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**the U.S. Embassy in Ukraine**

# **Environmental Issues**

## **INTERNATIONAL POLAR YEAR (IPY) 2007- 2008**

**March 2007**



AP Wide World Photo

**OFFICIALS MARK START OF U.S. EFFORT FOR INTERNATIONAL POLAR YEAR**

**Program involves more than 60 countries and focuses on Arctic, Antarctic  
By Cheryl Pellerin, USINFO Staff Writer. 26 February 2007**

The largest collaborative science program ever attempted – International Polar Year (IPY) 2007-2008 -- will focus on the Arctic and Antarctic and will involve more than 200 research projects, 50,000 scientists and more than 60 countries.

From March 1, 2007, to March 9, 2009, scientists from around the planet will conduct a range of physical, biological and social sciences research studies in the Arctic and Antarctic that address questions in these areas and include a large education component.

“The U.S. government has invested considerable effort and resources in projects related to the polar regions – more than \$350 million per year – and we’re excited about the International Polar Year,” said Paula Dobriansky, under secretary of state for democracy and global affairs, during the February 26 opening ceremony at the National Academy of Sciences in Washington.

The State Department directs international relations in polar affairs, leads federal policy involving the Arctic and Antarctic and heads U.S. delegations to the Arctic Council, and other polar organizations and forums. The Arctic Council is a high-level forum for cooperation among Arctic states.

“Our attention to the polar regions,” Dobriansky added, “is a very important aspect of our U.S. foreign policy.”

<http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2007&m=February&x=200702261635351cnirellep0.5515406>

**GOVERNMENT DOCUMENTS..... 8**

LIGHT AT THE END OF THE TUNNEL IS CLEANER AIR; EPA CUTS DIESEL LOCOMOTIVE AND VESSEL POLLUTION  
EPA, 03/02/2007 ..... 8

THE U. S. ENVIRONMENTAL PROTECTION AGENCY'S FY 2006 PERFORMANCE AND ACCOUNTABILITY REPORT ..... 8

ENERGY FOR SUSTAINABLE DEVELOPMENT  
Jonathan Margolis, Special Representative for Sustainable Development and Head of the U.S. Delegation; Statement at the Afternoon Plenary of the Intergovernmental Preparatory Meeting for the 15th Session of the UN Commission on Sustainable Development. New York City, February 27, 2007..... 9

POST-KYOTO SURPRISE: AMERICA'S QUIET EFFORTS TO CUT GREENHOUSE GASES ARE PRODUCING RESULTS  
Kurt Volker, Principal Deputy Assistant Secretary for European and Eurasian Affairs Remarks at the German Marshall Fund. Berlin, Germany, February 12, 2007..... 9

MILITARY BASE CLOSURES: OPPORTUNITIES EXIST TO IMPROVE ENVIRONMENTAL CLEANUP COST REPORTING AND TO EXPEDITE TRANSFER OF UNNEEDED PROPERTY  
U.S. General Accountability Office (GAO)]. January 30, 2007. 07AD307 ..... 10

USDA SHOULD IMPROVE ITS MANAGEMENT OF KEY CONSERVATION PROGRAMS TO ENSURE PAYMENTS PROMOTE ENVIRONMENTAL GOALS  
U.S. General Accountability Office (GAO). January 17, 2007. 07AD295 ..... 10

EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES 2005.  
United States Department of Energy, Energy Information Administration (EIA).  
November 14, 2006. 07AD135 ..... 10

**THE WHITE HOUSE ..... 11**

EXECUTIVE ORDER 13423: STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT  
The White House, Office of the Press Secretary. January 24, 2007..... 11

FACT SHEET: STRENGTHENING AMERICA'S ENERGY SECURITY AND IMPROVING THE ENVIRONMENT ..... 11

**CONGRESSIONAL DOCUMENTS (HEARINGS, REPORTS, ETC.) ..... 11**

EARTHQUAKES: RISK, MONITORING, NOTIFICATION, AND RESEARCH  
Peter Folger  
Congressional Research Service, Library of Congress. February 2, 2007. 07AD319..... 11

CLIMATE CHANGE: GREENHOUSE GAS REDUCTION BILLS IN THE 110TH CONGRESS  
Larry Parker  
Congressional Research Service, Library of Congress. January 31, 2007. 07AD318..... 12

**THINK TANKS AND INTERNATIONAL ORGANIZATIONS..... 12**

ARCTIC COUNCIL ..... 12  
COMMON OBJECTIVES AND PRIORITIES FOR THE NORWEGIAN, DANISH AND SWEDISH CHAIRMANSHIPS OF THE ARCTIC COUNCIL (2006-2012) ..... 12

BROOKINGS INSTITUTION .....	12
THE FUTURE OF ENERGY SECURITY. UNCORRECTED TRANSCRIPT	
The Brookings Institution Event, January 23, 2007 .....	12
ENDING OIL DEPENDENCE	
David Sandalow	
The Brookings Institution. January 22, 2007. 07AD320.....	13
DEPARTMENT OF ATMOSPHERE SCIENCE, COLORADO STATE UNIVERSITY .....	13
EXTENDED RANGE FORECAST OF ATLANTIC SEASONAL HURRICANE ACTIVITY AND U.S.	
LANDFALL STRIKE PROBABILITY FOR 2007.	
Philip J. Klotzbach and William M. Gray	
Department of Atmosphere Science, Colorado State University. December 8, 2006. 07AD186 .....	13
CENTER FOR ENVIRONMENT AND POPULATION (CEP) .....	14
U.S. NATIONAL REPORT ON POPULATION AND THE ENVIRONMENT.	
Victoria D. Markham	
Center for Environment and Population (CEP). Fall/Winter 2006. 07AD166.....	14
CENTER FOR INTERNATIONAL ENVIRONMENT LAW .....	14
INTELLECTUAL PROPERTY, BILATERAL AGREEMENTS AND SUSTAINABLE DEVELOPMENT:	
THE CHALLENGES OF IMPLEMENTATION	
Pedro Roffe	
CIEL. Intellectual Property, Bilateral Agreements and Sustainable Development Series: 1 January 2007 .....	14
ENVIRONMENTAL LAW INSTITUTION .....	15
WHERE IS THE MIDDLE GROUND ON POPS, PIC, AND LRTAP?	
ELI. <i>The Environmental Forum</i> , November/December 2006.....	15
GREENPEACE.....	15
CUTTING EDGE CONTAMINATION; A Study of Environmental Pollution during the manufacture of	
Electronic Products	
Greenpeace, February 08, 2007.....	15
PLASTIC DEBRIS IN THE WORLD'S OCEANS	
Michelle Allsopp, Adam Walters, Dave Santillo, and Paul Johnson	
Greenpeace International. Web posted December 28, 2006. 07AD233 .....	16
DON'T RUSH TO JUDGMENT ON U.N.'S IPCC GLOBAL WARMING SUMMARY	
by Ben Lieberman	
Heritage Foundation WebMemo #1351, February 7, 2007.....	16
NATIONAL ACADEMY OF SCIENCES .....	16
RETURNING FORESTS ANALYZED WITH THE FOREST IDENTITY	
Pekka E. Kauppi, Jesse H. Ausubel, Jingyun Fang, Alexander S. Mather, Roger A. Sedjo, and Paul	
E. Waggoner	
National Academy of Sciences. Web posted November 14, 2006. 06AD152 .....	16
Proceedings of	
NATIONAL CENTER FOR ATMOSPHERIC RESEARCH .....	17
2006/2007 NCAR ANNUAL REPORT (Online).....	17
NATIONAL CENTER FOR FOOD AND AGRICULTURAL POLICY .....	17
QUANTIFICATION OF THE IMPACTS ON US AGRICULTURE OF BIOTECHNOLOGY-DERIVED	
CROPS PLANTED IN 2005	

Sujatha Sankula National Center for Food and Agricultural Policy. November 2006. 07AD205.....	17
<b>NATIONAL INSTITUTES OF HEALTH.....</b>	<b>18</b>
MERCURY EXPOSURE FROM DOMESTIC AND IMPORTED ESTUARINE AND MARINE FISH IN THE UNITED STATES SEAFOOD MARKET Elsie M. Sunderland National Institutes of Health. November 20, 2006. 07AD176.....	18
ENVIRONMENTAL HEALTH IMPACTS OF CONCENTRATED ANIMAL FEEDING OPERATIONS: ANTICIPATING HAZARDS—SEARCHING FOR SOLUTIONS Peter S. Thorne Environmental Health Perspectives, National Institutes of Health. November 14, 2006. 07AD157.....	18
<b>NASA.....</b>	<b>19</b>
NASA DATA LINK INDONESIA WILDFIRE FLARE-UP TO RECENT EL NINO NASA 03.01.07.....	19
<b>NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA) .....</b>	<b>19</b>
NOAA'S CORAL REEF ECOSYSTEM RESEARCH PLAN FOR FISCAL YEARS 2007 TO 2011 NOAA, March 2, 2007.....	19
NEW DATA SHOW DOWNWARD TREND IN ARCTIC SEA ICE U.S. National Ice Center, National Oceanic Atmospheric Agency (NOAA), U.S. Navy, and U.S. Coast Guard. November 20, 2006. 07AD162 .....	20
<b>NATIONAL SCIENCE FOUNDATION .....</b>	<b>20</b>
U.S. SOUTH POLE STATION .....	20
ECOLOGY OF INFECTIOUS DISEASES: A SPECIAL REPORT NSF, October 27, 2006.....	21
<b>NATURAL RESOURCES DEFENSE COUNCIL.....</b>	<b>22</b>
NEW NUCLEAR POWER PLANTS ARE NOT A SOLUTION FOR AMERICA'S ENERGY NEEDS NRDC Fact Sheet. February 2007.....	22
<b>ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT'S.....</b>	<b>22</b>
IMPROVING RECYCLING MARKETS OECD Policy Brief, January 2007 .....	22
CLIMATE CHANGE IN THE EUROPEAN ALPS: ADAPTING WINTER TOURISM AND NATURAL HAZARDS MANAGEMENT Edited by Shardul Agrawala OECD. Published: 18 January 2007. ISBN: 9789264031692.....	23
<b>PEW CENTER ON GLOBAL CLIMATE CHANGE .....</b>	<b>23</b>
SUSTAINABLE MARINE AQUACULTURE: FULFILLING THE PROMISE: MANAGING THE RISKS: REPORT OF THE MARINE AQUACULTURE TASK FORCE Pew Charitable Trust. January 2007. 07AD259.....	23
GETTING AHEAD OF THE CURVE: CORPORATE STRATEGIES THAT ADDRESS CLIMATE CHANGE Andrew J. Hoffman Pew Center on Global Climate Change. Web-posted October 18, 2006. 07AD063 .....	24
<b>RAND .....</b>	<b>24</b>

BEYOND THE GAS TAX: ALTERNATIVES FOR A GREENER WORLD By: Martin Wachs Testimony presented before the Los Angeles Field Hearing of the National Surface Transportation Policy and Revenue Study Commission on February 21, 2007. ....	24
UNION OF CONCERNED SCIENTISTS .....	25
NEW VEHICLE DESIGN SURPASSES STATE GLOBAL WARMING STANDARDS; Engineers Design Affordable, Clean Car Using Existing Technology And Fuels UCS, March 1, 2007 .....	25
CLEAN VEHICLES UPDATE UCS, January 2007 .....	25
UNITED NATIONS .....	25
CONFRONTING CLIMATE CHANGE: AVOIDING THE UNMANAGEABLE AND MANAGING THE UNAVOIDABLE UN Foundation and Sigma Xi, February 2007.....	25
HUMAN DEVELOPMENT REPORT 2006: BEYOND SCARCITY: POWER, POVERTY AND THE GLOBAL WATER CRISIS Kevin Watkins United Nations Development Programme. United Nations. November 2006. 07AD214 .....	26
UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP).....	26
CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS: SUMMARY FOR POLICYMAKERS Intergovernmental Panel on Climate Change, World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP). Web posted February 2, 2007. 07AD299 .....	26
U.S. CLIMATE ACTION PARTNERSHIP (USCAP) .....	27
A CALL FOR ACTION USCAP Special Report. January 22, 2007 .....	27
WORLD RESOURCES INSTITUTE.....	27
POLAR WARMING AND ITS GLOBAL CONSEQUENCES FEBRUARY UPDATE: By Tom Damassa on Friday, March 2, 2007 .....	27
AGRICULTURAL SUBSIDIES, POVERTY AND THE ENVIRONMENT: SUPPORTING A DOMESTIC REFORM AGENDA IN DEVELOPING COUNTRIES Antonio La Vina, Lindsey Fransen, Paul Faeth, and Yuko Kurauchi WRI Policy Note, World Resources Institute. January 2007. 07AD316.....	28
EMISSIONS GROWTH IN THE UNITED STATES AND THE EUROPEAN UNION Are GHG emissions in the EU growing faster than in the US? Depends on how you look at it. Tim Herzog WRI, February 23, 2007.....	28
TARGET: INTENSITY: AN ANALYSIS OF GREENHOUSE GAS INTENSITY TARGETS Timothy Herzog, Kevin A. Baumert, and Jonathan Pershing World Resources Institute. November 2006. 07AD260.....	29
HYDROLOGIC MODELING OF WATERSHEDS DISCHARGING ADJACENT TO THE MESOAMERICAN REEF Lauretta Burke and Zachary Sugg The International Coral Reef Action Network (ICRAN) Mesoamerican Reef Project. World Resources Institute. December 1, 2006. 07AD270 .....	29

**ARTICLES FROM U.S. JOURNALS ..... 29**

DISTILLERY DEMAND FOR GRAIN TO FUEL CARS VASTLY UNDERSTATED  
Brown, Lester  
Earth Policy Institute Eco-Economy Update January 4, 2007 AA07008..... 29

NANOTECHNOLOGY COULD IMPROVE HEALTH, WATER IN DEVELOPING NATIONS  
Brazil, China, India, South Africa working on research initiatives  
By Cheryl Pellerin, *USINFO* Staff Writer. 05 March 2007 ..... 30

U.S. CITIES, STATES WORKING TO SLOW CLIMATE CHANGE; LOCAL GOVERNMENTS  
TAKING STEPS TO CUT GREENHOUSE GAS EMISSIONS  
By Michelle Austein, *USINFO* Staff Writer. 01 March 2007 ..... 30

## GOVERNMENT DOCUMENTS

### **LIGHT AT THE END OF THE TUNNEL IS CLEANER AIR; EPA CUTS DIESEL LOCOMOTIVE AND VESSEL POLLUTION EPA, 03/02/2007**

EPA is proposing a new rule to ensure that Americans continue to breathe cleaner air by significantly reducing air pollution from locomotive and marine diesel engines. The Clean Air Locomotive and Marine Diesel Rule would set stringent emission standards and require the use of advanced technology to reduce emissions.

“By tackling the greatest remaining source of diesel emissions, we’re keeping our nation’s clean air progress moving full steam ahead,” said EPA Administrator Stephen L. Johnson. “Over the last century, diesels have been America’s economic workhorse, and through this rule, an economic workhorse is also becoming an environmental workhorse.”

When fully implemented, this landmark initiative would cut particulate matter emissions from these engines by 90 percent and nitrogen oxides emissions by 80 percent. This would result in annual health benefits of \$12 billion in 2030 and reduce premature deaths, hospitalizations and respiratory illnesses across the United States. These benefits would continue to grow as older locomotive and marine engines are replaced. Overall benefits are estimated to outweigh costs by more than 20 to 1.

Clean Diesel Locomotive: <http://www.epa.gov/otaq/locomotv.htm>

Clean Diesel Marine: <http://www.epa.gov/otaq/marine.htm>

### **THE U. S. ENVIRONMENTAL PROTECTION AGENCY'S FY 2006 PERFORMANCE AND ACCOUNTABILITY REPORT**

EPA's FY 2006 Performance and Accountability Report describes to the President, Congress, and the public our environmental, programmatic, and financial performance over the past fiscal year. It also reports our progress in addressing management challenges. The report satisfies a number of legislative reporting requirements, including those of the Government Performance and Results Act. This is EPA's eighth performance report since FY 1999.

The FY 2006 Performance and Accountability Report includes four sections:

- The Management's Discussion and Analysis section presents an overview of the full report, including a summary of the Agency's programmatic and financial performance and a discussion of EPA's progress in implementing the President's Management Agenda.
- The Performance Section discusses EPA's performance results under each of its five strategic goals. We present detailed results for each of EPA's 80 annual performance goals and more generally discuss our progress toward our long-term strategic objectives. This section also provides performance measures and data associated with the Office of Management and Budget's Program Assessment and Rating Tool (PART) process and highlights some of the results achieved through EPA's grants to states, tribes, and nongovernmental organizations.



- The Management Accomplishments and Challenges Section discusses some of the management issues we face and describes EPA's progress in strengthening its management practices to achieve program results.
- The Financial Section contains EPA's financial statements and related Independent Auditor's Report, as well as other information on the Agency's financial management.

<http://www.epa.gov/ocfo/finstatement/2006par/index.htm>

Complete Report (328 pp, 10 MB):

<http://www.epa.gov/ocfo/finstatement/2006par/par06report.pdf>

## **ENERGY FOR SUSTAINABLE DEVELOPMENT**

**Jonathan Margolis, Special Representative for Sustainable Development and Head of the U.S. Delegation; Statement at the Afternoon Plenary of the Intergovernmental Preparatory Meeting for the 15th Session of the UN Commission on Sustainable Development**  
**New York City, February 27, 2007**

(...)One of the key solutions that emerges clearly from the case studies in the Matrix is Public Sector Efficiency Initiatives. This means, using public sector procurement, investment and operating practices on the buildings the government own to introduce and expand energy-efficient products and services. Changes in procurement and operating practices (something that the governments here can do themselves) can dramatically change the markets for energy efficient products and lead to significant financial savings for the government through reduced energy use and improved health and climate conditions

<http://www.state.gov/g/oes/rls/rm/2007/81162.htm>

## **POST-KYOTO SURPRISE: AMERICA'S QUIET EFFORTS TO CUT GREENHOUSE GASES ARE PRODUCING RESULTS**

**Kurt Volker, Principal Deputy Assistant Secretary for European and Eurasian Affairs**  
**Remarks at the German Marshall Fund. Berlin, Germany, February 12, 2007**

"(...) I want to set out three broad points, hoping they will illustrate clearly the perspectives and the actions my country has taken on this important matter:

**First**, the United States is actively working to reduce greenhouse gas emissions, and our approach is producing results. We have been addressing climate change with a combination of policies and investments, and we have been making about the same rate of progress as other developed countries in cutting emissions growth. We are taking action now, and we are also looking out over the next few decades. Our approach integrates the goals of human development, energy security, and emissions cuts. We need to harness the powerful incentive of the profit motive to expand the use of cleaner energy technologies.

**Second**, at the same time that we are taking steps at home, we are working multilaterally to cut global emissions. To be effective, we need a global approach that supports both human development and lower emissions. We need to promote the commercial deployment of clean technologies in developing countries and around the world.

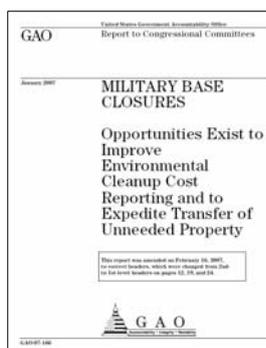
**Third**, and finally, I want to put this in a broader geopolitical context--because the issues of development, energy, emissions and democracy, are all inter-related, and are of fundamental importance to our people and nations. Frankly, we are concerned that our addiction to foreign oil (to borrow President Bush's phrase) is bankrolling some of the very dangerous, anti-

democratic security threats we face as a transatlantic community. We all need human progress and freedom and clean, secure sources of energy.

<http://www.state.gov/p/eur/rls/rm/80465.htm>

### **MILITARY BASE CLOSURES: OPPORTUNITIES EXIST TO IMPROVE ENVIRONMENTAL CLEANUP COST REPORTING AND TO EXPEDITE TRANSFER OF UNNEEDED PROPERTY**

**U.S. General Accountability Office (GAO)]. January 30, 2007. 07AD307**



The environmental cleanup of contaminated, unneeded government property has been a key impediment to the transfer of these properties. The cleanup of past base realignment and closure (BRAC) properties is expected to cost about \$13.2 billion. The objective of the General Accountability Office's (GAO) analysis was to examine the clean-up costs of the 2005 BRAC properties, the progress in transferring prior BRAC properties, and the opportunities to expedite cleanups and transfers.

<http://www.gao.gov/new.items/d07166.pdf> [pdf format, 55 pages]

### **USDA SHOULD IMPROVE ITS MANAGEMENT OF KEY CONSERVATION PROGRAMS TO ENSURE PAYMENTS PROMOTE ENVIRONMENTAL GOALS**

**U.S. General Accountability Office (GAO). January 17, 2007. 07AD295**

The Department of Agriculture's Environmental Quality Incentives Program (EQIP) and Conservation Security Program (CSP) are designed to promote conservation. The General Accountability Office (GAO) reviewed these programs to optimize environmental benefits, monitor performance and reduce duplication between the two programs.

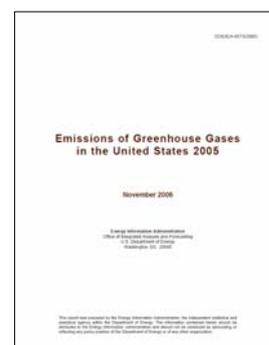
GAO found that the funds allocated did not clearly optimize environmental benefits; the National Resources Conservation Service (NRCS) which monitors these programs has begun to develop long-term, outcome-oriented performance measures; and duplicate payments are still being made despite legislative and regulatory provisions.

<http://www.gao.gov/new.items/d07370t.pdf> [pdf format, 15 pages]

### **EMISSIONS OF GREENHOUSE GASES IN THE UNITED STATES 2005.**

**United States Department of Energy, Energy Information Administration (EIA). November 14, 2006. 07AD135**

This survey reports that total U.S. greenhouse gas (GHG) emissions were 7,147.2 million metric tons carbon dioxide equivalent (MMTCO<sub>2e</sub>) in 2005, an increase of 0.6 percent from the 2004 level. Since 1990, GHG emissions have grown at an average annual rate of 1.0 percent. The 2005 emissions increase is well below the rate of economic growth of 3.2 percent and below the average annual growth rate of 1.0 percent in greenhouse gas emissions since 1990. Emissions of carbon dioxide from energy consumption and industrial processes, which have risen at an average annual rate of 1.2 percent



per year since 1990, grew by only 0.3 percent in 2005.

During 2005, approximately 83 percent of total U.S. greenhouse gas emissions consisted of carbon dioxide from the combustion and non-fuel use of fossil fuels such as coal, petroleum, and natural gas. In recent years, national energy consumption, like emissions, has grown relatively slowly, with year-to-year deviations from trend growth caused by weather-related phenomena, fluctuations in business cycles, changes in the fuel mix for electric power generation, and developments in domestic and international energy markets.

Other 2005 U.S. greenhouse gas emissions include carbon dioxide from non-combustion sources (1.5 percent of total U.S. greenhouse gas emissions), methane (8.6 percent), nitrous oxide (5.1 percent), and other gases (2.2 percent). The other gases include Hydrofluorocarbons (HFCs), used primarily as refrigerants; (Perfluorocarbons) PFCs, released as fugitive emissions from aluminum smelting and used in semiconductor manufacture; and Sulfur Hexafluoride (SF<sub>6</sub>), used as an insulator in utility-scale electrical equipment.

<ftp://ftp.eia.doe.gov/pub/oiaf/1605/cdrom/pdf/ggrpt/057305.pdf> [pdf format, 128 pages]

## THE WHITE HOUSE

### **EXECUTIVE ORDER 13423: STRENGTHENING FEDERAL ENVIRONMENTAL, ENERGY, AND TRANSPORTATION MANAGEMENT**

**The White House, Office of the Press Secretary. January 24, 2007**

President Bush signed an Executive Order to support alternative fuel use and help the federal government reduce oil use. The Order requires Federal Agencies to lead by example in advancing the Nation's energy security and environmental performance through effective environmental, energy, and transportation management.

<http://www.whitehouse.gov/news/releases/2007/01/20070124-2.html>

### **FACT SHEET: STRENGTHENING AMERICA'S ENERGY SECURITY AND IMPROVING THE ENVIRONMENT**

<http://www.whitehouse.gov/news/releases/2007/01/20070124-5.html>

## CONGRESSIONAL DOCUMENTS (HEARINGS, REPORTS, ETC.)

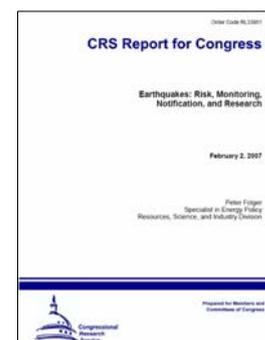
### **EARTHQUAKES: RISK, MONITORING, NOTIFICATION, AND RESEARCH**

**Peter Folger**

**Congressional Research Service, Library of Congress.**

**February 2, 2007. 07AD319**

Approximately 75 million people in 39 states (primarily in the western U.S.) face some risk from earthquakes. Under the National Earthquake Hazards Reduction Program (NEHRP), four federal agencies are responsible for (1) targeted research in long-term earthquake risk reduction, (2) notification of



seismic events, (3) developmental measures to reduce earthquake hazards, and (4) conducting research to reduce the U.S. vulnerability. However, over the past few years, the focus of NEHRP has shifted toward improving the U.S.'s ability to prepare for earthquakes and to minimize losses when they occur. Congress will continue to debate whether this federally supported program is an adequate response to earthquake hazards.

<http://www.fas.org/sgp/crs/misc/RL33861.pdf> [pdf format, 21 pages]

## **CLIMATE CHANGE: GREENHOUSE GAS REDUCTION BILLS IN THE 110TH CONGRESS**

**Larry Parker**

**Congressional Research Service, Library of Congress. January 31, 2007. 07AD318**

“A number of congressional proposals to advance programs that reduce greenhouse gases have been introduced in the 110th Congress. Proposals receiving particular attention would create market-based greenhouse gas reduction programs along the lines of the trading provisions of the current acid rain reduction program established by the 1990 Clean Air Act Amendments. This paper presents a side-by-side comparison of the major provisions of those bills and includes a glossary of common terms.”

[http://openocrs.cdt.org/rpts/RL33846\\_20070131.pdf](http://openocrs.cdt.org/rpts/RL33846_20070131.pdf) [pdf format, 19 pages]

## **THINK TANKS AND INTERNATIONAL ORGANIZATIONS**

### **ARCTIC COUNCIL**

#### **COMMON OBJECTIVES AND PRIORITIES FOR THE NORWEGIAN, DANISH AND SWEDISH CHAIRMANSHIPS OF THE ARCTIC COUNCIL (2006-2012)**

The Arctic Council (AC) is a high-level forum for cooperation, coordination and interaction between Arctic states, indigenous communities and other Arctic residents on issues such as sustainable development and environmental protection. The AC provides a valuable platform for discussions on all issues of relevance to the Arctic and the people who live there.

Delivering results on the major challenges facing the Arctic region takes more time than a two-year chairmanship allows. The purpose of this paper is to promote continuity in the work of the AC by identifying common objectives and priorities for the next three chairmanships.

[http://www.arctic-council.org/News/Formannskapsprogram\\_ArcticCouncil.pdf](http://www.arctic-council.org/News/Formannskapsprogram_ArcticCouncil.pdf)

### **BROOKINGS INSTITUTION**

#### **THE FUTURE OF ENERGY SECURITY. UNCORRECTED TRANSCRIPT**

**The Brookings Institution Event, January 23, 2007**

Three factors are dramatically affecting international energy markets: the rise of China and India as major global economic powers, the continued growth in U.S. energy demand, and

instability in key oil-exporting regions. Prospects for stable production are increasingly linked to internal political issues and the regional ambitions of major suppliers. As energy security is becoming a more important factor in countries' national security and economic development calculations, these dynamics will affect the global balance of power.

On January 23, Brookings hosted the inaugural Foreign Policy Studies Energy Security Series event with a panel comprised of leading energy experts who have written extensively on these issues. The goal of the series is to present research findings and analyze the implications of the actions of three key energy-consuming nations: China, India, Japan, and a major producing nation, Russia.

This series has already produced a set of baseline papers focused primarily on oil. Future papers will cover the full spectrum of energy security issues.

Read the full transcript (PDF—141kb):

<http://www.brookings.edu/comm/events/20070123.pdf>

## **ENDING OIL DEPENDENCE**

**David Sandalow**

**The Brookings Institution. January 22, 2007. 07AD320**

This paper looks at the U.S.'s oil dependence and the author offers several policy proposals to solve this dependency. "Plug-in hybrid engines, biofuels and other technologies can help end the United States' oil dependence in a generation. Doing so would provide important national security, environmental and economic benefits. A broad political consensus and game-changing technological advances create the conditions for dramatic change." The author stresses that there are no simple or short-term solutions to this crisis.

[Note: Contains copyrighted material.]

<http://www.brookings.edu/views/papers/fellows/sandalow20070122.pdf>

[pdf format, 27 pages]



## **DEPARTMENT OF ATMOSPHERE SCIENCE, COLORADO STATE UNIVERSITY**

### **EXTENDED RANGE FORECAST OF ATLANTIC SEASONAL HURRICANE ACTIVITY AND U.S. LANDFALL STRIKE PROBABILITY FOR 2007.**

**Philip J. Klotzbach and William M. Gray**

**Department of Atmosphere Science, Colorado State University. December 8, 2006. 07AD186**

Information and data obtained through November 2006 indicates that the 2007 Atlantic hurricane season will be more active than the average 1950-2000 season. It is projected that 2007 will have about 7 hurricanes with 14 named storms. The probability of U.S. major hurricane landfall is estimated at "125 percent." This forecast is based on a newly developed 6-11 month extended range statistical forecast procedure which utilizes 52 years of past data. <http://typhoon.atmos.colostate.edu/forecasts/2006/dec2006/> [29 pages]

## **CENTER FOR ENVIRONMENT AND POPULATION (CEP)**

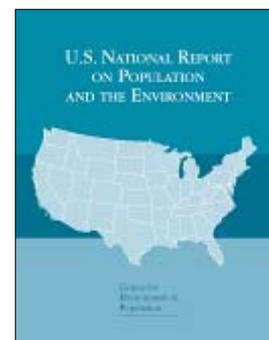
### **U.S. NATIONAL REPORT ON POPULATION AND THE ENVIRONMENT.**

**Victoria D. Markham**

**Center for Environment and Population (CEP). Fall/Winter 2006. 07AD166**

Global environmental changes are occurring in ways different than at any other time in our history. Experts say that virtually all of the Earth's ecosystems have been transformed through human actions and that these actions are using the planet's natural resources faster than they can be replenished. The environmental consequences are as follows:

- Freshwater resources are increasingly vulnerable,
- Plant and animal species are becoming endangered or extinct,
- Land-use transformation is pervasive, and
- The global climate is changing.



America's role has the largest "ecological footprint." The U.S. is the world's largest single emitter of carbon dioxide, the world's largest forest products consumer, and it generates the most municipal waste globally. According to the report, Americans need to be aware of the population and environmental challenges it faces and to apply sound, scientific planning to address these trends. Hot-spots need to be identified. America's role as a major player in the global community must be discussed and addressed, and local communities must be given the tools to better understand growth.

This report is part of the U.S. Reports on Population and the Environment series.

[Note: Contains copyrighted material.]

<http://www.cepnet.org/documents/USNatlReptFinal.pdf> [pdf format, 69 pages]

## **CENTER FOR INTERNATIONAL ENVIRONMENT LAW**

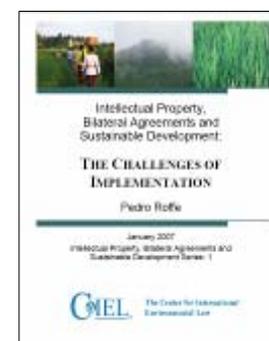
### **INTELLECTUAL PROPERTY, BILATERAL AGREEMENTS AND SUSTAINABLE DEVELOPMENT: THE CHALLENGES OF IMPLEMENTATION**

**Pedro Roffe**

**CIEL. Intellectual Property, Bilateral Agreements and Sustainable Development Series: 1 January 2007**

This paper examines the development of strategies for developing country officials, civil society organizations, and other stakeholders with respect to the implementation of intellectual property provisions in bilateral and regional free trade agreements. In particular, the paper aims to raise awareness of the continuing pressure for higher intellectual property protection during the implementation and annual review of bilateral trade agreements, as well as to outline the opportunities created by the diverse options for implementation to "claw back" policy space.

[http://www.ciel.org/Publications/FTA\\_ImplementationPub\\_Jan07.pdf](http://www.ciel.org/Publications/FTA_ImplementationPub_Jan07.pdf)



## **ENVIRONMENTAL LAW INSTITUTION**

### **WHERE IS THE MIDDLE GROUND ON POPS, PIC, AND LRTAP? ELI. *The Environmental Forum*, November/December 2006**

For over three decades the United States has been a leader in developing sound and effective risk management regimes in the fields of toxic chemicals and pesticides. The United States was among the first countries to begin addressing the human health and environmental threats posed by pesticides and other toxic substances.

This is why the Bush administration has urged that Congress make it possible to join three important international agreements to address toxic chemicals and pesticides: the Stockholm Convention on Persistent Organic Pollutants, the POPs Protocol to the Convention on Long Range Transboundary Air Pollution, and the Rotterdam Convention on Prior Informed Consent. These three agreements are a cornerstone of international efforts to foster environmentally sound management of chemicals. Joining these accords would confirm our commitment to protection of human health and the environment in this country and around the world, and would allow us to participate fully in the processes by which these agreements will evolve over time.

There is widespread agreement that the accords represent a significant step in the effort to protect the global environment. While the United States no longer uses or manufactures the POPs chemicals, some developing countries continue to use them. Because POPs are capable of long-range transport, no one country acting alone can address their human health and environmental effects.

[http://www.ciel.org/Publications/ELI\\_POPsForum\\_Nov06.pdf](http://www.ciel.org/Publications/ELI_POPsForum_Nov06.pdf)

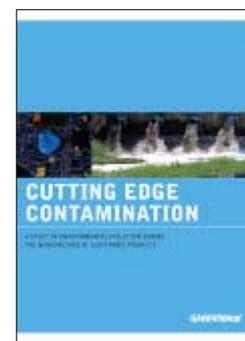


## **GREENPEACE**

### **CUTTING EDGE CONTAMINATION; A Study of Environmental Pollution during the manufacture of Electronic Products Greenpeace, February 08, 2007**

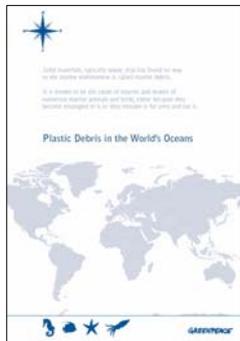
In recent years, concerns have grown over the use of hazardous chemicals and materials in electronic products. Attention has tended to focus on the impacts on human health and the environment due to such chemicals, through the use and ultimate disposal or recycling of these products. Less consideration has been paid to the potential environmental impacts that result from their manufacture. This industry has high resource intensity, in terms of chemicals, energy and water demands. This is especially the case for printed wiring board (PWBs) and semiconductor chip manufacture. Processes used in both sectors are highly complex and chemically intensive; many of the chemicals employed do not form part of the final product (e.g. solvents). Substantial concerns exist for many chemicals used in this industry, both for potential exposure in the workplace and the possible environmental consequences of their release in waste streams

<http://www.greenpeace.org/raw/content/usa/press/reports/cutting-edge-contamination-a.pdf>



**PLASTIC DEBRIS IN THE WORLD'S OCEANS**

**Michelle Allsopp, Adam Walters, Dave Santillo, and Paul Johnson  
Greenpeace International. Web posted December 28, 2006. 07AD233**



Marine debris (waste that has found its way into the marine environment) is a pervasive pollution. Plastic and synthetic materials are the most common marine debris and cause the most problems. Plastic debris is found floating in all the world's oceans, and many sea beds--especially near coastal regions--are also contaminated.

International legislation has attempted to address the problems of marine debris. Legislation on a local level has attempted to curtail littering and dumping into rivers and storm drains which in turn discharge litter into coastal zones.

“This report draws together scientific research on the distribution of marine debris in the world’s oceans and its impacts on wildlife. The information is sourced from papers that have been published on this subject between 1990 and 2005. Finally, it addresses workable solutions to help curb this threat to the marine environment.”

[Note: Contains copyrighted material.]

[http://oceans.greenpeace.org/raw/content/en/documents-reports/plastic\\_ocean\\_report.pdf](http://oceans.greenpeace.org/raw/content/en/documents-reports/plastic_ocean_report.pdf)  
[pdf format, 44 pages]

**HERITAGE FOUNDATION**

**DON'T RUSH TO JUDGMENT ON U.N.'S IPCC GLOBAL WARMING SUMMARY**

**by Ben Lieberman**

**Heritage Foundation WebMemo #1351, February 7, 2007**

A summary of the United Nations Intergovernmental Panel on Climate Change Fourth Assessment Report (IPCC Report) was released on February 2, and many in the media and Congress are citing it as further evidence that global warming is a dire threat. The full report, with accompanying scientific assessment and detailed assumptions, will not be released for several months. However, caution is warranted in drawing policy conclusions based on this summary, as the full scientific debate over the IPCC report has not begun. And while the summary strongly emphasizes mankind's role in global warming, it has retreated on a number of important assertions from past reports.

[http://www.heritage.org/Research/EnergyandEnvironment/upload/wm\\_1351.pdf](http://www.heritage.org/Research/EnergyandEnvironment/upload/wm_1351.pdf)



**NATIONAL ACADEMY OF SCIENCES**

**RETURNING FORESTS ANALYZED WITH THE FOREST IDENTITY**

**Pekka E. Kauppi, Jesse H. Ausubel, Jingyun Fang, Alexander S. Mather, Roger A. Sedjo,**

and Paul E. Waggoner

Proceedings of National Academy of Sciences. Web posted November 14, 2006. 06AD152



Using the data from the Food and Agriculture Organization's comprehensive Global Forest Resources Assessment 2005, the report concluded that the data suggest a reversal of forests decline in many regions of the world. Forest Identity quantifies the sources of change and the quantitative impact on forest expanse of timber harvest to regions and plantations where density grows faster. The forest identity could serve as a tool for setting forest goals to accelerate or retard forest transitions.

[Note: Contains copyrighted material.]

<http://www.pnas.org/cgi/reprint/0608343103v1> [pdf format, 7 pages]

## NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

### **2006/2007 NCAR ANNUAL REPORT (Online)**

This report describes NCAR's major accomplishments in 2006 and their plans for 2007. Beyond the scientific work itself, the need for effective communication, public outreach, and education is urgent, perhaps most notably in the context of anthropogenic climate change. As the evidence builds that climate change is under way and having visible consequences, the need for concerted responses intensifies. NCAR is working to improve society's ability to respond to the challenges faced by our leaders and decision makers, from computer modeling, to studying the genesis of hurricanes, to developing early warning systems and other effective communication tools.

<http://www.nar.ucar.edu/2006/>

## NATIONAL CENTER FOR FOOD AND AGRICULTURAL POLICY

### **QUANTIFICATION OF THE IMPACTS ON US AGRICULTURE OF BIOTECHNOLOGY-DERIVED CROPS PLANTED IN 2005**

**Sujatha Sankula**

**National Center for Food and Agricultural Policy. November 2006.**

**07AD205**

This report updates a 2004 report. It confirms that American growers continue to choose biotechnology-derived crops and that they derive significant benefits from these crops. This report evaluates the response for adopting biotechnology-derived crops and analyzes the producer and crop production impacts of these crops.

Alfalfa, canola, corn, cotton, papaya, soybean, squash and sweet corn are the eight biotechnology-derived crops grown in the U.S. The use of biotechnology has improved crop production by 26%, has lowered production costs, and has reduced the use of pesticides by 12%. Biotechnology provides the best hope to growers to improve yields while enhancing pest protection. The acreage planted with biotechnology-derived crops continues to grow each year and has resulted in positive impacts for the American growers.



[Note: Contains copyrighted material.]

<http://www.ncfap.org/whatwedo/pdf/2005biotechimpacts-finalversion.pdf> [pdf format 110 pages]

## **NATIONAL INSTITUTES OF HEALTH**

### **MERCURY EXPOSURE FROM DOMESTIC AND IMPORTED ESTUARINE AND MARINE FISH IN THE UNITED STATES SEAFOOD MARKET**

**Elsie M. Sunderland. National Institutes of Health. November 20, 2006. 07AD176**

“Methylmercury exposure causes a variety of adverse effects on human health. Per-capita estimates of mercury exposure are critical for risk assessments and for developing effective risk management strategies.” This technical study investigates the impact of mercury concentrations among fish and shellfish from the Atlantic and Pacific Oceans and from foreign shores. The analysis shows that exposure estimates are most influenced by reported concentrations in imported tuna, swordfish, shrimp, Pacific pollock, and Atlantic crabs.

<http://www.ehponline.org/members/2006/9377/9377.pdf> [pdf format, 34 pages]



### **ENVIRONMENTAL HEALTH IMPACTS OF CONCENTRATED ANIMAL FEEDING OPERATIONS: ANTICIPATING HAZARDS—SEARCHING FOR SOLUTIONS**

**Peter S. Thorne**

**Environmental Health Perspectives, National Institutes of Health. November 14, 2006. 07AD157**

A scientific conference and workshop was held in March 2004, consisting of environmental scientists from North America and Europe. The conference and workshops addressed major environmental health issues dealing with concentrated animal feeding operations. Five workgroups convened and issued reports on the following:

- Respiratory health issues,
- Modeling and monitoring air toxics,
- Water quality,
- Influenza pandemics and antibiotic resistance, and
- Community health and socioeconomic issues.

The workgroups also identified areas where further research was needed and suggested policy initiatives to improve public and environmental health.

<http://www.ehponline.org/members/2006/8831/8831.pdf> [pdf format, 13 pages]



## NASA

### **NASA DATA LINK INDONESIAN WILDFIRE FLARE-UP TO RECENT EL NINO NASA 03.01.07**

Scientists using NASA satellite and rainfall data have linked the recent El Nino to the greatest rise in wildfire activity in Indonesia since the record-breaking 1997-98 El Nino. s rainfall sharply decreased during the last quarter of 2006 across the dense tropical rainforests of Sumatra, Kalimantan, and Malaysia, the land became exceptionally dry. This allowed wildfires to quickly spread, releasing large amounts of soot and tiny dust particles called aerosols that brought unhealthy pollution levels to the area.

The Measurements of Pollution in the Troposphere (MOPITT) instrument aboard NASA's Terra satellite tracked the wildfire pollution plumes as they spread from the Indonesian islands into the Indian Ocean from September through November 2006, and measured the associated increases in atmospheric carbon monoxide levels.

"Droughts over Indonesia are often brought on by a shift in the atmospheric circulation over the tropical Pacific associated with El Nino conditions," said David Edwards, MOPITT project leader at the National Center for Atmospheric Research, Boulder, Colo. "Although the current El Nino is rather weak compared to that of 1997-98, we have found dramatic increases in wildfire activity and corresponding pollution."

[http://www.nasa.gov/vision/earth/environment/el\\_nino\\_wildfire.html](http://www.nasa.gov/vision/earth/environment/el_nino_wildfire.html)

## NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION (NOAA)

### **NOAA'S CORAL REEF ECOSYSTEM RESEARCH PLAN FOR FISCAL YEARS 2007 TO 2011**

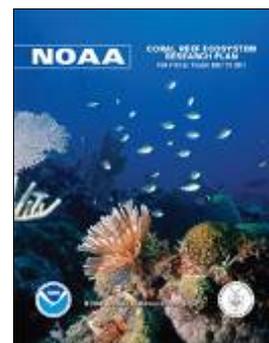
**NOAA, March 2, 2007**

NOAA released the NOAA Coral Reef Ecosystem Research Plan, identifying priority research needs and guidance for coral reef research through 2011. The plan looks at key research objectives and long-term needs to enhance NOAA's understanding of coral reef ecosystems and provide guidance to coastal and ocean managers on regional research priorities to help preserve, sustain and restore coral reef ecosystems.

[http://coris.noaa.gov/activities/coral\\_research\\_plan/](http://coris.noaa.gov/activities/coral_research_plan/)

Full report:

[http://coris.noaa.gov/activities/coral\\_research\\_plan/pdfs/coral\\_researchplan.pdf](http://coris.noaa.gov/activities/coral_research_plan/pdfs/coral_researchplan.pdf)



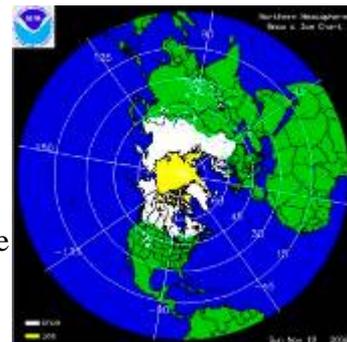
**NEW DATA SHOW DOWNWARD TREND IN ARCTIC SEA ICE  
U.S. National Ice Center, National Oceanic Atmospheric Agency  
(NOAA), U.S. Navy, and U.S. Coast Guard. November 20, 2006.  
07AD162**

<http://www.noaanews.noaa.gov/stories2006/images/arctic-ice-snow-11-19-2006.jpg>

Based on a new comprehensive analysis of satellite data, the Arctic Sea ice has experienced a steady decline over the past 33 years. The data have been collected by a tri-agency team from the National Oceanic Atmospheric Agency (NOAA), the U.S. Navy, and the U.S. Coast Guard.

<http://www.noaanews.noaa.gov/stories2006/s2744.htm>

[htm format, 1 page]



**NATIONAL SCIENCE FOUNDATION**

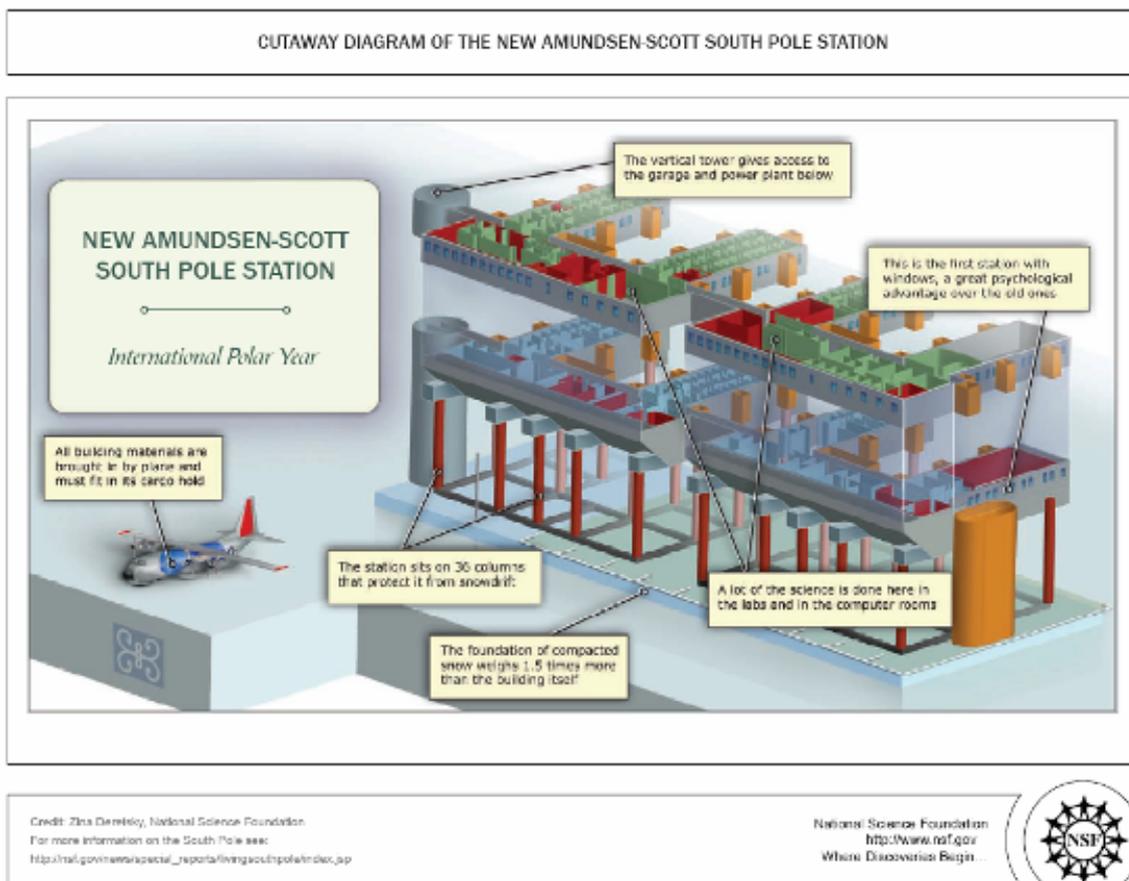
**U.S. SOUTH POLE STATION**

In the most forbidding environment on Earth, NSF has created a uniquely designed high-tech haven to support research and to house the scientists and others who keep the effort going year-round.

The National Science Foundation (NSF) funds and manages the U.S. Antarctic Program, which coordinates almost all U.S. science on the continent, including research carried out by other federal agencies.

In January 2008, a century after Norwegian Roald Amundsen erected the first artificial structure—a small pyramidal tent—at the South Pole, the National Science Foundation (NSF) will dedicate the third and newest U.S. scientific station at the Earth's southern extremity.

The new facility will replace the iconic domed facility built in 1975, and will mark two historic occasions: the 50th anniversary of the International Geophysical Year (IGY), when the first scientists took up residence in the very first South Pole station, and the beginning of International Polar Year 2007-2008, a global scientific field campaign.



The new \$153 million Amundsen-Scott South Pole Station is a technological and engineering marvel designed to support an array of scientific investigations, from astrophysics to seismology, while accommodating harsh conditions on the polar plateau. It will house more than 20 times as many people as stood at the Pole with Amundsen—or his British rival Robert F. Scott—and at a level of comfort, safety and connectedness to the outside world that would have been almost inconceivable to the explorers for whom the station is named.  
[http://www.nsf.gov/news/special\\_reports/livingsouthpole/intro.jsp](http://www.nsf.gov/news/special_reports/livingsouthpole/intro.jsp)

## **ECOLOGY OF INFECTIOUS DISEASES: A SPECIAL REPORT** **NSF, October 27, 2006**

West Nile virus. Hantavirus. Lyme disease. All are infectious diseases spreading in animals, and in humans. Is our interaction with the environment somehow responsible for the increase in incidence of these diseases?

A joint National Science Foundation (NSF) and National Institutes of Health program -- ecology of infectious diseases (EID) -- supports efforts to understand the underlying ecological and biological mechanisms behind human-induced environmental changes and the emergence and transmission of infectious diseases. Projects funded through the EID program and other NSF programs allow scientists to study how large-scale environmental events—

such as habitat destruction, invasions of non-native species and pollution—alter the risks of emergence of viral, parasitic and bacterial diseases in humans and animals.

[http://www.nsf.gov/news/special\\_reports/ecoinf/inf.jsp](http://www.nsf.gov/news/special_reports/ecoinf/inf.jsp)

**NATURAL RESOURCES DEFENSE COUNCIL**

**NEW NUCLEAR POWER PLANTS ARE NOT A SOLUTION FOR AMERICA’S ENERGY NEEDS  
NRDC Fact Sheet. February 2007**

New nuclear power plants are unlikely to provide a significant fraction of future U.S. needs for low-carbon energy. NRDC favors more practical, economical and environmentally sustainable approaches to reducing both U.S. and global carbon emissions, focusing on the widest possible implementation of end-use energy-efficiency improvements, and on policies to accelerate commercialization of clean, flexible, renewable energy technologies.

<http://www.nrdc.org/nuclear/plants/plants.pdf>



**ORGANIZATION FOR ECONOMIC COOPERATION AND DEVELOPMENT'S (OECD)**

**IMPROVING RECYCLING MARKETS  
OECD Policy Brief, January 2007**



Societies produce ever-growing quantities of solid waste, from packaging to abandoned televisions and cars. Disposing of this waste, often by burying it in landfills or burning it, produces significant soil contamination, as well as air and water pollution. It is particularly important to manage hazardous solid waste safely and efficiently. One way of limiting the scale of the problem is to recycle waste where it is economic to do so. As such, OECD governments are setting recycling targets at increasingly higher levels, and for a growing range of materials. Another reason for recycling for some governments is that it can contribute to “sustainable materials management”, reducing

pressures on natural resource stocks – recycling paper and cardboard packaging, for example, not only reduces the number of trees being cut down to produce pulp, but also uses less energy than producing paper using new materials.

Recycling is playing a larger role in our economies, at least partly thanks to government incentives. The Bureau of International Recycling (BIR) has estimated that the recycling industry handles more than 500 million tonnes of waste and employs more than 1.5 million people, with an annual turnover of USD 160 billion.

Recycling only makes sense if it is economically attractive – and that means recycling markets must function properly. What kind of barriers and failures are recycling markets facing and how can they be overcome? This Policy Brief looks at how recycling markets have developed and what government can do to encourage continued growth in recycling and use of recycled materials.

<http://www.oecd.org/dataoecd/37/59/38093900.pdf>

## **CLIMATE CHANGE IN THE EUROPEAN ALPS: ADAPTING WINTER TOURISM AND NATURAL HAZARDS MANAGEMENT**

**Edited by Shardul Agrawala**

**OECD. Published: 18 January 2007. ISBN: 9789264031692**

Climate change poses a serious challenge to social and economic development in all countries. While international commitments to reduce greenhouse gas emissions are essential, adaptation to the impacts of climate change must also be integrated into sectoral and economic policies worldwide. This volume examines the implications of climate change for the economies in the European Alps. It focuses on adaptation measures to address two key vulnerabilities: increasing losses in winter tourism due to reduced snow cover, and increased exposure of settlements and infrastructure to natural hazards.

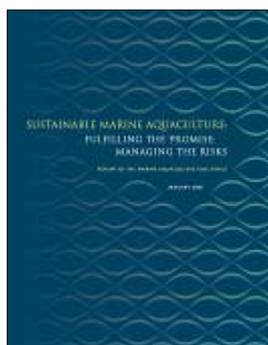


Climate Change in the European Alps: Adapting Winter Tourism and Natural Hazards Management is the product of a two year study by the OECD Environment Directorate. The volume presents the first systematic cross-country analysis of snow-reliability of Alpine ski areas under climate change for five countries in the region: France, Switzerland, Austria, Italy and Germany. It examines the implications of climate change for a range of natural hazards prevalent in the Alps, with a particular focus on frameworks and financial mechanisms to manage natural hazards in three countries: France, Switzerland and Austria. Technological and behavioural adaptation measures, together with institutional structures and risk transfer mechanisms, are also reviewed.

The implications of this assessment extend beyond the European Alps to other mountain systems which may face similar climate and contextual challenges, for example in North America, Australia and New Zealand. The case of the European Alps, with its high adaptive capacity, provides examples of good practices which are valuable not only for other developed country contexts, but for developing countries as well.

Executive Summary: <http://www.oecd.org/dataoecd/25/40/37909236.pdf>

## **PEW CENTER ON GLOBAL CLIMATE CHANGE**



**SUSTAINABLE MARINE AQUACULTURE: FULFILLING THE PROMISE: MANAGING THE RISKS: REPORT OF THE MARINE AQUACULTURE TASK FORCE Pew Charitable Trust. January 2007. 07AD259**

“According to the U.N. Food and Agriculture Organization (FAO), most capture fisheries are either fully exploited or have been overfished, while demand for seafood continues to grow.” Aquaculture--the farming of aquatic organisms--has been growing at a rate of 9 per cent annually worldwide and has attempted to fill the gap between capture fisheries and seafood demand.

However, aquaculture has environmental impacts which include water pollution, introduction of nonnative species, genetic effects on wild populations of fish, and the increased usage of wild forage fish for aquaculture feeds. “Sustainable development of aquaculture requires that its environmental impact be addressed effectively . . . policy makers are faced with difficult decisions about how to balance the potential benefits of aquaculture to the nation’s economy and food supply with its effects on the environment.”

[Note: Contains copyrighted material.]

[http://www.pewtrusts.org/pdf/Sustainable\\_Marine\\_Aquaculture\\_final\\_1\\_07.pdf](http://www.pewtrusts.org/pdf/Sustainable_Marine_Aquaculture_final_1_07.pdf)

## **GETTING AHEAD OF THE CURVE: CORPORATE STRATEGIES THAT ADDRESS CLIMATE CHANGE**

**Andrew J. Hoffman**

**Pew Center on Global Climate Change. Web-posted October 18, 2006. 07AD063**



This report lays out a step-by-step approach for companies to reshape their business strategies in order to succeed in a future marketplace where greenhouse gases are regulated and carbon-efficient production is in demand. Many of the companies highlighted in the report are shifting their focus from managing the financial risks of climate change to exploiting new business opportunities for energy efficient and low-carbon products and services.

Using six highly detailed case studies, as well as results from a 100-question survey completed by 31 companies, the report offers an in-depth look at the development and implementation of corporate strategies that address climate change. The featured case studies include Alcoa, Duke Energy, DuPont, Shell, Swiss Re, and Whirlpool.

One of the report’s major conclusions is that businesses need to engage actively with government in the development of climate policy. Of 31 major corporations polled by the author, nearly all companies believe that federal greenhouse gas standards are imminent, and 84 percent of these companies believe regulations will take effect before 2015.

<http://www.pewclimate.org/document.cfm?documentID=639> [pdf format, 150 pages]

## **RAND**

### **BEYOND THE GAS TAX: ALTERNATIVES FOR A GREENER WORLD**

**By: Martin Wachs**

**Testimony presented before the Los Angeles Field Hearing of the National Surface Transportation Policy and Revenue Study Commission on February 21, 2007.**

As we look to the future of transportation finance, two overriding concerns seem likely to determine our agenda. First, there is the challenge of finding the revenue to cover the costs of capital investments, operations and maintenance of the transportation system itself. This has always been the single most important purpose of transportation charges and fees. But, there is a second consideration



of growing importance, and that is achieving more efficient, equitable and environmentally sustainable use of the transportation system. In addition to asking whether a given fee or charge is adequate, we must increasingly also ask whether it can also function as a lever to encourage greater efficiency, fairness, and environmental protection than an alternative approach to charging for the use of the system or service.

[http://www.rand.org/pubs/testimonies/2007/RAND\\_CT274.pdf](http://www.rand.org/pubs/testimonies/2007/RAND_CT274.pdf)

## **UNION OF CONCERNED SCIENTISTS**

### **NEW VEHICLE DESIGN SURPASSES STATE GLOBAL WARMING STANDARDS; Engineers Design Affordable, Clean Car Using Existing Technology And Fuels UCS, March 1, 2007**

Automotive engineers at the Union of Concerned Scientists (UCS) today unveiled a minivan design that shows automakers can build affordable vehicles with existing technology that would meet or exceed global warming pollution standards for cars and trucks adopted by California and 10 other states. Automakers are currently fighting these standards in court.

The minivan, dubbed the UCS Vanguard, features off-the-shelf engine, transmission and fueling systems and other technologies that would save consumers money, maintain vehicle safety and performance, and cut global warming pollution by more than 40 percent. All of the technologies in the Vanguard are in vehicles on the road today, but automakers have yet to combine them all in one single package. (For a computer-generated animation of the Vanguard's features and the full report, go to [http://www.ucsusa.org/clean\\_vehicles/avp/](http://www.ucsusa.org/clean_vehicles/avp/)) [http://www.ucsusa.org/news/press\\_release/new-vehicle-design-surpasses-0011.html](http://www.ucsusa.org/news/press_release/new-vehicle-design-surpasses-0011.html)

### **CLEAN VEHICLES UPDATE UCS, January 2007**

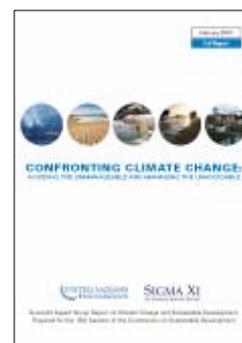
UCS remains an active participant in major California and Supreme Court cases over global warming pollution from autos while the new Congress will present new challenges for fuel economy. UCS analysts increase attention to creating sound biofuels policies with the EPA and a new coalition, while a new report on construction equipment pollution shows the health impacts of “Digging Up Trouble.”

[http://www.ucsusa.org/clean\\_vehicles/cars\\_pickups\\_suv/clean-vehicles-update-01-2007.html](http://www.ucsusa.org/clean_vehicles/cars_pickups_suv/clean-vehicles-update-01-2007.html)

## **UNITED NATIONS**

### **CONFRONTING CLIMATE CHANGE: AVOIDING THE UNMANAGEABLE AND MANAGING THE UNAVOIDABLE UN Foundation and Sigma Xi, February 2007**

Scientists present roadmap for reducing climate change risks in the final report of the Scientific Expert Group on Climate Change and Sustainable Development. The report, prepared as input for the upcoming meeting of the



UN's Commission on Sustainable Development (CSD), outlines a roadmap for preventing unmanageable climate changes and adapting to the degree of change that can no longer be avoided.

Two years in the making, *Confronting Climate Change* was written by an international panel of scientists co-chaired by Sigma Xi past-president Peter Raven, director of the Missouri Botanical Garden, and Rosina Bierbaum, dean of the University of Michigan's School of Natural Resources and the Environment. John Holdren, director of Woods Hole Research Center, was among the co-authors. The expert team was invited by the UN's Department of Economic and Social Affairs, Secretariat to the CSD, to make recommendations on key mitigation and adaptation needs. This year's 15th Session of the CSD is reviewing national and international efforts on energy and climate change.

Executive Summary Download PDF (3 MB):

[http://www.unfoundation.org/files/pdf/2007/SEG\\_ExecSumm.pdf](http://www.unfoundation.org/files/pdf/2007/SEG_ExecSumm.pdf)

Full Report (13MB): [http://www.unfoundation.org/files/pdf/2007/SEG\\_Report.pdf](http://www.unfoundation.org/files/pdf/2007/SEG_Report.pdf)

## **HUMAN DEVELOPMENT REPORT 2006: BEYOND SCARCITY: POWER, POVERTY AND THE GLOBAL WATER CRISIS**

**Kevin Watkins**

**United Nations Development Programme. United Nations. November 2006. 07AD214**

More than 1 billion people are denied the right to clean water and 2.6 billion do not have access to adequate sanitation. Every year 1.8 million children die as a result of unclean water and poor sanitation.

There is a growing recognition that the world faces a crisis when it comes to water. The Report rejects that view, but argues that the root of the water crisis is poverty, inequality and unequal power relationships as well as flawed water management policies.

Water is not running out, but there are mounting water stress areas, rivers are drying up, groundwater tables are falling, and water-based ecosystems are being degraded. Competition for water will intensify as population growth, urbanization, industrial development, and agriculture's needs continue to grow.

[Note: Contains copyrighted material.]

<http://hdr.undp.org/hdr2006/pdfs/report/HDR06-complete.pdf> [pdf format, 440 pages]



## **UNITED NATIONS ENVIRONMENT PROGRAMME (UNEP)**

### **CLIMATE CHANGE 2007: THE PHYSICAL SCIENCE BASIS: SUMMARY FOR POLICYMAKERS**

**Intergovernmental Panel on Climate Change, World Meteorological Organization (WMO) and United Nations Environment Programme (UNEP)**  
**Web posted February 2, 2007. 07AD299**



This report describes the human and natural drivers of climate change. The

conclusion drawn from the report is:

“Global atmosphere concentrations of carbon dioxide, methane and nitrous oxide have increased markedly as a result of human activities since 1750 and now far exceed pre-industrial values determined from ice cores spanning many thousands of years (see Figure SPM-1). The global increases in carbon dioxide concentration are due primarily to fossil fuel use and land-use change, while those of methane and nitrous oxide are primarily due to agriculture. {2.3, 6.4, 7.3}”

The final text of this report is not available at this time.

[Note: Contains copyrighted material.]

Full Text:

[http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4\\_SPM\\_PlenaryApproved.pdf](http://ipcc-wg1.ucar.edu/wg1/docs/WG1AR4_SPM_PlenaryApproved.pdf)

[pdf format, 21 pages]

## **U.S. CLIMATE ACTION PARTNERSHIP (USCAP)**

### **A CALL FOR ACTION**

**USCAP Special Report. January 22, 2007**

A diverse group of U.S.-based businesses and leading environmental organizations today called on the federal government to quickly enact strong national legislation to achieve significant reductions of greenhouse gas emissions. The group said any delay in action to control emissions increases the risk of unavoidable consequences that could necessitate even steeper reductions in the future.

This unprecedented alliance, called the U.S. Climate Action Partnership (USCAP), consists of market leaders Alcoa, BP America, Caterpillar, Duke Energy, DuPont, FPL Group, General Electric, Lehman Brothers, PG&E, and PNM Resources, along with four leading non-governmental organizations -- Environmental Defense, Natural Resources Defense Council, Pew Center on Global Climate Change, and World Resources Institute.



At a news conference today at the National Press Club, USCAP issued a landmark set of principles and recommendations to underscore the urgent need for a policy framework on climate change. The solutions-based report, titled A Call for Action, lays out a blueprint for a mandatory economy-wide, market-driven approach to climate protection.

<http://www.us-cap.org/ClimateReport.pdf>

## **WORLD RESOURCES INSTITUTE**

**POLAR WARMING AND ITS GLOBAL CONSEQUENCES FEBRUARY UPDATE:  
By Tom Damassa on Friday, March 2, 2007**

The earth's polar regions--the Arctic and Antarctic--are essential to maintaining the planet's climate as we know it. The vast expanses of ice and snow found at high latitudes help to cool the earth by reflecting incoming solar radiation, and the temperature gradient between the

equator and the poles is a major driver of ocean and atmospheric currents, the pathways by which heat is distributed around the globe.

With global warming, these dynamic processes have caused temperatures in many polar locations to rise about twice as fast as the global average during the past few decades. As a result, polar ecosystems have already undergone significant physical changes, often to the detriment of these regions' inhabitants. For example, recent media coverage has focused on climate change's negative effects on Arctic polar bear populations.

It may be that the potential loss of an iconic mammal provides much-needed impetus for more rigorous global action on climate change, but the physical changes to polar systems resulting from increasing temperatures have far greater implications worldwide for human well-being.

<http://earthtrends.wri.org/updates/node/167>

### **AGRICULTURAL SUBSIDIES, POVERTY AND THE ENVIRONMENT: SUPPORTING A DOMESTIC REFORM AGENDA IN DEVELOPING COUNTRIES**

**Antonio La Vina, Lindsey Fransen, Paul Faeth, and Yuko Kurauchi**

**WRI Policy Note, World Resources Institute. January 2007. 07AD316**

“Agricultural subsidies are one of the factors determining whether and how agriculture helps poor in developing countries. . .” The authors offer the following recommendations:

- Laws and policies that empower the poor; such as, rights-based land tenure policies, economic incentives, and marketing;
- Macroeconomic policies and measures that integrate poverty alleviation and environmental goals; e.g., taxation, credit, and technology;
- Laws and regulations that protect ecosystems including soil conservation, crop diversification and other ecologically safe agricultural practices; and
- Agricultural governance such as decentralization, stakeholder processes and stronger enforcement of environmental laws.

[Note: Contains copyrighted material.]

[http://pdf.wri.org/aspe\\_domestic\\_reform.pdf](http://pdf.wri.org/aspe_domestic_reform.pdf) [pdf format, 6 pages]



### **EMISSIONS GROWTH IN THE UNITED STATES AND THE EUROPEAN UNION Are GHG emissions in the EU growing faster than in the US? Depends on how you look at it.**

**Tim Herzog**

**WRI, February 23, 2007**

With the renewed focus on global warming policy in the United States, there have been several assertions made about the growth of US emissions, particularly with respect to the European Union (EU).

[http://www.wri.org/climate/topic\\_content.cfm?cid=4123](http://www.wri.org/climate/topic_content.cfm?cid=4123)

**TARGET: INTENSITY: AN ANALYSIS OF GREENHOUSE GAS INTENSITY TARGETS**  
**Timothy Herzog, Kevin A. Baumert, and Jonathan Pershing**  
**World Resources Institute. November 2006. 07AD260**

This report looks at intensity targets which are policies that specify emissions reductions relative to productivity or economic output whereas absolute emissions targets specify reductions measured in metric tons, relative only to a historical baseline. The report explores intensity targets and their underlying indicators, rationales, real-world applications, and implementation issues. The report found that “across countries, absolute emissions and emissions intensity have little correlations; countries with high total emissions often have relatively low emissions intensity and vice versa.”

[Note: Contains copyrighted material.]

[http://pdf.wri.org/target\\_intensity.pdf](http://pdf.wri.org/target_intensity.pdf) [pdf format, 37 pages]



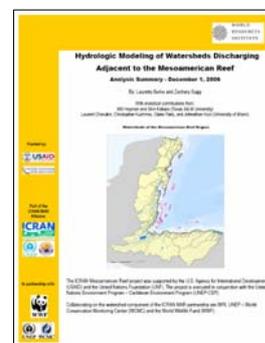
**HYDROLOGIC MODELING OF WATERSHEDS DISCHARGING ADJACENT TO THE MESOAMERICAN REEF**

**Lauretta Burke and Zachary Sugg**  
**The International Coral Reef Action Network (ICRAN) Mesoamerican Reef Project.**  
**World Resources Institute. December 1, 2006. 07AD270**

The objective of this analysis is to quantify the impact of human alteration of the landscape on land-based threats to the Mesoamerican Reef (MAR) and to influence land-use planning, agricultural policy and practice, conservation programs, and risk mitigation efforts. The results provide an overview of regional patterns of sediment and nutrient runoff and delivery. Local regions can use this data to implement more detailed, focused planning.

[Note: Contains copyrighted material.]

[http://pdf.wri.org/mar\\_hydrologic\\_model\\_results\\_english.pdf](http://pdf.wri.org/mar_hydrologic_model_results_english.pdf) [pdf format, 40 pages]



**ARTICLES FROM U.S. JOURNALS**

**DISTILLERY DEMAND FOR GRAIN TO FUEL CARS VASTLY UNDERSTATED**  
**Brown, Lester**  
**Earth Policy Institute Eco-Economy Update January 4, 2007 AA07008**

Summary: The author, founder of the Earth Policy Institute (EPI), writes that the U.S. fuel ethanol industry has grown so fast in the last two years that data collection has fallen behind. The U.S. Department of Agriculture estimates that ethanol production will consume 60 million tons of corn from the 2008 harvest, but the EPI, reviewing the combined data of several firms that survey the industry, estimates that more than twice that much corn will be needed. Brown warns that the unprecedented diversion of the world’s main food crop for fuel production will affect food prices everywhere, potentially leading to political instability in importing countries around the world. He writes that the U.S. corn harvest is 40 percent of the world total, and accounts for

70 percent of world corn exports. The state of Iowa alone produces more corn than the entire grain harvest of Canada; if all the ethanol-processing plants being built or planned in Iowa come online, Iowa may have to become a corn importer. Brown urges a moratorium on the licensing of new distilleries -- a "time-out, while we catch our breath and decide how much corn can be used for ethanol without dramatically raising food prices." Available online at <http://www.earth-policy.org/Updates/2007/Update63.htm> [PUBS;GWB]

## **NANOTECHNOLOGY COULD IMPROVE HEALTH, WATER IN DEVELOPING NATIONS**

**Brazil, China, India, South Africa working on research initiatives**  
**By Cheryl Pellerin, USINFO Staff Writer. 05 March 2007**

Washington – Nanotechnology, science on the scale of atoms and molecules, could give developing nations new ways to diagnose and treat disease and make clean water more available, if governments, nongovernmental organizations, industry and others would work to apply the powerful technology to these challenges, scientists say.

Nanotechnology is the ability to see, measure, manipulate and manufacture things on a scale of 1 to 100 nanometers. A nanometer is 1 billionth of a meter; a sheet of paper is about 100,000 nanometers thick.

"Nanotechnology has the potential to generate enormous health benefits for the more than 5 billion people living in the developing world," said Peter Singer, senior scientist at the McLaughlin-Rotman Centre for Global Health and professor of medicine at the University of Toronto, at a February 27 meeting, Using Nanotechnology to Improve Health Care in Developing Countries.

<http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2007&m=March&x=20070305134101lcniirelep0.9842035>

## **U.S. CITIES, STATES WORKING TO SLOW CLIMATE CHANGE; LOCAL GOVERNMENTS TAKING STEPS TO CUT GREENHOUSE GAS EMISSIONS**

**By Michelle Austein, USINFO Staff Writer. 01 March 2007**

Washington – Through legislation and community projects, U.S. cities and states are taking actions to address and mitigate climate change. Leaders of some of these governments shared their experiences with members of the Senate Committee on Environment and Public Works during a March 1 hearing.

"States are currently the leaders in addressing climate change," New Jersey Governor Jon Corzine said in his prepared testimony to the committee. Some states have done so by passing legislation aimed at reducing greenhouse gas emissions. Scientists have shown that the accumulation of greenhouse gases contributes to global warming. (See related article.)

Corzine issued an executive order February 13 that sets statewide targets for stabilizing New Jersey's greenhouse gas emissions at 1990 levels by 2020. Capping these emissions will support the state's economic growth by creating new markets for clean-energy technologies and spur technical innovation, Corzine said.

The California Global Warming Solutions Act, signed by Governor Arnold Schwarzenegger in September 2006, outlines a plan to cut the state's carbon dioxide emissions. California also is planning outreach programs to educate California's industries on how best to achieve these reductions, Speaker of the California Assembly Fabian Nunez said.

Some states are forming partnerships to examine climate issues that affect their regions. The Regional Greenhouse Gas Initiative (RGGI) is a partnership that is working to develop a plan to reduce carbon dioxide emissions in the northeastern United States. Currently, seven states - Connecticut, Delaware, Maine, New Hampshire, New Jersey, New York and Vermont -- are participating in the RGGI effort. Legislation was signed in April 2006 that requires Maryland to become a full participant in the process by June 30, 2007. In addition, the District of Columbia, Massachusetts, Pennsylvania, Rhode Island, the Eastern Canadian Provinces and New Brunswick are observers in the process.

<http://usinfo.state.gov/xarchives/display.html?p=washfile-english&y=2007&m=March&x=20070301173506hmnietsua0.5733148>

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