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ACTIVISM

Why Are Environmentalists Taking Anti-Science Positions?

On issues ranging from genetically modified crops to nuclear power, environmentalists are increasingly refusing to listen to scientific arguments that challenge standard green positions. This approach risks weakening the environmental movement and empowering climate contrarians.

BY FRED PEARCE • OCTOBER 22, 2012

For Rachel Carson's *Silent Spring* to James Hansen's modern-day tales of climate apocalypse, environmentalists have long looked to good science and good scientists and embraced their findings. Often we have had to run hard to keep up with the crescendo of warnings coming out of academia about the perils facing the world. A generation ago, biologist Paul Ehrlich's *The Population Bomb* and system analysts Dennis and Donella Meadows' *The Limits to Growth* shocked us with their stark visions of where the world was headed. No wide-eyed greenie had predicted the opening of an ozone hole before the pipesmoking boffins of the British Antarctic Survey spotted it when looking skyward back in 1985. On issues ranging from ocean acidification and tipping points in the Arctic to the dangers of nanotechnology, the scientists have always gotten there first — and the environmentalists have followed.

And yet, recently, the environment movement seems to have been turning up on the wrong side of the scientific argument. We have been making claims that simply do not stand up. We are accused of being anti-science — and not without reason. A few, even close friends, have begun to compare this casual contempt for science with the tactics of climate contrarians.

That should hurt.



Anti-GMO marches have become increasingly common in recent years. ROSALEE YAGIHARA/WIKIMEDIA

Three current issues suggest that the risks of myopic adherence to ideology over rational debate are real: genetically modified (GM) crops, nuclear power, and shale gas development. The conventional green position is that we should be opposed to all three. Yet the voices of those with genuine environmental credentials, but who take a

different view, are being drowned out by sometimes abusive and irrational argument.

In each instance, the issue is not so much which side environmentalists should be on, but rather the mind-set behind those positions and the tactics adopted to make the case. The wider political danger is that by taking anti-scientific positions, environmentalists end up helping the anti-environmental sirens of the new right.

Most major environmental groups - from Friends of the Earth to

Greenpeace to the Sierra Club — want a ban or moratorium on GM crops, especially for food. They fear the toxicity of these "Frankenfoods," are concerned the introduced genes will pollute wild strains of the crops, and worry that GM seeds are a weapon in the takeover of the world's food supply by agribusiness.

For myself, I am deeply concerned about the power of business over the world's seeds and food supply. But GM crops are an insignificant part of that control, which is based on money and control of trading networks. Clearly there are issues about gene pollution, though research suggesting there is a problem is still very thin. Let's do the research, rather than trash the test fields, which has been the default response of groups such as Greenpeace, particularly in my home country of Britain.

As for the Frankenfoods argument, the evidence is just not there. As the British former campaigner against GMs, <u>Mark Lynas published in</u> <u>September in the journal Food and Chemical Toxicology</u>, that GM corn can produced tumors in rats, has been attacked as flawed in execution and conclusion by a wide range of experts with no axe to grind. In any event, the controversial study was primarily about the potential impact of Roundup, a herbicide widely used with GM corn, and not the GM technology itself.

Nonetheless, the reaction of some in the environment community to the reasoned critical responses of scientists to the paper has been to claim a global conspiracy among researchers to hide the terrible truth. One scientist <u>was dismissed on the Web site GM Watch</u> for being "a longtime member of the European Food Safety Authority, i.e. the very body that approved the GM corn in question." That's like dismissing the findings of a climate scientist because he sits on the Intergovernmental Panel on Climate Change — the "very body" that warned us about climate change. See what I mean about aping the worst and most hysterical tactics of the climate contrarians?

Stewart Brandclaims that children eating nutrient-fortified GM "golden rice" are being used as "guinea pigs." And its UK Web site's introduction to its global campaigns says, "The introduction of genetically modified food and crops has been a disaster, posing a serious threat to biodiversity and our own health." Where, ask their critics, is the evidence for such claims?

For environmentalists to fan the flames of fear of nuclear power seems reckless and anti-scientific.

The problem is the same in the energy debate. Many environmentalists who argue, as I do, that climate change is probably the big overarching issue facing humanity in the 21st century, nonetheless often refuse to recognize that nuclear power could have a role in saving us from the worst. Nuclear power is the only large-scale source of low-carbon electricity that is fully developed and ready for major expansion.

Yes, we need to expand renewables as fast as we can. Yes, we need to reduce further the already small risks of nuclear accidents and of leakage of fissile material into weapons manufacturing. But as George Monbiot, Britain's most prominent environment columnist, puts it: "To abandon our primary current source of low carbon energy during a climate change emergency is madness."

Monbiot attacks the gratuitous misrepresentation of the risks of radiation from nuclear plants. It is widely suggested, on the basis of a thoroughly discredited piece of Russian head-counting, that up to a million people were killed by the Chernobyl nuclear accident in 1986. In fact, it is far from clear that many people at all — beyond the 28 workers who received fatal doses while trying to douse the flames at the stricken reactor — actually died from Chernobyl radiation. Certainly, the death toll was nothing remotely on the scale claimed.

"We have a moral duty," Monbiot says, "not to spread unnecessary and unfounded fears. If we persuade people that they or their children are likely to suffer from horrible and dangerous health problems, and if these fears are baseless, we cause great distress and anxiety, needlessly damaging the quality of people's lives."

Many people have a visceral fear of nuclear power and its invisible radiation. But for environmentalists to fan the flames — especially when it gets in the way of fighting a far more real threat, from climate change — seems reckless, anti-scientific and deeply damaging to the world's climate future.

One sure result of Germany deciding to abandon nuclear powercan pollute water and cause minor earth tremors, for instance. But at root this is an argument about carbon — a genuinely double-edged issue that needs debating. For there is a good environmental case to be made that shale gas, like nuclear energy, can be part of the solution to climate change. That case should be heard and not shouted down.

Opponents of shale gas rightly say it is a carbon-based fossil fuel. But it is a much less dangerous fossil fuel than coal. Carbon emissions from burning natural gas are roughly half those from burning coal. A switch from coal to shale gas is the main reason why, in 2011, U.S. CO2 emissions fell by almost 2 percent.

We cannot ignore that. With coal's share of the world's energy supply rising from 25 to 30 percent in the past half decade, a good argument can be made that a dash to exploit cheap shale gas and undercut this surge in coal would do more to cut carbon emissions than almost anything else. The noted environmental economist Dieter Helm of the University of Oxford argues just this in a new book, *The Carbon Crunch*, out this month.

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But this is an unpopular argument. Carl Pope, executive director of the Sierra Club, was pilloried by activists for making the case that gas could be a "bridge fuel" to a low-carbon future. And when he stepped down, his successor condemned him for taking cash from the gas industry to fund the Sierra Club's Beyond Coal campaign. Pope was probably wrong to take donations of that type, though some environment groups do such things all the time. But his real crime to those in the green movement seems to have been to side with the gas lobby at all.

Many environmentalists are imbued with a sense of their own exceptionalism and original virtue. But we have been dangerously wrong before. When Rachel Carson's sound case against the mass application of DDT as an agricultural pesticide morphed into blanket opposition to much smaller indoor applications to fight malaria, it arguably resulted in millions of deaths as the diseases resurged.

And more recently, remember the confusion over biofuels? They were a new green energy source we could all support. I remember, when the biofuels craze began about 2005, I reported on a few voices urging caution. They warned that the huge land take of crops like corn and sugar cane for biofuels might threaten food supplies; that the crops would add to the destruction of rainforests; and that the carbon gains were often small to non-existent. But Friends of the Earth and others trashed them as traitors to the cause of green energy. Well, today most greens are against most biofuels. Not least Friends of the Earth, which calls them a "big green con." In fact, we may have swung too far in the other direction, undermining research into second-generation biofuels that could be both land- and carbonefficient.

We don't have to be slaves to science. There is plenty of room for raising questions about ethics and priorities that challenge the world view of the average lab grunt. And we should blow the whistle on bad science. But to indulge in hysterical attacks on any new technology that does not excite our prejudices, or to accuse genuine researchers of being part of a global conspiracy, is dishonest and self-defeating.

We environmentalists should learn to be more humble about our policy prescriptions, more willing to hear competing arguments, and less keen to engage in hectoring and bullying.



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