the Norwegian Research Foundation and from UC San Diego's School of International Relations and Pacific Studies.

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# **Why Do Smart People Disagree About Facts?**

## Some Perspectives on Climate Denialism

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Scripps Institution of Oceanography

Thank you for the invitation to participate in the Scripps Institution of Oceanography (SIO) seminar series in “climate denialism.” Climate change has been perhaps the most visible research topic at SIO and is the area where SIO has made some of its most conspicuous contributions to human and ecological welfare. It is understandable that denialism is both bizarre and threatening, and I am glad that we are having a seminar to explore the concept.

I am a political scientist who studies international law and regulation. When the organizers first invited me they asked for a talk about international cooperation and how it was affected by denialism. I would be happy to talk about that, and there is some anecdotal evidence that denialists, as believers tend to call them, have made diplomacy more complicated. The continued failure of international diplomacy to achieve many tangible outcomes has perhaps also catalyzed the denialists a bit. But these are, in my view, second order effects. The real problem with international diplomacy on climate change is that this is a very hard problem for sovereign governments to manage. The costs of action are up front and affect well organized interest groups; the benefits are uncertain and spread mainly far into the future. And there is no reliable, rigorous system of international law. Add all that up and you have a recipe for failure. My research has been to identify some ways forward, but denialism frankly doesn't play a major role in this story. It's all about the structure of the economics and politics of climate change, with a large dose of bad policy making because diplomats have spent the last twenty years trying to address this hard problem with solutions that are badly designed for the task.

In my view, the real question about denialism is found in the title of my talk. Unless we assume that all denialists are complete morons, how can smart people disagree about facts?

I'd like to make two broad arguments today. First, I'd like to suggest that calling people who disagree “denialists” is clouding our judgment. If you really want to understand what motivates these people and what motivates the captains of industry and voters who listen to them, stop calling them denialists. I'll suggest

today that denialists come in three varieties—each with its own logic. Second, I'd like to suggest that the strategies that mainstream climate scientists and policy advocates are using against denialists are naïve. Much of the anti--denialist effort involves "speaking truth" and about focusing on the areas of "consensus." Some of it involves efforts to infiltrate the denialist organizations to expose their funding sources and networks of advisors. In some settings these approaches might work, but they are based on a logic that truth and cash are the scarce resources. I'll suggest a different way to engage with folks who seem not to believe in consensus.

I consider myself part of the mainstream scientific community on climate change, and I do all the things that the mainstream does. I teach about climate science and policy; I participate actively in the IPCC; I publish in all the normal journals. We in this community often behave as if we are under siege. And when we talk about complex phenomena where we are a bit uncomfortable, we show the audience with slides and data. Today I hope to do the exact opposite—there are no slides and figures. Just ideas. Just an effort to take a step back and reflect on how what we call denialism actually works.

### THREE TYPES OF DENIAL

I don't know if it is possible to do a systematic, scientific assessment of the people that seem to be called "denialists." But from having been engaged in the climate science community for nearly thirty years, I see three species in this ecosystem.

#### Shilling

First and most simply are people I will call "Climate Shills." These are people who pose as dispassionate analysts but are actually on the payroll of big carbon. There is no question that big carbon money flows to some dissenting scientists—a point that Naomi Oreskes and Erik Conway have made elegantly and decisively in their *Merchants of Doubt*. They make the point, as well, that many of the folks who were shilling on climate were professionals—they shilled on other topics, as well, where the science had big policy and commercial implications.

Early in the international debate on climate change—from the late 1980s through the 1990s—this species of denialist was omnipresent as were the funding mechanisms that kept them afloat. The Global Climate Coalition (GCC), in particular, aggregated funds mainly from big carbon and channeled them to sympathetic voices. As a practical matter, the GCC sent money to lots of people—not just denialists but also people who studied the costs of regulation—but the denialists got all the press.

For the mainstream climate science community, shills are the easiest denialists to understand. They disagree about facts because dissent generates a

paycheck. Indeed, I suspect that most mainstream scientists who are worried about denialism assume that if we just traced the money or other perquisites like nights in lavish New York hotels that we'd see the grubby evidence of corporate self-interest at work.

In reality, my impression is that this kind of denialism is becoming a lot more rare. The GCC was long ago disbanded in the face of withering public pressure on its main funders. A few other funding mechanisms have risen in its place—the Heartland Institute is perhaps an example—but the channel from organized big carbon to science is a lot weaker today. One reason, I suspect, is that it has become a lot easier to track money in politics and science. Official money in politics in the US—and now in other countries as well—must be disclosed on a quarterly basis. Unofficial money such as “donor-directed” foundations is quite a bit shadier, but there are strong incentives for investigative reporters and environmentalists to penetrate these organizations and root out their financial sources and strategies. (A leading environmentalist was actually suspended, for a while, from director of the organization he founded because he was caught red handed while penetrating one of these denialist organizations.) Within science, itself, disclosure and review is commonplace as well.

I suspect that fear of disclosure may help explain why, after the dramatic hacking at the Heartland Institute, funding documents revealed that none of big carbon figured prominently. General Motors gave them \$15,000—not much more than the donation from the company that owns Smirnoff Vodka. The big donors were tobacco and drug companies because Heartland works on more than just climate change. There's been a lot of speculation about the role of the Koch brothers in funding denialist science, including at Heartland, but the numbers seem to be small and there are no bright lines that connect narrow commercial interests in avoiding climate policy to the funding of denialists the way we saw them much more frequently in the early 1990s. The new paper by Robert Brulle just published in *Climatic Change*—which looks at the roles of foundations in funding “climate change counter-movement (CCCM)” organizations—shows that money traceable to the original donor, including money from the Koch foundation, is waning in relative importance. He makes that assessment by looking at node strength in funding networks over albeit a short time period of 2003–2010. On the rise are anonymous sources such as money from Donors Trust and Donors Capital. I am worried about anonymous money in politics and think we need to force more disclosure of such sources, but I'm also mindful of some important tradeoffs in liberty and legality from such disclosures.

In the 1990s I remember regularly seeing scientists at respectable meetings—including one that Roger Revelle ran here at Scripps that I attended as a graduate student—whose funding flowed directly from big carbon and was earmarked for what climate believers would call denialism. Today, that kind of conspicuous link is a lot more rare. Maybe it still exists but is less readily observed; my sense is that it has all but disappeared.

The idea that denialists are mostly shills hasn't died, however, in the eyes of the believer community. That's because self--interested arguments are the easiest ones to understand—they offer a simple explanation for why people who otherwise aren't morons would adopt a perspective on climate science that seems deeply at odds with the facts. When a denialist speaks in public the easiest assumption to make is that he or she got a check from Peabody coal. Maybe that is happening, but despite tremendous incentives to ferret out the money there isn't much evidence of that.

Before moving on to talk about other kinds of denialism—the kinds that, I think, are much more prevalent—I think two other points about the economics of self--interested dissent are worth mentioning.

One is that the role of money is probably over---stated because the kinds of dissent that matter for politics—namely, the ability to create some plausible reason why voters or other decision makers might not trust “science”—is very cheap. You don't need to run a GCM or fly a satellite to offer some plausible logic for why the science might be wrong. The ease of creating doubt helps to explain the long cat and mouse game between shill---like dissenters and the mainstream community that mobilizes to show why the logic *du jour* is wrong. If all you need to do is show a plausible logic for why science might be off—especially if your audience is the public, not actual specialists who are peer reviewers of journals and tenure files or gatekeepers at scientific societies—then the business of becoming a dissenter is pretty cheap. I suspect that the cost of creating doubt is lower when the public doesn't have much trust in science or in other institutions for that matter. A Huffington Post survey late last year found that only 36% of the public had “a lot” of trust in information from scientists. That's still three times the rate of trust in science journalists who are the main public conduit for scientific information. In Europe things are not much better. A 2010 Eurobarometer study that gained a lot of attention for finding that the public was more interested in scientific developments than sports (a finding I doubt is robust) also found that 58% of respondents think scientists can't be trusted to tell the truth on controversial subjects because they depend on industry for money. Over half of Europeans think that scientists' knowledge gives them dangerous power. Most scientists are probably shocked by their low approval ratings, but it is evidence that people just assume that opinion flows from money.

That assumption along with the very low cost of generating doubt is worrisome. Indeed, the entire budget of the Heartland Institute is \$7.7m/yr for all of its programs, and the portion devoted to climate is probably less than \$2m.

The other is that real scientists are, frankly, bad bets for anyone who has a narrow commercial interest in the outcome. Even with a ton of money on the table, you never know what good scientists will actually discover. Richard Muller, with funding in part from organizations that back climate change skeptics—notably the

Charles Koch charitable foundation—took a fresh look at the temperature record and announced in a *New York Times* op-ed published in the middle of 2012 that he was a “converted skeptic.”

It is important to remember that directed money is omnipresent in politics and science. We are, in this seminar series, focusing on people who disagree with the mainstream of science, and I suspect that those people earn the ire of most of the audience in the room. We are shocked—shocked—to find that there is interested money in science. Inspired by this seemingly noble purpose it is easy to forget that there is self-interested money in renewable power that has backed truly wild claims about the performance and potential for innovation in that field. And there’s now money—probably a lot more money—that comes mainly from foundations and is aimed at countering the denialists. Like it or not, directed money is a feature of modern politics and has also now suffused through the interface between political self-interest and many aspects of academia. When you adopt that perspective, it is pretty striking how little self-interested money seems to flow into scientific research that is organized against the climate consensus—with the caveat that nobody really knows how to measure the money flows for and against the consensus. All we know is anecdote, and the anecdotes actually favor the mainstream and favor interest groups that want decarbonization.

Let us now turn to look at other types of denialism.

### Skepticism

A second type is what I’ll call Climate “Skepticism.” This is the species that is most difficult for mainstream scientists to talk about. For two reasons. One is that, frankly, the business of science is about skepticism. Nobody has ever won a Nobel Prize by agreeing. A fair number of middling scientists have probably done just fine by agreeing, but excellence in science comes from being disagreeable and from looking at agreed propositions with fresh eyes. Here, among many areas, is where we can learn a lot from sociologists. In the 1940s Robert Merton, probably the most influential sociologist of science, suggested the core norms of science included disinterestedness, originality and skepticism. Since then, sociologists tweaked and debated the list, but there is little doubt that the core idea behind serious science is the ability to look at problems and assumptions with fresh eyes.

We are, in short, a disagreeable bunch of people—often so disagreeable that we are unable even to agree on more mundane topics like rules for parking and the best person to chair a department. That is our business, and I think that in many other realms of modern life—including corporations where, for better or worse, teamwork and group identity play a bigger role than individual skepticism—it is hard for people to understand just how science works. (As a test of this theory, at your next conference look around the room and see how many people are wearing lapel pins that celebrate their university. Almost none. Then wander into a conference room next door and observe a corporate event—lapel pins are



omnipresent, as are flag pins on the floor of the U.S. Congress. Conspicuous agreement is the norm in most professions; exactly the opposite is what we are about.)

As scientists we know that, and that makes it hard for us to talk about skeptics. For the public that is unaware of the scientific process or the fact that complex scientific issues are composed of many different sub---issues, all that matters is whether the science is “in” or “out.” Is there a “consensus” among scientists or not? But in the scientific world, there are no bright lines and the whole idea of “consensus” is deeply troubling. There is a consensus that  $2+2=4$ . After that, we are in shades of grey.

Just about now all of you are shaking your heads and noting that climate science is totally different. We all agree, you say, on some basic facts—that CO2 concentrations are approaching a mean of 400ppm, a value far above the 280 or 290ppm of the pre---industrial value. We agree that the climate will warm in equilibrium when net radiative forcing is added to the atmosphere, that humans are all but certainly responsible for at least half of the observed warming since the pre---industrial era, etc. etc. That zone of agreement is impressive, but we must face the reality that those aren’t the questions that really matter for policy. Sure, if we couldn’t answer those questions decisively the case for policy action would be weaker. But even if you agree with those answers it isn’t obvious what policy makers should do. If climate sensitivity is low then maybe policy can wait? If new technologies might appear in a few decades at low cost—much as the wireless revolution appeared in telecoms over a period of a couple decades and changed everything in that industry—then we can wait to cut emissions. If some countries cut emissions do we think that others will follow or free ride? These are the questions that matter for policy, and on these we have few crisp answers.

The instinctual unease with consensus helps to explain why some of the world’s greatest scientists have been climate skeptics and why the public has such a hard time understanding why these people are so disagreeable. They are disagreeable because the selection mechanisms in science demand it. If you want to find people who agree then hire an accountant. Nobody has caused bigger trouble than Freeman Dyson whose skeptical views on climate first came into focus through a 2009 *New York Times Magazine* profile. How do you dismiss perhaps the most accomplished physicist of his generation as an uninformed imposter? You can’t.

## Hobbyists

A third type of denialist is, in my view, the most interesting because their role in the policy debate is so poorly understood or appreciated. I will call them hobbyists. These are people who disagree because it gives them something to do. Perhaps it is a constant of conscious life that people want to be relevant. In the modern, highly connected world one way to be relevant is to take on the

establishment and use the internet as a megaphone. It is interesting, in my view, that many fields of science rely on amateur hobbyists to help advance the science—that's true in astronomy, ornithology and many others. In climate science, our relationship to hobbyists is some blend of indifference and hostility.

There are hobbyists in every walk of life. I, like many people who study international relations, am besieged by weekly emails from a young gentleman who deeply believes that the planet is headed to convergence around a "one world" philosophy that is modeled on the integration of the European Union. He also happens to be in prison, as far as I can tell, which gives him some spare time to pursue his mission. In an earlier era this young man might have to copy his missives by hand and add a stamp to every envelope—costs that would limit his reach. Today, he surfs the web and spams inboxes at zero cost in the prison library.

I suspect that most so-called "denialists" are hobbyists. They aren't shilling for some cause and they aren't bona fide scientists who can map out their zones of skepticism. Rather, they are looking for a way to be relevant. [story about the college student who wrote WSJ article on his re-analysis of climate historical records.] Lots of people with technical backgrounds are drawn into climate change hobbies—perhaps because the arrogance of engineering and physics training makes you think that with just enough brainpower you can rethink fundamental problems. John Sununu famously ran reduced form climate models while he was Chief of Staff in the George Bush ("41") White House. Quite often I field queries from senior people in business who have spent extraordinary numbers of hours on websites learning about climate science and the chinks in the climate community's armor. These people might better focus on running their organizations, but the draw to get one's hands dirty with data is intense. And once dirtied it is hard not to have an opinion.

Unlike skills, hobbyists are not motivated by narrow commercial interests. And unlike skeptics they aren't professional scientists.

The hobbyist perspective on denialism helps to explain two phenomena in the ecosystem of denialism today.

First, it is striking that the denial community is concentrated in English speaking countries—the United States, Australia and U.K. in that order. Some of that may be that English happens to correlate with the presence of libertarian political systems. Much of it, however, is probably a reflection that most hobbyists aren't experts, and if you are a non-expert it is very difficult to engage as a second tongue with science whose language is English. Maybe that rule doesn't strictly hold in countries where English is pervasive as a second language—The Netherlands, Denmark and Norway, for example, although all three countries are very green and politically don't open much space for denialism. When I look at the CVs of my colleagues in non-English speaking countries I am struck by how many articles they publish in their mother tongue—in German or French or Japanese for example.

That tells me that it is hard even for scientific experts to work in English. It must be even harder for hobbyists to do that. And if we think of hobby denialists as a loosely organized network then working in a common language must help as well. There are tremendous advantages in coordinating around a comfortable tongue.

The interesting test of the English hypothesis will be India. Once that country gets engaged with climate policy issues, will a denial community rise? There are lots of hobbyists on all manner of topics—development, cricket, the merits and demerits of the likely next Prime Minister, Narendra Modi—and it seems logical to me that Indians will quickly offer a new hub in the global hobby denialist community.

The hobbyist perspective also explains persistence and resistance to evidence. If your mission is to stir things up then evidence marshaled by experts doesn't much matter. And if the evidence becomes too problematic then you move on to a new hobby while a new crop of denialists with a new quiver of wacky ideas takes over. Donald Trump is a hobby skeptic. A few days ago in the midst of a deep freeze in the Northeast he tweeted "this very expensive GLOBAL WARMING bullshit has got to stop."

One of the things that is quite different about that debate today compared with even two decades ago is that it is much easier for hobbyists to engage in instant public debate. I am persuaded, as Clive Thompson argues in his terrific book *Smarter than you Think*, that the capacity for public debate "in print" has made people smarter—it has forced the whole connected population rather than just professional writers to think more carefully about logic and argument. The result is that people write more today than in the past and the logic is much tighter. But that line of argument really only applies to non-expert topics—where everyone can participate because a lot of expert information isn't needed before one can formulate a reasonable opinion. For expert topics this mode of open publishing—blogs, tweets and such—has probably expanded the volume of chaff. For folks who have time on their hands and the hobbyist inclination to sift through that chaff it is possible to look like a climate expert pretty quickly.

It is tempting for professionals to dismiss the hobbyists as just that—uninformed amateurs—but I suspect that we in the professional community can't do that so easily. It is irritating to have people spewing nonsense about a field where you know the facts. But we have all assumed that these views seem to have an impact on public opinion because the public, it seems, doesn't believe in warming science. And we in the scientific community are right to care about public opinion because in democratic countries policy can't be sustained if the public isn't supportive. All of the big emitters except for China and Russia are democracies and thus if denialism has toxic effects on broader public opinion, that should be a worry.

My view is that the supposed impact of skeptics on public attitudes is largely incorrect. There is no question that some fraction of the public doesn't believe that

climate change is happening. In some polls, the evidence points to belief that climate is changing but humans are not to blame. And in at least one poll there is strong evidence that people believe climate is changing, humans are to blame, but we shouldn't do much to respond. For scientists who have worked a lifetime on this topic, these polling data drive us nuts.

What's going on behind the polls, however, isn't denialism. It is something totally different. Lack of belief in climate change correlates highly with political party and with faith in government. People who lean left and look to government to solve problems believe in climate change because they can see a solution—policy—that is within the realm of their experience and tolerance. People who lean right—especially those who are libertarian—hear about climate change and start thinking, to their horror, about government.

Various scholars have tried to identify the impact of denialist chatter and events like the climategate email scandal, and some seem to find some links. But in my view what is going on has nothing to do with denialism. Instead, what we are seeing is what psychologists call “motivated reasoning” —people hear about something they abhor and they find reasons to justify their dissent. Believing that the science is “uncertain” is one of those reasons.

I know it is convenient to ascribe denialism to powerful commercial forces—evil Oz's who are pulling levers behind the curtain—but if you realize that much of denialism is a hobby then it becomes much clearer that denialism is here to stay. In fact, as the importance of the topic rises so will denialism.

While these hobbyists might be annoying to mainstream believers, here is an area where it is really important to “stand in someone else's shoes” if only to understand that what looks like denialism to you looks quite differently to people from other perspectives—especially people who are distrustful of government. Indeed, when they look at the wide array of policies that climate believers advocate they see their own version of horror played out before their eyes. They see people organized around subsidy schemes for corn ethanol—one of the most truly idiotic energy policies that the country has adopted, and a policy that lasted for [years] until sheer cost and political gridlock in Washington finally killed it. They see us in San Diego subsidizing solar powered electric vehicle recharging stations—a policy choice that reveals, in my view, a dereliction of fiscal duty since the cost of these stations against their likely amortized use is wildly out of balance with the benefits. In the realm of energy policy the stimulus program is either seen as a tremendous boon for those who welcomed the infusion of cash into DOE for great programs like the funding of ARPA-E, which I think is one of the most important R&D initiatives by government in years. But to those who are skeptical of government, the stimulus smells of waste, fraud and abuse—with money shunted to Solyndra, electric vehicle charging stations, and other obviously reckless pursuits.

If you are a libertarian looking at climate change you see nothing but endless opportunities for mischief financed by the state. Climate change policy makers may never get the far right on board for any kind of policy, but getting some form of better policy in place requires a broader coalition than just those who tend to trust government. The question of why American politics has become polarized is a topic for another day—a large part of the problem is rooted in income inequality and perhaps other factors like districting and campaign finance—but you can see the effects on topics that are unmovable without a broad centrist consensus. That list of topics is long and includes not just climate change but also tax reform, immigration and trade policy.

## WHAT NEXT?

Let me close by saying that if you came to this series expecting a rant against denialists I am sorry to disappoint you. Ranting can be useful, especially among frustrated believers, but it is not so useful in thinking about strategy. That requires, first, explanation and dissection—a scalpel, rather than a chain saw.

I think there are four implications of the argument I am outlining here today.

First, we in the scientific community need to acknowledge that the science is softer than we like to portray. The science is not “in” on climate change because we are dealing with a complex system whose full properties are, with current methods, unknowable. The science is “in” on the first steps in the analysis—historical emissions, concentrations, and brute force radiative balance—but not for the steps that actually matter for policy. Those include impacts, ease of adaptation, mitigation of emissions and such—are surrounded by error and uncertainty. I can understand why a politician says the science is settled—as Barack Obama did last night in the State of the Union Address, where he said the “debate is over”—because if your mission is to create a political momentum then it helps to brand the other side as a “Flat Earth Society” (as he did last June). But in the scientific community we can’t pretend that things are more certain than they are.

Second, under pressure from denialists we in the scientific community have spent too much time talking about consensus. That approach leads us down a path that, at the end, is fundamentally unscientific and might even make us more vulnerable to attack, including attack from our own. The most interesting advances in climate science concern areas where there is no consensus but the consequences for humanity are grave, such as the possibility of extreme catastrophic impacts. We should talk less about consensus and more about the consequences of being wrong—about the lower probability (or low consensus) but high consequence outcomes. Across a large number of climate impacts the tails on the distributions seem to be getting longer, and for policy makers that should be a call for more action, not less. But people don’t really understand that, and we in the scientific

community haven't helped much because we are focused on the consensus---prone medians rather than the tails.

This point is particularly important for consensus---oriented activities like the IPCC. I appreciate the goal of the IPCC, and as evidence of that support I have devoted a massive amount of time to volunteer IPCC activities over the years—including as convening lead author in the current IPCC assessment. I don't know if the cost---benefit ratio merits this kind of investment, but the IPCC is an important public good. Unfortunately, the structure of the IPCC—with line by line government review of final summaries and with an aggressive requirement to align findings around commonly agreed probability language—has drifted into a zone where high consensus findings get emphasized. It is easy to defend a high consensus finding under attack during line---by---line review. It is much harder to defend a hunch or some finding about a tail effect. We need to fix this problem so that we can talk in more useful ways about the tails. I find it dismaying that the most widely reported outcome of the current round of IPCC reports is that it is “extremely likely” that humans are to blame for more than half of the observed warming since 1951. The previous report said it was “very likely.” The report before that one just assigned “likely”. There's been a lot of ink spilled on the choice of one word.

Third, I think we need to embrace the reality that denialists are driven by different motivating forces, and they won't go away just because we speak more loudly, more often, or with bigger decks of slides. When you look at all three stripes of denialists—especially the second and third varieties—you see forces that won't disappear. We need to be comfortable dealing with a substantial number of dissenters and with the reality that their population won't be swayed by the normal modes of debate we use in science. Debate today is marked by a much higher level of high frequency noise; my general impression is that the younger generations are more adept than we older folks as sifting through large volumes of information.

Fourth, I think we need to take seriously the argument that the political effects of denialism happen not through the lack of trust in science but through motivated reasoning. The voting public holds views on climate science that strike us expert scientists as totally irrational because they are actually afraid of the consequences of belief. Voters are smarter than you think, and they know that the logical extension of a set of beliefs about the veracity of global warming science is a set of regulatory actions they find abhorrent. That's a hard problem to fix because it means that dealing with denialism isn't really about denialism at all—it is about convincing people that we can manage the climate problem in a way that respects boundaries on government, honors liberties and keeps costs in check.

And on that point I return to the original invitation to speak in this series. We can offer a vision for managing the climate problem if we recognize that the vision needs to be embedded in effective but flexible international legal agreements—no country will do much on climate warming if it doesn't see other emitters who are also economic competitors doing the same. Exhibit A in that logic,

today, is the EU—the region that has done the most on climate but which is now rethinking its energy policies as it sees the huge cost affecting EU competitiveness vis a vis the United States. (Cheap energy is one of America’s big assets—thanks, notably, to shale gas supplies but also better markets. Natural gas is less than half the cost in America when compared with Europe.) And within that international framework countries need to adopt flexible policies that don’t break the bank.

It is easy to make these arguments but much harder to deliver. That’s because there are strong political forces that push regulatory policy away from smart market--oriented strategies into the realm of much less effective strategies that make people suspicious of government. Markets, by definition, are transparent. You know what things cost and what is being paid. That’s a huge political liability if the public isn’t fully committed to the mission, and that’s one reason why policy activists usually favor regulation—it is much easier to hide the cost of regulatory mandates.

We need to learn to live with the denialists, even if they drive you nuts. They aren’t going away.