Chapter 10

Realistic Approaches

In the previous chapter, we were both realistic and cynical about most current activism. We understand that this is unlikely to win us many friends among climate activists. We apologize. We think most activists are well-meaning. Their goals are noble. Their idealism is commendable. We share many of their goals, and we wish that many more of their proposals had better chances of success. Unfortunately, they do not.

In our view, the problem is that most individual and small group activism seems more like a wellness "feel-good-about-yourself" approach to climate change to us than like an effective approach to reducing the CO_2 concentration in the atmosphere. Traditional activism has not made much of a dent. Worse, there is no reason to believe it will be more successful in the future. Right now, most climate activism seems to us like rowing the boat in circles as it slowly drifts toward Niagara Falls.

We may not like it, but we have to live in the world as it is. And in this world, most of the public has little stomach for issues that play out on spans of decades. When climate issues have the public's attention, we think activists should exploit this attention as effectively as possible. This means doing so in ways that build broad and permanent coalitions that can hold up for decades. Otherwise, even victories on the latest divisive domestic issues of the day are only temporary, often only until the next administration and congress come in.

1 Basic Requirements for Success

To make progress on reducing global greenhouse gases in the atmosphere, we posit two axioms that realistic solutions must satisfy:

- 1. The approach must not just work in the West, but throughout the world.
- 2. The approach must be in both the short-term and long-term self-interest of a good majority of decision-makers and voters in relevant countries.

Because there is a free-rider problem — making individual countries less eager to stem climate change than it would be in the collective interest each country will only want to enact solutions that are both cheap and have great local benefits. It is a corollary that solutions that fight against economic fundamentals are too expensive to be adopted on a broad basis.

This leaves two promising means to slow climate change. They are the subject of the remainder of this chapter and much of the book:

- 1. Economics and Technology: Fossil fuels are expensive to mine, to ship, and to process. They are also becoming more scarce. This is their Achilles Heel. Meanwhile, clean technology is becoming better and cheaper every year. This progress can be accelerated and coordinated. If clean energy becomes cheap enough, it will be adopted worldwide, independent of ideology. No one had to force people to buy smart phones when they became available.
- 2. Local pollution taxes: Fossil fuels emit not only global pollution, but also harmful local pollution. Unlike CO₂, the resulting smog is locally visible enough to stay on the minds of voters. It also reminds them of numerous serious health problems tied to local pollution. As Chinese, Indians, and Africans become wealthier, they are demanding cleaner air *and* they are becoming willing to pay for fossil-fuel reductions. This desire needs to be organized and channeled.

Both forces operate even in the absence of environmentalism, and we would argue that they are responsible for much of the real progress that the world has made to date. Even the IPCC has now backed away from its earlier most pessimistic forecasts (RCP 8). This is largely due to technological progress that is just starting to revolutionize the energy sector. The fact that progress is already happening does not mean that governments and citizens should now sit back, relax, and enjoy the ride. Yes, fossil fuels will eventually fade away even without activism, but the process will be far slower than it should be. Some specific implementations will relatively easily win public approval in the United States *and beyond* (like support for clean air and clean-tech R&D or for a better electric grid with charging stations for electric transportation); others will be more difficult and controversial (like the reduction of fossil-fuel subsidies, the closing of coal plants, and the curbing of population growth).

By focusing laser-sharp on clean technology progress and locally-justified CO_2 taxes, green activism can win over a majority of voters and politicians. We warn against bringing in divisive arguments regardless of whether they are correct. For example, even if the United Nations can back up global warming activism with scientifically valid analysis, their inclusion in a debate will only raise emotions and distract from achieving what is nationally achievable.

Adaptation

An important word of caution: Our book does not discuss climate-change **adaptation**. This is not because we consider adaptation to be unimportant. On the contrary — it is of great importance. The world is almost certain to warm by $2-3^{\circ}$ C in any event and adaptation will greatly reduce the associated damages.

Yet adaptation is usually in the self-interest of local decision-makers. As such, the world does not face the same public goods problem as it does with respect of mitigation of fossil-fuel emissions. We do not discuss the issue further, because it goes beyond the declared purpose of our book — moving the needle on global climate change. For more information on adaptation, <u>Robert Pindyck</u> from MIT has recently written a <u>book</u> that focuses more on this important subject.

2 Enact Local Fossil-Fuel Taxes!

In Chapter 7, we dismissed the idea of a *global* CO_2 tax. We also explained why countries will only do what is in their own self-interest. Fortunately, there are good reasons why a *local* CO_2 tax can be in their interest.

The U.S. Economists' Statement

Economists are not (always) as bad as their reputation would have it. We have already mentioned a public <u>statement</u> that over 3,000 prominent economists have signed. It advocates the imposition of a robust CO_2 tax in the United States. The statement reads, "By correcting a well-known market failure,¹ a carbon [dioxide] tax will send a powerful price signal that harnesses the invisible hand of the marketplace to steer economic actors towards a low-carbon [dioxide] future." Does our earlier stance in this chapter not place us at odds with the statement (that we also signed)? Actually, no.

One answer is that we would also sign a petition for peace on earth. We just don't think it will happen or that humanity should count on it. We still believe that there will be no global CO_2 tax that is against the self-interest of countries. This is especially the case for China, India, and many developing countries, representing the more than 6 billion people that already emit the majority of the world's emissions and are on course to emit much more in the future.

Yet the economists' statement is explicitly about a U.S. CO_2 tax and not about a global CO_2 tax. Thus, we need to explain why we signed and why we do not believe that it would harm the US.

¹We explained what a market failure is and how a tax remedies it in Chapter 5, where we tried to turn our readers into economists.

2. ENACT LOCAL FOSSIL-FUEL TAXES!

Competitiveness and Evasion

The Economists' Statement acknowledges that industries can escape to more favorable locales where they are taxed and regulated less. The statement explicitly cautions that tax policy must take this into consideration. We are perhaps a little more concerned about this than our colleagues. But economists agree: the specifics must take into account that CO_2 regulations could place the United States at a competitive disadvantage.

Industry migration is not an overblown ivory-tower concern. Greenhouse gases know no national borders. They are truly global. When they are emitted in China, it is just as bad for Americans as when they are emitted in the United States. Because firms and industries are self-interested, policy-makers better have a healthy fear of unintended consequences.

Firms and industries do not have to move themselves. It is enough if similar businesses spring up in other countries and domestic businesses close up shop. This flexibility of industries to evade regulation is less of a short-term than a long-term problem. It takes a while to leave, which is why declaring local victory early is often misleading. Industrial plants often last for decades. When new regulations are enacted that raise the price of power, they may be unavoidable for already existing plants that can no longer move. But the next round of plants will be built where the plants will be more competitive. And this may well be by different companies in different locations.

The most familiar case of the effect of industrial migration is the erosion of the U.S. manufacturing base over the last half century. It has caused great economic harm in what is now called the <u>rust-belt</u>. Many companies have closed their domestic plants and outsourced their manufacturing to China or Vietnam — where coal-based electricity has often cost half of what it has cost in the United States (<u>\$85/MWh</u> <u>in China vs \$150/MWh in the US</u>). We may not mourn that Bitcoin-mining —



We made three billion dollars mining Bitcoin, minus our electricity bill—that comes to \$1.61.

where electricity is the most important input — has largely moved abroad, but we do mourn the loss of the U.S.'s advanced manufacturing supply chains.

(And, due to the 2021–2022 logistics crisis, we are now noticing other negative effects of this migration.)

From the perspective of climate change activism, this manufacturing relocation has also not helped global warming. It has reduced U.S. emissions but not global emissions. In fact, to the extent that foreign manufacturing is less efficient, global emissions may have risen.

Local Fossil-Fuel Pollution

Yet, even with our fear that industries may relocate, we still *remain* in favor of local CO_2 taxes. Our primary rationale is *co-pollution*. Co-pollution consists of non- CO_2 forms of pollution that are released when fossil fuels are burned. It is why many peoples (and not just left-leaning intellectuals) are opposed to coal and oil. Voters and politicians, especially in high-density locales, are not revolting against today's emissions of CO_2 or other global GHG gases that disperse over the planet, cause no direct harm to human health, and will contribute to global warming in about a generation or two. Instead, they are revolting against the fossil-fuel byproducts that are *not* diffusing over the entire planet but instead remain local and have immediate harmful effects on them and their children.

These local byproducts have made <u>Delhi</u>, <u>Beijing</u>, or <u>Lagos</u> hazardous without a <u>mask</u> for much of the year. (Not a <u>rank</u> to be proud of.) Large smoke and soot particles are known to kill. Even better, the visibility of these particles helps keep them constantly on voters' minds. And even better yet, sometimes they clear out and remind voters how bad their living environments have become.

The effects are so large that they are worth expounding. As one example, Dr. Arvind Kumar reported to the <u>Economist</u> that when he started working as a chest surgeon in Delhi 30 years ago, nine-tenths of lung cancer patients were smokers and nearly all were men over 50. Now half of his patients do not smoke, 40% are women, and the average age is a decade younger. He regularly sees children with blackened lungs. This has lead Dr. Kumar to conclude "The urgent issue we need to face is not CO2. It is about our own health and the health of the next generation."

The most prominent harmful co-pollutants are the smallest <u>par-ticulates</u> of fossil-fuel exhaust. <u>PM</u> <u>10</u> pollution consists of fine par-ticles that are generally smaller than 10 micrometers, about 10% the diameter of a human hair. They can be inhaled and can accumulate in the body, often in the lungs. In turn, their smallest constituents (<u>PM 2.5</u>) can transfer directly into the bloodstream. It is not an overstatement to call them



"<u>murder</u>." Internet sites make it easy even for the poor to look up their local current PM 2.5 levels in real time.

<u>Smog</u> is less harmful but more visible. It is caused by volatile organic compounds and nitrogen oxides, which combine into ground-level ozone.

anecdote

Sure, we can do something about climate change now, but if we find out in 50 years that the researchers made a mistake and that climate change doesn't exist, we would have improved air quality in all major cities, gotten rid of noisy and smelly cars, cleaned up toxic rivers, and destroyed dictatorships funded on money from oil for no reason. — Climate-Change Jokes.

Although the health costs of fossil fuels are known to be large, it is difficult to come by precise estimates. <u>Drew Shindell (Duke and IPCC)</u> claims that fossil fuels lead to 250,000 worldwide premature deaths per year. Over 40 years, removing fossil fuels (leading simultaneously to decarbonization) would save around 1.4 million lives. Based on a reasonable value of life, decarbonization could thus save about \$0.7 trillion per year, or about \$2,000 per person. This is equivalent to approximately \$100/tCO₂ emitted (although it is *not* the CO₂ that is at fault).²

²We are skeptical about higher estimates that add in global climate-change attributed deaths. For example, on the one hand, a <u>UCL study</u> estimates as many as 8.7 million premature deaths in 2018 alone. On the other hand, and showing how difficult attributing deaths to climate-change is, the <u>UK</u> has recently estimated that climate change has saved lives in the last 20 years.

With regard to India, the <u>Economist</u> reports that a conservative estimate of lost productivity due to local pollution is \$36.8 billion in addition to \$11.9 spent on treating illnesses caused by pollution. The sum is equal to 1.8% of Indian GDP — about the same order of magnitude as the cost of converting from dirty fossil-fuel to clean energy.

The relevant cost to American voters is primarily their own personal harm. Scientists have estimated the average U.S. health costs to be around $\frac{550/tCO_2}{2}$, ranging from about $10/tCO_2$ in Arizona to $100/tCO_2$ in New Jersey. Beyond the health aspects, there are other more aesthetic aspects that many Americans are now rich enough to demand — less noise, smog, and smell; a cleaner environment; etc. It is a valid question whether the harmful local non-GHG externalities from fossil fuels justify a tax of $20/tCO_2$, $50/tCO_2$, or $100/tCO_2$. But it is clear that these health and quality-of-life costs are not small.

How far are these estimates from the effective fossil fuel tax in the United States today? Very far! The current tax is *negative*. Direct producer benefits of fossil-fuel government support alone are estimated to be as high as <u>\$62</u> <u>billion/year</u> (about \$10/tCO₂). A more complete estimate that includes subsidies for exploration, cheap land leases, and non-insistence of cleaning up all spills is between \$10/tCO₂ and \$30/tCO₂. Thus the gap between what *locally optimal* fossil-fuel taxes are vs. what they should be ranges from about $$30/tCO_2$ on the low end to $$100/tCO_2$ on the high end. Climate change and environmental activism of the collective kind can and should play an important role here, keeping the public's attention on the issues and thereby holding politicians' feet to the fire. It is important to remove fossil-fuel subsidies of all kinds and as quickly as possible. (If need be, cooperating fossil fuel companies could even receive a one-time payment in exchange.)

This is why we strongly support a local tax on fossil fuels, even if no other country adopted one. In the United States (and much of the Western world), the related costs justify an *immediate* tax on fossil fuel on the order of \$20-\$40/tCO₂. Imposing such a tax will not reduce but increase the welfare of the United States.

So who would oppose a local tax on fossil fuels? As we explained in Chapter 5, there are many. First, there is the differential effect. Low-density states like Arizona and Nevada may be against it. Wyoming is the top producer of coal in the United States, and it is not even burnt near Cheyenne. Even when coal is burned locally, with more area to disperse the pollutants, their population suffers less harm. Thus, from their local perspective, voting against fossil fuel taxes makes sense. Second, there are producer interests. There are still a lot of people working in the coal sector in West Virginia, in the oil sector in Texas, and in the natural gas sector in Pennsylvania. They vote their livelihoods, and it is cold comfort to them if the clean energy transition creates jobs elsewhere in the United States. Third, there are, of course, corporate interests — though the ultimate beneficiaries are not as obvious. Most shares in fossil-fuel companies are held by pension funds — i.e., you — and not by rich villains. And, fourth, there are the politicians. They rely on campaign contributions from lobbies, and energy companies are among the largest contributors there are.

We believe that with preparation, a tax between $20/tCO_2$ and $40/tCO_2$ stands a good chance of social acceptance as long as (1) the public conversation remains centered around residual local harmful health effects, and (2) there are cross-subsidies from tax beneficiaries to those harmed by such a tax — including not only to consumers and employees, but also to fossil-fuel states and companies that sign on.

Importantly, even a net tax as low $20/tCO_2$ tax is probably enough to immediately phase out coal in all but the most extreme cases.³ A fossil-fuel tax of $20/tCO_2$ may not be enough to solve the emissions problem — not in the United States, not in the world — but it would start moving the needle and it is achievable with proper political finesse.

Like most integrated assessment models discussed in chapter 6, the Economists' Statement recommends an *increasing* CO_2 tax. We are not opposed to it, but we do not think the increases should be on the immediate agenda. First, even with a $20-40/tCO_2$ tax, the transition to clean energy will proceed much more quickly and a lot of fossil-fuel use will disappear by itself. Clean energy is improving; and once fossil fuels lose and clean alternatives gain more economies of scale and network benefits, the decline of fossil fuels will accelerate. Market forces are powerful. Second, once a fossil fuel (like coal) is no longer economically viable, it does not matter whether a higher tax makes it even less viable. Deader than dead is still dead. Third, our concern is about

³It would also put oil on an even more tenuous basis in its prime use, transportation. However, Americans are very sensitive to higher gas prices. It may be better for political reasons to let the electric-vehicle revolution take hold before imposing the tax on oil.

moving the needle now. Thus, for pragmatic reasons, we really do not want voters to get caught up in complex arguments about future sacrifices and whether 80% is or is not good enough. We would rather focus the discussion on voters' immediate self-interests now and try to placate the opponents.

Of course, we also agree that the world would be better off if the fossil fuel taxes were even higher in order to take account of global warming. However, we fear that too high a tax would erode public support when it is most needed — *now!* Again, a modest net $20/tCO_2$ tax (about $35/tCO_2$ higher than it is today) would be enormous progress and eliminate much of the American contribution to the global warming problem.

The basic problems are much the same in the rest of the world as they are in the United States. A similar dynamic is playing out elsewhere. The <u>IMF</u> <u>estimates</u> that worldwide fossil fuel subsidies amount to about $15/tCO_2$ on average. The first activist step should be to organize locally to put an end to all fossil-fuel subsidies. This would not only deliver significant public savings but would also lower emissions. The tax revenues (or lower subsidy expenses) should be named and visibly bundled with an "energy subsidy" payment to those poor who are most affected by higher fuel costs.

Even China could do this. Coal is usually burned *near* high-density population centers, because electric transmission is lossy and expensive. This "fortunately" makes dirty fossil fuels much more harmful. In China, residents of large cities are on average now not only wealthy enough, but are also so encumbered by daily smog, that \$30/tCO₂ would probably win public support and pay for itself in health cost savings almost immediately. (China still faces two key problem in getting off the fossil fuel train. The first is not the economics of clean vs. dirty energy, but the employment in the coal sector. It may require large-scale subsidies to retrain coal workers. The second is its urgent need for more energy and its lack of time. Coal plants are faster to construct than nuclear power plants.)

Unfortunately, in some poor and non-dense countries, especially in Sub-Saharan Africa, parents have to worry more about providing basic sustenance for their children than about the long-term health effects of emissions. For them, local pollution concerns are probably not a viable reason for reducing fossil fuel use. In the Congo, where health expenditures per person are as low as <u>\$19/person/year</u>, CO₂ taxes of \$50/tCO₂ are unrealistic. Realistically, only lower prices will sway them towards cleaner energy.

2. ENACT LOCAL FOSSIL-FUEL TAXES!

Clean Fossil Fuels

Technologies that reduce or filter out more of the harmful copollutants of fossil fuels present a dilemma. Many people oppose fossil fuels not primarily for their global warming effects but for their local environmental effects. Remove the latter and the public cares even less about the former. There is a certain irony that visible local pollution is the best ally in the effort to reduce invisible global pollution. If all fossil-fuel emissions were as invisible as natural gas (which is however not particularly clean, once end-to-end leaks are accounted for), it would be more difficult to rally public support against them.

<u>Pulverized coal plants</u> present the clearest dilemma. They do burn cleaner. But they also reduce the local urgency to eliminate coal plants altogether.⁴ And once constructed, the world probably has to live with their emissions for 30–50 years. China is building <u>250 GW</u> of newer coal plants (about 1/4 of the total U.S. electricity generation) as we write this.

For a similar reason, climate-change adaptation is also a double-edged sword. It provides a way to reduce the local harm and thereby the desire to eliminate the global externality. Shoreline dwellers who can move inland care less about rising oceans. Residents who have installed air-conditioning care less about hotter climates. But their adaptations also reduce their incentives to reduce their fossil fuel emissions on behalf of the rest of the world.

In the end, even more so than local fossil fuel taxes that raise the price of dirty energy, the solution will have to be technologies that lower the price of clean energy.

anecdote

Clean coal is a bit like wearing a porous condom — at least the intention was there. — Robin Williams, comedian.

⁴There is another form of clean coal that promises to capture CO_2 at the chimney and inject it under pressure deep underground. However, this technology is still too expensive, and likely will never become economical. Worse, simply "forgetting" to do all maintenance, resulting in less capture, will magically make such plants more profitable producing a conflict of interest.

3 Promote Technological Change!

Ultimately, humanity can wean itself off fossil fuels only by advancing clean technologies to the point where they can compete with fossil fuels on an economic basis. Technology is the only truly globally scalable solution. In much of the remainder of the book, therefore, we turn to issues related to the research, development, and deployment of clean-energy technologies.

We are not so optimistic to believe that vested fossil-fuel interests won't be able to delay the clean-energy transition. However, we believe that they will be fighting a rear-guard action once clean technology will become cheap enough. We also believe that watchful environmental activism will serve a useful role in helping politicians resist their interests. Even fossil-fuel interests will eventually prefer to jump on the bandwagon rather than be rolled over by the train. (It's already beginning.)

Pie in the Sky?

Dominant clean technology is not pie in the sky. The technological progress over the last decade has been stunning. The most valuable energy companies today are already no longer Exxon and Chevron, but solar and wind producers like <u>Nextera Energy</u>. The most valuable car company, by far, is no longer Toyota, but Tesla.

The cheapest source of useful energy *in the history of humanity* is today's wind and solar power. When their power is available, no fossil fuel can match its cost. In a cosmic sense, this is not a surprise. Solar and wind plants can generate electricity without the need to mine and transport fossil fuels. And when (not if) the utility-scale electricity storage problem will be solved (Chapter 10), clean electricity will also become cheaper than the lowest-cost fossil fuel electricity on a 24/7 basis.

Realistically, we expect it will take <u>two decades</u> to invent and refine clean technologies, and another two decades to replace the existing fossil fuel infrastructure. This is because already-built fossil-fuel plants can still produce cheap electricity on the margin (Chapter 5). Thus, it often makes economic sense to keep running them. But as pieces of the fossil fuel infrastructure age out, they will be replaced by cleaner, better alternatives. It is at the top of our wish list to stop the building of new coal plants asap — unfortunately, it is not on <u>China</u>'s or India's wish lists.

We are less worried that humanity has so far not installed a lot of clean energy and especially energy storage (at least compared to new fossil fuel plants). Batteries that used to cost \$1,000 ten years ago now cost \$100. Solar power that used to cost \$250/MWh now costs under \$30/MWh. Wind power that used to cost \$150/MWh now costs \$30/MWh. When building green power plants required large subsidies, each one was as painful to pull off as pulling teeth. Today, for the same price that 1 unit would have cost ten years ago, entrepreneurs can profitably install 10, 20, or even 30 units. It could even be that humanity should optimally *not* deploy more batteries and other green technologies for another few years. They could be so much cheaper that entrepreneurs could install 100, 2,000, or 30,000 units instead at the same cost. But these are decisions we can leave to the expert entrepreneurs.

Setting an Example

In Chapter 7, we dismissed the idea that individuals or countries can systematically induce large numbers of others to follow by "setting examples" or "shaming" them. When you bicycle to work, it won't make 1.4 billion Indians more likely to bicycle. They will bicycle more only if they find it in their own interests to do so, regardless of your good example.

However, example-setting can work with technological solutions — though not by moral suasion. A country can lead the way by trail-blazing the adoption of clean technologies, which drives down the early adoption costs. (We called them FOAK – first-of-a-kind – in Chapter 5.) Once the technology cost has fallen enough, other inventors and adopters will more likely follow, because technological imitation is typically much cheaper than invention — if only because imitators can see what has failed and what has worked.

The best historical example of this dynamic were German subsidies for the deployment of wind power. They were expensive. In 2020, the average German consumer paid <u>\$370/MWh</u> for electricity, while the average American paid <u>\$150/MWh</u>, and the average Chinese and Indian paid <u>\$90/MWh</u>. Germans paid dearly for the privilege of being the first mover in the large-scale adoption of wind turbines — the equivalent of a carbon tax of about $$200/tCO_2$.

The main beneficiary of German policies was not Germany but the world. And the main benefit for the world was not the reduction in German emissions. The benefit was that Germany shouldered much of the initial development cost that drove wind power to where it is today: the lowest-cost source of electric power in the world! Germany's initial costly widespread adoption of wind has done and will continue to do a lot more for humanity than just a puny 0.1 GtCO₂ reduction of its own emissions. Unfortunately for Germany, the largest producer of wind turbines today is *not* Germany. Germany is a player, but the main <u>manufacturers</u> now sit in China, the United States, Denmark, and Spain.

We have stated before that the only viable interventions are those that are cheap enough to be economically viable. Government support for R&D is among them. <u>Bjorn Lomborg</u> estimates that every \$1 spent subsidizing investment in clean technology produces \$11 of benefits. Although his estimate may be on the high side, it is likely in the ballpark. With the OECD responsible for about <u>half</u> of world GDP, it's worth it for us.

Deployment

In addition to subsidizing research, it is also in the interest of governments to help the deployment of new technologies. For instance, there are coordination problems. The incentive to build new solar farms depends on development of the grid. Electric cars require charging infrastructure, and so on. In addition, outdated regulations have to be updated to ease the transition to clean energy. Although they will have to overcome some entrenched lobbies, it is overall in the interest of politicians and individual country governments to help solve these problems.

4 Recommendable Activism

To summarize, here are our two recommendations for climate activists that want to make the world a better place. They should focus on messaging the following:

- Clean energy technology is in your own interest. It will create well-paying jobs and prosperity, for you and for your children.
 In detail, we need our government to improve and subsidize the relevant research, development, and deployment of clean energy technology. A reasonable tax on fossil fuels is another effective step in the right direction. We need not only more but also better government support and coordination. Do you want foreign countries to eat America's lunch?
- 2. Reducing fossil fuel use is in your own interest. They are harming your health today.

In detail, the negative health effects of fossil fuels can be similar to those of cigarettes, except you personally do not have the option to quit. Fossil fuels could even be killing your children and elderly parents right now. What price would you put on their health?

The two messages work together. A fossil-fuel tax can provide more incentives for the development of clean energy technologies. Clean energy makes it more affordable to live with a fossil-fuel tax.

We would further suggest that other issues — perhaps even global warming itself — should be mentioned only in passing. The less talk there is about international institutions, the better. Initiatives focusing on approaches that cannot work on global scales to reduce the CO_2 concentration in the atmosphere — such as corporate responsibility, divestment, individual efforts, carbon footprints, shaming, or social justice — should be supported only if they do not needlessly antagonize and distract attention from initiatives that will work.

Now that you have heard us out, feel free to disagree.

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