



The Pollution Dividend

By Peter Barnes

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It was almost like winning a planetary lottery. When oil began flowing from state-owned lands in the 1970s, Alaskans found themselves in a tantalizing quandary: What to do with a windfall worth billions of dollars? After years of wrangling, they chose three uses: (1) let the state government use part of it for schools, highways, and other infrastructure; (2) return a big chunk to citizens directly through annual cash dividends; and (3) invest the remainder in a portfolio of stocks and bonds, so that dividends will continue after the oil runs out. The formula for paying dividends was an egalitarian "one citizen, one share." The entity created to handle the citizens' windfall was called the Alaska Permanent Fund.

The father of the Permanent Fund was a crusty bush pilot turned politician named Jay Hammond. A fiscally prudent Republican, Hammond was elected governor in 1974 just as oil money began flooding state coffers. Hammond felt strongly that Alaska's oil wealth belonged to its people, not its government (he described Alaskans as "stockholders in Alaska, Inc."), and that their windfall should not be squandered. He battled both politicians who wanted to spend the money quickly on pet projects and businesses who favored tax breaks over more equitable dividends. Through the Permanent Fund he sought to curb government spending, strengthen Alaska's economy for the long run, and fairly distribute the state's fortuitous inheritance. By 1978, after a veto, a popular referendum, and a Supreme Court challenge, he had largely prevailed.

The first dividend checks were mailed in 1982. Since then, Alaskans have received more than \$7 billion from the Permanent Fund. In 1998 the per-capita dividend was \$1,540; house holds of four collected \$6,160. Needless to say, Alaskans of all political stripes now love the Permanent Fund.

The Alaska Permanent Fund has not attracted much attention in the Lower 48-but it should. For citizens of all states are about to inherit another gift of nature worth trillions of dollars. And hardly anyone is talking about it.

How is this possible? How can a trillion dollar windfall appear on the horizon with scarcely a peep in Washington? One could, perhaps, blame Kenneth Starr or Saddam Hussein, but that would be unfair. The truth is that this asset is little noted because it's quite different from assets we're accustomed to noticing. Unlike oil, trees, or even water, this gift of nature isn't visible. It is

a quality of the gaseous bubble that surrounds the earth-the atmosphere's capacity to safely absorb carbon dioxide and other ecologically disruptive gases. This ethereal asset is extremely valuable, and it's becoming more so every day. The reason for its high value is simple: our demand for it is fast outstripping the supply. And when something is in both high demand and limited supply, sooner or later people will pay money for it.

The Sky Is Filling!

Our demand for skyborne carbon storage is, of course, the flip side of our demand for fossil fuels-the more we burn of the latter, the more we require of the former. The reason we pay for oil drilled from the ground, but not for air to hold its combusted residues, is that our market system has a serious flaw. It doesn't perceive gaseous waste absorption capacity to be scarce. Instead, it sees the atmosphere as an infinite waste sink, available without cost to any and all.

But the era of free sky is over now. What science has shown-and what governments have officially recognized in the 1990s-is that Chicken Little had it almost right. The sky isn't falling, but it is filling. It can safely absorb only so much acid-brewing sulfur, ozone-eating chlorine, and heat-trapping carbon dioxide-and we're now reaching those limits (if we haven't already passed them). Putting it another way, it's not oil that's in short supply, it's sky. The challenge facing us is to fix the flaw in markets that blinds us to this wild fact.

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Fortunately, a fix isn't hard to design. Normally, markets recognize scarcity because a set of property laws allow owners of scarce things to charge other people for using them. If Waste Management, Inc. owned the atmosphere, they would charge us whatever the market would bear for dumping our crud into their waste sink. But there aren't yet any property rules for the sky, nor any clear owners, and thus the sky is subject to what Garrett Hardin called "the tragedy of the commons." Because there is no owner, and because it is in each person's interest to grab a share before someone else does, the atmosphere is now a common sewer-not the usually benevolent "invisible hand" at work here! The fix is to create markets for sky use, just as there are now markets for land and water use. To do so requires creating new atmospheric property rights. And therein lies both danger and opportunity.

The danger is that we could slide into the biggest giveaway of a public asset since the railroad land grants of the nineteenth century-a giveaway of our no longer spacious skies. The magnitude of this potential giveaway cannot be overstated. A recent study by DRI/McGraw-Hill put the value of U.S. carbon absorption capacity at hundreds of billions of dollars per year throughout the early twenty-first century-making this asset a trillion dollar trove. What is particularly intriguing is that the value of the sky rises as emission caps are lowered, because of what economists call "scarcity rent." Scarcity rent is what landlords-or any owners of highly demanded things whose supply is fairly fixed-get to collect from other people just because of scarcity. The scarcer (relative to demand) things like buildable land, Van Gogh paintings, Mark McGwire home run balls, taxi medallions, and slivers of the broadcast spectrum become, the higher their scarcity rents rise. The same is true for the atmosphere's ability to soak up the effluvium of fossil fuels. Thus, a new cost will soon be factored into almost every thing we buy: atmospheric scarcity rent.

The first, albeit small, appearance of this scarcity rent came shortly after sulfur emissions-the cause of acid rain-were capped by the Clean Air Act of 1990, the de facto end of the free sky era. As the cap gradually declines to 50 per cent of the 1980 level, coal-burning utilities are trading sulfur emission permits among one another, allowing the industry as a whole to find the cheapest way to reduce its total emissions. Periodic permit sales take place at the Chicago Board of Trade alongside stock index futures, soybean puts, and a host of other arcane instruments.

What has happened with sulfur will soon happen with carbon and other gases that trap heat in the atmosphere. As the world muddles toward creating a mechanism to reduce the rate of climate change, a "cap and trade" system for greenhouse gas emissions is in the process of being built. At the international level, the Kyoto Protocol-signed last year by over 50 nations-laid the foundations. Whether or not the U.S. Senate ratifies this particular treaty, some way of allocating rights to scarce carbon absorbing capacity-both globally and domestically- will eventually emerge. And those rights, however allocated, will grow more valuable as they grow scarcer.

A critical question then becomes: Who gets these scarce emission rights when they're first created? In 1990 the question was answered by grandfathering sulfur emission rights to coal-burning utilities in rough proportion to their previous emissions. This was a give away-probably a necessary one in 1990, when the concept of tradable emission permits was new and untested. But it wasn't a huge giveaway because, economically speaking, little sulfur (less than nine million tons a year) is actually burned. After all, sulfur is just a minor impurity in coal, not the essence of coal itself.

Carbon is different. Carbon is the irreducible pith of all fossil fuels, the fire inside our cars and furnaces, the toaster of our bread, the elixir of our modern economy. We Americans, the world leaders in energy consumption, blow about 1.5 billion tons of it into our sky every year-about 6 tons per man, woman, and child. So the question of who gets the rights to store this burned elixir is far from trivial.

Sadly, the Clinton administration-though proud of its fiscal prudence in other areas-is slouching toward a greatly magnified replication of the 1990 sulfur giveaway. Future carbon emission rights would be grandfathered to large energy companies like Exxon, Con Edison, and their brethren. These corporations, without paying a cent, would become the new land lords of the sky. They would charge us not only for BTUs and kilowatts, but for the right to use the scarce waste absorption capacity of our commonly inherited atmosphere. We would all pay scarcity rent to them-trillions of dollars over the years. Within the administration, and even among some environmentalists, this is viewed as a price worth paying to neutralize the energy companies' opposition to the Kyoto Protocol. That is the looming danger.

But the coming era of scarce sky also brings with it an unusual historic opportunity. There's not only unaccustomed scarcity to contend with, there's also manna from heaven. New and valuable property rights will be created quite literally out of thin air. How we structure those property rights, and who will get them, are important questions that call for new and creative answers. And if we want a model that can make millions of Americans richer rather than poorer, we need only look north to Alaska.

Dollars From Heaven

Though almost no one in Washington realizes it, our situation today is similar to that of Alaskans in the 1970s. Willy-nilly, we've stumbled upon a treasure we didn't know existed, and we must decide what to do with it. We face the same choices Alaskans faced. We can squander our inheritance or preserve it. We can give big chunks of it to a fortunate few or give smaller but equally distributed pieces to all shareholders of America, Inc.

The Corporation for Enterprise Development, with which I work, has proposed a plan for sharing our trillion dollar windfall that closely follows Alaska's. As an analog to the Alaska Permanent Fund, we've proposed a trust whose underlying asset is America's share of the atmosphere's carbon absorption capacity. The trust would be neither a government agency nor a for-profit corporation. It would be a civic institution, embodying citizen ownership of a commonly inherited asset—a modern way for commoners to own a commons. Its operation would be off the books of the federal government and wouldn't affect taxes or expenditures in any way (except to the extent that taxable dividend income generates more income tax revenue). In essence, it would be a scarcity rent recycling system whose underlying formula is: from each according to his use of scarce sky, to each according to his equal ownership. Those who consume less than their proportionate share would come out ahead; gluttons would come out behind (but still have the right to be gluttonous).

We chose the trust structure for several reasons. A trust is a market-based entity that can own and manage assets, charge for use of its assets, and periodically distribute its income to shareholders ("beneficiaries" in trust terminology). It has a board of trustees who are legally responsible for its actions, and most importantly, it declares a mission, which its trustees are legally bound to fulfill. If trustees fail to adhere to their mission, they can be sued by beneficiaries.

Air Rights

All U.S. citizens, current and future, would be beneficiaries of the trust we propose. Its trustees would have three legally binding responsibilities: (1) to preserve the current mix of atmospheric gases, thereby stabilizing the climate; (2) to receive market prices for use of the atmosphere as a waste sink; and (3) to distribute income equally among beneficiaries.

Trust dividends would be a nontransferable property right of all U.S. citizens, including children. Each year's dividend would be determined by dividing the revenue from auctioning emission permits by the number of beneficiaries. Dividends would be paid annually, as they are in Alaska, and families could plan how to use them. Children's dividends would be placed in tax-deferred savings accounts, building assets for later use. Every future American adult would thus have a get-started-in-life nest egg, plus an ongoing source of property-based income. At the same time, every American would benefit from the inevitable rise in atmospheric scarcity rent—and even have a stake in accelerating that rise by lowering the caps on emissions. Our interests in conservation and income would be aligned.

To put this plan in some perspective, consider President Clinton's recent proposal to dedicate 11 percent of the projected budget surplus to Universal Savings Accounts for lower income Americans.

According to the administration, the dedicated funds would total about \$450 billion over 15 years-no small sum of money. A similar plan proffered by Senator Bob Kerrey of Nebraska-which calls for \$1,000 to be deposited in every newborn's savings account, plus \$500 a year until age five-would cost about \$250 billion over 15 years, and Kerrey suggests taking it out of Social Security. An even grander plan to create universal nest eggs-advanced by Yale law professors Bruce Ackerman and Anne Alstott in their new book, *The Stakeholder Society*-would require a wealth tax.

What all these plans-and ours-have in common is a desire to create starting-gate equity for all U.S. citizens (with equity here meaning "ownership" as well as "fairness"). Where they differ is in their funding mechanisms. Revenue from atmospheric scarcity rent, if it's efficiently captured and recycled, could exceed \$1 trillion over the next 15 years-more than the Clinton and Kerrey plans combined. That revenue wouldn't depend on iffy budget surpluses, wouldn't come out of Social Security, and wouldn't require a tax on anything. What's more, it would most likely be rising by the end of the period rather than vanishing-and, because of atmospheric scarcity, we would be paying it anyway, no matter who gets the property rights to the sky. Arguably, a canny Clinton could offer Republicans an attractive deal: take 10 percent of the projected surplus for tax cuts and put the atmosphere into a permanent trust for Universal Savings Accounts.

Most likely, though, the debate over atmospheric property rights won't be settled during the final years of the Clinton administration; it will bubble along into the next decade. And as it unfolds, it will present interesting opportunities to the political class. For example, as liberals come to grips with the possibility that the era of big government is over, they may see the expansion of property rights as an acceptable alternative. After all, such an approach is squarely in the Jeffersonian tradition and could achieve two high goals of twentieth-century liberalism-environmental protection and more wide spread economic opportunity-even as it avoids new taxes, regulations, and government bureaucracy.

Moreover, giving every American a share in the sky would involve no taking of any thing anyone now owns. The new property rights would be carved from assets currently unowned (and badly in need of being owned), and would be allocated in a way that few can quarrel with. Why, after all, should the atmosphere be unequally owned? No one lifted a finger to create it. It's indisputably an inherited asset-and not from anyone's parents, but from the common creation. As none other than Bob Dole stated with regard to another scarce ethereal asset, "The bottom line is that the [broadcast] spectrum . . . belongs to every American equally. No more, no less."

At the same time, conservatives could gravitate toward an Alaska-style plan that not only embodies their avowed aversion to corporate welfare, but also shows that market mechanisms can work as well as, if not better than, government. Conservative intellectuals have long been enchanted by a theorem of Ronald Coase, a Nobel prize-winning economist who contended that clearly defined property rights-including emission rights-can reduce pollution more efficiently than government regulation. Here's a practical chance to put his theorem to work.

At a more emotional level, many conservatives are hankering to privatize something big-and if it can't be Social Security, why not make it the sky? One can almost hear the sound bite now: "The sky isn't the government's asset, it's the people's." Moreover, as budget surpluses are sucked up by aging baby boomers, making tax cuts improbable, the new Republican mantra could well be dividends. And what could be a more pro-family dividend formula than equal shares for every man, woman, and child?

To be sure, there are intellectual and political obstacles to an Alaska-style plan for the sky. Some environmentalists object to the very notion of selling permits to pollute. How, they ask, could something as sacred as the sky be chopped into marketable slices and sold for cash? Many liberals, moreover, see no distinction between the government as trustee of a common asset and the government as outright owner. An owner can do whatever he chooses with an asset; a trustee cannot. Such liberals have lists of worthy programs that would soak up future sky revenue. The idea that an income-producing asset could belong to citizens rather than to government-that the commons is not the same thing as the state-doesn't sit easily with them.

The Sky's the Limit

Another objection-not to our plan specifically, but to any limit on carbon emissions-is that limiting emissions would, like a carbon tax, raise fossil fuel prices and thus be a drag on our economy. This claim is often rebutted with the assertion that the technological innovations in conservation and renewables would more than offset any economic drag. Our plan offers a stronger rebuttal: there would be little or no economic drag in the first place, because the mechanism we propose isn't at all like a tax. There would be no levy legislated by, collected by, or spent by the government. Instead, there would be a system for capturing and recycling scarcity rent, by passing the U.S. Treasury entirely. Yes, prices would rise to reflect the new scarcity of sky, just as they have risen throughout the past century to reflect the growing scarcity of land. But if, through dividends, 100 percent of sky scarcity rent is returned to citizens, who then spend and/or save it as they wish, there would be little if any economic drag. The portion of sky rent that ends up in children's trust funds will increase the national savings rate. Conservatives generally think that savings is good for investment, and liberals who worry about fiscal drag recognize that new investments in human capital, conservation, and renewables provide an offsetting boost to the economy.

The biggest obstacle to an Alaska-style plan isn't intellectual but political-the pervasive influence of the energy companies. They're not bashful about asserting their claim to the new millennium's atmospheric scarcity rent, even though there's no legal, moral, economic, or environmental reason for giving it to them. Their most endearing argument-that they'll be hurt by the scarcity of sky and are therefore "entitled" to compensation-won't fall sympathetically on ears outside the capital, where business risk and product obsolescence are not normally reimbursed. Still, their trump card is their ability to confuse the citizenry and delay progress on climate change, and that gets them heard inside Washington.

But despite these obstacles, the battle can be won. A new era will require new property rights. The ideological tides are right. A giveaway would be an outrage. And Alaska's model is powerful. What we need is a visionary like Jay Hammond to lead the fight.