

“WHAT DOES YOUR GROUP THINK ABOUT WIND POWER?”

Speech given by Theodore Roosevelt IV

at

“Innovative Policy Solutions to Global Climate Change” Conference

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Thank you. It is a great pleasure to be here tonight, though I will admit to some trepidation. As the last speaker at the end of a long day of eminently qualified speakers (by my count, 12!), I feel a little like Elizabeth Taylor’s seventh husband on their wedding night: I know what I am supposed to do, the question is -- can I make it interesting?

Actually, as my staff and I prepared this talk, the question quickly became: Could I give the speech and still get out of the room alive? In vetting our ideas with a number of interests (ngo, government, and business), I began to feel that we ourselves were drafting a *mini* Kyoto Protocol, and I toyed with the idea of titling it “Hurling into the Maelstrom.”

One relatively small environmental organization told me this story. After a very low-key community meeting of some sort, a member of the audience, who was associated with another environmental organization, approached one of the speakers. In a very neutral tone, she asked: “What does your group think about wind power?” Seemed innocuous enough. Offhandedly, the speaker replied that they hadn’t worked out a position *per se* on wind energy, but it certainly seemed like a good idea to him.

And, with that, he promptly found himself hurtled into the maelstrom.

Almost literally into those windmills. He was told that industrial windmills kill migratory birds and that neither that woman nor her group would support another group that supported wind power. And, with that, she stormed out of the room.

While that story is undoubtedly a *commedia del arte* version of the controversies with which you wrestle, I must say that I have never before had such an appreciation for the fact that for every good “pro” argument there is a “con” or opposing argument. And, I have certainly come away with an enormous appreciation for the sheer endurance of those of you who are dedicating yourselves to this work.

I am here tonight to talk about developing countries and global warming. And I promise that, eventually, I will do that. But the process of getting to the substance of this speech was so intriguing and so instructive that I wondered if the preamble wasn't in fact the substance. So, I decided to let this talk mirror my own experience at least a little. I promise, however, that my talk will *not* grow in proportion to the length of the preamble—though the length of my preamble may give the lie to it actually being one!

As you gathered from my introduction, I live my life on both sides of what I will call the business/environmental divide. On the one hand, I make my living on Wall Street, and on the other, I spend myself advocating for biodiversity conservation. (Either way you at look at it: Lions, tigers, and bears.) And to a very large extent – perhaps *because* I live on both sides of the divide -- I find the idea of one an illusion.

Nonetheless, its presence is stubbornly persistent in our approach to environmental problems, despite the fact that, without much fanfare or acknowledgment, many of the economic assumptions that created this divide have been breached. Environmental drivers have brought innovation, efficiency, and profit to American companies and jobs to the American people; in many sectors, these drivers have brought industry dominance. Jobs, shareholder value, GDP -- all served. Smart companies know this, as do smart investors. What remains to be found in *this* country are just a few smart politicians.

On what you call the gross emissions side of this problem, market forces are in play already and can be brought to bear more consistently and forcefully in the future by ridding the market of its distortions and perverse incentives. In other words, by creating a fair and equitable playing field. The Kyoto Protocol is a testament to the complexities

of achieving this, even with brilliant proposals, such as carbon emissions trading, on the table. Nonetheless, my own experience in business leads me to believe that, by reinforcing and amplifying the market's ability to reward greater innovation and efficiency, progress on this side of the global warming equation is within reach. One economist describes the "gross emissions side" of the problem as "tractable, though far from straightforward." Which leaves me wondering if he has an intractable two year old at home?!

On the intractable side of the equation and the one about which I have the gravest concerns, there is no market to assist us. To quote a paper from a recent forestry conference: "If tropical forests are allowed to disappear as much carbon will be released into the atmosphere as has been emitted by fossil fuels in the past 150 years." Market driven ingenuity is unlikely to find a substitute for forests . . . and would we want that substitute if it did? There is currently no market for the wide range of ecological services provided by forests, and they are disappearing at a staggering rate. With them goes our hope for stemming the tide of catastrophic biodiversity loss, a problem which E.O. Wilson gives us a mere twenty-year threshold to turn around before it is too late.

Needless to say, I was enthusiastic about the potential of bringing market value to at least one of the services forests provide, carbon sequestration. I maintain this enthusiasm, despite being advised in the preparation of this speech to stay out of the forest by several environmental advocates. *How* I am supposed to stay out of the forest and talk about developing countries and global warming is a mystery. But, apparently, carbon sequestration projects and the Clean Development Mechanism itself are . . . controversial. (Almost another Elian Gonzalez!) Well, it must be a genetic failing, but telling a Roosevelt to stay out of a forest – let alone avoid controversy -- is bound to raise a red flag. When Congress tried keeping President Theodore Roosevelt away from US forests, he locked away – literally locked away in a safe and in executive order and in the middle of the night -- a few more million acres of forestland.

I don't have *that* option, so I made another phone call. I wanted a local, on-the-ground, working-in-the-field, American perspective. And Dr. Ray Aycock, who works for the Fish and Wildlife Service in the Mississippi Delta, seemed to be just the man to provide it. The Service, in conjunction with the Black Bear Conservation Committee, is working a largely overlooked environmental miracle in the Delta. Focusing on the endangered Louisiana Black Bear (which species was the inspiration, by the way, for the toy Teddy Bear), F&W and the Black Bear Conservation Committee are working *with* agriculture, timber, and industry to restore health to an ecologically devastated region. They are utilizing every program available, including several carbon sequestration projects. The projects on line thus far will reforest every acre of public land in the Delta; they will also be used for reforestation on marginal farmlands in order to link up badly fragmented habitat; and, finally, these efforts are already improving the seriously deteriorated water quality of the region.

So, I asked Ray what he thought of the sequestration controversy. He said in his down-to-earth way: "Jeez, how can you get anyone to the table that way? Everyone deserves a chance to wear the white hat."

So ends the preamble. Onto the substance.

I do not intend tonight to discuss what developing countries themselves *should* do; I am only interested in what *we* in the industrial world can and should do to facilitate climate-friendly economic growth in the developing world. I primarily want to look at what it will take to allow government, business, and environmental advocates to wear the white hat on those issues that affect developing countries. I would like to suggest three stratagems: 1) appreciate your assets – or, put another way, bring home to every stakeholder the economic benefits of early action; 2) recognize your risks – bring home to government officials the international security threats posed by global warming; and, 3) remember employee morale – avoid squandering brilliant ideas in excessive naysaying.

Appreciate Your Assets: or The Upside of the Economic Picture

On the first point, the upside of the economic picture, here's what the Harvard Business Review has to say: "Those who believe that ecological disaster will be averted must also appreciate the commercial implications for such a belief: over the next decade, sustainable development will constitute one of the biggest opportunities in the history of commerce."

The potential in developing countries is as large as the problem, and the problem is large. Their demand for energy is growing explosively. Projections show electric sector CO₂ emissions in developing countries nearly tripling over the next 20 years, and they may exceed developed countries as early as 2010. As many of you know, China now ranks second in the world for greenhouse emissions, and it is estimated that by 2050, they will exceed the entire output of the OECD.

Initially, decreasing energy efficiency fueled the rapid industrial growth in these countries. But, as their outdated factories come into competition with more modern facilities in the global market, pressures mount for greater efficiency. In Eastern Europe, for instance, one third of the energy generated does not reach end-users. Bringing those countries up to Western standards would save energy, according to one publication, "equivalent to that produced by all of North America's nuclear reactors." Pressure is also mounting from consumers due to the recent move toward deregulation on the part of many of these governments. Previously, consumers paid as little as 60 percent of the real energy cost; now, with subsidies disappearing, they are beginning to pay market prices. In addition, while it is estimated that Asia alone will require in excess of a trillion dollars of energy investment to support economic growth, the world is facing capital constraints. This creates an incentive to increase efficiency, on both the supply and demand sides, rather than build more expensive new infrastructure. For instance, a client of mine, the Electricity Generating Authority of Thailand (EGAT), negotiated with lighting manufacturers to switch to higher efficiency florescent products. According to the International Institute for Energy Conservation, this enabled EGAT to save energy

equivalent to the \$285 million it would have cost to build that much new capacity. On the supply side, savings are available through cogeneration systems, high performance transformers, and even through improvements in cabling and wiring.

In short, there is a huge market for efficiency technology, and the United States can do a great deal to help our industries and developing countries find one another. Industry needs investment capital with which to develop this export market and the commitment of public resources to trade promotion. Just as important, however, the United States can take action to help developing countries assimilate these technologies through assistance aimed at building institutional and financing capability.

In FY 1999, the total of USAID monies focused on the Global Climate Change Initiative was a mere \$87 million dollars. Additionally, while the President's FY 2000 budget calls for \$2.5 billion for R&D and *domestic* deployment of these technologies, very little of this is going to developing countries or international efforts aimed at developing countries.

Much of what can be done here will also depend on setting international environmental standards for all agencies and institutions which fund infrastructure projects in developing countries. A recent Washington Post editorial, for example, noted the enormous disparity among export credit agencies in weighing the environmental impacts on project funding. They described the result as "a harmful race to the bottom in which projects rejected by one institution for potential environmental damage are snapped up by another." OECD countries have pledged to develop common environmental guidelines for these agencies by the 2001 G8 summit. In sum, our investment in this area, on all fronts, will yield returns not only for developing countries and the global environment, but also for our own industries and people. We must put an end to irrational economic scare tactics, which should never be a tool in long-term strategic planning for either industries or for nations.

Recognize Your Risks: International Security Issues

Speaking of scare tactics, unto my second point: recognize your risks. It is widely acknowledged that the costs of global warming will most severely affect developing countries. What is less widely discussed is what that will mean for international security. It is expected that effects of global warming will hit the economies of developing countries the hardest. We are already seeing the dislocation of millions of families every year due to desertification and land degradation. Global warming could bring mass migrations of people displaced by rising sea levels, extensive forest fires, water shortages, and agricultural failure. In the wake of those dislocations will come the spread of infectious diseases, the disruption of labor markets, and the undermining of financial and political institutions. Many experts agree that water, not oil, is likely to be the trigger resource of the next century. (And I suppose that I don't need to point out here the value of forests in protecting water resources.)

Here's how Thomas Homer Dixon, the Director of the Peace and Conflict Studies Program at the University of Toronto, describes it: "As global environmental damage increases the disparity between North and South, poor nations may more militarily confront the rich for a greater share of the world's wealth. Scarcity disputes in developing countries could lead to clashes between ethnic groups, and civil strife and insurgency, each with potentially serious repercussions for the security interests of the developed world."

Institutions in developing countries are more likely than those in the industrial world to be overwhelmed by nonlinearities or abrupt, unexpected changes. In other words, we may find that global warming does not heat like a pot on a stove, smoothly and evenly over time. There may be sudden unexpected shifts and accelerations that we cannot anticipate at our current level of scientific understanding. The geochemist, Wallace Broecker, describes it this way: "Earth's climate does not respond to forcing in a smooth and gradual way; rather, it responds in sharp jumps which involve large scale reorganization of Earth's systems." Unfortunately, hard-pressed social institutions in

developing countries may not be able to respond in kind -- with equally large-scale adaptations.

In a foreign policy environment where global warming is weighted appropriately, then construction of natural gas lines might become of as grave importance as protecting oil supply lines. Southeast Asia (Indonesia, Malaysia, and Thailand), for instance, is long on natural gas, while China is short on clean energy. The logistics and cost of getting natural gas to China are enormous, yet our environmental interests are so directly impacted by China's emissions, one has to ask if it makes sense for OECD countries to consider subsidizing financing the costs of a pipeline to bring the natural gas from the ASEAN grid to China.

Another example is Iran, which has the second largest reserves of natural gas in the world. Currently, they flare approximately 13 billion cubic meters per year, coming in just behind Russia and Nigeria. This contributes approximately 378 billion tons per year of sulfur dioxide into the atmosphere. Iran applied to the World Bank for funding to institute a process whereby the gases could be gathered and processed for lean gas for domestic consumption or reinjected into wells to increase oil output. The U.S. government opposed that funding for obvious reasons. While the U.S. may not want to work with Iran on a bilateral basis at this time, as part of a broader community of interests perhaps we should consider supporting multilateral development projects where environmental interests are served on this scale.

The costs of failure to remediate environmentally damaging activities in developing countries because we give greater weight to other variables, even human rights, even terrorism, may come back to haunt us. I don't see much chance for ensuring the one and defending against the other if global warming is not brought to bay and worse case scenarios fulfill themselves. The fate of the global commons must take a consistently prominent place on the U.S. foreign policy agenda.

Remember Employee Morale: or, Don't Squash a Brilliant Idea in Bickering

And now back to the forest, where – as most of you have probably guessed -- I wanted to be all along.

Certainly, the outstanding technical challenges regarding carbon sequestration programs are enormously complex, from problems of accounting, verifiability, additionality, leakage, permanence, and saturation to simply agreeing on what a forest actually is. I am principally concerned tonight, however, *not* with the technical difficulties, which I believe can be resolved technically, but with ideological arguments and fears that threaten to swamp this brilliant idea altogether. These include: 1) carbon sequestration projects will be forest killers, replacing old growth with short-rotation and monocultural tree plantations; 2) these projects are just a loophole for business; and finally 3) the corruption in government bureaucracies of several developing countries will at best limit the effectiveness of these programs and at worst make them a farce.

So, in the face of this, what do we know about the market forces that do affect forests?

- Americans consume 3 to 4 times the global average of forest products and are currently exporting deforestation. While America protects its old growth areas, as it should, our increasing demand for timber is putting pressure on old growth forests around the world.
- Global demand is beyond the harvest level of the world's natural forests and the estimated volume in maturing plantations will not make up the deficit.
- Two-thirds of industrial wood is harvested for construction and uses other than pulping; 50 percent of the global harvest is for fuel wood.
- Available substitutions in construction, such as cement, brick, plastics or steel, require more energy inputs than wood and, as such, cause more carbon emissions into the atmosphere.

There is as much as 3.5 million square kilometers of land available globally for reforestation, with a potential carbon storage of 60 to 87 billion tons of carbon.

Furthermore, better management practices on current private timberlands could yield as much as 40 percent more product, though those practices, such as prompt regeneration of stands on a 35-year rotation, are extremely capital intensive and, as such, difficult for industry to undertake. Reforestation of available lands can be directed to restoration of habitat or toward forest product development; often, they can serve both ends.

Cutting down old growth to replace it with faster growing monocultural plantations will not accomplish our aims, and I have heard no one suggest it. In fact, it is estimated that it would not be until the fourth cutting cycle, or after 130 years, that the total carbon sequestered by intensive management for wood products would equal the amount in an undisturbed forest. Better utilization of marginal, fallow, or waste lands, as well as better forestry practices, should take harvesting pressure off old growth and provide literal, as well as economic, buffer zones for biologically sensitive areas. Furthermore, carbon sequestration programs can be directed toward the protection of natural forest reserves, though the accounting for carbon credits is somewhat more difficult in those instances. In fact, programs do exist and look to be successful. The profits, for instance, from Costa Rica's Certified Trading Offsets are supporting both sustainable forestry practices on private land (where they have been introduced thus far on 150,000 hectares), and those profits are also being used for the conservation of land as national parks and bioreserves (with 530,000 hectares so far saved). It is my firm belief that we will save more of the world's forests, more habitat, more watersheds, more species *with* these projects than would ever be possible without them.

I consider at least the partial answer to the second objection -- that business will misuse carbon sequestration projects -- to be quite simple. We could reforest every ounce of land available on the planet, and we still would not solve the problem of global warming unless we also deal with gross emissions. We will not succeed without forestry solutions, but we also cannot rely exclusively on them.

Population growth and increasing competition for cheap resources will push all manufacturers and utilities to greater efficiency and innovation. It is likely that the Bill

Gates of the next generation will be found in environmental technologies. The world *must* move to a post-fossil fuel economy, and business knows this; it also knows that, if it is to buy time to develop better technologies and get them on line, then its carbon sequestration efforts better succeed. And, thus far, in my opinion these efforts seem to be of the highest quality.

Furthermore, while international ngos have a strong presence in the developing world, industry has also been effectively working in those areas but with a wider spectrum of interests and contacts. I would suspect that industry will have unexpected leverage in many difficult scenarios that ngos might not have on their own. The sustainable development aspects of most of the pilot projects now on line also have the potential for providing much needed material alleviation in rural and remote areas; this should have a strong appeal not only to local and national leaders, but to business interests in the region. The bottom line is: if you are not *in it*, if you are not *there*, you have no leverage at all.

Speaking of leverage, we also need to consider the leverage that industry has with Congress and the leadership they can bring to getting the Kyoto Protocol ratified. Ngos are giving up the opportunity here to garner support from potential allies on the unpleasant (and in sphere of economics, some would call it “irrational”) assumption that industry will act in bad faith on carbon sequestration.

I recently read a speech that Theodore Roosevelt gave at a national conference on forests (what else!) that seemed applicable to the broader concerns of this conference, and I would like to close with a quote from it. That conference, ironically at the turn of the last century, was an effort to bring environmentalists of the day, foresters, together with the timber industry to consider the proper husbandry for this nation’s forests as a whole, those on private and public lands.

TR said: “The time of indifference and misunderstanding has gone by. Your coming to this conference is a very great step toward the solution of the problem – a problem which cannot be settled until it is settled right. And it cannot be settled

right until the forces which bring that settlement about come, not from the government, not even from the public, but from the active, intelligent, and effective interest of business. I do not in the least underrate the power of an awakened public, but in the final test, it will be the attitude of industry which more than anything will determine whether or not our forests [or in this case climate] are [is] preserved.” He then goes on to describe the difference between working without industry and working with industry: **“[it is] the difference [he says] between mere agitation and actual execution, between the hope of accomplishment and the thing done.”**

I think we can all agree that we need to get this thing done soon, so let's put on our white hats and do it.