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AN ACT OF WAR?

YOUR FORESTS — YOUR SURVIVAL

Native Forest Council
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Power & Hope

Everyone has the power if they just stand up for what's near & dear to them.

With 2006 upon us, I asked myself: what do I want **for** you and what do I want **from** you?

For you, I want the realization that, though we are passing through some tough times, each and every one of us, regardless of our individual skill sets, has the power of truth, conviction and spirit to make a real difference in our world by our actions. Like a pebble thrown in a pond, we may not see where the ripples go or what their impact is, but we know they went somewhere and we know they had an impact. I want you to see a world where those who seek to threaten that which we rely on for our very lives are discredited, removed from power, and punished severely. I want you to know that where there is a will, there is a way.

From you, I want your renewed commitment to demand the truth, the whole truth and nothing but the truth — to defend Nature and the life, land and liberty that Nature provides; to make every effort to stay informed without succumbing to hopelessness; to support only those individuals and organizations that uphold and defend the principles you believe in; that you constructively criticize those individuals and organizations that engage in weak, timid or dishonest political deals and compromises that are robbing our future generations blind.

We are facing nothing less than global genocide. If we continue to allow corporations to liquidate, pollute and destroy the 'lungs of the planet' — if we continue to allow the oil industry to burn fossil fuels, pollute our soil, air & water while destroying the ozone layer — life on earth may cease to exist.

While this seems grim, we have the power to not only slow the rate of destruction but to change direction and reverse course. Of course, it will take many of us acting together to put an end to the feeding frenzy of dishonest corporations. It will take a great deal of money to defeat the widespread saturation of our culture by industry propaganda, advertising and mind-numbing entertainment. We will have to stop bickering as if we were but a herd of cats going in all directions at once, serving only our own personal self-interest. It will take people working together, a unified and uncompromising vision to protect all that remains and recover what's been lost, instead of arguing over the terms and conditions for the continued destruction of Nature (and ultimately the human race).

Where's our endowment to defend and preserve Nature? Harvard University has a \$25 billion endowment to assure its future, however no similar endowment exists to defend and preserve Nature and assure a chance of survival for the human race. This must change.

Yes, we have the vision, and we have the power. But without you and your efforts we have nothing.

Recently, the Senate blocked yet another proposal to drill in ANWR—while allowing drilling almost everywhere else.

Immediately, I received many declarations of victory from big green groups. Yes, let's take a minute to rejoice over the fact that the coastal plain, caribou, musk oxen and polar bear are granted another stay of execution. But then let's get back to business.

Dodging a bullet, when the loaded gun is still trained at our heads, does not constitute a victory. Holding back the tide for a little while does not mean that we've won. While we scramble to temporarily protect one little slice of our wild heritage, the subsidized and dishonest corporate parasites are swarming all over the rest of the pie.

For decades the thoroughly intimidated environmental movement has only played defense. The robber barons propose a timber sale, we fight it in court using up our time and money to stop, modify, or postpone the cut. Meanwhile, while we are so occupied, dozens of other timber projects are in the works, like storm clouds on the horizon.

Sure, we've had some successes over the years, and those who put in their blood, sweat and tears for the cause should be commended. And certainly we need a strong defense. However, as we all know: "the best defense is a strong offense." Without a strong offense, we will never score any points or win the war.

So long as we keep quibbling over an old-growth parcel here, a wildlife refuge there, industry's lackeys will continue to drain us of our lifeblood: our majestic forests and deserts, our wild rivers and streams, our once thriving fish and wildlife. We're swatting at the tails of the worst of the deadly corporations when we should be taking out their headquarters and funders. That's what they do to us.

In 2006, we are at a crossroads. Although much of our nation's wild lands have already been trashed or degraded, few will deny that what remains is worth fighting for. However, our water, soil and air continue to be spoiled and polluted because no public costs are calculated for these priceless and irreplaceable resources. There is no natural resource inventory accounting. As a consequence, the chainsaws continue to rip up and tear apart the national forests and big oil drillers invade and trash every possible corner of the natural world. All the while the American taxpayers are forced to subsidize and pay the bill.

It's time to change our tactics. We need to stop playing by the rules of their rigged game. We need to play a whole new game.

When the Native Forest Council first proposed Zero Cut on public lands at our formation in 1988, we were told that we were "ahead of our time." We called that nonsense, but if we were ahead of our time back then, then surely our time has finally come today! Now, more than ever, the time has come to take a stand and *demand an end to all logging, drilling, mining and grazing on public lands for humanity's sake!*

It's clear that the only way we can begin to stop the genocidal trashing of our planet and its living life support system is to place every acre of public lands off limits to the extraction industries and the politicians whose favors they have purchased. We must go on the offensive and reclaim the forests, mountains, deserts, fields, plains, rivers and streams that are our birthright. At this point, if we are serious about the survival of the species, we have no choice but to save America's legacy of publicly owned lands, by preserving them as forever wild.

As Dr. Seuss' character the Lorax said: "Unless someone like you cares a whole awful lot, nothing is going to get better; it's not."



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No Thanks
All those who feel it's OK to cut deals that leave us with less native forests and clean water.

Submission Guidelines
We welcome unsolicited submissions that address issues relevant to public lands protection and support the Native Forest Council's mission. If you would like us to return your work, please include a SASE.

Inspired? Incensed? Impressed?
Please write:
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Eugene, OR 97402

Cover Photo
Gary Braasch



Native Forest Council

The Native Forest Council is a nonprofit, tax-deductible organization founded by business and professional people alarmed by the wanton destruction of our national forests. We believe a sound economy and a sound environment need not be incompatible and that current public land management practices are potentially catastrophic to both.

The mission of the Native Forest Council is to protect and preserve every acre of publicly owned land in the United States.

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News and Views

ANWR Drilling Voted Out

The Senate recently voted out the provisions of the defense spending bill by Senator Ted Stevens of Alaska that would have opened up the Alaska National Wildlife Reserve to oil drilling.

The vote was 48-45 to strike the Arctic drilling provisions from one of the last remaining bills of the year's session. The defense spending bill is considered a "must pass" bill, and many people were outraged that Stevens attempted to use the bill as a vehicle to push through the drilling.

In response to the vote, Stevens said: "This has been the saddest day of my life." The victory may be short lived. Senator Lisa Murkowski, also from Alaska stated "We have a commitment from congressional leaders that we will consider ANWR again next year."



EPA Recommends Easing Pollution Reporting Rules

The EPA is looking at changing reporting provisions of the Clean Air Act for corporations releasing toxic pollutants. The rule changes would allow companies to "streamline" their reporting by not having to report if they claim to release fewer than 5,000 pounds of a specific chemical. Current regulations put that limit at 500 pounds.

Pombo/Gibbons Land Grab Withdrawn

Representatives Jim Gibbons and House Resources Committee Chairman Richard Pombo withdrew their controversial revisions to the 1872 Mining Act from the budget reconciliation bill. The revisions would have allowed mining companies to buy public lands that they have been mining.

The Environmental Working Group estimated that 5.7 million acres of public land would have been subject to privatization under the proposed changes.

Gibbons said he plans to work on new mining legislation next year.

Representatives Walden and Baird and Senator Smith Introduce Logging Bills

Representative Greg Walden (R-OR) and Brian Baird (D-WA) recently introduced a bill, called the "Forest Emergency Recovery and Research Act" (HR4200) that sweeps aside protections for forests, fish and wildlife in order to rush logging and roadbuilding after normal, natural events that occur in national forests.

Senator Gordon Smith (R-OR) recently introduced a Senate version called the "Forest for Future Generations Act."

More information on these acts and their progress can be

found on the Klamath-Siskiyou Wildlands Center website at www.kswild.org.

EPA Fines Teflon Maker DuPont for Chemical Cover-Up

The EPA recently announced that it will fine Teflon maker DuPont \$16.5 million for two decades' worth of covering up company studies that showed it was polluting drinking water with an indestructible chemical that causes cancer, birth defects and other serious health problems in animals. The chemical PFOA is in the blood of over 95 percent of Americans.

Four Arrested Outside Pacific Lumber Headquarters

Three women and one man were arrested November 28 morning during a direct-action protest at the headquarters of The Pacific Lumber Co.

The protest, according to Bay Area Coalition for Headwaters and Rainforest Action Network officials, dealt with the cutting down of old-growth trees by PALCO. The trees in question are part of an old-growth stand called Nanning Creek Grove, which is the last, largest unprotected stand of virgin redwood forest in the world, according to the Campaign for Old Growth.

More information can be found at www.ancienttrees.org or at www.wesavetrees.org.

Governments Complain About Google Earth

Several governments around the world are complaining that the Google Earth Software is a major threat to their security [for more information on Google Earth and the Native Forest Council's uses of it in monitoring the forests, see www.forestcouncil.org/googleearth].

The governments, including India, Russia and South Korea complain that Google Earth provides too detailed views of municipal and military installations and wants the company to block such images from its software.

More Than 140 Contaminants Found in the Nation's Drinking Water

The first ever nationwide compilation of tap water testing results from drinking water utilities shows widespread contamination of drinking water with scores of contaminants for which there are no enforceable health standards. Examples include the gasoline additive MTBE, the rocket fuel component perchlorate, and a variety of industrial solvents. The pollution affects more than one hundred million people in 42 states.

LETTERS

Tim,

I can truly tell you that my life threatening experience 4 years ago really did change my life. Now after my brain surgery, I am an environmental activist rather than just a closet environmentalist employed by the Forest Service. Based on what I heard, I knew that if the Forest Service found out, I would be fired. At this point of my life, being 57 years old with only a MS in forestry (and not much other work experience), I had no other options... even if it did mean still working for the Forest Service. I had this crazy idea that I might be successful initiating USFS change from inside the agency. Boy, was I wrong. Now I am also an animal rights supporter.

I know that if humanity does not act soon to restrain itself from destroying what few natural public treasures are left and the critters that live there (vertebrates and invertebrates)... all for money, the treasures will be gone.

Dick

[Dick Artley is a retired Forest Service employee who has

devoted his retirement to exposing the wrongdoings of the organization to which he devoted his working life]

Tim,

Thank you for all you do with and for The Native Forest Council! I respect and admire you for your perseverance and tenacity! You set an example for us all and I applaud you! I am enclosing a check to help with the cause of saving our National Forests and other issues that ultimately effect the natural Earth and what's left of it.

Again, Tim, I appreciate what you and your staff are doing and I will continue to contribute whatever I can. Keep up the good work — It is brilliant!

May the Forest be with you!

Jeanie
Olympia, Washington
December 2005

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"Eco-Terrorism:" Cui Bono?

By Michael Donnelly

In the 1980s in the North Santiam Canyon east of Salem, Oregon, Ancient Forest activism was peaking after years of dogged effort. This is the area of the famous 1986-89 North Roaring Devil blockades and tree sit (the second ever pro-forest tree sit; the first coming in the nearby South Santiam's Millennium Grove actions of 1985). North Roaring Devil protection efforts went on for three years, over 60 folks were arrested for nonviolent civil disobedience at the logging site; sixty-three acres of five-hundred-plus-year-old trees were leveled; but, in the end, a lawsuit stopped the logging of an additional 170 acres and even led to the Willamette National Forest Plan being thrown out and redone. The entire area is now a part of a 49,000-acre reserve.

Naturally, this effort gained a lot of notoriety. It was the first such effort to garner national attention to the plight of our fast-vanishing old-growth forests, bringing in reporters from around the world. It led to a spread in *National Geographic* and some TV documentaries. By 1988, things also got going eight miles away in the Little North Fork Santiam drainage when a concerted effort was mounted to stop Forest Service plans to liquidate Opal Creek's wondrous ancient forest.

The successful Opal Creek endeavor (it's now a designated Wilderness area with over 35,000 acres preserved) led to even more attention coming to the Santiam area.

In the end, a lawsuit stopped the logging of an additional 170 acres and even led to the Willamette National Forest Plan being thrown out and redone. The entire area is now a part of a 49,000 acre reserve.

In 1995, 60 miles south at Warner Creek, activists mounted an occupation of a planned post-fire (an arson) "salvage" logging area. People from around the country came and camped out in the snow and rain for a year before a lawsuit ended the threat of logging there.

Change in Tone

Soon a few new folks arrived on the two scenes advocating more violent defense of the forests. One who moved to the Detroit area claimed *ecobona fides* as one of the folks arrested with famed activist Judi Bari when she broke into the home of Harry "we log to infinity" Merlo, CEO of Louisiana Pacific (until he was rudely fired by LP shareholders in 1995 after years of mismanagement). Bari and friends famously drank Merlo's sherry and soaked in his hot tub before arrest.

Of course, when Northwest activists checked into this guy's story, he was not with Bari in California that night. He constantly pushed for more extreme actions by forest defenders. He claimed to have spiked trees in the area and falsely cited a recently deceased local (one of my best friends) as his accomplice. He even loudly claimed to have provided the accelerants used in the famous Vail arson. Then, he vanished one night and cannot be found, even by a contractor trying to settle a multi-thousand-dollar monetary dispute in his favor.

On the Cusp of Victory

On October 28, 1996, a minor arson fire broke out at the Detroit Ranger Station, the Ranger District responsible for both Opal Creek and the Breitenbush River area of the North Roaring Devil. A truck was burned and graffiti reading "Earth Liberation Front" was painted on the building. At the time, Earth Liberation Front (ELF) was an England-based group that had done no actions in the USA. This was possibly the first in the USA.

Two days later, the Oakridge Ranger Station (yep,

Warner Creek) was burned to the ground. Forest Service Chief Jack Ward Thomas visited the site declaring the arson an act of cowardly eco-terrorism. "This is what people do who do not understand how to operate in a democracy," Thomas pontificated.

When peaceful protesters arrived the next day, Halloween, at Forest Service HQ in Eugene to protest yet another Ancient Forest timber sale in the Detroit area, they were met by a phalanx of riot police, decked out in full Seattle WTO Ninja-turtle attire and surrounding the entire block.

From that point on, increased militarization took place at every forest protest; including ski-masked, black-attired, highly armed characters slinking through the woods taking photos of every protester and, every once in awhile, leaping out of the brush and tackling and arresting folks for "violating a closure area."

The big question at the time was; not so much who was doing these arsons, though that was high on everyone's minds; but why here? Why in the two areas where activists were winning? It was so counterproductive that major research into spotted owls and recovering burned areas went up in smoke at Oakridge; research that made the case of the protesters!

Detroit was also well on its way to a transformation away from being the nation's biggest timber cutting ranger district in the 1980s (an average of 13,000 acres of ancient forest cut annually, leading to an average yield of 125 million board feet per year!). Now, after the transition, the Detroit Ranger District hosts over three million visitors per year and cut less than one million board feet last year; all from salvage and small tree thinning operations.

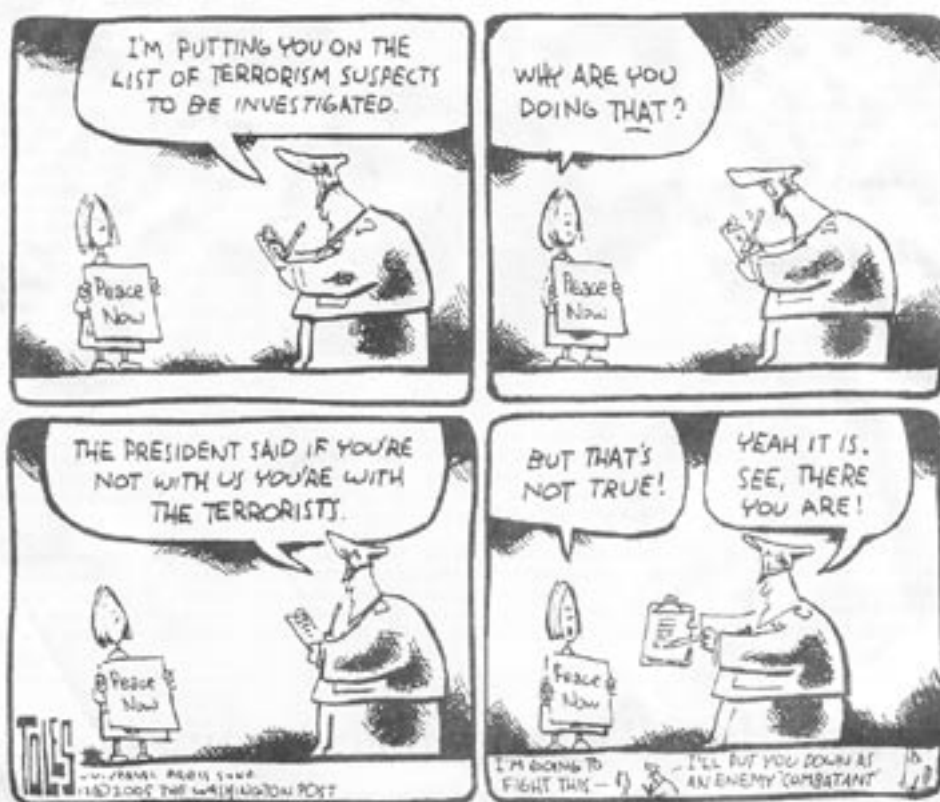
Who Gains?

All this brings me to last week's arrests in a number of "ELF" and "Animal Liberation Front" (ALF) incidents. Bandied about universally in the media as "eco-terrorism" cases, each event also cries out for the same "Why here?" analysis.

Bandied about universally in the media as "Eco-terrorism" cases, each event also cries out for the same "Why here?" analysis.

Even if one was a dedicated ELF/ALFer, why would one choose to attack these specific targets? Of course, one can find the rationales on their own website. (The notion of committed Luddites having websites is another issue.)

Tim Hermach, head of the Native Forest Council, has seen how the fallout from such actions has impacted nonprofit advocacy groups like his. He put it this way, "It's strange how easily we forget COINTELPRO, industry's arsons, insurance fraud and strategic PR campaigns to divide and conquer its opposition of responsible citizens. ELF and its alleged crimes are far more likely to be one or all of the above rather than 'us.' Just look at the targets. Just look at the results. Did they help us? Did they advance our cause or set us back? Even if one believed there were some willing dupes from within our ranks who played a role in "ELF" actions; were they directed, encouraged or manipulated by the



FBI or industry agents?"

"Eco-Terrorism" as a concept itself is the brain-fart of Ron Arnold, guru of the Wise Use Movement. Arnold ginned up the entire notion as a way to combat ever-increasing public support for conservation.

Ironically, Arnold claims that "eco-terrorism" is clandestinely carried out at the behest of major nonprofit groups and their funders when he himself uses the theory as the main cash cow for his own nonprofit. While I agree with him on some things, especially that there is something just a tad shady about the Big Greens and their Big Oil foundation funders; it's not them in any way behind this wave of arsons.

Most long-time activists knew none of the accused.

Nor is it the work of any of the many small groups that have organized to protect critical habitats. Despite the fact that a couple of the recent arrestees did spend some time at the Warner Creek blockade, they were not instrumental in that effort. Most long-time activists knew none of the accused.

And accused is all they are. We also must remember that the FBI arrested activists Judi Bari and Daryl Cherney after they were the victims of a car bomb. The FBI basically accused them of bombing themselves. After years of litigation, Bari and Cherney were exonerated, and the FBI was forced to pay Cherney and the deceased Bari's estate a \$4.4-million-dollar settlement for violating their First and Fourth amendment rights.

In summary: we have questionable actions at questionable sites; we have arrests with the aid of unnamed "confidential informants;" we have provocateurs (informants?) who arrive, then vanish; and, after ten years, we have no arrests in the Bari bombing nor in the Detroit and Oakridge arsons or the arson of the Warner Creek forest. All of this is reminiscent of the lack of law enforcement effort on the "Anthrax letters" to the media and top Democrats.

A pattern emerges: issues that remain "unresolved" are matters where activists or their causes are harmed or silencing dissent is the motivation. Should industry or their stooges be even slightly impacted by anything, legal or otherwise, the FBI stages a full-court press — rights be damned.

It really is "what people do who do not understand how to operate in a democracy."

MICHAEL DONNELLY was instrumental in both the North Roaring Devil (he was the plaintiff in the lawsuit that stopped it) and the Opal Creek campaigns. He can be reached at pahtoo@aol.com.

US Senate Feigns Outrage Over Big Oil's Windfall Profits

By Bill Van Auken
November 10, 2005

The joint hearing of the US Senate's Energy and Commerce committees on oil profits had its comical side. Republican and Democratic lawmakers, many of them millionaires themselves and recipients of fat campaign contributions from the oil companies, feigned dismay and even outrage over the vast sums that have poured into the coffers of big oil—and the pockets of its CEOs—as a result of soaring fuel costs over the past several months.

The exercise recalled nothing so much as the scene from the film "Casablanca" in which Inspector Renault—himself on the take—declares that he is "shocked, shocked to find that gambling is going on here."

There is a "growing suspicion that oil companies are taking unfair advantage," blustered Senator Pete Domenici (R-NM), "The oil companies owe this country an explanation." His constituents, he added, think that "they are getting ripped off."

Exxon's total revenues for the third quarter topped \$100 billion. On an annualized basis, this is slightly less than the total earnings of Australia.

Among those promoting the hearings were the Senate's multi-millionaire Majority Leader Bill Frist and House Speaker Dennis Hastert, who himself has taken in some \$20,000 in campaign contributions from the oil industry PACs so far this year.

"We expect oil companies to do their part to help ease the pain American families are feeling from high energy prices," Hastert declared.

Even the White House got in on the act. Bush's press spokesman Scott McClellan told reporters, "Energy prices have been too high and energy companies have realized significant increases in profits. It's important that the private sector be good corporate citizens and invest in the energy infrastructure and support those in need."

This from an administration that is effectively run by the former Halliburton CEO Dick Cheney and that counted Enron and its CEO, Kenneth Lay, as among its closest supporters.

One Republican at Wednesday's hearing summoned up genuine anger. "I must tell you, it's not terribly fun defending you," declared Sen. Larry Craig of Idaho. It may be a dirty job, but at least it pays well. Craig took in close to \$100,000 in contributions from oil and gas companies between 1999 and 2004.

Senator Barbara Boxer (D-CA) escalated the rhetorical offensive. She exhibited a chart detailing

the multi-million-dollar pay packages going to each of the CEOs. Then, in what must qualify as the understatement of the session, she declared heatedly, "Your sacrifice appears to be nothing."

Indeed, Lee Raymond, chairman of Exxon Mobil, boasted \$38 million in total compensation in 2004, a figure that could be construed as modest in relation to the \$9.92-billion quarterly profits racked up by the company recently—a record in the history of world capitalism—and the \$96 billion in profits that the industry as a whole is expected to reap in earnings for this year. Exxon's total revenues for the third quarter topped \$100 billion. On an annualized basis, this is slightly less than the total earnings of Australia.

Raymond and the four other big oil CEOs—Chevron, ConocoPhillips, BP America and Shell Oil USA—called to testify at the hearing were hardly contrite about the massive amounts of money that they took in from soaring gas prices and as a result of the disasters suffered by millions in Hurricanes Katrina and Rita. Speculation and profiteering at the expense of the American people is their business, and it has been a very good one.

The hearing began with a dispute over whether the five CEOs would be made to rise, raise their right hands and swear to tell the truth. The ritual—associated in the public consciousness with mobsters and people hauled before Congress accused as Communists—was required of tobacco industry executives at Senate hearings on the effects of smoking in the 1990s.

Certainly, there is an unassailable argument to be made that the oil monopolies have inflicted far greater harm upon the people of the US and the world than the tobacco bosses.

A war is being fought in Iraq—at the cost in lives of over 2,050 US soldiers and more than 100,000 Iraqi civilians—to secure for these companies preminent control over the second largest oil reserves in the world. Moreover, they have been the driving force behind a US policy to deny the threat of global warming and continue on a path that threatens the destruction of all life on the planet.

Nonetheless, they were not asked to stand and swear to tell the truth. Republican committee leaders intervened to spare them the indignity. All those campaign contributions have to count for something.

In his testimony, Raymond defended Exxon's gargantuan profits, asserting that they only made up for the oil giant's lean years. Petroleum earnings, he declared "go up and down" from year to year. This year, of course, Exxon's third-quarter earnings went up by an astonishing 75 percent from a year ago.

He went so far as to acknowledge that rising gas prices "have put a strain on Americans' household budgets." For a man who took home \$38 million last year, this is merely a theoretical proposition.

For millions of American working people, however, it is a question of having to choose between filling up the gas tank, heating the home, or providing food and other basic necessities for themselves and their families.

The government has warned that natural gas prices in the Midwest will skyrocket by 61 percent this winter and home heating oil in the Northeast will likely soar by over 30 percent. The inevitable result will be deepening poverty and deaths from the cold.

A rather modest proposal that the oil companies divert a portion of



their windfall profits into the Low Income Heating Assistance Program—a program repeatedly slashed by the Senate itself—got a frigid reception from the big oil CEOs.

"As an industry we feel it is not a good precedent to fund a government program," ConocoPhillips chairman James Mulva, told the Senate panel. He warned that giving money to the poor would only divert it from the quest for new oil to exploit.

As for threats of windfall profit taxes or anti-gouging legislation, the oil executives responded by threatening that any such measures would only produce shortages and higher prices, while driving away investment in new refineries. That the oil industry has not built a single new refinery in the US for 29 years was not something they bothered to mention.

All of the industry's arguments about the "free market" setting prices is so much hogwash. The soaring cost of energy can be traced in large part to the ever-greater monopolization of the oil industry. The process of mergers and acquisitions within the industry that began in the 1990s was driven by the Wall Street's demands for profits, not energy needs. And the industry's decisions remain a matter of producing quarterly profits for investors.

That such methods are incapable of assuring rational distribution of energy supplies has become obvious. Even more evident is the inability of this system to confront the profound dangers posed by global warming, caused by dependence upon fossil fuels.

For the oil companies, the Senate hearing was an opportunity to press for even greater concessions from the government.

For the oil companies, the Senate hearing was an opportunity to press for even greater concessions from the government. Chief among them is environmental deregulation. They want Alaska's Arctic National Wildlife Refuge as well as the continental shelves opened to unfettered drilling. They also want the Clean Air Act gutted to make refining cheaper and further boost profits.

There is no prospect of any legislation that will curb energy prices or the profit drive of the oil monopolies emerging from the US Senate. The hearing merely served as a stage for members of both parties to pose as critics of the energy industry. That they felt the need to do so is indicative of the growing anxiety within US ruling circles that the connection between soaring corporate profits, on the one hand, and the deepening social crisis confronting the majority of the population, on the other, is becoming dangerously apparent.

While the pretense of the Senate in holding the hearing was farcical, the testimony that was elicited made a strong case for a necessary measure that neither Democrats or Republicans will advocate, much less carry out: the nationalization of the energy industry so that it can be run under public ownership and control in the interest of the entire population.



Rigged: Senate Fails Public, Gives Oil Moguls Red-Carpet Treatment

by Ralph Nader

It was Wednesday, November 10, and the Senators had the five bosses of the largest oil conglomerates in the world facing them and the media in a large hearing room. Millions of Americans are indignant over gouging gasoline and natural gas prices and want action.

So what did the two Senate Committees do? They blew it. As Dana Milbank wrote in the *Washington Post*, "Instead of calling oil executives on the carpet yesterday, senators gave them the red-carpet treatment." Not quite. Senator Barbara Boxer, among a few, gave the oil tycoons a hard time. But generally, by the end of the hearing, none of the executives broke a sweat.

They just want lower taxes, more subsidies, more freedom from environmental regulations, and more access to the public lands onshore and offshore.

There was at least a high expectation for some tough rhetoric and demands for information, though nobody thought there would be any action whether for an excess profits tax, tougher anti-gouging legislation or anti-trust crackdowns. But surely some table thumping.

After all, it was the people-frightened Republicans who called the hearing to expose, in their majority leader, Senator Bill Frist (R-TN)'s words, "those who abuse the free-enterprise system to advantage themselves and their businesses at the expense of all Americans."

Instead, what the public saw was the astonishing workings of corporate power, ideology and campaign money on Capitol Hill. Senators, like Mary Landrieu (D-LA), were tossing soft questions and deep praise on the oil moguls, after receiving big-time campaign money from their oil and gas paymasters. Landrieu received \$249,155 over the past five years. Observing the moguls, one got no sign that any of them were at all worried about the hearing. Many of the senators were marinated in oil. The rest were frustrated or not courageous enough to come adequately prepared to take apart the all-purpose response that these oil companies were merely responding to the global marketplace. It is always the impersonal market, the all-encompassing ideology that leaves these oil giants powerless — just so many profit-gushing buoys on the ocean of market determinism.

When Senator Maria Cantwell (D-WA) wanted the moguls to be sworn in at the onset of the hearing (an almost routine formality in many hearings), Chairman Senator Ted Stevens (R-AK) repulsed the suggestion. Later he rejected Senator Barbara Boxer's large chart showing the huge salaries and bonuses of each of the five oil executives by name, from being entered into the hearing record as irrelevant to the subject matter of the hearing.

Steven Pearlstein of the *Washington Post* was disgusted. In his column, he described Stevens as "so cloyingly deferential to his corporate witnesses one had to wonder if he was auditioning for the job of headwaiter at the grille room of the Petroleum Club in Houston." The testimony by the executives was so similar to one another that their words became metaphors for the structural collusiveness of this ever-tighter corporate cartel. The market makes them behave as they do. They just want lower taxes, more subsidies, more freedom from environmental regulations and more access to the public lands onshore and offshore. They denied the lower taxes bit, but their lobbyists pushed through another multi-billion dollar tax break bill through Congress a few weeks earlier.

Some of the executives made the same assertion that they have reinvested the identical amount that they earned into larger facilities and exploration. Didn't they send much of those earnings to their shareholders? No one asked this question.

Here is the game the big companies are playing. Blame the helpless gas stations if you are pushed to explain why gas prices are so high. Never mind that ExxonMobil made 79% more profit this last quarter than a year earlier, which was also very profitable. That 79% amounted to almost \$10 billion after modest taxes in just one quarter! By way of comparison, the first company to make \$1 billion in one quarter was AT&T 20 years ago.

They had to admit that refinery capacity was tight but refused to take responsibility for the industry shutting down half of the refineries in the US since 1980. The oil companies have long played this game of raising prices by tightening refinery capacity or shipping refined products to other countries.

Given the internal industry documents showing this strategy, one would have thought some senators would have probed more. But then oil senator Ted Stevens held each senator to five minutes and refused to have a multi-day hearing examination as senators use to do back in the Sixties and Seventies. After all, tens of billions of dollars out of the family budgets could have justified a lengthier investigative hearing. There was little mention of the oil companies taking out newspaper ads urging consumers to conserve, while having avoided over the years pressuring the auto and appliance industries to sell more consumers energy efficient products. But then, the oil and gas companies would sell less of their fuel, wouldn't they?

Meanwhile, ex oil men, Bush and Cheney, continue to push for lower taxes on corporations and their affluent executives, while pressing for large cuts in programs benefiting the middle class and the poor. Bush is pushing to liquidate Amtrak and replace it with pieces of private companies. Last week, Amtrak's Board, picked by Bush, fired Amtrak's competent CEO, David Gunn who opposed



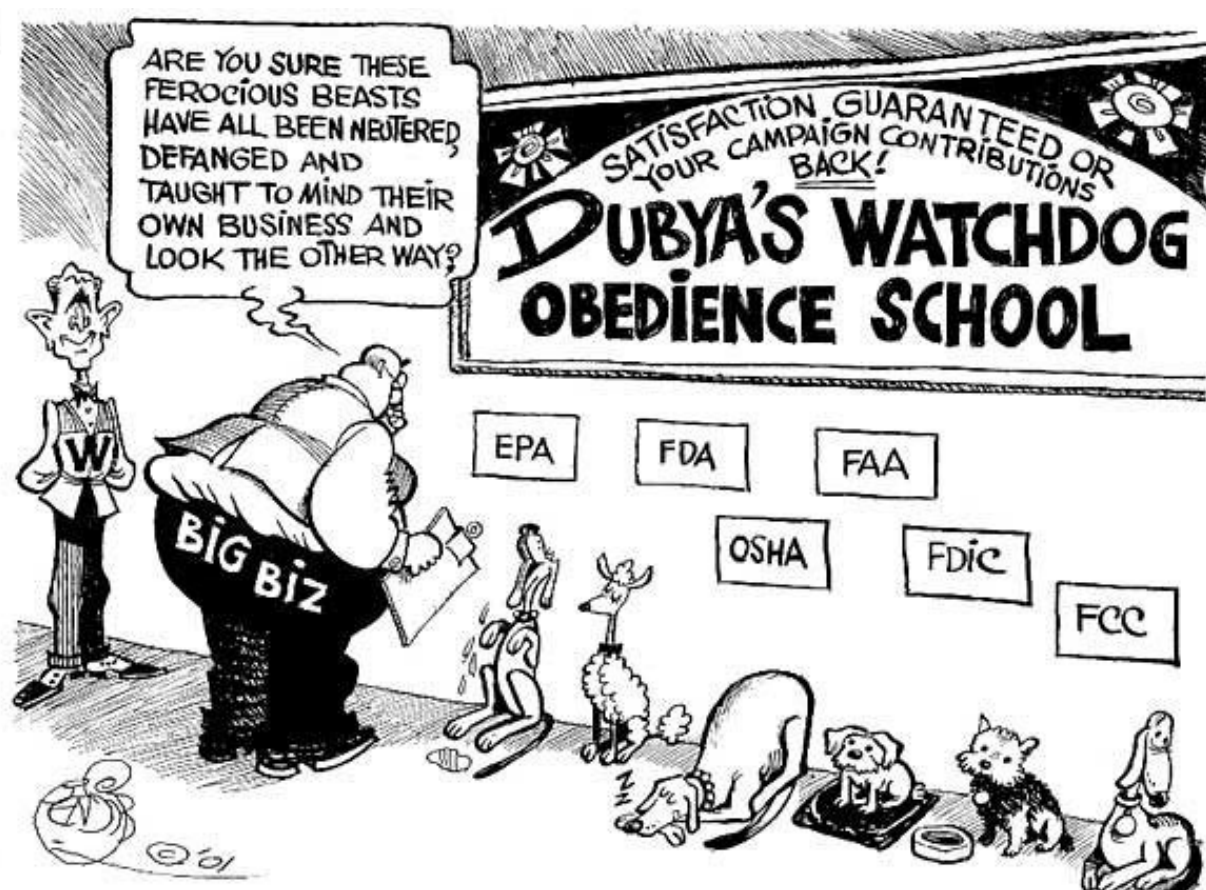
scuttling a passenger railroad system — crucial to energy conservation and national security — that is starved for capital funds while the airlines and auto companies benefit from huge taxpayer subsidies for airports and highways. The *Post's* Pearlstein titled his column, "Oil's Bigwigs Enjoy a Rigged Market."

Meanwhile, ex oil men, Bush and Cheney, continue to push for lower taxes on corporations and their affluent executives, while pressing for large cuts in programs benefiting the middle class and the poor.

It is more than that. The anti-trust laws no longer stop mergers of the big companies. The big oil companies have learned to profit from the overseas producers' oil cartel. And the Mercantile Exchange in New York daily turns oil into a speculative commodity to further enhance the dominant rule of Big Oil.

As for ExxonMobil and their brethren paying some of these rigged profits into a fund to help poor families pay their fuel bills this winter, forget it. Not a single Senator pressed them each for answers. Corporate greed has reached new depths, because our indentured government has left the American people defenseless.

Ralph Nader is an American activist lawyer and has worked for decades on environmental, consumer rights, and pro-democracy issues.



Prepare for Peak Oil Now

By Richard Heinberg
AlterNet
November 14, 2005

The subject I teach — human ecology — is a discipline that largely concerns population and resources. Over the past few years I have chosen to study oil, because it is the most important energy resource of the modern world.

Only 150 years ago, 85 percent of all work being accomplished in the U.S. economy was done by muscle power — most of that by animal muscle, about a quarter of it by human muscle. Today, that percentage is effectively zero; virtually all of the physical work supporting our economy is done by fuel-fed machines. What caused this transformation? Quite simply, it was oil's comparative cheapness and versatility. Perhaps you have had the experience of running out of gas and having to push your car a few feet to get it off the road. That's hard work. Now imagine pushing your car 20 or 30 miles. That is the service performed for us by a single gallon of gasoline, for which we currently pay over \$2. That gallon of fuel is the energy equivalent of roughly six weeks of hard human labor.

It was inevitable that we would become addicted to this stuff, once we had developed a few tools for using it and for extracting it. Today petroleum provides 97 percent of our transportation fuel, and is also a feedstock for chemicals and plastics.

It is no exaggeration to say that we live in a world that runs on oil.

However, oil is a finite resource. Therefore the peaking and decline of world oil production are inevitable events — and on that there is scarcely any debate; only the timing is uncertain. Forecast dates for the peak range from this year to 2035.

The peaking phenomenon itself has been observed again and again in individual oil fields and in entire producing nations. One of the first countries to hit its peak was the US. During the 1930s and 40s, half the world's production of petroleum came from Texas and Oklahoma. However, US production reached its all-time maximum in 1970 and has been declining ever since. Currently the US imports 60 percent of its oil.

**oil is a finite resource.
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are inevitable events**

Evidence that we are approaching peak includes the following:

* ExxonMobil documents that global oil discoveries peaked in 1964. Declining rates of discovery are therefore a long-established trend.

* Chevron notes in recent advertisements that 33 of 48 nations are in decline. We have thus seen the peaking of production in a majority of individual nations, including some important producers such as Indonesia, Norway, Great Britain, and Venezuela. Mexico will reach its peak within the next two years.

* As noted by the International Energy Agency, there is evidence that a substantial amount of "proven reserves" in OPEC countries are illusory, the result of a scramble for market share within a cartel that allocates export quotas based on stated reserves.

With regard to this last point it should be noted that reserves figures, even when accurate, have historically given little warning of peaking. The US instance is once again emblematic: in 1970, US oil reserves were higher than ever; so were production rates. But only a year later, American production began its terminal decline. The study of discovery rates and depletion rates gives us a much better idea of when the global peak is likely to occur.

Recently the International Energy Agency (IEA) issued a statement saying that the world will have sufficient energy supplies for the next quarter century. However, the statement noted the necessity of the investment of \$17 trillion in the supply train in order to maintain sufficiency for so long. Also, the IEA anticipates Saudi Arabian production expanding to 18 million barrels per day by 2030—a figure considerably higher than the maximum possible rate of production from that country, cited not long ago by Sadad al Husseini, the recently retired head of exploration for Saudi Aramco.

Expressions of concern have been voiced by corporations, prominent organizations, and knowledgeable individuals, including ChevronTexaco, the Royal Swedish Academy of Sciences, Volvo, Ford Motor Company Executive Vice President Mark Fields, the Chinese Offshore Oil Corporation's chief economist, and numerous petroleum scientists and oil industry analysts.

The question immediately arises: Will alternative sources be able to make up the difference?

Alternative sources often discussed include oil sands from Canada, shale oil in Colorado, coal-to-liquids, gas-to-liquids, nuclear, and renewables such as solar and wind. Each of these will require immense investment and well over a decade of intense effort in order to produce substantial quantities of energy to offset declines from fossil fuels. And in most cases, rates of production are and will be constrained by non-economic factors.

How about increased efficiency -- surely that can offset any potential oil supply problems. In principle, yes, but most efficiency strategies will likewise require significant lead times. For example, we have the technology now to enable all of us who own cars to be driving ones that get up to 100 miles per gallon. If we were, that would obviously save an enormous amount of fuel. But how long would it take to implement that strategy? It would certainly take four or five years for Detroit to begin producing such high-efficiency cars in large numbers.

Then, not everyone buys a new car every year. In fact, it takes about 15 years to change out nearly the entire U.S. car and truck fleet. So, altogether, it would take about 20 years to fully implement this particular efficiency strategy.

Will the market be able to respond quickly enough to forestall serious economic, social, and political impacts? It is often said that the Stone Age did not end for lack of stones, nor will the Oil Age end because we run out of petroleum -- but instead because we find a cheaper source of energy. However, as we have just seen, that cheaper source of energy has yet to be identified.

Early this year a report was released, prepared for the US Department of Energy by a team led by Robert L. Hirsch, who has a distinguished background in the oil industry and is a senior energy analyst at SAIC and the Rand Corporation. The Hirsch Report (titled "Peaking of World Oil Production: Impacts, Mitigation and Risk Management") concludes that price signals will arrive at least ten years too late to enable a gentle, market-led transition away from oil to other energy sources. The report describes Peak Oil as an "unprecedented" challenge for modern societies, and describes economic, social, and political risks if preparation is not undertaken soon enough or on adequate scale.

Here is an excerpt from the Hirsch Report:

The problems associated with world oil production peaking will not be temporary, and past "energy crisis" experience will provide relatively little guidance. The challenge of oil peaking deserves immediate, serious



attention, if risks are to be fully understood and mitigation begun on a timely basis. Mitigation will require a minimum of a decade of intense, expensive effort, because the scale of liquid fuels mitigation is inherently extremely large. Intervention by governments will be required, because the economic and social implications of oil peaking would otherwise be chaotic.

The report also concludes that the costs of preparing too late for global oil peak would far outweigh those of preparing too early.

The worst-case scenario for the impact of global production peak is very bad indeed. As I mentioned earlier, we are extremely dependent on oil for transportation, agriculture, plastics and chemicals. In each area, we are already seeing serious impacts resulting from current prices in the \$60-per-barrel range.

As prices go even higher, and with actual scarcities of fuel, people will experience difficulties commuting, and the maintenance of our far-flung food distribution systems may become problematic.

On top of all this, oil is a strategic resource: as supplies become scarce, there is increasing likelihood of international conflict.

To avoid the worst-case scenario, we must begin today to reduce our dependence on oil. The effort must have top priority. It must focus primarily on reducing demand, and only secondarily on producing large quantities of alternative transportation fuels.

A global "Oil Depletion Protocol" would reduce price volatility and competition for remaining supplies, while encouraging nations to move quickly to wean themselves from petroleum. In essence, the Protocol would be an agreement whereby producing nations would plan to produce less oil with each passing year (and that will not be so difficult, because few are still capable of maintaining their current rates in any case); and importing nations would agree to import less each year. That may seem a bitter pill to swallow.

However, without a Protocol — essentially a system for global oil rationing — we will see extremely volatile prices that will undermine the economies of all nations, and all industries and businesses. We will also see increasing international competition for oil likely leading to conflict; and if a general oil war were to break out, everyone would lose. Given the alternatives, the Protocol clearly seems preferable.

National governments, local municipalities, corporations, and private individuals will all need to contribute to the effort to wean ourselves from oil, an effort that must quickly expand to include a reduction in dependence on other fossil fuels as well.

All of this will constitute an immense challenge for our species in the coming century. We will meet that challenge successfully only if we begin immediately.

'Clean' coal doesn't do much to protect environment

By Abraham T. Mwaura
and J. Scott Straight

Talk of "clean coal" focuses only on reducing some pollutants released into the air when we burn coal for electricity. Such talk completely ignores massively destructive coal extraction techniques. Mountaintop removal is not "clean."

Ohio's Herald-Dispatch recently carried a news article about carbon sequestration, which could theoretically help reduce global warming. Relying on carbon sequestration is akin to burying toxic waste, with the attitude that we will worry about it later, instead of actually fixing the problem.

Research in this area is already gobbling up loads of taxpayer money, but any realistic uses — if there are any — remain decades away. Meanwhile, scientists are telling us that the need to curb greenhouse gases is urgent.

Temperate forests can sequester 0.6 to 1.8 tons of carbon per acre per year. According to the draft environmental impact statement (DEIS) on mountaintop removal/valley fill coal mining, present and estimated future forest losses to this mining technique will total as much as 1.4 million acres. That's 2,200 square miles, or 6.8 % of Appalachian forests.

By allowing mountaintop removal... we needlessly destroy huge tracts of carbon-dioxide sequestering forest.

How paradoxical and sad that the government willingly spends billions on underground carbon sequestration on one hand, while ignoring and relaxing environmental laws so more mountaintop removal can destroy more forests.

Consider that mountaintop removal-mined coal provides only 5-7% of the nation's coal burned for electricity, and with currently available energy efficiency techniques and conservation measures, we could cut the nation's energy usage by 20-30%.



Mountaintop removal coal mine in southern WV encroaching on a small community.

Photo by Vivian Stockman

By allowing mountaintop removal, which helps create the global warming problem in the first place, we needlessly destroy huge tracts of carbon-dioxide sequestering forest.

The same faulty logic is used in promoting Integrated Gasification Combined Cycle as "clean" coal. While air emissions may be improved, there are still dirty coal extraction techniques. After combustion, there's still toxic ash, and there are no federal laws governing its disposal.

This method is being touted as a potential source of raw material to take us into the hydrogen era. But, as long as the source of the hydrogen is from fossil fuels, we are still stuck in an archaic energy era, instead of looking to the future with an eye on true alternative energy sources.

Renewable energy sources such as wind, hydro, solar and some biofuels already exist and promise lesser environmental impacts.

These energy sources also do not have the extreme extraction practices like mountaintop removal, which, even according to the DEIS, exacerbates

flooding, pollutes streams and groundwater, reduces forests to rubble and devastates some of the most economically distressed communities in our society.

Full funding for more research into these energy sources has been thwarted by the fossil fuel companies that have a near monopoly in the energy industry and have a vested interest in preserving the status quo.

Renewable energy sources such as wind, hydro, solar and some biofuels already exist and promise lesser environmental impacts.

Carbon sequestration and coal gasification cannot answer the full range of problems associated with fossil fuels.

Most of the problems associated with fossil fuels are problems that deal with the effects that the extraction process has on communities. The major problems such as toxic sludge ponds, worsened flooding and blasting damage to property are ignored by these "new" technologies.

Until we shift our focus and resources toward actual alternative, renewable energies, our communities will continue to be terrorized by corporations whose loyalties are to their shareholders and not the people that they claim to serve.

Next time you hear the words "clean coal," think about what a myth that phrase is.

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Catenary Coal Company, Kayford Mountain, June 15, 2005.

Photo by Vivian Stockman

Insane Lust for Petroleum Threatens to Destroy Pristine Alaskan Wilderness

By Gabriel Scott
Alaska Field Representative
Cascadia Wildlands Project

Ground zero was a little-known corner of Alaska's rugged south coast, in the shadow of the insane St. Elias icefields along the naked Pacific coast, at a place called Katalla bay. Here Alaska's first oilfield offers a glimpse into the future of energy extraction.

Oil companies have retreated from Katalla, leaving oil and gas in the ground. Driven off by the harsh environment and furious local fishermen, in their place have sprouted fly fishing lodges. The little bit of oil there isn't worth the monumental effort needed to get it. A couple hundred visitors would rather catch wild salmon in the pristine river.

Katalla is emblematic of an increasingly urgent conflict in Alaska: fish versus oil.

While locals generally prefer sustainable salmon fishing, the Bush administration made a different choice. Complimented at the state level by the oil friendly governor Murkowski administration, energy extraction is threatening the world's last remaining great wild salmon runs. From the Copper River to Bristol Bay, the oil and mining industry is taking advantage of high energy prices

to force their radical agenda. The stakes could not be higher.

The fish versus energy conflict is perhaps clearest on the Copper River, whose salmon are world famous. Fishing communities on the Copper River Delta have made their choice. Just one Copper River King salmon is worth more than four barrels of oil.

Yet, the Bush administration, through its new BLM "East Alaska Resource Management Plan," proposes to open 3.9 million acres, including headwaters and tributaries of the Copper River, to oil and gas drilling, and mining. A Midland, Texas oil company already has their first well down, in the wetlands west of Glennallen.

Nearby the Trans-Alaska Oil Pipeline, carrying every drop of Arctic crude, is a catastrophe waiting to happen. A leaking pipeline valve recently raised alarms on the Klutina River, an especially abundant spawning ground for King Salmon.

The search for cheap energy leads also to coal. Alaska has tons of coal, and it's value has been skyrocketing in Asia. A Korean company owns the massive Bering River coalfield, suddenly hugely valuable, and coal export schemes are flying. Bering coal mining would blast mountains off the Copper River Delta and smother spawning habitat with roads.

The indigenous Eyak Preservation Council is in a race against time to purchase a conservation easement on the coalfield, saving it in a Nature Conservancy before it is exploited. Enlisted in the struggle are the grandchildren of Teddy Roosevelt and Gifford Pinchot, who originally conserved this coal from corporate plunder back in 1907 by establishing Chugach National Forest.

In Prince William Sound, scientists studying the aftermath of the 1989 Exxon Valdez oil spill are



discovering exactly how damaging oil is to fish. Salmon eggs and fry were found to be 1,000 times more vulnerable to oil exposure than previously thought. Since Exxon's oil spill the Prince William Sound, the herring fishery collapsed, driving fishermen into bankruptcy and shocking the ecosystem. Meanwhile Exxon, filthy rich and shameless, stonewalls in court.

The most audacious, potentially disastrous move of Bush and Murkowski would put oil drilling rigs in Bristol Bay. With over twenty million Sockeye salmon returning each year, Bristol Bay is the biggest, most valuable salmon run in the world, bar none.

The effort to drill offshore here is a remarkable reversal. In 1994, in response to outraged fishermen, the federal government paid nearly \$100 million to buy back leases here, and instituted a drilling moratorium. But in the last few months, Shell front men have been pitching their plan for an offshore gas field, and LNG plant, to local leaders.



Mendenhall Glacier, Juneau, Alaska

Hydrogen Hijacked

By Lyn Harrison
Windpower Monthly

"These Fuelish Things," ran a headline in *The Economist*, referring to hydrogen fuel cells and the "hoopla" over them. The implication is that hydrogen is not really a fuel and that the concept is inherently foolish. On the first point, the magazine is correct. Hydrogen is not a fuel. It is an energy carrier. Just like electricity, it is only as clean as its means of production; and only renewables can make it sustainable. On the second point, it is not necessarily the innocent fuel cell that is foolish, but the people who believe that hydrogen holds the magic key to a future of clean and never-ending supplies of energy that will free the world from fossil fuels. Sustainability is not that simple.

If something sounds too good to be true, the chances are that vision has lost touch with reality. Fantastic claims are being made for hydrogen. According to the EU's high-level working group on the subject, hydrogen can "effectively de-carbonize fossil-based energy carriers" through the use of technologies that "capture and retain damaging emissions" thus allowing "fossil hydrogen to be used on a large scale with limited greenhouse gas emissions." Specific to wind power, hydrogen will "open access" to the transport fuel market. It will also provide a means for "load levelling," thereby increasing the technical potential for high levels of wind power on electricity systems. Bunkum. All of it.

Now for some facts. Hydrogen can no more "de-carbonize" fossil fuels than electricity can. Producing hydrogen from hydrocarbons results in carbon emissions. If viable techniques should be found for capturing and retaining emissions, then electricity, not hydrogen, will remain the superior energy carrier, both economically and environmentally. For transport, hydrogen might have overall clean air advantages in spark ignition engines were it not for the matter of finding a practical solution to compressing and transporting the gas. Even the better efficiencies of using fuel cells in vehicles does not make that problem disappear. On the subject of efficiency, a favorite

argument of fuel cell proponents is that they are "highly efficient." But even if fuel cells run at the 50% efficiency claimed for them, losses are incurred at the electrolysis stage of hydrogen production. On a really good day, fuel cell cycle efficiency cannot be better than 40% -- only a slight improvement on coal. Cleaner and more efficient at the point of use they may be, but not in the overall cycle.

Now for some facts. Hydrogen can no more "de-carbonize" fossil fuels than electricity can.

As to wind, much of this magazine's in-depth analyses of hydrogen myths and renewables' realities (published May 2003) is devoted to exposing two serious fallacies. First, even if dedicated back-up for wind power were necessary, which it is not, it would be daft to use hydrogen to provide it. Second, if the transport sector were to demand large amounts of hydrogen, this would not, as claimed, open up a huge new market for wind power — a point the European Wind Energy Association makes with great force. There are as yet no economic or environmental advantages to using hydrogen in either case — and thus no drivers to open markets for wind. The economic downside is important. Economic viability is as much a part of sustainability as the development of clean, safe technologies and secure supplies. Sustainable energy solutions are those which do not compromise the well-being of future generations. That, by the way, rules out nuclear.

So why, with all its drawbacks, and 200 years after the first combustion engine was fuelled by hydrogen, has it become all the rage? Look no further for an answer than the enthusiastic embrace extended to it by big oil and the coal and gas industries. Under increasing pressure to clean up their act, investment in a bit of hydrogen dabbling is a least-cost way of hedging their options, especially with cash handouts from taxpayers to ease the pain. It is also a good ruse for hampering renewables by distracting attention away from investment in them. For the past several years, *Windpower Monthly* studiously ignored the

hydrogen topic in the belief that common sense would prevail long before any politician got the bright idea of siphoning money from wind into hydrogen. How naive we were. President George Bush is bent on doing just that. John Kerry seemed to have similar ideas.

Freeing the hostage

Make no mistake about it, the visions being mapped out for a hydrogen economy on both sides of the Atlantic provide an excuse for the revival of nuclear and give environmental legitimacy to fossil fuels. Falsehoods about wind power's reliance on hydrogen are rampant in strategy papers, which lack the environmental imperative that would reveal the truth -- that renewable energy, not hydrogen, is the essential fundamental of clean energy supply. The hydrogen campaign is hugely funded and cleverly managed. The money is coming from fossil fuel. It has hijacked hydrogen for its own gain, with cynical disregard for the economic and environmental downsides of elbowing renewables out of the way. To the world at large, renewables are beginning to look like a poor cousin to glamorous hydrogen, busy airing its voluptuous abundances to entrap the foolish.

There is an upside to all this. By and large, environment lobby groups like Greenpeace, the Climate Action Network and several energy and environment institutes are rushing forth to free the hydrogen hostage, launching vicious attacks on big oil, gas and coal in the process. What a grand opportunity that presents for wind to leap aboard the hydrogen PR vehicle and proclaim the industry's credentials — as the leading zero emissions energy option. In time, wind energy might even open up some uses for hydrogen.

About the Author...

Lyn Harrison, editor of *Windpower Monthly*, is a familiar face at international wind energy conferences and exhibitions. A British trained journalist with several years of newspaper and public relations experience, she moved to Denmark in 1982. She is a co-owner of *Windpower Monthly*, which was founded in 1985.

+++ Nuclear Power is a Waste +++ No one wants such a legacy

Every nuclear power station converts uranium fuel rods through nuclear fission into highly radioactive nuclear waste. Nuclear waste constitutes a life-threatening hazard because of its radioactive emissions. People, animals and plants need to therefore be shielded from it for several hundreds of thousands of years.

Nuclear power stations have been in operation for some 50 years but to date no one knows how nuclear waste can ultimately be stored. Worldwide there is not one safe and secure disposal option for the highly radioactive waste produced by nuclear power stations.

In the short period of time that nuclear power has been used, it is leaving behind — in the shape of the resultant nuclear waste — a dead hand of historical dimensions for the Earth. If prehistoric man had already had nuclear power stations we would even today still be having to maintain a watch over his waste.



Shut down nuclear power plants.
International Physicians for the Prevention of Nuclear War (IPPNW) – German Section
Kortestr. 10, D-10967 Berlin, Germany. International Campaign: www.facts-on-nuclear-energy.info

Driving Vegetarian

By Leah George
News 10 Now Web Staff
May 25, 2004

Record prices at the pump are peaking people's interest in fuel alternatives - and a homegrown business in Ithaca is helping people find them.

The founder and president of Liquid Solar, a two-man Ithaca company that converts diesel cars and trucks to "Veggie" or "Grease Cars," says business is booming.

Seth Mead says veggie cars run on recycled vegetable oil that's easily collected from local restaurants that need to dispose of it anyway.

Veggie vehicles have a second fuel tank to hold the vegetable oil.

Mead says once the engine is warmed up all a driver has to do is flip a switch.

Drivers say they love knowing they're helping the environment and saving money.

"It's worked great. It's just amazing. It really does make you smile driving on the highway knowing that the diesel tank stays full. That needle just does not move the whole trip and the rest of the fuel...the trip is just free," said Joe Cummins.

Now that he's converted his diesel-fueled Volkswagon to a veggie car, Cummins says he only spends about eight dollars a month on fuel.



Farming for Biofuels = Disaster

By George Monbiot, UK
December 6, 2005

Over the past two years I have made an uncomfortable discovery. Like most environmentalists, I have been as blind to the constraints affecting our energy supply as my opponents have been to climate change. I now realize that I have entertained a belief in magic.

In 2003, the biologist Jeffrey Dukes calculated that the fossil fuels we burn in one year were made from organic matter "containing 44 x 10¹⁸ grams of carbon, which is more than 400 times the net primary productivity of the planet's current biota." In plain English, this means that every year we use four centuries' worth of plants and animals.

The idea that we can simply replace this fossil legacy — and the extraordinary power densities it gives us — with ambient energy is the stuff of science fiction. There is simply no substitute for cutting back. But substitutes are being sought everywhere. They are being promoted today at the climate talks in Montreal, by states - such as ours - that seek to avoid the hard decisions climate change demands. And at least one substitute is worse than the fossil-fuel burning it replaces.

The last time I drew attention to the hazards of making diesel fuel from vegetable oils, I received as much abuse as I have ever been sent for my stance on the Iraq war. The biodiesel missionaries, I discovered, are as vociferous in their denial as the executives of Exxon. I am now prepared to admit that my previous column was wrong. But they're not going to like it. I was wrong because I underestimated the fuel's destructive impact.

Before I go any further, I should make it clear that turning used chip [french fry] fat into motor

fuel is a good thing. The people slithering around all day in vats of filth are performing a service to society. But there is enough waste cooking oil in the UK to meet a 380th of our demand for road transport fuel. Beyond that, the trouble begins.

When I wrote about it last year, I thought that the biggest problem caused by biodiesel was that it set up a competition for land use. Arable land that would otherwise have been used to grow food would instead be used to grow fuel. But now I find that something even worse is happening. The biodiesel industry has accidentally invented the world's most carbon-intensive fuel.

Before oil palms are planted, vast forest trees, containing a much greater store of carbon, must be felled and burnt.

In promoting biodiesel - as the EU, the British and US governments and thousands of environmental campaigners do - you might imagine that you are creating a market for old chip fat, rapeseed oil, or oil from algae grown in desert ponds. In reality you are creating a market for the most destructive crop on Earth.

Last week, the chairman of Malaysia's federal land development authority announced that he was about to build a new biodiesel plant. His was the ninth such decision in four months. Four new refineries are being built in Peninsula Malaysia, one in Sarawak and two in Rotterdam. Two foreign consortiums — one German, one American — are setting up rival plants in Singapore. All of them will be making biodiesel from the same source: oil from palm trees.

"The demand for biodiesel," the Malaysian Star reports, "will come from the European Community ... This fresh demand ... would, at the very least, take up most of Malaysia's crude palm oil inventories." Why? Because it is cheaper than biodiesel made from any other crop.

In September, Friends of the Earth published a report about the impact of palm oil production. "Between 1985 and 2000," it found, "the development of oil-palm plantations was responsible for an estimated 87 per cent of deforestation in Malaysia." In Sumatra and Borneo, some four million hectares of forest have been converted to palm farms. Now a further six million hectares are scheduled for clearance in Malaysia, and 16.5 million in Indonesia.

Almost all the remaining forest is at risk. Even the famous Tanjung Puting National Park in Kalimantan is being ripped apart by oil planters. The orangutan is likely to become extinct in the wild. Sumatran rhinos, tigers, gibbons, tapirs, proboscis monkeys and thousands of other species could go the same way. Thousands of indigenous people have been evicted from their lands, and some 500 Indonesians have been tortured when they tried to resist. The forest fires, which every

so often smother the region in smog, are mostly started by the palm growers. The entire region is being turned into a gigantic vegetable oil field.

Before oil palms, which are small and scrubby, are planted, forest trees, containing a much greater store of carbon, must be felled and burnt. Having used up the drier lands, the plantations are moving into the swamp forests, which grow on peat. When they've cut the trees, the planters drain the ground. As the peat dries it oxidises, releasing even more carbon dioxide than the trees. In terms of its impact on both the local and global environments, palm biodiesel is more destructive than crude oil from Nigeria.

The British government understands this. In a report published last month, when it announced that it would obey the EU and ensure that 5.75% of our transport fuel came from plants by 2010, it admitted "the main environmental risks are likely to be those concerning any large expansion in biofuel feedstock production, and particularly in Brazil (for sugar cane) and south-east Asia (for palm oil plantations)."

It suggested that the best means of dealing with the problem was to prevent environmentally destructive fuels from being imported. The government asked its consultants whether a ban would infringe world trade rules. The answer was yes: "Mandatory environmental criteria ... would greatly increase the risk of international legal challenge to the policy as a whole." So it dropped the idea of banning imports, and called for "some form of voluntary scheme." Knowing that the creation of this market will lead to a massive surge in imports of palm oil, knowing that there is nothing meaningful it can do to prevent them, and knowing that they will accelerate rather than ameliorate climate change, the government has decided to go ahead anyway.

At other times it happily defies the EU. But what the EU wants and what the government wants are the same. "It is essential that we balance the increasing demand for travel," the government's report says, "with our goals for protecting the environment." Until recently, we had a policy of reducing the demand for travel. Now, though no announcement has been made, that policy has gone. Like the Tories in the early 1990s, the Labour administration seeks to accommodate demand, however high it rises. Figures obtained last week by the campaigning group Road Block show that for the widening of the M1 alone the government will pay £3.6bn — more than it is spending on its entire climate change programme. Instead of attempting to reduce demand, it is trying to alter supply. It is prepared to sacrifice the south-east Asian rainforests in order to be seen to be doing something, and to allow motorists to feel better about themselves.

All this illustrates the futility of the technofixes now being pursued in Montreal. Trying to meet a rising demand for fuel is madness, wherever the fuel might come from. The hard decisions have been avoided, and another portion of the biosphere is going up in smoke.



Biofuels pump in Europe

White Roofs — Affordable Solutions Now

By John Emshwiler
The Wall Street Journal

With unruly white hair and a mildly absent-minded manner, 74-year-old Arthur Rosenfeld looks like the retired physics professor he is. But these days he has a new career: developing stealth weapons to help keep electricity shortages from short-circuiting California this summer.

Dr. Rosenfeld's humble proving grounds are Building G, a somewhat grimy one-story structure owned by the Sacramento Municipal Utility District, and a spiffier Kaiser Permanente medical office building 10 miles away. There's nothing remarkable about the two facilities — except that both have slashed their electricity demand for lighting and air-conditioning by as much as 30%, largely without their occupants noticing the change.

To cut its consumption, Building G used a combination of digital electric meters and basic physics. The Kaiser office's method was even less sophisticated; it simply replaced its flat dark roof with a flat light one.

Can simple and unobtrusive conservation measures like these be the best way to attack an electrical-power crisis? "That's exactly right," says Dr. Rosenfeld. And, as the newest member of the five-person California Energy Commission, he is in a strong position to influence other energy policy makers in the state.

Researchers found that a white roof can be as much as 90 degrees cooler than a black one and reduce the energy needed to air-condition a building by up to 40%

He may find a receptive audience. That's because the electricity crisis that erupted in the summer of 2001 and gave rise to rolling blackouts across the state has thrust electricity conservation back near the top of the state's political agenda, after a lengthy hiatus. Amid the sky-high wholesale power prices and the shortages wrought by the state's flawed 1996 electricity deregulation law, ex-Gov. Gray Davis vowed to slash the state's electricity consumption by more than 3,200 megawatts, or about 7%. To set an example, he sharply turned down his thermostat at home and the lighting in his office.

But Dr. Rosenfeld isn't a big fan of the self-deprivation approach to electricity savings. He argues that the best kind of conservation, and the kind people are most likely to accept, "doesn't affect how you live." For more than a quarter century, he has been pursuing ways to put that theory into practice.



By summer, when Californians switch on their air conditioners and the state's electricity demand peaks, Dr. Rosenfeld hopes to have tens of thousands of commercial buildings outfitted with new meters and vanilla roofs. Though some energy-industry officials say that goal is far too ambitious, Dr. Rosenfeld and others say his plan could reduce electricity demand statewide by hundreds of megawatts or more, possibly enough to avert some rolling blackouts.

"Art is a visionary," Loretta Lynch, president of the California Public Utilities Commission, says of Dr. Rosenfeld. His present efforts, she adds, could help produce "really spectacular savings."

Really spectacular savings would be really helpful if California is to weather its electricity woes. Paying for high-priced wholesale power already has left the state's two biggest investor-owned utilities, PG&E Corp.'s Pacific Gas & Electric Co. and Edison International's Southern California Edison unit, on the edge of bankruptcy and put the state on the hook for billions of dollars in power purchases.

In an effort to help stem the drain, the state legislature is looking to roughly double the state's \$400 million in annual conservation-related spending. Its kilowatt-cutting plans range from rebates on energy-efficient refrigerators to radio spots urging citizens to do their laundry after 7 p.m., when electricity demand is lower.

With California desperately trying to build electricity-savings momentum, Dr. Rosenfeld is ready with some practical ideas, such as "cool roofs," that he worked on for years at the University of California at Berkeley. His new public role is something of a reprise from a decade ago. Then, as a private citizen, he helped lead a largely aborted statewide search for electricity savings, a commodity one of his associates dubbed "negawatts." If pursued, the program could have left California in a much better power position than it is now, but it ultimately became a casualty of the deregulation push.

Since the mid-1980s, Dr. Rosenfeld has worked with the Heat Island Group at the Lawrence Berkeley National Laboratory to investigate ways to reduce temperatures in urban areas. Researchers there found that a white roof can be as much as 90 degrees cooler than a black one and reduce the energy needed to air-condition a building by up to 40%. Cooler roofs also mean cooler outside air. That could help reduce smog, which forms more readily at higher temperatures.

Dr. Rosenfeld says white roofs are generally no more expensive than dark ones. Nonetheless, the California Energy Commission is offering \$10 million to encourage commercial building owners to switch. The 10-cents-per-square-foot subsidies would help cover 100 million square feet of roof space. Dr. Rosenfeld says more state money might be coming soon. And with about five billion square feet of commercial roofing in California, he believes there's a lot more room for lightening to strike.

The physicist is even more enthusiastic about digital electric meters. Traditional meters, with little clock faces on the dials, only keep a running total of electricity use, to be measured when a meter reader comes calling. The new digital meters can track consumption during intervals of a few minutes and transmit the reading to the utility via phone lines.

Dr. Rosenfeld says

that providing something close to "real-time" metering is extremely important, because the cost of electricity varies widely during the day, fluctuating with demand. Under deregulation, retail rates in California have been largely frozen, so that consumers don't see the soaring cost of electricity reflected in their bills. However, he hopes that one day rates will reflect real-time costs and that meters will be part of consumer efforts to regulate demand in response to fluctuating prices.

Partly spurred by Dr. Rosenfeld's efforts, the California Independent System Operator, which runs the state's electricity grid, has begun voluntary demand-reduction programs that pay electricity users for cuts.

Though he can't do much about the current retail rate freeze, Dr. Rosenfeld has been pushing for programs to pay electricity customers for voluntarily cutting their consumption during peak demand periods. In keeping with his conservation-without-deprivation approach, he arranged for pilot programs last summer at Building G and at another location.

During test periods in the summer, the thermostats in the buildings were turned up four degrees and lighting reduced 30%. Most commercial buildings tend to be overlit, and the laws of physics dictate that once a building is cool, it will stay cool for a while. So, Dr. Rosenfeld hoped the buildings' occupants wouldn't notice the changes. Indeed, they didn't seem to. "It wasn't a problem," says Harlan Coomes, a senior demand-side specialist for the Sacramento municipal utility who worked on the test.

Armed with his data, Dr. Rosenfeld began proselytizing state and utility-industry officials. With \$40 million, he calculates, the state could install 40,000 digital meters at large commercial sites. Combined with financial incentives to get businesses to adjust their thermostats and reduce their lighting when requested, he figures the program could reduce statewide demand by perhaps as much as 2,000 megawatts during peak hours, all without inflicting any hardships.

Partly spurred by Dr. Rosenfeld's efforts, the California Independent System Operator, which runs the state's electricity grid, has begun voluntary demand-reduction programs that pay electricity users for cuts. Under one such program, commercial building owners who agree to reduce their electricity use during peak hours on a tight-supply day are reimbursed a set amount for every kilowatt-hour they save. "Art has been very passionate in trying to get people to pay attention," says Don Fuller, the ISO's director of client relations.

A not-so-brief overview of some of Dr. Rosenfeld's other passions can be viewed on the California Energy Commission's website. Entitled "The Art of Energy Efficiency," and initially prepared for an academic publication, it runs 49 pages, including footnotes.

After earning a bachelor's degree in physics at age 18, he received his Ph.D. at the University of Chicago, studying under the legendary physicist Enrico Fermi. He later moved to U.C. Berkeley, where he was part of the research team that helped Prof. Luis Alvarez win the 1968 Nobel Prize for physics.

Dr. Rosenfeld was teaching and doing research in particle physics at the Lawrence Berkeley lab in 1973 when his life took an abrupt turn. The Arab oil embargo and subsequent energy crisis spurred him to begin exploring energy-efficiency ideas. Initially, he thought those ideas would occupy him for only a few months. Then it was a few years. "I completely misjudged how interesting it would be," he says.

At Lawrence Berkeley, he helped assemble a diverse portfolio of energy-efficiency research projects. Work at the lab contributed to the development of electricity-saving compact fluorescent lights and super-insulating windows. And Lawrence Berkley estimates that a research investment of \$70 million has produced billions of dollars of energy savings nationwide.

Along the way, Dr. Rosenfeld met Amory Lovins, already well-known in energy circles for his insistence that inexpensive efficiency improvements could eliminate the need for tens of billions of dollars worth of planned power plants. The two men helped persuade PG&E and others that energy efficiency offered substantial potential savings. By the early 1990s, California had established a program that allowed utilities to charge higher rates if they agreed to pay rebates to ratepayers who bought energy-efficient appliances or took other conservation steps.

In January 1991, PG&E announced plans to invest \$2 billion over 10 years to reduce projected demand by 2,500 megawatts. Under the initiative, electric customers got rebates for buying more efficient appliances, lighting or air conditioners, and the utility established a \$7.5 million center to teach contractors and architects about new energy-saving

building designs.

One of the project's most interesting discoveries was "that you could get most of the savings with very basic off-the-shelf technologies" by carefully integrating them.

PG&E recruited Messrs. Lovins and Rosenfeld for a \$10 million project to apply the best in energy-efficiency ideas to a half-dozen new or existing buildings. "Amory was going all over the country spouting off" about the potential for huge demand reductions, recalls Carl Weinberg, the retired manager of research and development for San Francisco-based Pacific Gas & Electric. "I said let's test it, [and] if you don't prove this, I want Amory to shut up." The project produced electricity savings in the range of 50%, and Mr. Lovins kept talking.

One of the project's most interesting discoveries was "that you could get most of the savings with very basic off-the-shelf technologies" by carefully integrating them, says Chris Chouteau, former

head of energy-efficiency activities at PG&E and now an outside consultant to the company. For instance, more efficient room lighting not only uses less electricity but produces less heat. That in turn reduces the amount of power needed to air-condition a building. And, in newer, better-insulated buildings, it might even reduce the size and expense of the air-conditioning systems required to cool them.

Some argued that the rebates unfairly favored the well-to-do, who could better afford to replace their old appliances. However, the effort soon tripped over a much bigger obstacle. Under the California deregulation plan, begun in the mid-1990s, conservation would largely be taken out of the hands of utilities and left to the marketplace. Some people who took part in the process say that years of progress were lost in the transition. Utilities cut back their conservation efforts, and new players didn't immediately take their place.

If utilities' energy-efficiency efforts hadn't been disrupted, California's electricity demand could have been reduced by as much as 1,100 megawatts from its current level, according to one estimate from the state's Energy Commission. By comparison, the recent rolling blackouts in the state were caused by shortages of several hundred megawatts.

Green Roofs

By Jill Fehrenbacher and Sarah Rich
WorldChanging
November 12, 2005

American cities have a surprising amount of wasted open space. Even in densely packed urban areas like New York City, the prime real estate atop roofs is given much less consideration than one would expect from a populace that values each square foot of space so highly. This oversight is a real shame, because there is so much that can be done to improve the local environment and quality of life, simply by fixing up a roof.

The average city rooftop is layered with black tar, a material which traps sunlight and heat, raising the temperature of the surrounding area. The heat trapped by dark, flat roofs elevates city temperatures as much as ten degrees Fahrenheit - contributing to what scientists call the "urban heat island" effect.

So what can we do about it? Read on.

Cool Roofs

The easiest and quickest solution to combat the urban heat effect is simply to turn hot dark roofs into "cool roofs" by painting them with a basic coating of light-colored water sealant. In the same way that white clothing helps keep you cool in the summertime, white roofs reflect sunlight and heat. If all the roofs in New York City were "cool roofs", the city would save some \$100 million dollars per year in cooling costs.

Green Roofs

An even better alternative to cool roofs (albeit one that requires more time and effort) is to turn rooftops into landscaped "green roofs." Green roofs having the same cooling effect of white roofs, with the added benefits of:

- Providing amenity space for building users replacing a yard or patio
- Increasing roof life span
- Reducing storm water run off
- Providing noise insulation
- Filtering pollutants and CO₂ out of the air
- Providing locally grown food (with roof-top vegetable gardens)
- Increasing wildlife habitat in built up areas
- Reducing heating (by adding mass and thermal resistance value) and cooling (by evaporative cooling) loads on a building
- Reducing the urban heat island effect

Cost & city planning

Green roofs add so many benefits to a building and its surrounding area, it is astonishing that more roofs aren't green at this point. The biggest roadblock to our green roof future seems to be cost and bureaucratic red tape of city planning



An intensive green roof atop the Coast Plaza Hotel in Vancouver, British Columbia

laws. Although green roofs cost more up front to install than regular roofs, the savings that they accrue over the years quickly pay off. The biggest hurdle to getting green roofs going in more places, is convincing getting city governments to change their policies and adopt programs which provide incentives to property owners to renovate their roofs.

Chicago's Department of Environment is actually giving away \$5,000 grants to any building owners who want to start a green roof project.

In this endeavor, the city of Chicago is leading the way. Chicago's Department of Environment is actually giving away \$5,000 grants to any building owners who want to start a green roof project. So if you are a lucky homeowner living in Chicago, you have no excuse for not making your rooftop green!

Aesthetics

Frustratingly, another hurdle to green roof world-domination is the fact that ever since the "back-to-the-earth" straw bale movement of the seventies, green roofs have been associated with a sloppy, crunchy aesthetic. This is an unfair and unfortunate connotation, since green roofs can be as clean,

modern, and integral to "good" architecture as glass and steel. Peter Zumthor's green roofs on the Val Thermal Baths in Switzerland are just one example of a stunning use of green roofing in contemporary architectural design.

Others include Renzo Piano's proposed redesign of the California Academy of Science in San Francisco. Piano's green roof design features mounds and valleys of various heights and sizes, creating pockets of shade and opening vistas into the surrounding Golden Gate Park.

The largest "living roof" in the world was designed by environmental architect William McDonough, and sits on top of the the Ford Motor Company's Rouge Manufacturing Plant in Dearborn, Michigan. Other notable green roofs include the international airport in Amsterdam, and the sloped green roofs of the Palais Omnisports in Paris-Bercy.

For more information on green roofs check out:

www.greenroofs.com/jscms.jrn.columbia.edu/cns/2005-03-01/schwartzs-greenroofs
www.gothamgazette.com/article/environment/20051028/7/1635
en.wikipedia.org/wiki/Green_roof

Jill Fehrenbacher and Sarah Rich write about the ongoing evolution of sustainable design at *Inhabitat*.

US Lags on Renewable Energy

Denver Post Editorial
September 6, 2004

Very few conferences change the world, but 1,000 people from 90 countries gathered last week in Denver with their fingers crossed. The eighth annual World Renewable Energy Conference differed from some green-minded gab fests in its emphasis on practical solutions.

These were true believers. One after another, the participants could demonstrate that renewable energy is no longer pie-in-the-sky but a practical answer to many energy problems.

More could have been accomplished already if the U.S. government had embraced efforts as extensive and consistent as in Asia and Europe.

At the end of last year, the entire United States had only 464 megawatts of wind energy capacity in place, according to the World Renewable Energy Network. (One megawatt can supply about 1,000 homes.) Compare that to Germany's capacity of 14,609 megawatts; Spain, 6,202; Denmark, 3,110; and Italy, 904. US solar energy production was about 127 megawatts last year, compared to 331 megawatts in Japan. Those other countries have smaller populations and economies than the United States, yet America's diverse climate provides opportunities for both solar (think Arizona) and wind (for example, Wyoming).

Other countries have done better by achieving a long and non-partisan focus on renewable energy. The consistent public policies help the private

sector secure financing and achieve economies of scale still not seen yet in the US.

Since the 1970s, federal support for renewable energy has come in fits and starts, with Congress changing its mind more often than most people change their socks. For example, tax breaks for home solar energy systems, available in the 1970s, vanished by the 1980s. And nearly every budget cycle, advocates have had to fight to keep the lights on at the National Renewable Energy Labs in Golden. (NREL hosted the world conference in Denver.)

More could have been accomplished already if the U.S. government had embraced efforts as extensive and consistent as in Asia and Europe.

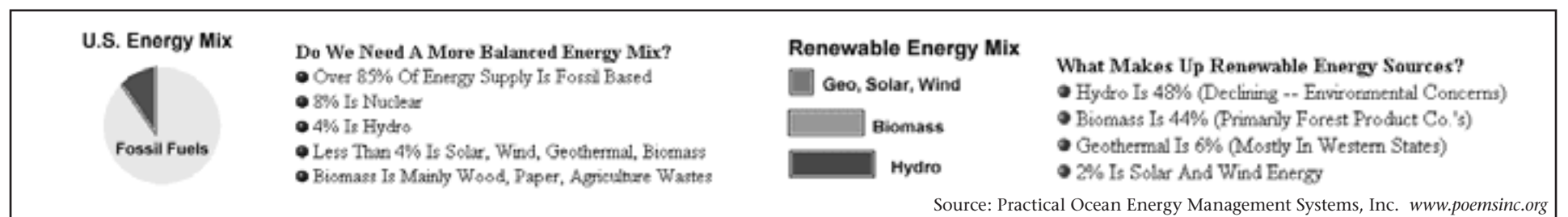
At the conference, the US Department of Energy said it will offer \$77 million in federal grants for renewable energy research, focusing on hydrogen fuels. Audience members said privately that while the DOE's announcement was welcome, the overall Bush administration energy policy still mostly emphasizes fossil-fuels production, including oil and gas drilling. Moreover, continued funding for the research projects is uncertain, as Congress hasn't passed this year's budget.

Very often, US advocates of renewable energy

encounter stiff resistance to having the government support the key components to make renewables work: research, support for start-up businesses and creation of markets. Yet the philosophical opposition doesn't stand up to historical

scrutiny: Early in their development, other energy sectors also got government support. When the transcontinental railroad was built across the West in the 19th century, Uncle Sam gave the railroads every other section of land along the route. The properties were rich in coal, making the railroads among the largest U.S. mineral producers. The nuclear business has been nursed by the government since the first atoms were shattered more than a half-century ago. U.S. Navy ships now patrolling the Persian Gulf represent a form of government support for the oil business.

The lack of consistent renewable-energy policies has left our country more dependent than ever on imported energy and all the more vulnerable to global political upheaval. Consistent federal support is crucial for economic stability - and national security. Renewable energy should be debated in the presidential and congressional campaigns.



Heeding the Lessons of Nature's Elegance

by Jeff Curtis
Trout Unlimited

Last week, lawyers representing federal, tribal and state governments, along with those representing conservation, business and fishing groups, descended on the federal courthouse in Portland yet again to ask a federal judge to help strike a balance between the needs of people and salmon in the Columbia-Snake River Basin.

The fight within this France-sized area that once boasted the world's most prolific runs of chinook salmon is painfully familiar to most of us and has been for decades.

In the mid-1990s, a diverse group of scientists

working under the auspices of the Northwest Power Planning Council was asked to assess the problem. Their report, "Return to the River," was radical in the stark simplicity of its premise: A river will work better for salmon, they said in 1996, when allowed to function again as a river.

A region gasped.

The report documented how we had transformed the Columbia from a river into a machine: a hydropower-producing, barge-accommodating, development-enabling, desert-irrigating marvel of engineering and technological genius. The river became part of the distant history of the machine. The problem was and is: so did its salmon. By the mid-1990s, many populations of the former river's salmon and steelhead had dwindled, only to resurface as listings under the Endangered Species Act.

Crises like the one we found ourselves in with salmon following the dam-building era on the Columbia and Snake are where technology meets human arrogance. We engineered our way into the salmon crisis, so why not engineer our way out?

Because it doesn't work.

Trucks and barges transported fish around the dams, hatcheries were built to replace lost spawning and rearing areas, elaborate plumbing was installed to suck baby fish out of the lakes behind the dams and shoot them out below. Decades and billions of dollars later, the salmon continue to decline. Our arrogance has been in thinking our engineering could dominate the simple elegance of the river.

"Return to the River" advanced the radical if obvious notion that the Columbia River is, in fact, a river,

and that the solution to the decline in salmon, is to return it to a more natural state, to a vision of the Columbia River as an ecosystem rather than an economic engine. It suggests that compromise between human and natural economies is not only possible but necessary, and that the notion that we could have it all — abundant salmon, cheap hydroelectricity and the power to transform the desert — must give way because nature has the final say over human hubris.

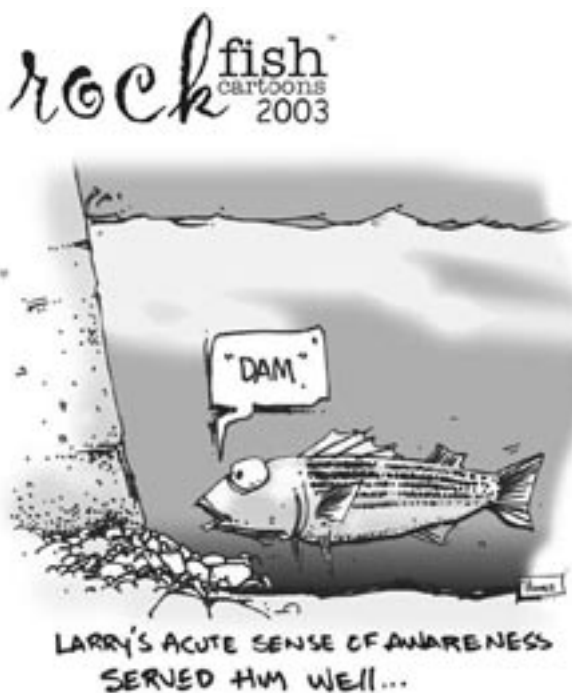
The question we should ask ourselves a decade after "Return to the River" is this: Have we learned anything in 10 years? The good news is that, yes, we have. On the Kennebec River in Maine, the removal of a dam has led to the return of striped bass and Atlantic salmon. Here in the Northwest we are close to removing the major dams on the Elwha River, as well as smaller dams on the Sandy and Rogue rivers.

The bad news is that we have not learned enough. The Columbia and Snake rivers of 2005 do not look markedly different than they did in 1990. All the dams remain in place, fish bypass and transportation remain the norm for getting salmon to and from the ocean, and most of the salmon still return to hatcheries.

The major lesson of "Return to the River" is that the river had it right the first time, and the more it is allowed to return to that reality, the more salmon, in their own elegant simplicity, will follow.

All of us involved in this epic fight about bringing back the salmon should bear these lessons in mind.

Jeff Curtis is Pacific salmon director for Trout Unlimited in Portland, Oregon.



Hydropower Industry Exploiting New Loophole

U.S. Newswire
Dec 20, 2005

Under a new federal regulation issued last month, a number of companies that operate hydroelectric dams on rivers across the country hope to evade requirements meant to protect the health of rivers. If successful, numerous utilities would be able to avoid installing fish ladders, making sure rivers have enough water, and protecting fish and wildlife that are affected by their dams.

Years of negotiations between the utilities, states, local governments, tribes, and federal agencies have modernized existing dam operations and brought them into compliance with today's environmental laws. But now, utilities are using these new rules to back out of agreed-upon protection measures designed to safeguard rivers from the damaging effects of dams. Under the rules, energy companies hope to remove or weaken protective requirements — even after they've been finalized as part of the licensing process.

"The new dam rules give utilities an unfair advantage," said Robbin Marks, director of hydropower reform at American Rivers. "Now, companies whose dams have caused so much environmental damage over decades, expect to do even less to safeguard our rivers."

A coalition — including American Rivers, Trout Unlimited, American Whitewater, Idaho Rivers United, Friends of the River, and Upper Chattahoochee Riverkeeper — has filed suit, charging that the new rules illegally allow challenges to already finalized measures that protect rivers from dams. The complaint also accuses federal agencies — Departments of Interior, Commerce and Agriculture — of illegally publishing the new rules as "final" without ever having provided the opportunity for public comment on the draft rules.

"Conservation groups, tribes and local communities across the country have worked for years in good faith to build consensus around the management of these dams and the rivers they impact," said Jan

Hasselmann, an attorney at Earthjustice in Seattle, who is representing the coalition in the lawsuit. "Unfortunately, the Bush administration changed the rules to give dam owners unfair control over our nation's greatest public resource — our rivers — without letting citizens and communities have a say.

The move to scuttle on-going negotiations and weaken river protections is the direct result of the energy bill signed into law by President Bush in August. Because of that law, hydroelectric dam operators have new leverage to: challenge requirements to build fish passage to allow fish to move around dams; protect lands on and around rivers; or help keep water clean and at natural flow levels. Under the law, industry and others also can propose their own preferred protection measures, which federal agencies must accept under many

circumstances.

While many dams provide benefits, they also cause considerable harm to rivers, as well as local communities. Dams have depleted fisheries, degraded river ecosystems, and diminished recreational and economic opportunities on rivers across the nation. According to American Rivers, most existing dams could be operated in new and improved ways that reduce their current impacts on rivers.

"The public deserves to have a voice in how our rivers are managed," said Steve Moyer, vice-president of government affairs for Trout Unlimited, a party to the lawsuit. "The new rules stack the deck in favor of dams, at the expense of fish that need healthy rivers to thrive. They also deny concerned citizens the opportunity to offer smarter alternatives."



Glen Canyon Dam, Page, Arizona

Big Downtown Solar

By Mark Kapner
Whole Earth
Summer 2001

Imagine urban buildings that harvest sunlight. Their walls are photovoltaic—directly converting sunlight into electrical power, using solid-state semiconductor wafers or thin films mounted on panels. There's no fuel consumed, no sound, no maintenance, no moving parts, and no pollution of any kind. And it makes money.

Most PV systems are mounted on racks or on poles. A skyscraper is a giant rack. These vast power-generating surfaces can supply everyone within the building and, at midday, can export power throughout the city. No need to store any power — the city's utility grid still supplies power at night, and during clouds and rain. The enlightened power company — say, Austin Energy, owned and run by Austinites (for whom I happen to work) — pays the building owner for the juice supplied to the grid. Not only would this work financially and physically — the buildings themselves would look great!

Using solar panels as a structural component is known as BIPV, Building Integrated PhotoVoltaics. Solar panels replace conventional walls or roof cladding. Labor that might have been wasted on a conventional roof simply mounts the electrical skin. Installing solar from the get-go saves on real estate and site development costs. The utility wires the building, so there's no need for new interconnections. Best of all, it's hard to imagine any more visible and public commitment to sustainability than the roof, walls, and awnings of a major-league urban skyscraper.

Solar architect Steven Strong pioneered this concept in his 1980 solar home design for a client in Carlisle, Massachusetts. In the 1990s, BIPV began to take off in Europe and Japan. Dozens of photovoltaic-clad buildings were constructed in Switzerland and Germany.

Recently 15 exemplary photovoltaic-integrated buildings were documented by architects Gregory Kiss and Dr. Patrina Eiffert.

Austin Energy will furnish the PV materials for a gigantic sunscreen for our city's new convention center expansion, now under construction. This power-producing sunscreen will filter sunlight on the western wall, daylighting the lobby and lowering power bills at the same time. We're also putting up solar sunshades over city parking lots throughout town.

A private group of investors in Austin will clad our new "world class" performing arts center in PV roofing and facade, turning the Center into a small generator between performances.

The solar industry now offers quite a variety of solar products integrated into buildings:

- Electricity-producing glass panels. These substitute for curtain wall spandrels (the opaque glass between rows of windows).
- Encapsulated wafer-type solar cells. These wafers are sandwiched between layers of glass and spaced out to allow light transmission between the cells. These panels create a beautiful pattern of diffuse light during daylighting.
- PV roofing systems specifically designed for flat

roofs.

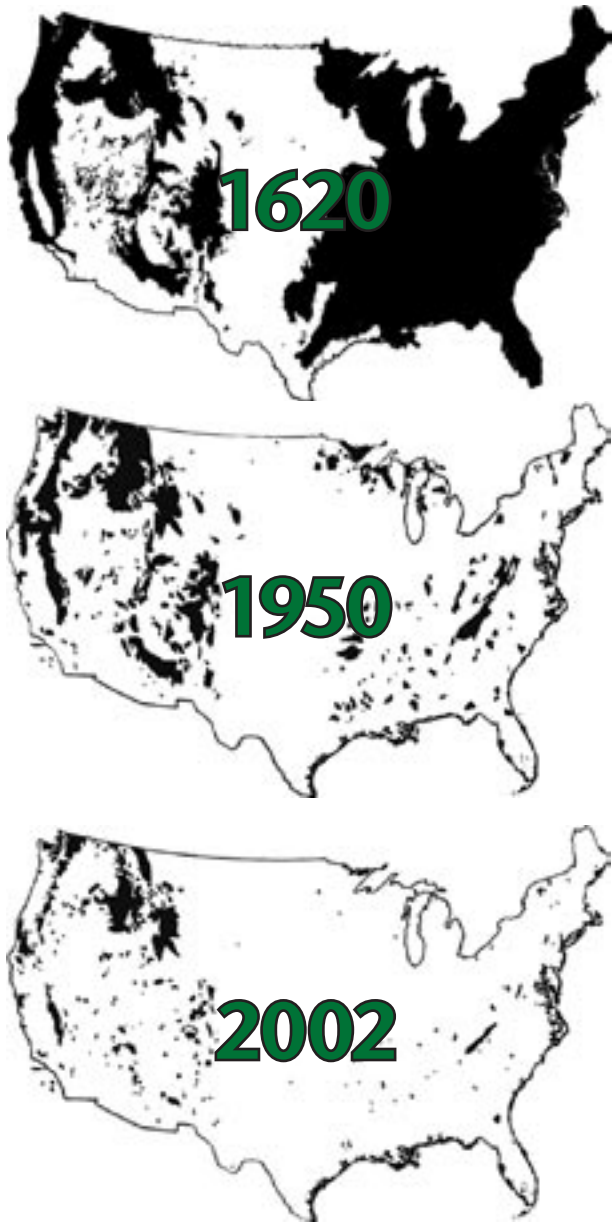
- Rigid roofing tiles and flexible shingles; PV panels compatible with metal roofing and awnings.

Photovoltaic panels don't come cheap, but almost every major building budgets something for sheer character. Imported granite or polished marble goes for about the same price as photovoltaic "building skin." The difference? A solar skin has a cash-flow stream! A marble facade can deliver only prestige — as the soot and acid rain of a fossil-fueled city slowly eat it away.



4 Times Square incorporated Solar Panels in its design

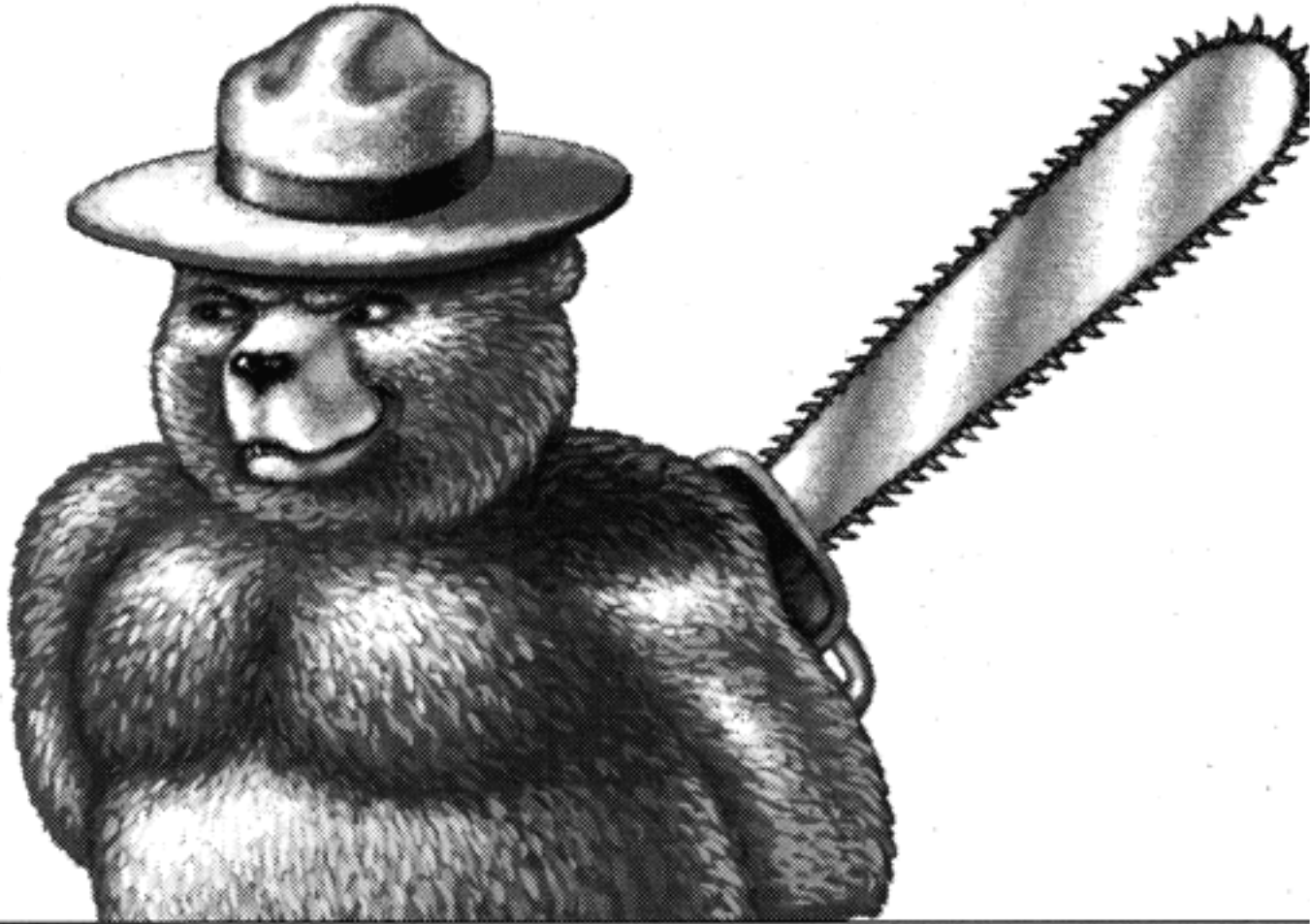
Save Our Disappearing Native Forests



A native forest is a self-regenerating forest that has never been cut or planted by humans.



There's a bear in the woods,
and he's destroying our heritage.



courtesy of Americans for Ancient Forests

Say it ain't so, Smokey.

YES!

I want to help save
the last of America's
national forests.
Here's how I can help:

Mail to:
Native Forest Council
PO Box 2190
Eugene, OR 97402
www.forestcouncil.org
info@forestcouncil.org

Sign me up!

- \$25 Student/Limited Income
- \$35 Advocate/Basic annual membership
- \$50 Supporter
- \$75 Contributor
- \$100 Conservator
- \$500 Sustainer
- \$_____ David Brower Circle
- \$1000 Patron
- \$5000 Benefactor

- I'll pledge a monthly gift of \$_____
 - Send me a monthly reminder
 - Bill my credit card
 - Please deduct my monthly gift from my checking account.
- I'm sending a signed and voided check. I understand deductions may be stopped or adjusted at any time.

Name _____

Address _____

City _____

State _____ Zip _____

Phone _____

E-mail _____

My check is enclosed.

Please bill my VISA MasterCard

Discover American Express

Card number _____

Exp. Date _____

Signature _____

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