

INFORMATION RESOURCE CENTER

American Embassy • Budapest, Hungary

Environmental Issues

NEWSLETTER No.33

August 2005

GOVERNMENT DOCUMENTS	3
New Report Shows Progress Reducing Air Pollution in Eastern United States	3
Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2005.....	3
United States Investing \$195 Million in Energy-Efficient Vehicles, July 14, 2005	4
CONGRESSIONAL DOCUMENTS (HEARINGS, REPORTS, ETC.).....	4
Climate Change Legislation in the 109th Congress.....	4
THINK TANKS AND INTERNATIONAL ORGANIZATIONS	5
BROOKINGS INSTITUTION.....	5
Replace Energy Bill with Serious Legislation	5
Climate Pact a Good Beginning	6
CENTER FOR INTERNATIONAL ENVIRONMENT LAW	6
Center for International Environmental Law	6
NATURAL RESOURCES DEFENSE COUNCIL	6
Prairie Crossroads.....	6
Alaska's Meltdown	7
Empty Nest Syndrome.....	7
NATIONAL CENTER FOR ATMOSPHERIC RESEARCH.....	8
NCAR Radar Probes Hurricane Rainbands; Hurricane field program could improve intensity forecasts.....	8
NASA	8
Volcanic Blast Location Influences Climate Reaction, Study Finds	8
NATIONAL SCIENCE FOUNDATION	9
First Drill Hole Into San Andreas Fault Will Aid Earthquake Studies	9
Hurricanes Growing More Fierce Over Past 30 Years	9
Amazon River Cycles Carbon Faster than Thought; Carbon is Returned to Atmosphere in Five Short Years.....	9
PEW CENTER ON GLOBAL CLIMATE CHANGE	10
U.S. Electric Power Sector and Climate Change Mitigation	10
Towards a Climate-Friendly Built Environment	11
RAND	11
The Cost of Cleaning Up Unexploded Ordnance	11
Explaining the Potential of Hydrogen Fuel Cells	11
UNION OF CONCERNED SCIENTISTS.....	12

Closing Fuel Economy Loopholes Can Save Consumers Billions; New Bush administration rules must plug leaks in America's oil security plan 12

THE WORLD CONSERVATION UNION (IUCN)..... 12

Draft text for World Summit recognises role of environment 12

ARTICLES FROM U.S. JOURNALS..... 13

AA05239 The Dotcom King And The Rooftop Solar Revolution 13

AA05240 E-GAD!..... 13

AA05208 Arsenic Crisis In Bangladesh..... 14

AA05193 Solar Power, Lakota Empowerment 14

AA05174 Mark Of Sustainability? Challenges For Fishery And Forestry Ecolabeling 14

AA05161 Tusk Tales..... 15

GOVERNMENT DOCUMENTS

New Report Shows Progress Reducing Air Pollution in Eastern United States EPA (Washington, D.C.-August 18, 2005)

2004 decreases in emissions of ozone forming nitrogen oxides (NOx) signal that ozone air quality throughout the eastern US is improving. According to a new report released today, "Evaluating Ozone Control Programs in the Eastern United States: Focus on the NOx Budget Trading Program, 2004", EPA's rule, known as the "NOx SIP Call," has yielded reductions to improve air quality for more than 100 million people. The NOx SIP Call directs 21 eastern states and the District of Columbia to reduce emissions of NOx during the summer months. All states subject to this rule chose to comply by participating in the EPA-administered NOx Budget Trading Program.

"The NOx Budget Trading Program is yet another example of how market-based trading programs are significantly reducing emissions of air pollutants," said EPA Administrator Stephen L. Johnson. "The NOx SIP Call and our new Clean Air Interstate Rule ensure that Americans continue to breathe cleaner air by dramatically reducing air pollution that moves across state boundaries."

The new report, "Evaluating Ozone Control Programs in the Eastern United States: Focus on the NOx Budget Trading Program, 2004" is available at:

<http://www.epa.gov/airtrends>

Light-Duty Automotive Technology and Fuel Economy Trends: 1975 Through 2005 EPA

Since 1975, EPA has published its annual Trends Report entitled: "Light-Duty Automotive Technology and Fuel Economy Trends: 1975 through 2005." The report provides a historic time line of key fuel economy and technology usage changes related to light-duty vehicles (i.e., cars, vans, sports utility vehicles, and pickup trucks) sold in the United States. Fuel economy has remained steady for the past several years. Vehicle technology has advanced, including hybrid-electric vehicles and clean diesel technology which hold promise for significant fuel economy improvements. On this web page, you will find links to the Light-Duty Automotive Technology and Fuel Economy Trends report for 1975 through 2005.

Executive Summary: **<http://www.epa.gov/oms/cert/mpg/fetrends/420s05001.htm>**

Complete Report: **<http://www.epa.gov/oms/cert/mpg/fetrends/420s05001.pdf>**

**United States Investing \$195 Million in Energy-Efficient Vehicles, July 14, 2005
(Joint effort to develop batteries follows one on lightweight materials)**

U.S. Energy Secretary Samuel Bodman and leaders of the U.S. Council for Automotive Research (USCAR) announced an agreement July 14 that could provide \$125 million over five years to develop high-performance batteries for electric, hybrid electric and fuel cell vehicles.

According to a Department of Energy (DOE) press release, using such new technologies will reduce the demand for petroleum fuel as the vehicles are introduced into the nation's transportation system, thereby significantly reducing the need for foreign sources of oil.

Highlighting the agreement and a recent, similar one to invest up to \$70 million to develop lightweight materials that increase fuel efficiency by reducing vehicle weight, Bodman expressed the Bush administration's support for new energy technologies.

"Industry, government and academic partnerships like the ones announced today are key to securing our nation's energy future," he said during an appearance in the Midwest state of Michigan, the traditional center of the U.S. automotive industry.

The \$125 million agreement is for three years with two, one-year continuing options in which the government and industry will share research costs. With the \$70 million agreement initially signed in May, this brings total joint vehicle technology investments to a potential \$195 million over five years.

As part of the new agreement, the DOE FreedomCAR Program and USCAR's U.S. Advanced Battery Consortium will split the cost of research and development for new battery materials and technologies that potentially could increase energy storage and charge/discharge performance, improve durability and reliability, and reduce cost.

The 10-year old DOE/USCAR partnership helped develop the nickel metal hydride battery technology used in all commercially available, light-duty hybrid electric vehicles.

These announcements complement a variety of other international initiatives the Bush administration has launched to reduce reliance on fossil fuels and develop alternative energy sources, notably the International Partnership for a Hydrogen Economy, involving 15 nations, and the Renewable Energy and Energy Efficiency Partnership, involving 20 nations.

http://www.usembassy.it/file2005_07/alia/a5071502.htm

CONGRESSIONAL DOCUMENTS (HEARINGS, REPORTS, ETC.)

Climate Change Legislation in the 109th Congress

**Brent D. Yacobucci, Specialist in Energy Policy, Resources, Science, and Industry Division
CRS Report for Congress Updated July 18, 2005**

Summary

Climate change and greenhouse gas (GHG) emissions are an issue in the 109th Congress, as they have been in past Congresses. Bills directly addressing climate change issues range from those focused primarily on climate change research to comprehensive emissions cap-and-trade programs

for the six greenhouse gases covered under the United Nations Framework Convention on Climate Change.

Additional bills focus on GHG reporting and registries, or on power plant emissions of carbon dioxide as part of wider controls on pollutant emissions.

Within several broad categories, the bills vary in their approaches to climate change issues. For example, some bills covering research issues focus solely on modeling the effects of future climate change, while others address the development of monitoring technologies. Bills focusing on technology deployment do so through tax incentives and credit-based programs within the United States, or through the promotion of deployment in developing countries. Bills with greenhouse gas registries may be voluntary or mandatory, and vary in the entities covered and the gases registered. Bills with emission reduction requirements also vary in the entities covered, the gases limited, and the target emissions levels.

This report briefly discusses the basic concepts on which these bills are based, and compares major provisions of the bills in each of the following categories: climate change research, technology deployment, GHG reporting and registries, and emissions reduction programs. This report will be updated as events warrant.

<http://www.usembassy.it/pdf/other/RL32955.pdf>

THINK TANKS AND INTERNATIONAL ORGANIZATIONS

BROOKINGS INSTITUTION

Replace Energy Bill with Serious Legislation

**David B. Sandalow, Director, Environment and Energy Project, Foreign Policy Studies
Published in The Baltimore Sun, August 4, 2005**

To understand why Americans hold the current Congress in such low esteem, look no further than the energy bill passed last week.

The United States faces serious energy problems. Our dependence on Middle East oil cripples us in the fight against terror. Greenhouse gas emissions are out of control, playing havoc with the climate. High gas prices and gas-guzzling cars squeeze family budgets. Other nations have surpassed the U.S. in the huge and growing market for clean energy technologies.

....

What would serious national energy legislation look like?

<http://www.brook.edu/views/op-ed/fellows/sandalow20050804.htm>

Climate Pact a Good Beginning

Warwick J. McKibbin, Nonresident Senior Fellow, Economic Studies

Published in the Australian Financial Review, August 1, 2005

There is much to recommend the initiative on climate change embodied in the new Asia-Pacific Partnership on Clean Development and Climate. Australia is engaged with the right nations. The United States and Japan (and Australia) are responsible for any current climate change, and China and India are the key future emitters. Engagement starting with the main countries is critical, the rest of the world can join over time.

<http://www.brook.edu/views/op-ed/mckibbin/20050801.htm>

CENTER FOR INTERNATIONAL ENVIRONMENT LAW

Center for International Environmental Law

2004 Annual Report

This report describes some of CIEL's recent activities and accomplishments. Among other things, we amplified the voices of indigenous people and other individuals and communities in all corners of the world, helping secure transparency and justice for them and, indirectly, for others like them. These efforts included obtaining the first ruling by the Inter-American Commission on Human Rights that pollution is a human rights violation and prompting a landmark settlement for indigenous people being displaced by a dam in Chile.

http://www.ciel.org/Publications/CIEL_Report_2004.pdf

NATURAL RESOURCES DEFENSE COUNCIL

Prairie Crossroads

by Richard Manning

OnEarth, Summer 2005

The harsh landscape of the Montana plains has never been kind to humans. Now a proposed wildlife reserve could let nature, finally, have its way.

I usually enter the Missouri Breaks by driving a 55-mile-long gravel road straight south out of the closest town of any consequence, Malta, population 2,100 and falling. I often stop atop what passes for a hill in the short-grass prairie, a tawny landscape of gentle rolls like a cougar's hide. Gentle,

however, is a seldom-used word in central Montana, a place of 50-below blizzards, 106-degree heat waves, and just enough annual rainfall to keep it from -- at least officially -- desiccating to desert.

<http://www.nrdc.org/onearth/05sum/montana1.asp>

Alaska's Meltdown
by Charles Wohlforth
OnEarth, Summer 2005

If folks above the 49th Parallel are scared about global warming, they're sure not letting on. Now that's scary.

High-temperature records are being broken so often that the local newspapers barely make note anymore. Last summer, 6.5 million acres of Alaska burned, an area the size of Massachusetts, breaking a 50-year-old record. Smoke hung over a broad swath of the state, and tourists took shelter. Even when the smoke cleared, the forests and cities didn't smell right: They smelled hot, like the Lower 48, not like Alaska. Sea ice withdrawing, catastrophic erosion, glaciers shrinking, melting permafrost, winters warming and shortening: Alaskans are not only losing economically, they are losing their ways of life.

So why aren't they doing anything about it?

<http://www.nrdc.org/onearth/05sum/alaska1.asp>

Empty Nest Syndrome
by Sharon Levy
OnEarth, Summer 2005

Hawaii's forests were once home to flightless ducks and long-legged owls, both now extinct. To give other bird species a fighting chance of survival, biologists are plotting to kill off their mortal enemies.

Six thousand feet up on the flank of Mauna Kea, Jack Jeffrey and I lurk in the shrubbery near an ancient ohia tree. Its trunk bears thousands of small scars, the legacy of generations of akiapola'au that have drilled through the bark to harvest sap. Affectionately known to Hawaiian ornithologists as the aki, the bird is one of the rarest creatures on earth.

<http://www.nrdc.org/onearth/05sum/hawaii1.asp>

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

NCAR Radar Probes Hurricane Rainbands; Hurricane field program could improve intensity forecasts

August 8, 2005

BOULDER—A collaborative research team will soon begin one of the largest hurricane research projects ever undertaken. Its goal is to better understand dramatic, rapid changes in tropical storm intensity that have baffled forecasters for years.

The team includes scientists from the University of Miami Rosenstiel School of Marine and Atmospheric Science, the University of Washington, the National Center for Atmospheric Research (NCAR), the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Navy. The project, called the Hurricane Rainband and Intensity Change Experiment (RAINEX), will study how the outer rainbands and inner eye of a hurricane interact to influence the storm's intensity. The National Science Foundation (NSF) provided \$3 million to fund the study, which may shed light on how and why a storm can change in strength in only a matter of hours.

<http://www.ucar.edu/news/releases/2005/rainex.shtml>

NASA

Volcanic Blast Location Influences Climate Reaction, Study Finds Earth's response to volcanoes depends on "aerosols," geography

New research funded by NASA and the U.S. National Science Foundation on tiny particles called "aerosols" shows that major volcanic eruptions far north of the equator affect global climate much differently than do eruptions in the tropics.

"Studying such events will help us be better prepared for the next major eruption, while giving scientists clues on the type of climate shifts and changes to expect," said lead study author Luke Oman at Rutgers University in New Jersey.

<http://usinfo.state.gov/gi/Archive/2005/Aug/15-112075.html>

NATIONAL SCIENCE FOUNDATION

First Drill Hole Into San Andreas Fault Will Aid Earthquake Studies NCF Press Release August 3, 2005

Geologists affiliated with the EarthScope Project have successfully drilled a hole 2 miles deep into the San Andreas Fault, an 800-mile-long rift. The entire borehole will be lined with steel and concrete so sensitive instruments can be installed underground.

EarthScope is a National Science Foundation (NSF)-funded project carried out in collaboration with the U.S. Geological Survey.

http://www.nsf.gov/news/news_summ.jsp?cntn_id=104300&org=NSF&from=news

Hurricanes Growing More Fierce Over Past 30 Years Press Release July 31, 2005

Hurricanes have grown significantly more powerful and destructive over the past three decades, according to atmospheric scientist Kerry Emanuel of the Massachusetts Institute of Technology.

In his new analysis of tropical hurricane records, which he reports online today in the journal *Nature*, Emanuel finds that both the duration of the storms and their maximum wind speeds have increased by about 50 per cent since the mid-1970s. Moreover, this marked increase in the energy release has occurred in both the north Atlantic and the north Pacific Oceans.

Unlike previous studies, which have focused on whether hurricanes are becoming more frequent, Emanuel's study is one of the first to ask whether they are becoming more fierce.

http://www.nsf.gov/news/news_summ.jsp?cntn_id=104325&org=NSF&from=news

Amazon River Cycles Carbon Faster than Thought; Carbon is Returned to Atmosphere in Five Short Years Press Release July 27, 2005

Until now, explains Emilio Mayorga, University of Washington (UW) oceanographer and lead author of the *Nature* piece, researchers had hoped that regions such as the nearly 2.4 million-square-mile Amazon River basin, where tropical forests rapidly gulp carbon dioxide during photosynthesis, were holding onto that carbon for decades or centuries.

Indeed, says his co-author, Anthony Aufdenkampe of the Stroud Water Research Center in Pennsylvania, "those who've previously made measurements assumed that the return of this carbon

to the atmosphere must be a slow process that offered at least temporary respite from greenhouse effects."

But the data told a different story, Aufdenkampe says: "As part of the largest radiocarbon age survey ever for a single watershed, we show that the enormous amount of carbon dioxide silently being returned to the atmosphere is far 'younger' than carbon being carried downstream."

http://www.nsf.gov/news/news_summ.jsp?cntn_id=104321&org=NSF&from=news

PEW CENTER ON GLOBAL CLIMATE CHANGE

Two new reports released today by the Pew Center on Global Climate Change identify a number of technologies and policy options for GHG reductions in both sectors. The first report is *Towards a Climate-Friendly Built Environment*, written by Marilyn Brown, Frank Southworth and Therese Stovall of Oak Ridge National Laboratory. The other is *U.S. Electric Power Sector and Climate Change Mitigation*, written by Granger Morgan, Jay Apt, and Lester Lave of Carnegie Mellon University.

(...)

"The importance of these two sectors to both the U.S. economy and to the issue of climate change cannot be over-stated," said Eileen Claussen, President of the Pew Center on Global Climate Change, "This research shows that we can achieve enormous reductions in the building and electric sectors, but only if we craft a clear and comprehensive policy to guide them."

(...)

These reports are parts of the Solutions series, which is aimed at providing individuals and organizations with tools to evaluate and reduce their contributions to climate change. In 2003, the Solutions series released the first of its sectoral reports, *Reducing Greenhouse Gas Emissions from U.S. Transportation*, written by David L. Greene of Oak Ridge National Laboratory and Andreas Schafer of the Massachusetts Institute of Technology. Other Pew Center series focus on domestic and international policy issues, environmental impacts, and the economics of climate change.

U.S. Electric Power Sector and Climate Change Mitigation

Granger Morgan, Carnegie Mellon University; Jay Apt, Carnegie Mellon University; Lester Lave, Carnegie Mellon University

Prepared for the Pew Center on Global Climate Change, June 2005

<http://www.pewclimate.org/document.cfm?documentID=468>

Towards a Climate-Friendly Built Environment

Marilyn Brown, Oak Ridge National Laboratory; Frank Southworth, Oak Ridge National Laboratory; Therese Stovall, Oak Ridge National Laboratory

Prepared for the Pew Center on Global Climate Change, June 2005

<http://www.pewclimate.org/document.cfm?documentID=469>

RAND

The Cost of Cleaning Up Unexploded Ordnance

How Clean Is Clean?

RAND, August 10, 2005

Since the end of the Cold War, the Department of Defense has closed almost 100 major military bases and many smaller ones. Closed bases are either turned to other governmental purposes at the national, state, or local level, or, in some cases, sold to individuals or companies in the private sector. Regardless of the purpose the land may be put to, these installations must all go through a process of environmental restoration to ensure the safety of the eventual users. This restoration pertains not only to the contamination caused by toxic substances, but also to a hazard unique to military bases: unexploded ordnance (UXO), which occurs when the munitions used in military training or weapons testing do not explode as designed. UXO includes such items as artillery shells, bombs, rockets, hand grenades, and so forth. Clearing the land of UXO is an expensive, time-consuming, and often contentious process. One of the problems contributing to the complexity of UXO remediation is that it is difficult to estimate the costs of clearing the land. Researchers from RAND Arroyo Center explored the issues related to the cost of cleaning up UXO, focusing specifically on how changes in the cleanup protocols affect costs. The results of their research appear in *Unexploded Ordnance Cleanup Costs: Implications of Alternative Protocols*.

<http://www.rand.org/publications/RB/RB9124/>

Full Document:**<http://www.rand.org/publications/MG/MG244/>**

Explaining the Potential of Hydrogen Fuel Cells

RAND, Jul. 26, 2005

Hydrogen as an energy carrier has generated much attention due to its potential large-scale use in producing electrical energy through fuel-cell technologies and in replacing gasoline for use in transportation. On December 9, 2004, the RAND Corporation hosted a forum that drew 40 experts in various fields to discuss what needs to be done to better inform decisionmakers in the public and private sectors of the benefits and risks of various hydrogen-related programs and policies. The document summarizes the proceedings of that forum.

Summary: **http://www.rand.org/pubs/conf_proceedings/2005/RAND_CF218.sum.pdf**

Full Document: http://www.rand.org/pubs/conf_proceedings/2005/RAND_CF218.pdf

UNION OF CONCERNED SCIENTISTS

Closing Fuel Economy Loopholes Can Save Consumers Billions; New Bush administration rules must plug leaks in America's oil security plan UCS August 20, 2005

The new report provides a yardstick for evaluating a proposal from the National Highway Traffic Safety Administration (NHTSA) that is expected later this month. Fuel economy standards are the nation's chief tool for reducing America's oil dependence. The forthcoming NHTSA proposal would be the first radical change to the fuel economy program since its inception 30 years ago. The proposal is expected to alter the way sport utility vehicles, minivans, and pickups are regulated. These changes could alleviate consumers' pain at the pump if they address regulatory loopholes, or they could add fuel to the fire of rising gasoline prices by creating new ones.

http://www.ucsusa.org/news/press_release.cfm?newsID=500

Complete Report:

http://www.ucsusa.org/clean_vehicles/cars_and_suvs/page.cfm?pageID=1835

THE WORLD CONSERVATION UNION (IUCN).

Draft text for World Summit recognises role of environment July 27, 2005

High-level plenary meeting of the General Assembly of September 2005
(revised draft outcome document)

The draft negotiating text for the 2005 World Summit, released on 22 July, shows improvements in recognising the role of the environment in development. Nonetheless, there remains scope to further improve the document and, to that end, IUCN releases a position paper with suggested changes.

<http://www.iucn.org/mdg5/docs/DraftUnoffjul05.pdf>

ARTICLES FROM U.S. JOURNALS

(Contact the IRC for copies)

AA05239 The Dotcom King And The Rooftop Solar Revolution

Reiss, Spencer

Wired vol. 13, no. 7, July 2005

Summary: Most of the entrepreneurs of the Internet boom of the 1990s have moved on to other things, but Bill Gross, founder of Idealab, the Pasadena, California-based high-tech incubator, is still going strong. Idealab's latest innovation: a low-cost, downsized, lightweight, rooftop-mountable solar concentrator, consisting of a field of movable mirrors in a two-metre-square frame, that focus sunlight on an elevated silicon wafer, generating electric power at double the efficiency of flat photovoltaic panels. Several prototypes are being subjected to accelerated-aging tests, to see how the sophisticated machinery and electronics hold up to the elements, and the first shipment of 1000 units from a low-cost offshore manufacturer will be delivered in the fall. Solar energy has the greatest potential to revolutionize how mankind obtains energy, notes the author, but it has also been the most challenging to harness. The solar industry's long-term strategy is to maintain government financial incentives for users to obtain solar equipment to keep it competitive with coal, gas and nuclear power; as technological improvements and large-scale manufacturing lower the costs, the author predicts that the market for solar "will explode." [TEM;GWB]

AA05240 E-GAD!

Royte, Elizabeth

Smithsonian Vol. 36, No. 5, August 2005, pp. 82-85

Summary: The author's difficulty in safely disposing of her late-model computer led her to investigate the challenges of properly recycling high-tech equipment. Despite its reputation as a "clean" technology, computer and high-tech manufacturing requires large quantities of raw materials, including toxic heavy metals and petroleum-based plastics. At least 60 million personal computers are already buried in U.S. garbage dumps, and about 250 million more are expected to become obsolete in the next few years. Approximately 100 million cell phones are discarded in the U.S. each year, many of which also wind up in landfills. Finding solutions to the growing problem of e-waste requires a challenging mix of consumer and business financial incentives and practices, better materials recovery practices, and intensified consumer demand for safe disposal of ubiquitous and easily outdated e-gadgets. Action is urgently needed, the author writes, as ever-increasing amounts of heavy metals from electronic equipment poison the air and contaminate landfills and groundwater in the U.S. and abroad. [GIC;GW]

AA05208 Arsenic Crisis In Bangladesh

Chowdhury, Mushtaque

Scientific American vol. 291, no. 2, August 2004, pp. 86-91

Summary: In the 1970s and 1980s, the government of Bangladesh undertook an ambitious project to bring clean drinking water to rural areas. With the help of international aid agencies, tubewells with pumps attached were drilled to underground aquifers. However, nobody checked the underground water for arsenic content; Bangladesh is now suffering from an epidemic of arsenic poisoning from years of use of well water in the villages. The telltale lesions on palms and the soles of the feet from arsenic poisoning usually show up only after years of drinking arsenic-tainted water. While no perfect technology exists for removing arsenic from water, the "three-pitcher" filter is the most promising. The challenge is to then dispose of the arsenic-tainted sludge. The author cautions that "the poorest nations [especially] should check the quality of their water constantly." An accompanying map shows major arsenic concentrations in aquifers occurring in the western U.S., Mexico, Chile, Argentina, Hungary, Romania, Nepal, India, Mongolia, parts of China and Kazakhstan, Taiwan, Vietnam and Thailand. [TEM;GWB]

AA05193 Solar Power, Lakota Empowerment

Wockner, Gary

World Watch Vol. 18, No. 4, July/August 2005, pp. 11-17

Summary: The Pine Ridge Indian Reservation in South Dakota is home to the Oglala Lakota Native Americans. The Lakota have high rates of unemployment, poverty and chronic illness, and many houses are in disrepair. The Colorado-based environmental organization Trees, Water & People (TWP) met with Lakota leaders in 2002 seeking their input to develop a program suitable for the reservation. Learning that some residents spend up to 50 percent of their income for heat, TWP proposed a solar heating program. TWP staff and high school and college students from reservation schools build and install low-tech, low-cost solar panel systems on homes to provide daytime heat. While improving living conditions for the recipients of the panels, both TWP and some Pine Ridge residents believe sustainable solar power will reinforce the Lakota people's traditional connection to nature and the land. The author is an environmental writer and research ecologist at Colorado State University. [GIC;JRT]

AA05174 Mark Of Sustainability? Challenges For Fishery And Forestry Ecolabeling

Gulbrandsen, Lars H.

Environment Vol. 47, No. 5, June 2005, pp. 8-23

Summary: "Eco-labels" on food items and other materials were meant to increase consumers' choices and to motivate producers to adopt sustainable practices by rewarding them with a "certified" -- and potentially more lucrative -- brand. But has the use of such labels produced

positive environmental impacts in farming, fishing, forestry, and other industries? The author, focusing on forestry and fishing, provides an historical overview of how eco-labeling developed and explores issues such as auditing, standards, supply-chain tracking and enforcement. He also describes the emergence of nongovernmental organizations as players in the certification structure. This extensively referenced article features comparison charts of international certification programs, case studies, and descriptions of international eco-certification laws. [GIC;GLW]

AA05161 Tusk Tales

Scigliano, Eric

Discover Vol. 26, No. 6, June 2005, pp. 46-51

Summary: The 1989 international ban on ivory trading was designed to stop the slaughter of African elephants, but poaching and smuggling of tusks continues. If the origins of a 2002 seizure of smuggled ivory, the largest ever made, can be identified, that would help investigators learn the magnitude of the trade, the structure of the criminal syndicates running it, and the dynamics of the smuggling operations. Analysis of tissue and fecal samples collected from 45 locations in 23 countries has been compiled by scientists into a genetic map of the savanna and forest elephant herds, and DNA from the seized tusks will be compared with this database. This test of the reliability of genetic detection will be of interest to both criminal investigators and countries that wish to resume legal ivory sales. The author wrote *LOVE, WAR, AND CIRCUSES: THE AGE-OLD RELATIONSHIP BETWEEN ELEPHANTS AND HUMANS* (Houghton Mifflin, 2002). [GIC;JRT]