

The Kyoto Protocol, and Beyond

By Tom Athanasiou | February 17, 2005

The first thing to say about Kyoto's entry into force (Feb 16th) is that it is a significant victory, won particularly by the Europeans, over social and economic complacency, cash-amplified, flat-earth pseudo-science, the carbon cartel, and, of course, the Bush administration. The second is that, if it's not soon followed by other victories, deeper and even more challenging ones, the Earth's climate will soon—think 2050 or even sooner—be transformed into one that is far more inhospitable, and even hostile, than even most environmentalists imagine.

The story begins with the rapidly-clearing science, and its increasingly obvious message. Consider one recent and highly notable report: *Meeting the Climate Challenge*.¹ The product of a weighty international taskforce organized by policy activists in Britain, the U.S., and Australia, it was designed to offer politicians in general, and Tony Blair in particular, a set of sharp, well substantiated talking points to take to their people and, particularly, to the G8, where Blair—who has pledged to make climate change a top priority—is now assuming the presidency.

The “taskforce report” seems at first to be just another high-level warning, to be stacked away with many, many others. In fact, however, it's something new, particularly for the clarity with which it estimates our rapidly evaporating margin of safety. In the face of an incessant denialist mantra that “uncertainties” render meaningful estimates of the climate danger impossible, it refocuses on probability. This, as it turns out, is a powerful move, especially when made in a quantitatively rigorous way, and it's quickly becoming a preferred approach among climate scientists (though you wouldn't know it from the media coverage). Further, the probabilistic approach reveals a picture startling to even most global-warming pessimists: If we're to avoid precipitating what that UN Framework Convention genteelly calls “dangerous anthropogenic interference,” we're going to have to aim at an atmospheric greenhouse-gas concentration target that, by current trends, we'll reach in less than two decades. If we overshoot that target, and we will,

we'll have to do everything possible—everything—to bring the concentration down again. Fast.

Here are the key paragraphs from the taskforce report:

“Climate science is not yet able to specify the trajectory of atmospheric concentrations of greenhouse gases that corresponds precisely to any particular global temperature rise. Based on current knowledge, however, it appears that achieving a high probability of limiting global average temperature rise to 2°C will require that the increase in greenhouse-gas concentrations as well as all the other warming and cooling influences on global climate in the year 2100, as compared with 1750, should add up to a net warming no greater than what would be associated with a CO₂ concentration of about 400 parts per million (ppm).

Concentrations of CO₂ alone are likely to rise above 400 ppm in coming decades and could rise far higher under a business-as-usual scenario. At the same time, atmospheric levels of reflecting and cloud-forming particles, which are partly offsetting greenhouse gas warming today, will continue to go down. Action is therefore required that includes immediate measures to reduce emissions of all greenhouse gases and soot (a heat-trapping form of particulate matter), as well as a commitment to protect and expand the capacity of forests and soils to draw down CO₂ from the atmosphere.”



The details are many, and you'll find lots of them in *Meeting the Climate Challenge*. If you want more, see *Honesty About Dangerous Climate Change*,² and its technical notes, on the EcoEquity website. Or Malte Meinshausen's *On the Risk to Overshoot 2°C*,³ on the website of the British government's recent climate science summit.⁴

Alternatively, note that all the details come, in the end, to one daunting target: a combined greenhouse-gas concentration equivalent to 400 parts per million of carbon dioxide. This is the concentration level that we need to meet if we want a good chance (about 75%) of holding total planetary warming to 2 degrees Centigrade. If, that is, we want a good chance of avoiding the dismal future that Bill Hare, an accomplished scientist and the godfather of Greenpeace's climate campaign, has so carefully warned us about:⁵ Unstable weather, routine heat waves, widespread drought, crop failure, mass extinction, rising sea levels, and, in general, a markedly more hostile environment and a situation that our society, as presently constituted, is unlikely to navigate with grace and aplomb.

This isn't going to be easy. To see this, you need only know how close to the 400 ppm "line in the sand" we already are, and how quickly we're approaching it. Put aside, for a moment, the non carbon-dioxide gases (though they actually make things worse, because, taken together, they are "cooling pollutants and as such are masking the warming) and consider only carbon dioxide. Here's what you have: From a pre-industrial baseline of 280 ppm, we've now risen to 380 ppm, and it's only about a decade more before we blow past 400. By about 2030, at the current rate, we'll hit 450 ppm, where, by current science, we'll have about a 50/50 chance of having locked in 2°C of warming. Then, if we don't change direction, and quite radically, we'll continue on into the sharpening realities of dangerous climate change. When would it all add to up to "a crisis?" We cannot say, not exactly, but it no longer looks like it'll take long. In fact, a carbon-dioxide concentration of, say, 550 ppm, which was until quite recently (think Bill Clinton) the preferred target of the liberal political classes, would almost certainly be disastrous.

It sounds bad, because it is. Especially since the rate of increase in the atmospheric carbon concentration has itself been increasing, and may, if we're unlucky, be settling into a steady pace of over 2 ppm per year.

In other words, we still have time, but not much.

Next Steps

But enough of the bad news. Kyoto is entering into force, and this means that we'll have a chance to take—or at least to debate—the next steps. The future is still open, and we already have the technology⁶ needed to move quickly towards it. But even in the happy case where the pendulum soon swings toward rational technology policy and multilateral cooperation, the climate challenge will still dwarf all human precedent.

What, as we look forward from Kyoto, do we know? Only that the question is no longer if we can avoid dangerous climate change (time's up on that account) but rather if we can avoid *catastrophic* climate change. That we face a future in which the carbon concentration rises above any plausibly safe level (it will, and quite soon) and work to ensure that it subsequently peaks, and then drops back, far enough and fast enough to keep total global temperature change within manageable limits. That negotiating such a peak will demand a degree of international cooperation that, just now, is a bit difficult to imagine. That the longer we must wait, and the higher the carbon-dioxide concentration has risen when we finally hit the peak, the faster emissions will have to drop. And that at some point, surprisingly soon, the necessary rate of reduction will become so high as to be politically and economically implausible.⁷

Still, we can make it. We have the means and the motive. It's only that, somehow, we seem to lack the opportunity. Or perhaps it's better to say that the opportunities are all around us, but that given the imminence and magnitude of the threat, our means seems strangely abstract, almost immaterial. As if we had somehow not learned to grasp them.

Which brings us to the Tenth Conference of Parties to the United Nations Framework Convention on Climate Change, the annual "Climate Conference,"

which passed its two fitful weeks, only a few months ago, in Buenos Aires, Argentina.

COP-10 has been called “a sleepy COP,” and, indeed, there wasn’t a lot of visible action. But this lull itself was the real story, and coming just after the American election and just before Kyoto’s entry into force, it was fraught with meaning. To attend COP-10 was to have the sense of floating on a vast, calm sea. There were large shapes moving in the depths; we could all sense them. And in the distance, in Ministerial meetings that few of us were privy to, the shapes did sometimes surface. We heard the noises, and saw scurries and splashes in the distance. But, still, the overwhelming sense was of deadlock, punctuated by anger and fear. Of weariness.

Obviously, we can’t predict the future, but it’s a safe bet that when this lull is broken, it will be by a storm. It is, after all, no natural event, but rather the product of a long campaign in which the U.S., the Arab oil producers (led by the Saudis), and a variety of other, lesser villains, have managed to drag “the process” to an almost complete halt.

For the moment, a few brief observations may be useful.

First, the Bush people have broken their word. When they pulled the U.S. out of Kyoto, they went out of their way to assert—in sanctimonious tones that were believed by none—that the U.S. would refrain from obstructionist behavior. Since then, events have told a rather different story, with the U.S. waging a multi-front campaign—organizing a global network of bilateral agreements designed to render the UN climate process “irrelevant,” sending out its flacks to argue that fossil technologies like “clean coal” and carbon capture are the best ways forward, insisting that the under-funded climate secretariat separate its Kyoto Protocol accounts from those related to the Framework Convention, ruthlessly undermining all attempts to talk about, or even talk about talking about, the future of the regime.

Further, with Australia and Russia shuffling listlessly into line, it is now absolutely clear (if there was any doubt) that the hard core of the anti-Kyoto resistance emanates from neoconservative Washington and neo-medievalist Riyadh. With Kyoto now passed into law

and the European Emissions Trading System about to enter into force, the business lobby is increasingly tantalized by the prospect of carbon trading. And then there’s the climate, which is already changing. And, of course, there’s the war, which has even Republican realists worried about energy security.⁸ In such a context, the increasingly isolated refusnik lobby will continue to do its ruthless best to prevent progress and derail negotiations.

COP-10 had barely opened when the U.S. proposed to delete agenda items which welcomed input from other international negotiations (the Barbados Programme of Action for the Sustainable Development of Small Island States, the World Conference on Disaster Reduction, and the UN Commission on Sustainable Development) with the clear motivation of blocking any dangerously proliferating discussion of the impacts of climate change. And things went downhill from there.

In a worrisome sign of things to come, the U.S. managed to twist even Kyoto’s impending entry into force into an interminable opportunity for obstructionism. How, after all, shall the negotiations proceed, with the U.S. a party to the Framework Convention but not to Kyoto? This, believe it or not, is a real question, at least for the unlucky diplomats charged with keeping the negotiations on track. Shall the U.S., the world’s largest economy, be excluded from the talks? Impossible! But were it to be a full-fledged participant, would it not have an implicit veto power over a process that it is quite explicitly trying to destroy?

How, then, to proceed?

At COP-10, this question, which the U.S. will certainly use to confuse the next few meetings as well, was focused on a proposal by Argentina to organize a series of “seminars,” informal conclaves where the future of the regime could at least be discussed. The ensuing negotiations were torturous, and not only because of U.S./Saudi machinations. The Americans and their Arab allies are hardly alone in their desire to avoid the coming reckoning. Still, the Bush people, in their typical shameless fashion, managed to push matters to the edge of the surreal. U.S. conditions for participating in the seminars stipulated that participants would only be able to discuss past activi-

ties (instead of, well, the future), that they'd not report back to COP-11, and indeed that the seminars would be one-off events without any formal follow-up whatsoever.

Then things got worse. Members of the G77+China (the South's long-dysfunctional grand coalition, held together only by the fear—well justified, as it turns out—of Northern pressure to accept climate agreements that would hobble their development) began making proposals that almost seemed to have been designed in Washington. India was the first standout,⁹ insisting that development projects funded by Kyoto's "Clean Development Mechanism" should not actually be required to be strictly "additional," which is climate speak for actually yielding carbon emission reductions that would not otherwise have occurred. Then, a few days later, a draft G77+China text on the seminars (read: "the post-2012 debate") took essentially the same position as the U.S.:¹⁰ the seminars could take place, but they weren't to discuss the way forward, or to report back to the COP. This pushed matters beyond tragi-comedy, and it seemed like the G77+China would wind up playing along with the U.S. grand strategy, which depends on manipulating the South's fear of climate constraints, and by so doing prevent the emergence of any coalition capable of imposing a strong climate accord.

It had worked before, but this time history was drifting in another direction. The G77's text turned out to have been a gambit by some of its richest members, and it was not widely appreciated. Further, and this is the real news, the excluded countries spoke up. Qatar, which has the presidency of the G77, was taken to task for sacrificing the interests of the least developed and soon-to-be-inundated island nations to those of OPEC. And even Indonesia added its shoulder to the wheel. In fact, matters within the G77, particularly, wound up looking better than they had in some time. COP-10 may even have seen the beginning of the end of "Babylonian Captivity" by which the developing countries were held in perverse thrall by the oil-producing countries.¹¹

This too is a long story, but one further point is crucial. COP-10 was to focus on "adaptation," and

by so doing feature the interests of the poorer and more vulnerable countries over the rich world's obsession with low-cost mitigation. It didn't work out that way, in part because the "adaptation agenda" can only move forward if the protection of the climate and the protection of the poor are treated as two sides of one single, indivisible coin. The surprise at COP10, however, was that the blame for the lack of progress was not laid exclusively at the feet of the North. The Saudis, after all, had absolutely insisted that whenever "funding for adaptation" became available, the "impacts of response measures" would have to be treated as equal in importance to the impacts of global warming itself—as if climate change and the climate treaty were equivalent evils. And, in this, they went too far. Even the Indonesian minister demanded that negotiations over adaptation to the two issues be kept separate. And they were.

There is more to say, but not here. If you want more nuanced insider analysis, read *It Takes Two to Tango*,¹² a conference report prepared by the excellent team from Germany's Wuppertal Institute. And those who want to balance such details with an unabashed global justice perspective should, perhaps, make a point of glancing at George Monbiot's rather more pointed *America's War with Itself*.¹³

The point, in any case, is that little time remains for either truism or received wisdom. This means, first of all, that we need a long and honest view over the ranks of our enemies. The U.S. and the Saudis, to be sure, hold prominent positions, and just behind them are the rest of the usual suspects: ExxonMobil lobbyists, the American Enterprise Institute, The International Chamber of Commerce (whom journalists complain is so predictable as to be boring, and therefore useless), the skeptics-cum-denialists, the anonymous scum who distributed counterfeit editions of NGO newsletters (they weren't, actually, very funny) and fake-byline flyers ridiculing the third-world victims of climate change (you have to see them to believe them). All told, it's a strong coalition, and this isn't even the end of it. The warning, now many times repeated, was delivered again in Argentina: If there's to be a strong climate accord, the developing countries are going to have to support it, and not begrudgingly.

The Agenda Now?

First, the “Kyoto mechanisms” must be made to work. This means honesty about the troubled “Clean Development Mechanism,”¹⁴ but most of all it means protecting Kyoto’s carbon trading system, without which we’d never have gotten even this far. It isn’t going to be easy, particularly since the carbon markets are threatened on one side by Enronization and phalanxes of quick-buck artists, and on the other by eager politicians, who hope now, above all, for “efficiency” and cash, even if they come without real decarbonization.

For the movement, all this means reorienting a tired debate, and a harder look at the challenges of protecting global commons resources. It means, particularly, that it’s time to abandon all the pointless high-flown critiques of emissions trading that conflate the weaknesses of the Kyoto mechanisms with the commodification of nature, and which somehow, in the process, lose track of the immediate challenge—using emissions trading to fund both decarbonization and sustainable development.

Second, we must somehow contrive, in the next five or seven years, a global “post-Kyoto architecture” that’s capable of limiting emissions in not only Europe, but China and America as well. And that there is no chance of doing so, no chance at all, unless we attend to both the fears and the aspirations of the developing world, and to the most difficult problem of all, the problem of justice.

The post-Kyoto debate was quiet at COP-10. It almost seemed that a sense of irrelevance had settled over the discussion of alternatives, of visionary agendas that actually intend to solve the whole long-term problem. And it’s not difficult to understand why. Beneath the surface lull, the climate community is exhausted by the last seven years, and by the terrible harrowing that its aspirations have received at the hands of the carbon cartel. Think beyond Kyoto? To a fair and global treaty that might actually bend the emissions curves sharply down? How to do so when the U.S. only comes to the negotiations to throw rocks?

The U.S., of course, can change. It can even change for the better. And we all know, those of us who fol-

low climate politics, about all the local action, the state action, the regional action. About the Climate Stewardship Act. About the new movement by moderate Republicans¹⁵ to position themselves as willing to act, but differently. This all, taken together, is no doubt the American way towards climate protection, and we should welcome it. But we should also, at the same time, prepare ourselves for another future, one in which America’s choices are no longer made in exclusively American terms.

The key is China. Or, rather, coal in China. Or, rather, coal in China, and India, and in general the drive by developing countries to have enough electricity, cheap electricity, come what may. The key, to quote Blair at Davos, is that “By 2030, coal plants in developing countries could produce more carbon emissions than the entire power sector in the OECD does now.” For China alone is planning to build more than 500 coal-fired power stations between now and 2030, and if it does, they had better not be anything like coal plants as we know them today. Unfortunately, even in China, where efficiency is a far higher priority than here in our once technologically-ambitious country, nothing like the necessary change seems likely.

Again, there are options, but they’re not going to be cheap. We have to move too quickly for that.¹⁶ Which brings us to the real question, the one that the U.S. is so viciously intent on avoiding: What does it really mean to construct a climate regime that would work for the South? How, in particular, do we expect to pay for rapid decarbonization, particularly in the developing world? By what means? And who, finally, is going to pick up the tab?

Think about this, “the financing question,” and you see that environmentalism, whether it’s dying (as recent rumors aver), or whether it’s already being reborn, is going to change. Because with the financing question on the table, everything has to change, not just environmentalism. In the U.S., the “Just Transitions” debate has been constructed in almost exclusively domestic terms, but this, clearly, has limited its horizons. In the global NGO movement, the need for new sources of funding—for disaster preparedness, sustainable development, poverty alleviation, and now, climate change adaptation and large-

scale decarbonization—has forced many if not most strategists to realize that massive Export Credit Agency and the Multilateral Development Bank reform is only the beginning of a far larger challenge. And then there is the Kyoto timetable, which demands that decarbonization funding be debated, in earnest, in the next few years. It's an interesting situation, particularly since this debate, once it begins in earnest, is going to raise some very dangerous questions—about responsibility, and liability, and even redistribution. Particularly because we now all know, or soon will, that to move forward fast we're going to have to think big.

Bill McKibben, in a clever report¹⁷ on the “Death of Environmentalism” debate, points out that the Shellenberger/Nordhaus argument, at its core, is that U.S. environmentalism has failed to prevent a “fundamental political realignment,” a deeply conservative turn in American culture, and that this realignment has, in effect, swept us all away. Clearly, this is true, though it's less obvious that the blame can be laid primarily at the feet of the greens. Because, while America, long a nation beset by strange religious enthusiasms, is currently riding a wave of cultural conservatism, it's not the greens alone that have gotten caught in the wash. Most of us have failed to connect the dots. And most of us, daunted by the crystallization of a center-right majority on social issues, have missed another, equally significant fact: When it comes to the economic issues of interest to the broad middle and working classes—say universal health care—the majority tilt is just the opposite, to the center-left.

The point? That there's hope for America, as there is for environmentalism. But that before we can seize that hope we're going to have to talk a new language, and take a new stand. When it comes to climate politics in the U.S., we're going to have to talk about science, and responsibility, and the imperative of a broadly conceived economic realism in which the poor and the vulnerable are protected during a transition that promises to be more than a bit difficult. And when it comes to global climate politics, we're going to have to embrace just this same sort of ethos—call it global economic populism. And when we do, we're likely to find that it returns our atten-

tion with surprising gifts, not the least of them being the possibility of success.

Who Will Pay?

It may be dangerous, but there's no way forward unless we face the “Who Pays?” question. Fortunately, there's a sweetener—facing it may be just the way to assist the rebirth of American environmentalism. Besides, it's not like we don't already have an answer. We already know that the polluter pays, or that they should. And all we have to do, if we would be serious, is play out the implications of this very simple, very compelling position. As the Sierra Club's Carl Pope put it in his nicely heated response¹⁸ to Shellenberger and Nordhaus:

The global warming debate is not complicated. It is simply very difficult because it is about who is going to pay.

Kyoto is an attempt to start down the road that everyone knows will have a very large bill, without ever deciding who will pay for the bill. Which is why, in my view, Kyoto has gone nowhere in the U.S. Confronted with a potential liability, as long as I think I won't have to pay the bill, I'll hire my lawyer. That's what the U.S. carbon lobby has done. They know carbon is a liability. They don't want to pay the bill...

But if we frame global warming as pollution, and assert that the polluter should pay, then suddenly this otherwise completely abstruse, overly technical problem becomes much easier for the public to understand.

We can then get people to recognize that you shouldn't be electrifying villages in India by hanging copper wires between them. You should be electrifying them with methane generators and windmills—and the polluters, the emitters of carbon, ought to be paying for them.

What then do we know about the world after Kyoto?

We know that, with only about 0.7 degrees Centigrade of warming manifest, the Earth's climate is changing in terrifying and abrupt ways, and that all

sorts of terrifying, unprecedented risks are now facts of human life.

We know that, if we allow the warming to rise above 2 degrees Centigrade, these risks increase very substantially. That widespread extinctions or even ecosystem collapses will become real possibilities. That major increases in famine and horrific water shortages, as well as huge socio-economic damages, will become real and present dangers, particularly in developing countries.

But we also know that, with the Kyoto Protocol, the first step has been taken. We know that Kyoto was a major victory,¹⁹ won against a powerful and devious enemy, and that it should be celebrated.

And we know that the next victory will be harder, and that we won't be winning it with a traditionally environmental strategy. And that we won't have to. There's a great deal more at stake in the climate debate—and more specifically in the “post 2012 debate”—than can be accounted for with the categories of old-school environmentalism. And most of us already know it.

In a nutshell: We need a crash program of energy sector decarbonization, around the world, and the only way we're going to get it in time is if the developed and developing countries make the right sort of deal. Leave aside the details, and it comes to this: The developed world is going to have to ante up. In exchange, the South is going to have to agree to a new kind of development, one that produces as little carbon as possible. And none of this is going to happen, not fast enough, unless the poor and the vulnerable are protected along the way.

To stabilize the climate, we're going to have to do much more than stabilize the climate. The irony is that admitting this does not in any way make the prospect seem more daunting. Just the opposite. Because if this was just an environmental problem, we'd be toast. It's only because so much is at stake that we have a chance at all.

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