

The Wall Street Journal

An Inconvenient Tree

By Russell Seitz

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A report that just came online in the Proceedings of the National Academy of Sciences should make warm reading for Al Gore. The former next president, like many black-clad greens gracing the cover of Vanity Fair, relies on firms that promise to plant trees to offset their clients' fuel-intensive lifestyles, allowing the affluent to ignore their effluence and claim to be CO₂ free. Mr. Gore also points to windmills and other energy alternatives when pleading carbon-neutral to charges his jet-setting contributes to global warming.

But where do Mr. Gore's green woodlands grow? Canada? Scotland? Patagonia? Alaska? Siberia? Does he really know? Carbon offsets are sold by the ton, not by the acre, and don't come with return addresses.

He'd better find out -- before Earth Day. The research reported by Govindasamy Bala of Lawrence Livermore National Laboratory and colleagues at the Carnegie Institution's Department of Global Ecology compared the climate effects of planting and clearing forests at latitudes high and low. Their computer simulations yielded some disturbing results.

Saving the tropical rain forest is well and good, for cutting down trees in the tropics means less long-term water transfer from soils to the atmosphere, leading to fewer clouds and a warmer planet. But planting trees where none exist in northern areas may actually hasten global warming. Northern tree plantations can trap heat -- they both absorb solar energy and shade sun reflecting snow. This, say the scientists, can apparently overpower the cooling effects of trees soaking up carbon dioxide and storing carbon in growing biomass. Take away the trees in the long-running climate model, and high latitude areas become 0.8 degrees Celsius cooler by the year 2100, when compared to a standard model of North Woods forest density. Carbon-offset plantings there could send the tree line north, worsening global warming.

Atmospheric scientist Govindasamy Bala of Lawrence Livermore says, on the other hand, that tropical reforestation efforts could slow global warming -- low latitude regions that the model left treeless until 2100 increased in average temperature by 0.7 degrees. That's a warming trend as large as the planet saw in the 20th century.

Climate scientist Victor Brovkin of Germany's Potsdam Institute for Climate Impact Research told Science magazine, which is edited by Mr. Gore's friend Donald Kennedy (former president of Stanford University), that while the new study serves as an important warning against planting trees in the far north, planting trees in temperate regions probably has little or no net regional effect. Comparing models of reforestation and deforestation of areas in the temperate zone shows temperatures shifting just 0.04 degrees Celsius -- an impact even smaller than the predicted .07 degree effect of the Kyoto treaty. So Mr. Gore can't very well wag a finger at that hatchet-wielding Arbor Day delinquent, George Washington, for chopping the Little Ice Age down in its prime, or snip at the energetic brush cutting of Presidents Bush and Reagan.

The inconvenient truth -- that ill-placed "carbon offset" reforestation schemes can backfire could give rise to a legal climate of fear. Will environmental lawyers chasing tree surgeons' ambulances become the next big thing in torts? The climate modeling game affords few certainties, but it seems likely that carbon-offset lawsuits will sprout like kudzu from this fertile new research field. As it grows, will the green state attorney generals who took the EPA to the Supreme Court end up inviting the former next president back for an encore?