

Global Climate Change and Warming, 2000

Contributed by Lawrence Jorgensen

January Given that last winter was the warmest winter in 105 years, this first quarter beats that by one year, and spring was the warmest on record for the United States since 1910, it doesn't look good for the home team here at planet earth. However, thanks to the ingenuity, resourcefulness and creative intelligence of many forward thinkers, scientists, and engineers, hope can still be found in the following pages. Solar energy continues to be a viable alternative as a renewable source, but the new kid on the block is Fuel Cells, efficient and with zero pollution. Smaller but no less important is the development of the use of carbon dioxide instead of chemicals for dry cleaning, and gallium light bulbs instead of incandescent or fluorescent. While these are all commendable and give us kernels of hope, the real seeds for faith come from the ability and willingness of major world corporations and governments to acknowledge and accept burning fossil fuels is dangerous to the world's health, and investing in alternative energy sources is a necessary option. Ford Motor Company's creation of a line of electric vehicles and bikes under a new brand name, "Th!nk" environmentally friendly in manufacture, operation and afterlife besides having zero or near-zero emissions, is just one example. Keep in mind as you read on: All is not lost as long as we all strive to limit our own contributions to pollution, and seek to use and create alternative energy sources as well as habits. Tapia Martinez-Russ, 8/9/00{mospagebreak title=February}February Great Lakes Levels Likely To Drop: "Environmental official predict water levels in the Great Lakes could fall significantly this summer... because of a lack of snow and ice cover this winter. Experts predict the water levels… could fall as much as 10 inches below last summer's levels… The U.S. Army Corps of Engineers… has received 225 dredging requests… a 27 percent rise from last year… half of the dredged material is contaminated… (including) heavy metals such as lead, nickel, and cadmium, farm pesticides, including DDT, and diesel fuel. Stirring up this material… leads to contamination of fish. The water in lakes Michigan, Huron and Erie sunk to their lowest levels in decades… worse may be on tap for this summer." UPI, 2/5/00 Coral Provides Clues to Climate Change: "[G]rowth rings in Indian Ocean coral tell how El Nino, the warm-water phenomenon of the tropical Pacific Ocean, influences marine temperatures a continent away." In addition to bringing more rain to Africa as well as Arizona, El Nino warms the oceans there, which is reflected in coral growth. "Chemical changes in the rings tell the story of sea temperature. When the water warm, the coral reveals light oxygen. When the water is cold, the coral is saturated with heavy oxygen. 'We found a record of climate change that reflected the influence of the El Nino on the Indian Ocean. This record tells us a story that has broad climate implications,' said Julia Cole of the University of Arizona and co-author of a report on coral growth rings." El Nino/Southern Oscillation (ENSO) may set the pace for slower decadal changes as well as being responsible for some of the year-to-year changes in East African climate. Robinson Shaw, ENN, 2/6/00 Famine Worsen in Northwest Kenya: "Four more divisions in northwest Kenya's Turkana District have joined the list of drought-hit area requiring urgent relief food, local officials said… [A]ll 17 divisions in the district will be declared disaster zones by the end of this month if it does not rain soon, according to district officer Alloys Otieno." XINHUA, 2/8/00 Oil and Gas Companies Must learn from Other Industries to Survive: "New forces are driving the world's energy industry toward dramatic and historic changes as companies battle for the "New Prize"-access to customers… "It is access to the customer that will increasingly dominate across all industries," said Dr. Stanislaw, Cambridge Energy Research Associates President. "[T]his shift in focus from commodity to customer will require them to create new service- and technology-oriented organizations… Energy companies that fail to recognize this shift… will be left on the sidelines permanently." PRNewswire, 2/9/00 PIPA - President's Global Warming Initiative Likely to Draw Public Support: "The American public is likely to support President Clinton's \$4 billion budget request to encourage energy efficient technology and research… [A] strong majority of America believes evidence for global warming is persuasive enough to justify moderate spending in support of reducing green house gas emissions. A strong majority … favors … ratifying the Kyoto Treaty…. A majority favor requiring developing countries to limit their emissions… a modest majority favors ratifying … even if countries do not agree to join in…. [A] majority is willing to accept increases of \$25 per month in household energy cost … sufficient to comply. A majority initially opposes … emission rights trading regime but shifts to support after hearing the economic trade-offs." Steven Kull, U.S. Newswire, 2/9/00 Endless Rains Drench Northern South Africa: "In the poor Alexandra township just north of Johannesburg, the Jukskei River burst its banks for the second time in a week… [O]fficials asked residents to stay away from the flood-prone riverbank (which) rose to a level 8 meters… above normal… The heavy rains also raised fears of malaria outbreaks." Susanna Loof. AP, 2/11/00 Australia's Natural Disasters Cost Up: "An unusually high number of catastrophes caused Australia's bill for natural disasters in 1998 and 1999 to blow out to 4.5 Australian dollars (2.97 billion U.S. dollars), Emergency Management Australia (EMA) said… The cost of these disasters in 1998 and 1999 was almost double the yearly average of the past 25 years." XINHUA, 2/11/00 Tornadoes Sweep Southwest Georgia: "Tornadoes tore through southwest Georgia early Monday, killing at least three people and injuring hundreds." AP, 2/14/00 Eastern Africa Caught In Vicious Weather Cycle: "Separate from global warming, natural climate change in eastern Africa over the past millennium has resulted in extended periods of drought and heavy rainfall… 'We have shown … large fluctuations in water availability on a decadal to centennial time scale … due to natural oscillations in climate," said Brian Cumming, a biologist… and co-author (of) the study… The researchers warn that a catastrophic dry period… lasting decades, might visit eastern Africa again in the next 50 to 100 years (which) could trigger large-scale migration, political upheaval and economic and social devastation." Robinson Shaw, ENN News, 2/14/00 Snow, Ice Cancel Flights, Schools: "Nearly 300 flights were canceled at O'Hare International and Midway airports in Chicago… In the New York Area, Newark airport faced five-hour delays and LaGuardia waits of up to two hours… In Detroit, Northwest Airlines canceled 156 flights… Other airports, such as Philadelphia International felt the ripple of delays and cancellations … The storm brought 9 inches of snow to

central northeast Iowa, up to 6 inches in parts of Nebraska and southern Wisconsin, and a mix of snow and freezing rain to Detroit… A snow emergency was declared in Milwaukee…" In Maryland, New York, New Jersey, Virginia and Washington, D.C., Pennsylvania and parts of the Midwest, schools were closed. MSNBC Staff and Wire Reports, 2/18/00

Science Digs Deep to Study Pros and Cons of Marine Methane: "Researchers are on a quest to understand the microorganisms that produce gas hydrates trapped in the ocean floor. The hydrates may be a boon to an energy-hungry world, but their release could trigger catastrophic global warming." John Roach, ENN News, 2/20/00

Brazilians Seek New Strategies Against Drought: "Chronic drought has devastated Brazil's 'sertao' or northeastern outback, for as long as anyone can remember, and is a key reason the region remains… poor (and) undernourished," according to Pedro Pereira, the agriculture secretary in Bezerros, Brazil. "Now, some northeasterners are looking for new strategies in the daily struggle for water… The latest project is a low-cost, Israeli hydroponics method, which irrigates crops grown inside long trays of nutrient-rich soil with a steady stream of water dripped through hoses with tiny holes bored in the sides… excess water is recycled… pumped back into the hoses… It could be the solution for agribusiness in the northeast." Harold Olmos. AP, 2/21/00

Rain Storm Approaches Mozambique: The desert nation of Mozambique, which is still recovering from the worst floods in 30 years, is bracing for the arrival of Cyclone Eline. "The Mozambican floods are reported to have killed 150 people and left hundreds of thousands homeless. Vast areas of agricultural land have been destroyed in the floods, leading to acute hunger." AP, 2/21/00

New Report Analyzes Challenges, Progress in California's Green Power Market: "A new report authored by Warren Byrne, president of Foresight Energy Company, an Oakland-based green energy consulting firm, provides the first detailed analysis of the good and bad new about California's green power market… In 1999… the green market expanded rapidly… 10% growth per month. 'The positive upswing in green power purchases are occurring despite the fact that California Energy Service Providers (ESPS) have been severely hampered by unfavorable regulatory structure,' states Byrne… Current growth in the green power market exists almost exclusively due to additional revenues available from state incentive programs." Business Wire, 2/21/00

Storm Gusts Act Like Mini Tornado: A series of strong wind gusts caused serious damage in Anaheim, California. "Part of the roof of a home … was torn away, a camper shell was blown off a truck on the freeway, a van was overturned and several large trees were uprooted. 'We're calling it a 'tornado-like' incident,'" said Bruce Jacobson, a spokesperson for the Anaheim Fire Department. 'We don't know exactly what it was.'" Yahoo!News, 2/21/00

Mozambique Faces Disease Outbreak After Floods: "The worst rains in 30 years have left more than 200,000 homeless… Heavy downpours and gales cut a trail of destruction through food producing regions of the…African state." Reuters, 2/22/00

Climate is Warming at Steep Rate, Study Says: "A new analysis by government scientists indicates the Earth's climate is warming at an unprecedented rate, suggesting that the future impact may be more severe and sudden than predicted… Such a steep warming rate was not expected to occur until well into the 21st century, said Tom Karl, The National Oceanic and Atmospheric Administration climatologist who led the study… [W]arming since 1976 occurred at a rate of nearly four degrees per century… could be evidence of a 'change point' -a period when the Earth's climate begins warming at a faster rate." Usha Lee McFarling, LA Times, 2/23/00

Changes in Arctic Sea-Ice Thickness Show Evidence of Climate Change: "The sea ice cover in the Arctic Ocean has decreased in thickness over the last several decades, from… over three meters to under two meters…more in the eastern portion of the Arctic Ocean… The last five decades have witnessed a distinct warming trend in the Antarctic Peninsula… [I]ce shelves in the northern portion of the peninsula have [also] begun to disintegrate." ENN Direct, 2/23/00

Global warming May Be Speeding Up: "A recent series of record world temperatures may indicate a speedup of global warming, researchers say… [F]rom May 1997 to September 1998- each month broke the previous monthly world average temperature record [according to the] National Climatic Data Center]. The team led by Thomas R. Karl calculated that there is only a one-in-20 chance that the string of record high temperatures was simply an unusual event… More likely… it marked a change to faster warming. It raises a flag because it was such a unusual event that we need to watch very carefully in the next several years… it could be signal of an increased rate of temperature increase, Karl said." Randolph E. Schmid. AP, 2/23/00

Natural Disasters: Homes in Australia evacuated as worst flooding on record submerges part of Australia's normally arid Outback. APCyclone Kills 2, Leaves 250,000 Homeless in Zimbabwe. Xinhua News Agency Strong Winds, Rain Pound California. APRain causes mudslides in Taiwan that buried houses and cut off mountain roads. AP[A] drought in northwestern Kenya is worsening, endangering the lives of residents. AP NewsEdge, 2/25/00

Drought Stokes Fears of Brush Fires in Georgia: "Unusually warm weather and a lack of rain could trigger a record number of forest fires this summer in Drought-stricken… Georgia, state and federal officials said." Water levels in many parts of this state are three inches below normal and could set the stage for wildfires "that could rival those that burned hundreds of thousands of acres in 1954-1955… The National Weather Service issued a fire watch (for the) 396,00-acre Okefenokee National Wildlife Refuge." Reuters, 2/28/00

Floods Destroy 10,00 Houses in Botswana: "About 10,000 houses built of mud in Botswana have been destroyed by the rains which have pounded the country since the beginning of the year… the ground is saturated… Meteorologists predicted that the rains are expected to continue through to April." XINHUA, 2/28/00

Cyclone Hits Australia: "Northeastern areas of Australia were hit heavily by Cyclone Steve… The Cyclone slammed into the coastal areas... bringing 160 kph winds and torrential rains leaving a trail of destruction in its wake." XINHUA, 2/29/00

March Mudslide Kills 11 in Brazil: "Tons of mud loosened by a rainstorm collapsed on a shantytown, killing 11 people and injuring four… The mudslide, caused by a four-hour downpour… buried 10 wooden shacks… on the outskirts of Sao Paulo." AP, 3/1/00

Top Companies to Join WWF in Innovative Effort to Save Energy, Lower Greenhouse Gas Emissions Climate Savers: A partnership designed to help businesses lower energy consumption and reduce greenhouse gas emissions, has been created by World Wildlife Fund and the Center for Energy and Climate Solutions. "The first two corporations joining Climate Savers are IBM and Johnson & Johnson… 'We're delighted that these two major multinational companies are the first members of Climate Savers,'

said William Eichbaum, WWF Vice President for Global Threats." Cool Companies, 3/1/00AMS March Bulletin Focuses on Trends and Impact of Weather and Climate Extremes: "The March Bulletin of the American Meteorological Society presents a series of five articles, each dealing with a different phase of weather and climate extremes, examin[ing] trends and observations in extreme climate events… socioeconomic and ecological impacts… [and are available at] <http://www.ametsoc.org.ams>." ENN Direct, 3/2/00South African Floods Caused by Warm Indian Ocean: "Rains that have lashed southern Africa and prompted floods [in Mozambique] have been triggered by exceptionally warm ocean water temperatures," said meteorologist, Tracey Fill of the South African Weather Bureau in Pretoria. "Other meteorologists have also pointed to water temperatures, noting that sea surface temperatures over the Mozambican channel have been unusually high." Ed Stoddard. Reuters, 3/2/00Response to Mozambique Floods Difficult Because Crisis Growing: "The global response [to flooding in Mozambique] has been … slow-mainly because the catastrophe has evolved over several weeks and is still getting worse each day… The United Nations estimates that 800,000 to 1 million … have lost their homes and in urgent need of help following the worst floods in decades." Nicole Winfield, AP, 3/3/00Chilly Reception for Warm Weather: The early thaw of this winter in the northeastern United States has had a devastating economic effect on the recreation industry. "The casualties of all the warm weather include North America's largest cross-country ski race and an ice fishing derby in International Falls, Minnesota… Ed O'Lenic, a meteorologist with the U.S. Weather Service's Climate Prediction Center in Camp Springs said, `We did predict a warm winter… but what we have seen far exceeded anybody's expectations.'" Robert Imrie, AP, 3/3/00Methanex Joins California Fuel Cell Partnership: "Methanex Corporation has joined the California Fuel Cell Partnership as an associate partner [and] will assist… demonstrating the viability of methanol fuel infrastructure technology… developing appropriate methanol fuel composition standards and in exploring the path to commercializing fuel cell electric vehicles, including the development of a commercial methanol fueling infrastructure." CNW, 3/ 2 /00Batten Down the Hatches, Sea Level Is Rising: "[P]repare for a rise in sea level of 20 inches and the inundation of 13,000 square miles of land by the year 2100," says Gary Yohe, co-author of a report for the Pew Center on Global Climate Change and economics professor at Wesleyan University in Middletown, Connecticut. "'The oceans have a considerable amount of momentum in their expansion… even if temperatures were stabilized next month.'… According to the report, costs associated with a rising sea level range from \$20 billion to \$150 billion… The effects of sea level rise include erosion of beaches, inundation of deltas, loss of wetlands, increased storm activity and environmental degradation owing to recreation and development. " John Roach, ENN, 3/4/00Zimbabwe Appeals for \$22 million for Flood Relief: "In a statement, President Robert Mugabe's government said the [recent] cyclone and floods… had affected 500,00 people… 'We are appealing for 826 Zimbabwe dollars from the international community.'" Reuters, 3/4/00Spring Weather Greets Alaska's Iditarod Mushers: "A record 81 mushers and their dogs trotted through downtown Anchorage in relatively warm weather on Saturday to start the Iditarod Trail Sled Dog Race. Temperatures hovered around 40 degrees Fahrenheit, as a relative heat wave gripped Alaska's largest city. Yereth Rosen, Reuters, 3/4/00Food, Medicine Now Priority in Mozambique: "Foreign troops and relief workers scrambled Sunday to deliver food and medicine to tens of thousands of Mozambicans stranded by floods… Meanwhile, a cyclone… was downgraded to a tropical storm." Concerns are now about the possibility of malaria and cholera outbreaks. "'Mozambique is a very long way away and the floods developed over a long period of time. It was much more difficult to predict than anyone had imagined,'" said Mike Young, a spokesman for the United States mission in Maputo. "'Many people died here. There is nothing to eat. The roads are broken. People are crying because they are hungry and can't drink the water here,' said truck driver John Maduna." Emma Thomasson, Reuters, 3/5/00IFC Boosts Power, Efficiency For Automotive Fuel Cells Leapfrogs Competition by 15 Percent: "International Fuel Cells, Inc., (IFC), a subsidiary of United Technologies Corp. today announced it has developed a way to boost the power of automotive fuel cells while at the same time shrinking their size. This is a significant step toward commercializing fuel cells for automobiles. IFC has developed the technology to increase the amount of power a fuel cell will produce per liter [to] 1.5 kilowatts, 15 percent more power than competitors' fuel cells." PRNewswire, 3/6/00Ford, BP Amoco Offer Cleaner Fuels: " BP Amoco and Ford Motor Company today announced the availability of newly reformulated lower sulfur fuels that could reduce smog-producing vehicle exhaust emissions in the Detroit area by 7 1/2 tons per month. The cleaner gasolines - Crystal Clear Amoco Ultimate and BP Super 93 - will keep an estimated 176,000 pounds of emissions out of the Motor City's air each year, equal to the exhaust of some 5,192 cars and trucks. Ford, the world's second largest car company, said it will use BP Amoco's cleaner fuels to fill the tank of each new vehicle that rolls off an assembly line where the low sulfur gas is available. UPI, 3/6/00Swiss Reinsurance's List - Most Deadly and Most Costly Disasters of 1999The 20 worst catastrophes in terms of fatalities:

- Dec. 15: Floods, mudslides and landslides in Venezuela - 50,000
- Aug. 17: Earthquake in Izmit, Turkey - 50,000
- Oct. 29: Cyclone hits Orissa, India - 19,118
- Sept. 20: Earthquake in Nantou, Taiwan - 3,400
- Oct. 3: Floods and landslides in Mexico - 1,300
- Jan. 25: Earthquake in Colombia - 1,185
- Nov. 12: Earthquake in Duzce, Turkey - 834
- May 20: Tropical cyclone in Pakistan - 751
- June 16: Floods on the Yangtze River - 725
- Oct. 25: Flooding in seven provinces of Vietnam - 662
- Nov. 24: Sinking of the ferry Dashun, China - 440
- Aug. 6: Flooding in West Bengal, India - 411
- Oct. 18: Sinking of the ship Bimas Raya II, Indonesia - 313
- Feb. 6: Sinking of the ferry Arta Rimba, Indonesia - 313

- July 12: Flooding in Bihar and Andhra Pradesh, India - 307
- Aug. 2: Train crash in West Bengal, India - 286
- Dec. 31: Cold weather in northern and eastern India - 275
- July 30: Flooding in the Philippines, Cambodia, etc. - 265
- July 15: Heatwave in the eastern United States - 224
- Oct. 31: Crash of EgyptAir Boeing 767 off United States - 217 The 21 worst catastrophes in terms of insurance losses, in U.S.dollars:
- Dec. 25: Winter Storm Lothar hits western Europe - 4.5billion
- Sept. 22: Typhoon Bart hits southern Japan - 2.98 billion
- Sept. 9: Hurricane Floyd hits eastern United States - 2.36 billion
- Dec. 27: Winter Storm Martin hits southwest France - 2.2 billion
- Aug. 17: Earthquake in Izmit, Turkey - 2 billion
- May 3: Tornadoes in United States midwest - 1.485 billion
- Sep. 20: Earthquake in Nantou, Taiwan - 1 billion
- Apr. 14: Hailstorm in Sydney, Australia - 982 million
- Jan. 1: Snowstorm in the United States midwest - 755 million
- Feb. 1: Explosion at Ford Motor Co. factory, Dearborn, Mi.,U.S. - 650 million
- Jan. 13: Wind, rain and snow in the United States - 575 million
- Dec. 4: Winter Storm Anatol hits Denmark - 500 million
- Dec. 15: Floods, mudslides and landslides in Venezuela - 400 million
- April 23: Hails, tornadoes and wind in the United States - 390 million
- Nov. 12: Floods in southwest France - 382 million
- May 11: Floods and landslides in Switzerland, Germany and Austria - 320 million
- Jan. 21: Storms and hail in Texas and Arizona, United States - 300 million
- Apr. 8: Tornadoes and hail in the midwestern United States - 300 million (tie)
- July 5: Explosion at aluminum plant in Gramercy, La., United States - 275 million
- May 4: Loss of the Orion F3 satellite on Delat-3 launch vehicle - 266 million AP, 3/7/00 Georgia A. Callahan Appointed Vice President - Environment and Health for Texaco: "Georgia A. Callahan has been appointed Vice President Environment and Health for Texaco… Callahan is responsible for monitoring global environment and health issues, and the development of competitive environmental strategies that enhance business opportunities and foster strategic partnerships within the company and externally." Business Wire, 3/8/00Solar Concentrator Scores High in Sacramento: "Initial monitoring by the Sacramento Municipal Utility District (SMUD) indicates that a new solar energy technology can provide 20 percent more power than conventional solar panels. Photovoltaics International installed a 30 kilowatt linear solar concentrator project at SMUD's 59th Street Warehouse last October dubbed the SunFocus™.' Monitoring results from SMUD … confirmed PVI's predictions from computer modeling that the technology will generate more electricity than conventional solar panels. Once installed, the SunFocus™ has virtually no operating or maintenance costs." ENS, 3/ 8/00Flooding Hits Botswana, Mozambique: "Five straight days of downpour have killed scores of people throughout southern Africa… More than 100,000 people were left homeless… Water covered thousands of acres of sorghum, corn and other crops. The flooding was the worst in memory in Botswana." AP, 3/11/00Scientists - Winter Warmest on Record: "This winter… warmest on record since… 105 years ago, according to scientists at the National Oceanic and Atmospheric Administration. [R]esearchers said that seasonal temperatures from December to February averaged 38.4 degrees Fahrenheit, or 0.6 degrees warmer than the previous record… set just last year. The scientists attributed the warm temperatures to La Nina… couldn't say… whether the warm winter had any link to a 'greenhouse effect' caused by pollution into the atmosphere. In fact, the last three winters have been the warmest on record in the United States - a pattern of warm winters established in 1980 said the scientists. Since then, 67 percent of the winter seasons have been warmer than the long-term average." Brigitte Greenberg. AP, 3/12/00Eco-Industrial Park Receives 10,000 Square Foot Solar System: "PowerLight Corporation recently install[ed]… the latest roof-integrated, thin-film solar electric system in North America. [According to] PowerLight Executive Vice President Dan Shugar, 'In addition to generating solar electricity, the tiles insulate the building, reducing the const of heating and air-conditioning, while also protecting and extending the life of the roof. They're an integral part of the rooftop… require[ing] no roof penetration or adhesives… eliminating leakage and related maintenance.'" Cool News, 3/14/00More Mozambique Food Shortages Predicted: "Saturated soil and a shortage of seed are threatening the start of the planting season… If the farmers can't plant, they'll miss the September harvest… The southeast African nation's worst recorded flooding has killed 492 people… and damaged nearly 1.9 million acres of farmland in the central and southern regions." Craig Nelson, AP, 3/18/00Bolivia Flooding Wrecks Crops: "Flooding from torrential rains in recent weeks has destroyed crops, killed thousands of cattle and left hundreds of people homeless, the Civil Defense Office said Monday. The rains ended a severe drought that affected a third of Bolivia... Rain-swollen rivers overflowed their banks, covering fields of soybean, cotton, corn and grapes... also flooded parts of the cities of Santa Cruz and Cochabamba." AP, 3/20/00Study Predicts Rapid Global Warming in Future: "The Earth is in a natural warming cycle that, combined with warming from the greenhouse effect, will push it through a period of rapid global warming according to a new climate study conducted by the Scripps Institution of Oceanography… This is the first study to explore the link between tidal mixing and climate change over the last 1,000 years." Cool Companies, 3/23/00Giant Iceberg Shakes Loose Off Antarctica: "One of the largest icebergs ever recorded broke off of Antarctica's Ross Ice Shelf earlier this week and is now flying solo in the Ross Sea… In the 23-year history of the U.S. National Ice Center's iceberg database, no iceberg has been bigger, said Selina Nauman, a NIC scientist." Lucy Chubb, ENN, 3/25/00Waste-free Fuel Cells to be

Tested in Autauga County, Alabama: "Prototypes of an improved fuel cell apparatus that convert hydrogen from natural gas or propane into electricity is scheduled to be tested in Autauga County, Alabama. "The fuel cell will be hooked up to a home, and possibly a business …for testing. 'I think this has a great future,' said Millbrook Mayor Al Kelley. 'This could play a larger role in helping to bring people out to the outlying areas.' The fuel cell would serve as a cost effective alternative to traditional power lines when they are too costly to install in outlying areas." Christie Sellers, Montgomery Advertiser, 3/25/00

Power Companies Enlist Farmers in War Against Global Warming: "Power companies are offering to pay… farmers to till their fields less frequently in order to control… global warming." Tilling soil rich in carbon releases it back into the atmosphere, where it contributes to global warming. By giving farmers carbon-credits, the power companies hope to delay this release until they are better able to cope with and/or utilize it. Norm Heikens, Indianapolis Star, 3/26/00

Global Warming Serves Notice for Public Health: "As global temperatures rise, so do health risks associated with the heat, scientists say." Lead author Jonathan Patz of the Johns Hopkins School of Public Health is quoted as saying "Heat and heat waves are projected to increase in severity and frequency with increasing global mean temperatures." Lucy Chubb, ENN, 3/28/00

Rio Grande Valley Drought Sparks Friction Between Texas, Mexico: A major political controversy is brewing due to the ongoing drought in along the Texas/Mexico border. A water treaty signed in 1944 between the United States and Mexico guarantees Mexico water from the upper Rio Grande, north of El Paso, and allots water to the U.S. from Mexican rivers that feed the river below that point. However, because of the recent drought (according to Mexican officials), Mexico has not paid its water debt present debt. " This is either the worst or second-worst drought of the 20th century," said Jesus Luevano, spokesman of the Mexican section of the International Boundary and Water Commission. On the opposing side is a study by the R.J. Brandes Co. of Austin, commissioned by the Rio Grande Water Planning Group asserting "Mexico hadn't experienced an `extraordinary' drought… could have provided water to the United States." Steven H. Lee and Brendan M. Case, Dallas Morning News, 3/28/00

La Nina Wields Its Weight on Hurricane Season: "'Because the 2000 season will exhibit the effects of La Nina, we can expect a greater number of hurricanes and a chance for more severe hurricanes,' said Anthony Lupo, assistant professor of atmospheric sciences at the University [of Missouri]." Robinson Shaw, ENN, 3/29/00

Ford Commits to 80 MPG Vehicle by 2003: "Ford Motor Co. will mass market a car capable of 80 miles per gallon by 2003. Vice Preside Al Gore told CNBC that For made a commitment to producing the vehicle on a large scale within three years while he me with General Motors, Ford and Daimler Chrysler as part of USCAR." Michael Strong, Bridge News, 3/30/00

Texas Tornado Kills Four: "A tornado carved a path of destruction through downtown Fort Worth Tuesday, shattering windows in high-rise buildings, overturning cars and uprooting trees. Four people were killed and at least 36 were injured." Stephen Hawkins, AP, 3/31/00

US Ecology Appeals Ward Valley Court Ruling: "Jack Lemley, Chairman, CEO and President of American Ecology Corporation, today announced that subsidiary US Ecology, Inc. is appealing a federal court order dismissing a complaint filed against the federal government by the company and the State of California in the U.S. Court of Federal Claims. US Ecology currently holds a valid State of California license to construct and operate the Ward Valley disposal facility. 'We remain fully committed to developing this environmentally sound disposal facility, allowing California to meet its thirty year disposal obligation to low-level radioactive waste producers in the four state Southwestern Compact region,' Lemley concluded." Business Wire, 3/31/00

Second Big Iceberg Breaks Off from Antarctica: "A second giant iceberg has broken off from Antarctica and is bumping into a huge iceberg that broke off the Ross Ice Shelf last week, researchers said… [They also say that] large chunks are breaking off of Antarctica for several reasons, some due to global warming… Much of Antarctica consists of ice sheets with no ground underneath, [and its shrinkage] could not only help raise ocean levels but… shift ocean circulations and weather patterns, bringing drought, severe storms and the wider spread of tropical diseases." Reuters, 3/31/00

April High and Dry on the Great Lakes: "The fastest decline in water levels in the Great Lakes in nearly a century and a half is creating havoc… [T]he middle Great Lakes-Michigan, Huron and Erie-and Lake St. Clair… have each fallen 3 1/2 feet… and could soon hit all-time low water levels, scientists predict." William Claiborne, Washington Post, 4/3/00

Cyclone Flattens Madagascar: "Cyclone Hudah leveled almost all buildings in the northeastern city of Antalaha before leaving Madagascar… on a course for flood-wear Mozambique." AP, 4/3/00

Despite Deregulation, New Jersey Residents Tend to Keep Electric Company: Since August 1, 1999, New Jersey consumers have been able to buy electricity from any non-traditional supplier. However, as of March 16, only 63,757 residential customers have chosen to do so. "People are just not used to buying electricity," said Ratepayer Advocate Blossom Peretz. ENN, 4/4/00

Texas Utilities Map Out Their Futures Under Deregulation: Texas electric utilities have submitted plans to the Public Utility Commission describing in detail how they will be structured after 2002, when the industry by law will be deregulated. Terry Maxon, The Dallas Morning News, 4/4/00

Arctic Warming Signals Dire Straits for Birds: "Climate change could eliminate 50 percent of rare Arctic bird populations, according to a study released… by the Worldwide Fund for Nature… In the next 70 to 100 years, scientists predict… the concentration of carbon dioxide in the environment could double," drastically impacting the Arctic habitats of such rare species as the red-breasted goose, tundra bean goose, spoon-billed sandpiper and emperor goose. Margot Higgins, ENN News, 4/5/00

Arctic Ozone Layer Rapidly Thinning: "The most comprehensive study ever undertaken into ozone levels over the Arctic has found that two-thirds of the Earth's protective layer has been destroyed… said NASA and the European Union in a joint report." MSNBC, 4/5/00

Early Fires Related to Global Warming: "The forest fire season in Canada has begun much earlier than usual this year, which experts say may be related to global warming. There are 11 major fires burning across northwestern Ontario… Bob Johnson, a fire boss [said] that severe fires are becoming the norm now." CBC, 4/6/00

Dust Storm Blast Beijing: "Fierce winds laden with desert dust … the worst such storm in 10 years…`The vegetation in the northwest is sparse and the climate is rather dry,' said Lei Zhenfa, director of the Beijing Meteorological Bureau." AP, 4/6/00

Greenland Glacier Warming Feared: "Scientists fear that a rise in the Earth's average temperature could make the oceans rise and swamp low-lying coastal cities in the coming century. 'A 2-degree global warming doesn't sound like much, but you have

to realize the consequences can be really quite disastrous," said Kurt Cuffey, co-author of a study published in the April 6th issue of Nature. AP, 4/6/00Jamaica Ends Use of Leaded Gasoline: "Jamaica… officially ended the use of leaded gasoline… following decades concern about health and environmental hazards resulting from its use… Jamaica's petroleum industry welcomed the lead-free era as consistent with [its] commitment to environmentally sustainable development." ENN, 4/6/00Cambridge Professor Develops Better Light Bulb: Metallurgy professor Colin Humphrey has developed a "longer-lasting, low energy light bulb" utilizing the gallium nitride computer chip. "Without a doubt, this is the most important new invention in electrical materials since silicon," he said. ENN, 4/6/00Tree-city Projects Improve Quality of Life: "Tree-city projects in noisy, congested, fast-paced urban areas have distinct scientific as well as psychological effects on people, [such as] diminish[ing] street noise two or three times, reduc[ing] heat by 10 to 20 degrees, decreasing] dust levels by as much as one third [and contributing] a sense of natural beauty in landscapes dominated by buildings and roads." ENN, 4/7/00No Deadline for Global Warming Pact: Representatives at talks in Otsu, Japan regarding the Kyoto Protocol of 1997, have not set a target date for implementation, and have only agreed to doing so "as soon as possible." Japan and Europe have supported ratification by 2002, but the United States does not want to set a specific deadline without Congress' permission. AP, 4/8/00Ford to Sell Electric-gas SUV in 2003: "Ford Motor Co. will sell a versions of its Escape small sport utility vehicle powered by gas and electricity in 2003, with fuel economy close to 40 miles per gallon in city driving. 'This will be the most fuel efficient, cleanest SUV on the planet,' said Rick Eagle, Ford Escape project management supervisor." AP, 4/7/00Emergency Declared In Flood-hit Hungary: "Prime Minister Viktor Orban declared a state of emergency today in eastern Hungary, threatened by the worst flooding in years of from heavy rain and melting snow. 'The situation is really very serious.' Transport Telecommunications and Water Minister Kalman Katona told Reuters earlier." Sandra Peto. Reuters, 4/9/00Argentine Vessel Able to Get Closer to Southern Antarctic Base: After the icebreaker Almirante Irizar completed its mission of retrieving the icebound cruise ship, "Clipper Adventurer" in Antarctica, it continued on to another southernmost base Belgrano II and was able to get within sight. This had been impossible until now since ice had previously kept any ship from passing any closer than 65 nautical miles, " supporting the theory that rising temperatures are melting the ice shelf." Justin Ratcliffe, Reuters, 4/9/00G8 Ministers Agree on Global Warming Accord: "In a joint communique issued after the three-day meeting in the western Japanese city of Otsu, the ministers agreed that an early ratification of the Kyoto Protocol was necessary… The Kyoto Protocol of 1997 commits industrial countries to reduce their greenhouse gas emissions by an average of 5.2 percent from 1990 levels by 2008-12."

Kazunori Takada, Reuters, 4/9/00Six Day of Flooding in Hungary, Romania and Serbia Killed Ten: "Six days of floods along major rivers in Hungary and Romania killed at least 10 people and caused millions of dollars worth of damage, officials in the two countries said." AP, 4/10/00Three U.S. Companies Become Climate Neutral: "Through cooperation with the Climate Neutral Network, Shaklee, Interface and Saunders Hotels have taken the lead to entirely eliminate the greenhouse gases that result from their products and enterprises in order to achieve a zero net impact on global warming." PRNewswire, 4/10/00Secretary Albright Proposes Global Alliance for Safer Water: "Secretary Madeleine Albright announced a global initiative… to protect world water supplies and reduce the 5 million deaths caused every year by drought or water-borne disease. 'Our citizens cannot be secure if the air we breathe, the food we grow and the water we drink are at risk because the global environment is in danger,' she said." Elaine Monaghan, Reuters, 4/11/00Dominion Generation Announces Major Environment Project for Cleaner Air in Northern Virginia: "Dominion Generation, a unit of Dominion, announced… it will stop burning coal at its Possum Point Power Station in Northern Virginia and construct an environmentally cleaner combined-cycle unit that generates electricity with natural gas." PRNewswire, 4/12/00Flood of the Century Hits Hungary: "The Hungarian government called an emergency session… declar(ing) a state of emergency for eight states in eastern Hungary." Xinhua News, 4/12/00Mexican State Plagued by Drought: "Mexico's interior secretary declared Sonora a disaster area on Monday to allow officials in the drought-stricken border state access to federal aid." AP, 4/12/00Global Warming Warnings: "Scorching summers, higher rates of infectious diseases, more weather-related disasters, disappearing farmland, vanishing species-these and other grim scenarios are all possible effects of greenhouse gases, say global-warming experts." Wynne Brown, ENN, 4/12/00Seattle Mayor and City Council Adopt Environmental Commitment to Clean Energy: "[T]he Seattle City Council unanimously adopted a proposal by Major Paul Schell and City Council member Heidi Wills to meet Seattle's future electricity needs with no net emissions of "greenhouse gas." Business Wire, 4/12/00Amazon Tree Loss Continues: "[T]he rate at which [the] Amazon rainforest is being destroyed is… unchanged." Alex Kirby. BBC, 4/12/00Report Says U.S. Power Plants Emit Tons of Pollution: "[T]he dirtiest US. Power plants… pump 2 billion tons of pollution into the air, causing smog, global warming and scores of health and environmental problems. 'Americans choke on smog and soot pollution, eat poisonous fish, and confront the real life consequences of global warming because of these dirty power plants,' said Rebecca Stanfield, staff attorney for The U.S. Public Interest Research Group." Patrick Connole, Reuters, 4/13/00New Animal Feed Cuts Gas at the Source: Scientists in Scotland have discovered that by adding a bacteria supplement to feed for farm animals such as sheep and cattle, it is possible to cut the amount of methane the animals produce. ENN, 4/13/00North China Suffers Severe Drought: "Four consecutive years of severe drought have evaporated the drinking water of nearly 1.5 million people in north China's Hebei Province… Hebei is facing a shortage of 800 million cubic meters of water." Xinhua News Agency, 4/14/00PG&E Breaks Ground for Madison Windpower Project: The first step in the construction of the largest wind generating facility in the Eastern U.S., was initiated today by PG&E Corporations' National Energy Group. "The seven-turbine, 11.5 megawatt project is slated to be operational by September 2000… In an average wind year, Madison Windpower will save 12,00 tons of carbon dioxide, 65 tons of sulfur dioxide, and 19 tons of nitrogen oxides." ENS, 4/14/00Warm Weather Causing New Hazards: "This new century is already showing signs of a record-beater when it comes to the weather. There's been short-term damage to California and there are long-term prospects for more climate altering weather conditions." Robert Hager,

MSNBC, 4/18/00DOE Unveils Hybrid Fuel Cell Turbine: The U.S. Energy Department announced the development of a new hybrid fuel cell turbine that would generate electricity more efficiently. "The new power plant… would combine a state-of-the-art fuel cell with a gas turbine… one of the cleanest and most efficient ways to produce electricity… [and] will be able to generate electricity at 55 percent efficiency, [meaning] 55 percent of the energy from the natural gas it uses as fuel will be converted into electricity." Reuters, 4/18/00First Three Months Warmest in 106 Years: "The first three months of the year were the warmest in the nation in 106 years, according to the National Oceanic and Atmospheric Administration… June 1999 through March 2000 was the warmest June through March period ever." AP, 4/19/00Storm, Wind Rip Los Angeles: "High wind ripped through part of the city… upending mobile homes… toppling trees… [following a] record rainfall." AP, 4/19/00Nine Mexico States Declared Disaster Zones Due to Drought: "Mexico announced… nine of its northern states natural disaster areas due to drought… making them eligible for emergency funding." Bridge Information Systems, 4/19/00Drought Plagues South Korea: "A drought has hit South Korea over the past two months, the Korea Meteorological Administration said. The KMA forecast… drought will continue for some time." Xinhua News Agency, 4/19/00Effects of Global Warming Clear in Canadian Arctic: "Inuit[s] whose job it is to brave snow and ice to find caribou, seal and other animals say the signs of a gradual increase in temperature are everywhere. '[N]ow I just wear a light parka. It is so hot… my snowmobile often overheats,'" said Steven Kooneeliusie, resident of a small town, Pangnirtung, nearly on the Arctic Circle, 1,500 miles north of Ottawa, Canada. David Ljunggren, Reuters, 4/19/00Gore Still Wants Traditional Car Engine Eliminated: In a new introduction for the re-release of his book, *Earth in the Balance*, Vice-President Al Gore "warns global warming is more of a threat than ever… the world must... protect the ozone by reducing pollution." … In his 1992 book he wrote 'It ought to be possible to… completely eliminat[e] the internal combustion [in] twenty-five year[s].' [Continuing in his new introduction]… 'I am proud that I wrote those words in 1992, and I reaffirm them today.'" Thomas Ferraro. Reuters, 4/21/00Europe Needs 85 New Nuclear Plants to Beat Global Warming: "At least 85 new nuclear power plants must be built in Europe in order to prevent carbon dioxide emissions from increasing, say a new European Commission report… Under the Kyoto Protocol, the European Union is committed to reducing carbon dioxide levels by eight percent from 1990 levels by the five year period 2009 to 2012… Europe's nuclear power stations are due for decommissioning after 25 to 30 years service." Helen Andre, ENS, 4/21/00Tornados Destroy Kansas Homes: "A line of severe storms stretching from Kansas to Missouri unleashed at least four tornados that destroyed homes and businesses and flattened a carnival." AP, 4/21/00Hundred of Thousands of People Facing Drought in Western India: "Hundreds of thousands of villagers are battling acute shortages of food, water and animal feed with the worst drought in 100 years hitting parts of western India." AP, 4/21/00Earth Charter Sets Course for Sustainable Living: "[E]nvironmental leaders from around the country are gathered in Washington, D.C., to find way to implement the Earth Charter for sustainable living... 'It's a declaration of widely shared values and common goals. It sets forth fundamental ethical principle for protecting the environment, building a strong community locally and globally, and a sustainable way of life. It's an expression of hope and a call to action," said Steven Rockefeller, chairman of the Earth Charter international drafting committee." Robinson Shaw, ENN, 4/21/00Sierra Club Awards Toyota Prius: The Sierra Club has given its Excellence in Environmental Engineering Award to the Toyota Prius, a hybrid car that gets 50 miles to a gallon of gasoline by utilizing two sources of power, a zero-emission electric motor and super-low-emissions gasoline engine. In addition, it also harnesses energy each the time brakes are applied. ENN, 4/21/00APS Announces Solar Energy Expansion Plans for Earth Day 2000: "APS will nearly double the size of its solar facilities in Arizona over the next year to further reduce air emissions and to advance the development of renewable energy… 'APS is proud to be leading the way toward furthering the development of the earth-smart technology,' said Ed Fox, Pinnacle West vice president of communications, environment and safety." Business Wire, 4/21/00Cyclone Victims in India's Orissa Hit by Heatwave: "[A] million people [recently hit by a devastating cyclone]… are enduring over 40 degree Celsius (104 degree Fahrenheit) temperatures… 'It's getting hotter by the day… it seems as if we are being burned alive,' says Renubala Patro… sole survivor of the [most recent] cyclone in a family of five." Reuters, 4/24/00Sandstorm Sweeps Inner Mongolia: "For the eighth time this spring, a sandstorm has swept the central and western part of the Inner Mongolia Autonomous Region. The sky in Hohhot, the capital of the region… was covered with floating sand." Xinhua News, 4/25/00Deadly storm Hit Northern Bangladesh: "A tropical storm tore through northwest Bangladesh… killing… 16 villagers." AP, 4/25/00Central China Suffers Severe Drought: "Hubei Province in central China is suffering its most severe drought in half a century. More than 980 reservoirs in the province have reported alarming drops in water levels." Xinhua News, 4/25/00Hurricane Forecaster Sees Unprecedented Damage in Next Decade: "The nation's top hurricane forecaster [Bill Gray]… predicted increased storm activity over the next 15 to 20 years, with damage five to ten times worse than ever before in the Gulf and Atlantic Coast states." AP, 4/25/00Severe Drought Hits 50 Million in India: "[S]evere drought is punishing 50 million people… The desert state of Rajasthan and adjoining Gujarat are the worst affected. The water table has been dropping since November the region endures its third year of drought." Neelesh Misra. AP, 4/26/00Proposal for Burying Carbon Dioxide: A unique alternative to controlling carbon dioxide emissions has been getting more attention lately in the U.S. The U.S. Energy Department is spending about \$29 million to study carbon sequestration, disposing of carbon dioxide after it's produced. Suggested places for disposal are: "Oil fields…Coal seams… soil… Deep underground… [and] The ocean." Many areas could benefit from the injection of carbon dioxide. It could make hard-to-reach oil pockets more easily accessible, turn coal seams into sources of natural gas," and feed plants and trees. Malcolm Ritter. AP, 4/28/00U.S. Agencies in Denver to Utilize Wind Power: "All U.S. agencies in the Denver area will be powered in part by wind under the biggest- ever federal contract for "green power," [according to] Energy Secretary Bill Richardson. The agencies have agreed to buy 10 megawatts of power yearly from wind farms operated by Public Service Co. of Colorado and other utilities." AP, 4/28/00Study Proves Green Power Most Effective in Cutting Pollution: A study by Citizens for

Pennsylvania's Future offers proof that "switching to green power is the single best action Pennsylvanians can take to cut pollution and protect human health. The report established that each family that switches to renewable energy removes an amount of pollution equal to planting 950 trees or not driving 20,000 miles." PRNewswire, 4/28/00

Heat Wave Could Bring Summer Blackouts in California: There is a very real possibility that a heat wave in California, lasting more than four or five days this summer could result in blackouts, or rolling brown-outs, due to a "short-term power shortage." The rise in demand for electricity in order to support technology, such as computers, has resulted in its increased demand, and has not been met with increased providers. As a temporary solution the Independent System Operator, who manages most of the state's energy use, will ask customers to "reduce usage and refrain from any nonessential power use… 'When we start calling, we're not crying wolf,' said Terry Winter, the ISO's chief executive officer." MSNBC, 4/29/00

Drought Grips Pakistan and Afghanistan: Pakistan and Afghanistan are in the grips of their "worst drought for a century." With little rain forecast, officials are concerned "the problem will worsen." BBC, 4/30/00

DOE Announces Wind Power Grants: The Department of Energy has issued \$2.7 million in grants that will be primarily used to educate state lawmakers and regulators about using more wind power in the United States. "The 11 grants… are the first to be awarded under the Wind Powering America program launched last year by Energy Secretary Bill Richardson." UPI, 5/2/00

NOAA Weather Satellite Launched Successfully: The National Oceanic and Atmospheric Administration's GOES-L weather satellite was successfully launched from Cape Canaveral Air Force Station in Florida. "The satellite, designed to monitor hurricanes, severe thunderstorms, flash floods and volcanoes, will give meteorologists [the ability] to better forecast weather across the United States [in a timely manner]." Robinson Shaw, ENN, 5/3/00

Soaring Sea Temperatures Destroy Belize Coral: "The highest sea temperatures ever recorded, which scientists suspect were caused by global warming and the El Nino weather phenomenon, have destroyed coral in Belize for the first time in 3,000 years." Reuters, 5/3/00

China Coastal Province Successfully Controls Pollution: According to Li Jianxin, deputy director of the Liaoning Provincial Bureau of Oceanography, "due to intensified pollution reduction measures, [s]ubstantial improvement has been reported in the ecological environment of the Bohai Sea and polluted waters of all shade have basically disappeared." Xinhua News, 5/4/00

BP Amoco Invests Substantially in GreenMountain.Com: BP Amoco is buying an initial 18.5 percent shareholding in GreenMountain.Com, the "leading marketer of cleaner electricity to consumers in three deregulated states where households can choose their energy supplier… Formed in 1997, GreenMountain serves more than 100,000 households in California, Pennsylvania and New York… 'GreenMountain has built a powerful environmental brand by showing people their energy choices can and do make a difference.' Said Anne Quinn, group vice president of BP Amoco's Gas and Power business in the Americas." PRNewswire, 5/4/00

Honda to Increase Production of Hybrid Car: "Honda plans to increase production of its gasoline-electric hybrid car, the Insight… to 6,500 vehicles in the next year. 'Consumer interest and demand has far exceeded our expectations,' said Tom Elliott, executive vice president of American Honda." The Insight has an EPA rating of 61 mpg in the city and 70 mpg on the open road. ENN, 5/5/00

Ford Tests Low Pollution Propane SUV: Ford has begun testing 24 propane powered Excursions in 20 cities for a two-year study. The nearly 19-foot, nine-passenger SUV has emissions that are 62% lower than legally required. "The nationwide test… will determine whether there is a market for cleaner alternative fuel technology in a heavy duty SUV." UPI, 5/5/00

New Car Sharing Program in San Francisco Area: San Francisco's Bay Area Rapid Transit and Hertz have implemented a car-sharing program for commuters using the Fremont BART station. Vehicles will be made available for use between the BART station and local business during the day, and between the station and commuters' home in the morning and at night. "The fee for the program is \$400 a month, which includes guaranteed parking near the Fremont station entrance and full maintenance of the car, including refueling up to 1,000 miles a month." ENN, 5/9/00

People Dying in Drought-Ravaged Pakistan: "127 people have died amid blistering temperatures and a severe water shortage… 'General Pervez Musharraf asked people to pray for rain." S.M. Quereshi, AP, 5/9/00

Sandstorms Bring Serious Damage to Inner Mongolia: "Recent frequent sandstorms in North China's Inner Mongolia Autonomous Region have resulted in devastation of farmland as well as losses of tens of millions of yuan." Xinhua News, 5/9/00

New Anti-smog Fuel Due in Houston Area: A new gasoline mixture intended to reduce smog will be the only fuel available in the greater Houston area from June 1 to September 15. Due to short supplies, problems with refining and an ongoing patent dispute, it may be more costly (2-5 cents) "The U.S. Environmental Protection Agency says use of the new fuel will be comparable to pulling 6 million cars off the nation's roads, including more than 2 million in Texas." David Ivanovich and L.M. Sixel, Houston Chronicle, 5/10/00

Iacocca's E-Bike Gets New Distributor: "Total EV, a distributor of electric bicycles and scooter will [soon sell]… Lee Iacocca's E-Bike." Iacocca expressed pleasure at the partnership. "By putting electric bicycles in every garage, we'll improve our quality of life, help clean up the environment and have a little fun… [W]e share a commitment to a clear safer more enjoyable future." ENN, 5/11/00

Goddard Space Flight Center Switches to Landfill Gas for Heat: "NASA's Goddard Space Flight Center will soon heat its buildings by burning landfill gas under a contract awarded… to Toro Energy of Maryland. The contract provides for modification of two Goddard boilers in the space center's central heating plant, installation of a pipeline to transport landfill gas and construction of a gas-treatment facility at Sandy Hill landfill in Bowie, Maryland." ENN, 5/11/00

Ford Says SUVs Pose Hazards: "Ford Motor Co... says sport utility vehicles are environmentally unfriendly, chug gas and can be a danger to drivers in smaller vehicles… Ford admits that 'with few exceptions, its products are not industry leaders in fuel economy." AP, 5/12/00

Climate Warms as Black Soot Traps Sun's Heat: "Soot… may be a major contributor to global climate change. Scientist have found that airborne black soot has the capacity to raise regional temperatures far more than carbon dioxide." Cat Lazaroff, ENN, 5/15/00

Tornadoes in Iowa Injure at Least 10: "Tornadoes swept through… northeastern Iowa… The twisters… cut a swath about 10 miles wide… 'Fortunately, it did not go through any densely populated areas,'" said Black Hawk County Sheriff's Deputy Tony Thompson. AP, 5/15/00

Wind Energy Use Up in North Dakota: The use of wind turbines as a source of energy is increasing in North Dakota. According to a 1991 study by the U.S. Department of Energy's Pacific Northwest

Laboratory. "With some of the concerns about the environment and global warming, the nice thing about wind energy is that it's emission-free- there are no byproducts to be concerned about," said Russell Makeeff, former head of the Renewable Energy Association of North Dakota. "Suddenly, the power companies are realizing that wind can be an energy mix… [and] can work well with hydropower [as well as] coal power." AP, 5/15/00 Kennedy Heir Links Ecology to Economy: Robert F. Kennedy Jr., guest speaker at an annual dinner in Pueblo, Colorado, stressed that a strong environmental policy is also good economically. "We can't separate the environment from the economy. Nature enriches us economically-but also aesthetically… spiritually… and culturally… From the beginning of our country, nature has been a unifying theme." Mary Jean Porter, The Pueblo Chieftain, 5/15/00 Bearing Up to Climate Change to Cost UK Billions: "Strengthening coastal and river flood defences to withstand climate changes could cost 1.2 billion pounds… for England and Wales… Priority areas… are water resources, flood protection, building and infrastructure, habitats and species and planning." ENN, 5/16/00 Water Crisis from India to Morocco: "[A] water crisis now exists from India… The Middle East… Northern Africa to Morocco on [its] west coast… [P]eople are leaving scorched land in search of water and food in cities… The Tigris and Euphrates rivers… dried to 20 percent… of normal flow." ENN, 5/16/00 McCain - Global Warming for Real: "Sen. John McCain expressed concern... about the 'mounting evidence' pointing to global climate change and the potential for harm." During a hearing before his Senate Commerce Committee on global warming, various scientists testified "the surface of the Earth is warming… concentrations of… greenhouse gases have significantly increased… there's plenty of evidence humans have something to do with it." H. Josef Hebert, AP, 5/17/00 Flood Hits Central, Southern Somalia: Heavy rains following a drought in central and southern Somalia have resulted in floods, causing "many river banks to overflow, submerging… villages… [and] washing away livestock and plants." Xinhua News, 5/17/00 Drought Could Cut Polish Grain Harvest by Thirty Percent: "Polish grain crops could be badly affected by the current drought and the grain harvest could be 30% lower than expected… Some central parts of the country have not seen any rain for six weeks. 'If there is no rain in the next week or so, the situation could be dramatic in some regions', said to Agriculture Minister Artur Balazs." Bridge News, 5/17/00 Clinton Administration Moves to Curb Diesel Truck and Bus Emissions: "The Clinton administration… will propose rules to eliminate 90 percent of the pollutants from the diesel smokestacks of 18-wheelers, heavy-duty construction trucks and passenger buses beginning in 2006, the Washington Post reported. The proposed regulations… would require petroleum refiners to cut 97 percent of the amount of sulfur now found in their diesel fuels… The rules would also require new over-the-road truck… to begin using catalytic converters and computerized pollution controls [that are presently required on all cars]." ENN, 5/17/00 Southern California Metropolitan Water District Praised by National Drought Commission for Supply Reliability: In the recently released National Drought Policy Commission report, The Metropolitan Water District of Southern California was praised for its "focus on preparedness and efficient resource management strategies… 'Metropolitan has long been involved in climate change research, keeping a watchful eye on scientific developments that… influence future planning decisions,' said Metropolitan General Manager Ronald R. Gastelum." Business Wire, 5/18/00 Floods Kill 93 in Indonesia, Hundreds Missing: "At least 93 people were killed when floods triggered by two days of heavy rains swept away villages in Indonesia's West Timor… In some areas, the floodwaters were up to seven feet deep." Reuters, 5/18/00 EPA Unveils New Standards: "Under rules unveiled Wednesday by the U.S. Environmental Protection Agency, oil refiners are going to be required to produce virtually sulfur-free diesel fuel while engine manufacturers are going to be required to reduce pollutants by more than 95 percent." Diesel engine makers announced at the same time, their willingness to meet these new standards. Melita Marie Garza, Chicago Tribune, 5/18/00 Marine Disasters in China Result in Costly Human Consequences: "[T]idal storms in 1999 caused a total of 600 million dollars in direct economic losses and sank 65 ships," according to Wang Fei, director of the Marine Environmental Protection Department of the State Oceanic Administration. Xinhua News, 5/18/00 Army To Test Clean Fuels: The Army will begin testing cleaner-burning alternative fuels for the National Energy Technology Laboratory this fall. "Under a formal agreement… the Army will equip its fleet of Humvees, tanks and Jeeps with… instruments to monitor how… fuels burn, [and] then send… data back to Lab." Vicki Smith, AP, 5/19/00 Warmest January-April on Record in United States: "The first third of 2000 marked the warmest January-April period in the 106-year-old record of the National Oceanic and Atmospheric Administration… 70 percent of the country experienced much warmer than normal temperatures… less than 1 percent was cooler than usual… [B]oth land and ocean temperatures were well above the 1880-1999 long-term mean for April." UPI, 5/19/00 Wind, Snow and Rain Strike Plains: In a storm pattern that stretched from the Colorado mountains to western New York, snow fell in Colorado and Wyoming, and tornadoes, winds and heavy rain battered the Midwest. "More than a dozen tornadoes were reported across Colorado's northeastern plains… [i]n Wisconsin… flash flood[s]… Deep drifts of hail… in Kasota Minnesota… Mudslides in… steeper terrain closer to Mississippi… gusting winds up to 70 mph in South Dakota." Jessica Fargen, AP, 5/19/00 Thunderstorms Disrupt Air Traffic: "United and Delta canceled or delayed hundreds of flights Friday [due to] thunderstorms stretching from Texas to New England." MSNBC/UPI, 5/19/00 Waste Management and Processors Inc. Facility in Pennsylvania to Produce Aero-Sulfur, Low Particulate Diesel Fuel: The U.S. Department of Energy has authorized funding for the construction of the "nation's first proposed facility to convert coal waste or culm and silt to a clean diesel-like liquid fuel." PRNewswire, 5/19/00 Floods Hurt East Timor Coffee Harvest: "Five days of deadly flooding across Timor island may also have spoiled East Timor's… coffee harvest… [M]ore than 100,000 people are still displaced… Many roads... washed away… bridges… collapsed." AP, 5/20/00 Kuwait Temperature Hits Springtime 115 F Record: Temperatures in Kuwait rose to a record 115 Fahrenheit in the shade… [E]xperts predicted a possible high of 127.4 Fahrenheit in July." Reuters, 5/20/00 First Heat Wave Continues in Southern California: "A strong ridge of high pressure over Central and Southern California is responsible for creating the year's first heat wave… Additional high temperature records are likely… 'The combination of high temperatures and limited power sources make conservation an absolute necessity

if we are to keep everyone's lights on,' said Southern California Edison spokesperson Clarence Brown." MSNBC, 5/22/00South Dakota Floods Declared Disaster: "President Clinton declared that area struck by a blizzard, flooding, landslides and mudslides in South Dakota… to be a 'major disaster.'… The storm dumped… 2 feet of snow in parts of the Black Hills." AP, 5/22/00Carbon Dioxide Has Choke-Hold on Coral Reefs: "By 2065, carbon dioxide levels are expected to be twice what they were before the Industrial Revolution." This could have a devastating effect on coral reefs because historically, when carbon dioxide increases, reefs disappear, and when levels drop off, they (reefs) come back. ENN, 5/22/00GM, Giner Collaborate on Fuel Cell Cars: General Motors is collaborating with technology and electrochemical research company Giner Inc., in order to develop clean and quiet fuel cell vehicles. The joint venture to be called Giner Electrochemical Systems, will be based in Waltham, Massachusetts. AP, 5/23/00Fuel Cell Company Wins Navy Contract: The U.S. Navy has awarded a \$16.5 million contract to FuelCell Energy Inc. to "build and test a diesel-fired fuel cell that can generate electricity for ships or makeshift island bases while emitting very little air pollution… The Navy wants to develop 2.5-megawatt fuel-cell power plants… FuelCell Energy' project has created… newer way to incorporate diesel fuel, which is already used to power non-nuclear ships and submarines." David Hamner, Waterbury Republican-American, 5/23/00Japanese Researchers Develop "Flying Train": "Japanese researchers have just developed a "flying train" that promises high-speed train travel at a quarter of the energy cost of other conventional and experimental methods. Using high-speed technology known as magnetic levitation, or "maglev" and a physical phenomenon called the "wing in ground (WIG) effect. Yasuaki Kohama and colleagues at Tohoku University Institute of Fluid Science in Sendai, Japan, have developed a train that rides 5 to 10 centimeters off the ground, and according to Kohama, 'can run at least 10 times less energy that that of maglev, and one third of the conventional high speed train if they [could] go up to 5000 kilometers per hour (300mph).'" Dan Whipple, ENN, 5/24/00National Weather Service Forecasts No Break In High Temps for Drought-Prone Areas of US: According to the National Weather Service, even though the effects of La Nina are anticipated to fade in the next several months, "above normal temperatures which speed the evaporation and soil moisture, are expected to keep drought-weary states dry for the rest of the spring and into summer… [P]redicted to be hardest hit are southern Arizona, Texas, Louisiana, Mississippi, Arkansas, Alabama, Tennessee, Florida, Georgia, Nebraska, Iowa, Illinois and Indiana." Robinson Shaw, ENN, 5/24/00Hailstorm Injures 100 in Japan: "More than 100 people suffered minor injuries today when hailstones bigger than golf balls fell on two states north of Tokyo… The largest hailstones …2.4 to 2.8 inches in diameter." AP, 5/24/00Senator Champions "Green Power" Conservation Plan: "U.S. Senator Peter G. Fitzgerald (R-Illinois)… announced legislation… to use renewable energy, like solar and geothermal power, to provide electricity in some federal facilities… [A]lso requir[ing] electric utilities to provide information about the sources and environmental impact of their energy." PRNewswire, 5/24/00Senator Fitzgerald Leads Way for Ethanol Research Funding: At Senator Peter Fitzgerald's urging, the House-Senate Agriculture conference committee has designated \$14 million for the ethanol research plant at Southern Illinois University at Edwardsville. "The ethanol research plant is joint federal and state project that is expected to cost \$20 million... 'The national ethanol research facility will provide a place where new ethanol production technologies can be tested and perfected for broad commercial use.' [said] Fitzgerald." PRNewswire, 5/24/00Killer Seaweed Choking Marine Life Along Florida Reefs: "'Killer Seaweed,' [a] seaweed that feeds on water polluted by agricultural runoff and sewage, [is] crowd[ing] out and smother[ing] coral, invertebrates and other native ocean reef organisms. [It is rampant] along six miles of deep-water reefs off South Florida, where it is choking marine life… [and] fertilized by sewage… pumped into Florida's aquifer by 3,000-foot-deep wells." AP, 5/25/00Dry Cleaning Goes Green: Two "green" entrepreneurs from North Carolina, Joseph DeSimone and Kirk Kinsell, hope to make the dry cleaning industry eco-friendly through the use of a patented liquid CO2-based cleaning solvent. "Using Micell technology, clothes are washed in liquid CO2 using patented, earth-friendly detergents to dissolve and wash away the dirt. Once the wash is completed, the CO2 and grime are then sucked away, separated and recovered. The greasy residue is hauled back to Micell Technologies, where it is repackaged and used as a fuel. The CO2 is recycled for another load of laundry." Their ultimate goal is to develop a franchise called Hangers Cleaners which will use this technology exclusively. Claude Morgan, ENN, 5/25/00Storms Pound Southeast, Plains: "[P]owerful storms slammed into the Southeast and Plains, toppling trees and causing flash flooding…" Tornadoes touched down in the Salt Lake City area and Kentucky, hurricane-force winds toppled trees, flooded areas and rained hail in north-central North Carolina, Tennessee, and lightning struck 50 miles east of Oklahoma City and Calico Rock, Arkansas. AP, 5/26/00Metcalf Energy Center Plans Big Emissions Cut; NOx to be Reduced by Third, Ammonia By Half: "Capitalizing on improved technology and operational refinements, the Metcalf Energy Center (MEC) will have the lowest annual NOx emissions of any plant its size ever licensed in California, Calpine and Bechtel, joint venture partners in the MEC announced today. Annual emissions of oxides of nitrogen (NOx) are to be reduced by 33%… Emissions of ammonia are to be cut by half. 'Mindful of concerns in the community, Calpine Corporation and Bechtel Enterprises have been exploring every opportunity to further reduce emissions,' announced Curt Hildebrand, Calpine vice president and MEC project director." Business Wire, 5/30/00Metro Birmingham to Get Lower-Sulfur Gasoline: "In a joint announcement with Alabama Governor Don Siegelman, BP Amoco Senior Vice President Deb Copeland said that BP and Amoco service stations in the area will offer lower-sulfur BP Super 93 and Crystal Clear Amoco Ultimate premium gasoline year round with a 30 part-per-gallon average sulfur level, 80 percent lower than legally required." PRNewswire, 5/31/00 {mospagebreak title=June}JuneWhite House and Kremlin Join Forces to Combat Global Warming: "President Clinton and President Putin … announced a new commitment between the United States and the Russian Federation to strengthen joint efforts to combat global climate change… pledged… expand cooperation on… measurement and reporting of greenhouse gas emissions… strong… international rules… maximize… the [Kyoto] Protocols's… tools to achieve cost-effective emissions reductions." U.S. Newswire, 6/4/00Florida Fires Close Highway Due to Smoke: "Wildfires' smoke… closed 14 miles of a major north-south

interstate… Drought has left much of Florida extremely susceptible to fire… Since January 1st, 3,313 wildfires have burned 11,852 acres across Florida." Mike Schneider. AP, 6/5/00Thunderstorms Wreak Havoc in Wisconsin: "Thunderstorms packing heavy rain and strong winds pounded Minnesota and Wisconsin… A tornado touched down in southwest Wisconsin… In parts of Minnesota, up to five inches of rain flooded communities… 'It was just like a wall of water that came through,' said Jim Cooper... emergency management coordinator. 'It happened so fast… we were not able to get in and sandbag.'" AP, 6/5/00New Fires Flare Up in North, Central Florida: "More than a dozen new wildfires flared up across drought-stricken Florida… [F]irefighters continued to grapple with scores of blazes… Fifteen new fires flared on Monday in the Orlando area, three in Putnam County… and another in Marion County." Reuters, 6/5/00Drought Threaten Wildlife Species: "A third straight year of unusually dry weather in the U.S. Southeast is forcing alligators to find new homes, threatening endangered mollusks and drying up cool springs in the Flint River." AP, 6/5/00Drought in Afghanistan Threatens Millions: "Afghanistan's worst drought in almost 30 years is parching crops, draining wells and causing widespread famine and economic hardships… Last winter brought much less snowfall than the winter of 1998-1999,… also a drought year. The water table has dropped throughout much of the country, drying up the shallow wells relied upon for drinking water in most areas." Cat Lazaroff, ENN, 6/6/00DynaMotive Technologies Joins With Genergy to Test BioOil as Clean Fuel: "DynaMotive Technologies Corporation… signed an agreement with Genergy to test Dynamotive's BioOil as a clean fuel to generate 'green' power."… This is important because it will develop and expand the gas turbine market for potential users of BioOil fuels. "[S]aid Antony Robson, Managing Director of DynaMotive Europe Limited, 'This builds on our strategy of validating BioOil… increasing range of power generation equipment… ultimately provide customers with… flexibility in… selection of BioOil-fueled systems.'" CNW, 6/6/00Forecaster Increases Hurricane Prediction: "Long-range hurricane forecaster William Gray predicted today there will be 12 named storms, eight hurricanes and four major hurricanes this season, an increase of one in each category… [He] said the changes were prompted by a series of changes in atmospheric and oceanic phenomena [called] 'climate signals.' 'There has never been a case where La Nina has remained as cold as at present and El Nino has then developed before the season is over.'" UPI, 6/7/00Fire Danger Rises in Hot West: Due to extreme drought conditions in many western states, forecasters are predicting things will get worse before the get better. "[C]onditions are ripe for wildfires… State Forester Firewarden Roy Treoweth said warm, dry breezy days are drying out vegetation in all area but a few parts of northeastern Nevada. Much of the southern and western parts of the state already are primed for fires." AP, 6/7/00Floods in China Kill 74 People: "Flooding and landslides in separate regions of China have killed 74 people and left thousands homeless… Torrential rains triggered floods and landslides… Each summer, floods due to heavy seasonal rains cause widespread damage in many parts of China." AP, 6/8/00Oakland Takes Key Step Toward Becoming World's Largest Green Power City: "A Public Works Agency subcommittee recommended to [Oakland's] full City Council… to approve a power purchase contract for green electricity with ABAG Power to meet 100% of its electricity needs with green power." Business Wire, 6/7/00DaimlerChrysler Taps Landfill Gas to Power Plant; Reduces Greenhouse Gas Emissions and Cuts Costs: "DaimlerChrysler Corporation is tapping waste gases from the decomposition of landfill trash to provide power for its two St. Louis, Missouri, assembly plants." The landfill gas is 50 percent methane, also a greenhouse gas. ["T]he project will reduce use of fossil fuels and eliminate a source of greenhouse gas emissions." PRNewswire, 6/8/00Florida Seeks Federal Drought Relief Aid: "Gov. Jeb Bush urged federal officials… to declare all of Florida an agricultural disaster area as the drought stricken state struggles with searing heat, parched crops and smoky wildfires. 'This is one of the most unique and threatening weather phenomenons that the state of Florida has ever experienced.' Bush said." Michael Peltier. Reuters, 6/9/00Rising Temps Forecast Changes: A four-year study of the effects of global warming on the United States projects that if the nation's climate increases by five to ten degrees over the next 100 years, there will be "a complex mix of positive and negative impacts' [with some] surprises…. [E]ntire ecosystems… will shift northward as temperatures increase… coastal area will… cope with higher sea levels and… more frequent storms... Cities will [experience] more frequent heat waves… droughts… likely in parts of the Midwest… [O]cean levels [will] rise… barrier islands… disappear. Tree, fish and animal species will migrate northward everywhere." H. Josef Hebert, AP, 6/9/00Rains in Guatemala Leave 21 Dead: "The start of the rain season has caused at least 21 deaths and more than 2,000 victims in Guatemala… Meteorology Institute sources said that the rain has surpassed this year by one hundred percent the recording of the last decades." Xinhua, 6/9/00Global Warming - House Still Blind: Even though "Senators [are] shifting their debate from 'Is global warming real?' to 'How can we prepare for global warming in an economically sensible way?'" , this shift in thinking has been slower to reach the "House of Representatives… expected to consider a measure that bars federal officials from taking almost any steps to confront climate change and mitigate its effects." L.A. Times, 6/11/00, M4Southeast Suffers Through Drought: "Across the Southeast, farmers are watching their crops wither in the fields," and cattle are being slaughtered early because they are running out of food. "The Southeast is in the grip of a drought the like of which some states have not seen in generations." Vickie Chachere. AP, 6/12/00Floods Hit Nepal's Western Region: "Incessant pre-monsoon rains have brought… pervasive flood in the mid-western and western regions of Nepal." Xinhua News, 6/12/0046 Die in Torrential Rain in North India: "At least 46 people were killed in house collapses, landslides and flash flood, triggered by heavy rain in Uttar Pradesh stae in north India." Xinhua News, 6/12/00Heavy Rains and Wind in Catalunya: Torrential rains and gusting winds killed two elderly people, stranded 500 tourists and drove 200 people from their homes in eastern and northern Spain." AP, 6/12/00Hundreds Evacuated From Floods in France: "Hundreds of people were evacuated from their homes in southern France and the Pyrenees mountains… when violent rain and snowstorms caused flooding." AP, 6/12/00Drought Continues in South: "One of the worst droughts on record… in the South, continu[es] to threaten wildlife and agriculture with no relief in sight… The National Weather Service said this could be the driest 6-month period in southern Alabama in more than a century." UPI, 6/12/00Daimler's Hubbert Calls for

"Urgent" Action on Gasoline: "Daimler-Chrysler's Jurgen Hubbert has issued an "urgent" call for the global oil refining industry to clean up its gasoline and diesel product. If the oil industry failed, Hubbert threatened by implication, automakers would opt for hydrogen fuel cell and other alternate fuel technology and leave the oil industry behind." Will Harvie, BridgeNews, 6/12/00
 Downtown Detroit Hit by Power Outage: "A power outage struck downtown Detroit on Tuesday afternoon, cutting electricity to police and government offices, stranding people in elevators and forcing the closure of 70 schools." Reuters, 6/13/00
 Mother Nature Turns Up the Heat: "Summer has arrived in the Southland about a week early… According to National Weather Service specialist Stuart Seto, highs… should be about 15 degrees warmer [today]… 'This is unusually high for this time of year… We don't usually see these sort of highs until later in the year, even the fall.'" MSNBC.com, 6/13/00
 Harsh Change Predicted for State Climate: "Global warming over the next 100 years will probably cause drastic changes in California's climate-increasing the state's bouts with fires, floods and drought, a new federal report says." Rising temperatures could augment California's periodic water shortage even though they may actually increase the overall rainfall. This is due to a possible shift in rain and snow away from the areas where it counts most, the Sierra Snowpack, where California's own natural water supply originates. "The report `paints quite a sobering picture of the future,' President Clinton said… 'I have tried for several years to get the United States to respond, to do our part. We are the largest emitter of greenhouse gases in the world." Kenneth R. Weiss, LA Times, 6/13/00
 UN Conference Takes Up Technical Issues on Global Warming Treaty: "Some 2,000 representatives from 150 countries opened a week of talks Monday aimed at resolving technical and political differences over a global treaty on reducing emissions of carbon dioxide and other global-warming gase… A protocol for reducing greenhouse gases worldwide was adopted in Kyoto, Japan in 1997, [but has yet to be enforced] because most governments are holding off ratifying it until agreement is reached on how it will operate in practice." AP, 6/13/00
 Flour City International Completes Prototype of Device for the Wireless: Management and Transference of Electricity Generated by Photovoltaic Panels

"Flour City International Inc… announced the completion of the first prototype for its wireless device developed to harness and transfer electricity generated by photovoltaic panels. The patent-pending technology will eliminate the network of wires currently used to capture and transfer electricity generated by PV panels to battery storage for… electricity in mid to high-rise buildings." Business Wire, 6/13/00
 World Petroleum Congress Confronts Environmental Issues as Well as Activists: 3,000 oil and gas executives and officials from 80 countries have convened at the World Petroleum Congress in Calgary Canada. At issue are the growing expense of production of cleaner burning fuels, adaptation to climate change and the demand for carbon free energy. "Most of the easy environmental improvements have now been made, said Bob Peterson, chief executive of Imperial Oil, and that due to the expense of upgrading and retooling refineries, governments and industry must work out uniform standards." At the same time dozens of activist groups protested outside the congress and simultaneously held their own convention, voicing their concern with the effects of burning fossil fuels on climate change, as well as "the oil industry's record on the environment and human rights." ENS, 6/13/00
 Floodwaters Take Deadly Toll in India's Remote Northeast: "Floods triggered by heavy monsoon rains have killed at least 20 people and marooned more than 10,000… The floodwaters also threatened to submerge the 430-square-kilometer Kaziranga National Park." AP, 6/14/00
 Smog From Huge Ontario Power Affecting Upstate New York: New York is being inundated with three times the rate of nitrogen oxides allowed in New York, thanks to emissions from North America's largest coal-fired power plant in Nanticoke, Ontario, Great Lakes United, [63 miles north] equipped with second-rate pollution equipment. "[N]egotiators are meeting… in Washington to consider smog reductions under the United States-Canada Air Quality Agreement." Individual.com, 6/14/00
 Northern China Fights Dust Bowl: "A dozen massive dust storms [have] scoured northern China this spring… Prolonged drought, excessive grazing and timber cutting and the cultivation of grasslands, riverbanks and mountains with corn and other grains have made northern China a dust bowl… 'There's a connection between the dust storms and ourselves,' says Liang Congjie, head of the environmental group Friends of Nature. 'People take eating mutton for granted... But the sheep are grazing pastures bare.'" Elaine Kurtenbach, AP, 6/15/00
 Northern California Heat Wave Relents: "Temperatures edged lower around northern California today after an early summer heat wave slammed the San Francisco area with a blast of triple-digit temperatures… San Jose… saw the temperature climb to a record 109F." Reuters, 6/15/00
 Spire to Convert Brownfield to Solar Brightfield: Spire Corporation's business unit, Spire Solar Chicago, will provide a 500kW photovoltaic system to be used at a reclaimed industrial dumping ground and landfill on Chicago's south side, converting an environmental Brownfield into a Solar Brightfield(TM). "This 500kW array [is] the first installment of the City's announced 2.5 megawatt PV array… the world's largest when completed covering… 10 acres." Business Wire, 6/15/00
 LADWP Invests \$6 Million in Solar During First Year of Effort: The Los Angeles Department of Water and Power… has awarded AstroPower Inc. a \$6 million contract to supply solar electric power modules. This contract is the largest single award for solar power since utility deregulation… 'This marks a new chapter in our quest to make solar power widely available in the City of Los Angeles,' said Angelina Galiteva, LADWP director of strategic planning. 'We hope that other energy companies throughout America will take our lead and give the people what they want: electricity that is clean, safe, and reliable.'" Business Wire, 6/15/00
 Floods Kill 120 in Mexico: "Floods caused by torrential rains have killed 120 people in the southern Mexican state of Oaxaca." Xinhua News, 6/16/00
 Chilean Storm Leaves 60,000 Homeless: "A powerful storm left some 60,000 people homeless in a midweek rampage across central Chile… Heavy snow blocked border crossings with Argentina." AP, 6/16/00
 Researchers Believe Global Warming May Affect El Nino Pattern: In a new report in Science magazine, two Princeton researchers, Alexey Federov and George Philander, propose that the frequency and intensity of the El Nino Southern Oscillation cycle follows a measurable pattern which possibly influenced by climate change. Looking at the increased intensity of El Nino in 1982 and 1997, they are considering what role global warming may be playing. "At the heart of all activity that influences sea surface temperature in the eastern tropical Pacific are… wind strength and

the depth of the transition zone between the warm and cold layers of the ocean [which] are supremely vulnerable to shifts in global temperature." Kathleen Wren, Science/MSNBC, 6/16/00 Spring Broke Record as Nation's Warmest: This spring was the warmest on record for the United States since 1910. "Climatologist Jay Lawrimore of the National Climatic Data Center said even though being reluctant to blame global warming directly, "[T]here is the possibility that there is some impact from global warming and it is amplifying the normal oscillations in our climate." AP, 6/17/00 Romania Seeks to Ease Drought Worries: "The Romanian government is struggling to quell public fears that the country's worst drought since 1947 will trigger runaway inflation and food shortages… The 2-month-old drought has wiped out an estimated \$330 million worth of cereal crops; sugar beets; corn; potatoes; sunflowers and hay." UPI, 6/18/00 Los Angeles Bars New Diesel Garbage Trucks, Buses: The Los Angeles air quality agency [AQMD] has voted to require almost 11,000 transit buses and garbage trucks to convert to cleaner burning alternative fuels. "Existing diesel buses and trucks will not be affected, [b]at any new purchases by government agencies, transit companies and universities in Los Angeles and a three county area covering Orange, Riverside and San Bernardino Counties, must use cleaner burning alternative fuels." Cat Lazaroff, ENS, 6/19/00 World Expo 2000 Hears Urgent Warning to Limit Resource Demands: "A pioneering analysis of the world's ecosystems reveals a widespread decline due to increasing resource demands… As part of the global dialogue at Expo 2000, the World Resources Institute warned that if the decline continues, consequences could be devastating." ENS, 6/20/00 Fargo in Emergency State After Rain: "[A] night of heavy rain left the city [Fargo] looking like a watery maze… The city got about 7 inches of rain in a six-hour period from Monday night into Tuesday, said Mayor Bruce Furness, who declared a state of emergency." Brian Witte, AP, 6/22/00 California Could Face More Blackouts This Summer: "California is at risk for power losses due to a lack of new generating units in the next two years, little construction of new power lines, less available power from neighboring states and climbing rates of population and economic growth within the state, especially in the hotter valley regions… Most power traders agreed that areas of California could experience blackouts… in the coming months. 'No doubt,' on trader said. '(Blackouts) could happen in Los Angeles too. There's just not enough supply.'" David Feliciano, David Given and Laura Hertzfeld; Bridgenews, 6/23/00 Operators of State Power Grid Declare "Stage One Emergency": Due to the recent high temperatures in the West, there has been an increased demand for energy as people turn to their air conditioners for relief from the near-record and record heat. Because of this, the California Independent System Operator has declared a "Stage One Emergency" and is calling on all customers to cut back on their power usage, thus preventing more severe measures, such as declaring a Stage 2 and 3 alert. At "Stage 2," certain customers agree to reduce their power use and at Stage 3, "rolling brown outs" are put into effect, when the ISO cuts off energy to different areas at different times. MSNBC, 6/27/00 Beach Properties Are Washing Away: "One of every four building near a coastline will be destroyed or severely damaged by erosion in the next 60 years," according to James Lee Witt, head of the Federal Emergency Management Agency. "If coastal development continues unabated, and if the sea levels rise as some scientists are predicting, the impact will be even worse." MSNBC, 6/27/00 Homeowners Urged to Conserve Power: "The California ISO declared a Stage 2 alert yesterday … as the demand for electricity peaked, due mainly to increased air-conditioning use." Pacific Gas & Electric, Southern California Edison and San Diego Gas & Electric were asked to "activate voluntary load management programs in phases as part of the Stage 2 alert." MSNBC, 6/28/00 {mospagebreak title=July} July Not Fun in the Summertime Oil Industry Backs Bush Campaign: "[T]he oil industry has pumped more than \$1.5 million into George W. Bush's campaign… [O]il executives believe Bush and the people he would appoint to key posts will be more receptive to their point of view… The industry has contributed less than \$100,000 to Gore's campaign." H. Josef Hebert. AP, 7/2/00 Midwest Storms Cause Some Flooding: "Severe thunder storms that pounded parts of the Midwest caused flash floods and left thousands of Wisconsin residents without power… Flash flooding was reported along the Mississippi River in the Davenport, Iowa, and Rock Island Illinois areas… Hail the size of golf balls pummeled some areas of southern Minnesota." Reuters, 7/3/00 Punishing Drought in Afghanistan: Afghanistan is experiencing the worst dry spell in 30 years, "devastating entire provinces in the south and relentless rains wipe out entire villages north of the capital… The drought has wiped out entire herds." AP, 7/3/00 China Battling Severe Drought: "China is going all out to fight against a devastating drought that has ravaged northern China. More than 40 million people are battling the severe drought every day." Xinhua News, 7/4/00 Heat Wave to Hit parts of Balkans from Romania to Greece: "A heat wave was expected to sweep through the Balkans… and countries from Romania to Greece… were bracing for temperatures that could soar to 43 degrees Celsius (110 degrees Fahrenheit)." AP, 7/4/00 Canadian Government Includes Innovative Landfill TEAM Gas Project in \$1.3 Million Investment: Canadian Minister of Environment, David Anderson announced funding for nine projects totaling \$1.3 million, which will include \$772,750 in a Technology Early Action Measures (TEAM) pilot project. The project, headed by CFS Alternative Fuels Inc. is intended to demonstrate converting landfill gas into liquefied natural gas for use in vehicles is cost effective. "The landfill gas project is an excellent example of how we can find ways to turn environmental problems into solutions," said Minister Anderson. "Projects like this prove that climate change solutions can offer both economic opportunities and environmental benefits," said Ralph Goodale, Canada's Minister of Natural Resources." CNW, 7/4/00 Abnormal Weather Afflicts China: "A series of climatic anomalies plagued China during the first half of this year, leading to climatic disasters in some regions, said Wen Kegan, director of the China Meteorological Bureau… From March to May, the average high temperature across China was second only to the same period of 1998 since 1961… [T]he average precipitation in north China was only 23 mm, the lowest in 50 years." Xinhua News, 7/4/00 Heat Wave Hits Southern Europe: "Hundreds of wildfires burned across southern Europe on Tuesday as the region remained in the grip of a heat wave that has driven temperatures as high as 120 degrees." Mihaela Armaselu, AP, 7/5/00 Funds for Pakistani Drought Relief Evaporate: Hundreds of millions of dollars intended for drought victims in the province of Balochistan, have disappeared. "It's not a question leakage, where small amounts may be pilfered. It's like a huge burst," said former chief minister of Balochistan, Sardar Akhtar Mengal, Ahmar Mustikhan. ENS, 7/5/00 Typhoon, Tropical Depression Hit Philippines: "A typhoon east of

the Philippines and a tropical depression blowing from the west dumped heavy rains over the main Philippine island of Luzon… killing at least three people and flooding wide areas." AP, 7/5/00Nation Faces Possible Power Outages: "With growing demand for electricity and a power industry in the midst of a rocky transition, customers are facing another summer of tight electricity supplies and possible rolling blackouts in some parts of the country… Power problems [that] already… surfaced in New England and California 'could be an ominous sign' of things to come'… said Energy Secretary Bill Richardson." H. Josef Hebert, AP, 7/6/00Fuel Cell Bus Field Trials Set for California: Ballard Power Systems and EXCELLSIS Fuel Cell Engines Inc. have announced plans to stage of field trials of pre-commercial fuel cell bus engines with SunLine Transit Agency in Palm Springs, California and Alameda-Contra Costa Transit District in Oakland California. "Through the California Fuel Cell Partnership, we will further validate our technology with the deliver of 25 buses over the next two years," said XCELLIS President Dr. Ferdinand Panik. Business Wire, 7/6/00Southeast Europe Scorched as Heat Wave Reaches Record High: "Scorching heat swept southeast Europe… breaking century-old records and sending temperatures from Romania to Italy and Turkey as high as 44 degrees Celsius (111.2 Fahrenheit)." Arid conditions contributed to 136 blazes in Bucharest, Hungary over a 24-hour period. "Meteorologist blame the heat on hot air masses Moving north from Africa." Patrick Quinn, AP, 7/6/00Minorities Could Be Hard Hit by Kyoto Protocol: "American minorities would suffer more than white Americans if the Kyoto climate change treaty is ratified by the U.S. Senate… argues a study released and supported by the Center for Energy and Economic Development. [The] study warns that the Kyoto Protocol would cause a ten percent drop in earnings among some 25 million black and Hispanic American workers." ENS, 7/7/00Nevada See Vast Potential for Geothermal Energy: "Senator Harry Reid, a Nevada Democrat, wants Nevada to lead the U.S. in the development of geothermal energy. 'Think of what we could do in research and other programs if we didn't have to import all this foreign oil,' he said at a conference of scientists, federal and state government officials and business people from across the country." ENS, 7/7/00Killer Algae Invades Southern California: "A mutant algae responsible for killing marine life throughout the Mediterranean has now invaded the seas off San Diego. The ocean weed smothers marine plants and animals, and releases a toxin that can destroy the eggs of many smaller species." ENS, 7/7/00Winds Cool Heat Wave in Europe: Temperatures have finally dropped by several degrees across some parts of southeastern Europe, which had been recently hit by a record-setting heat wave. AP, 7/7/00Climate Change Affects Polar Bears: "A new study by Ian Stirling, Nicholas J. Lunn, and John Iacozza, scientists with the Canadian Wildlife Service, concluded that polar bears are under threat of starvation from climate change due to melting sea ice." The Compendium Newsletter, 7/10/00Extreme Weather Across Europe: "Scorching heat claimed more lives, rekindled fires and closed weltering offices across southeast Europe." [However] an unusual cold snap in Switzerland, brought snow to Alpine passes forcing the closure of at least one to close. AP, 7/12/00Torrential Rains Pound Western India: "More than 100 people were buried alive in massive… as torrential rains pound across Western India… The monsoon rains drench India each year from July through September, but these are the heaviest rains in recent memory, weather officials say." ENS, 7/13/00Oil Field Stores Greenhouse Gas Underground: Saskatchewan's Weyburn oil field will become the world's newest site for storing carbon dioxide (CO2) underground." PanCanadian Petroleum has been pumping CO2 into the oil field since 1997 because it is a good solvent that aids in the separation of crude oil from the porous rock where it is located. The Weyburn Monitoring Project is unique in that, in addition to scientists and researchers being able to collect background information before the oil field is flooded with CO2, they will also be able to "better understand the interaction and relationships between oil recovery and CO2 storage." ENS, 7/14/00Quest for Reliable Power Turns to Fuel Cells: "The energy industry is packaging fuel cells and small turbine generators in new 'hybrid' mini power plants to make electricity more efficiently and cleanly than conventional generating stations for factories, office building, rural homes, hospital and other facilities. The new systems … may give the growing Internet economy a more reliable and higher-quality source of power, energy analysts believe." Leonard Anderson, Reuters, 7/14/00June Warmer Than Normal and Year-to-Date Temps Warmest on Record: "January-June 2000 was the warmest first half of the year on record… The six-month period was also the third direst year-to-date for Florida and the second wettest year-to-date for New York… [S]atellite data… indicated the presence of slightly warmer than normal temperatures in the lower half of the atmosphere over the U.S." NOAA, 7/14/00Report Helps Policy Makers and Journalists to Understand Economic Analysis of Climate Policies and Assessments: "A new report commissioned by the Pew Center on Global Climate Change explains how economic analysts use computer models to predict the costs and benefits of proposed policies, and why the predictions vary so widely." The report identifies five variables that explain the majority of differences: How the economy adjust to fluctuating energy prices; how this influences the development of new technologies practices as well as buying patterns; how the economy might respond to policy measures; policy environment affecting adjustments the economy might make and the benefits of reducing Greenhouse Gas emissions. "A clear understanding and interpretation of these determinants will help explain nearly all of the difference in climate policy cost estimates," said Eileen Claussen, President of the Pew Center. PRNewswire, 7/17/00High-Tech Senator Buys High-Tech Car: "Senator Bob Bennet (R-Utah), chairman of the Senate High-Tech Task Force, is the proud new owner of a high-tech car-a 2000 Honda Insight… He is the first member of the U.S. Congress to purchase an Insight… The Insight feature's Honda's 'Integrated Motor Assist' (IMA) system-a 1.0-liter, 3-cylinder gasoline engine combined with an electric motor for improved efficiency… It does not require an outside source of electric power [and]… never needs to be plugged in." PRNewswire, 7/18/00FuelCell Energy Selected by King County, Washington: "FuelCell Energy, Inc. has been selected by King County, Washington… to negotiate a fuel cell project using municipal digester gas and the Conmpnay' Direct FuelCell™ (DFC) power plant technology… A digester is a municipal waste treatment system that produces a methane-rich gas which can be fed to the DFC power plant as a fuel source. Jerry Leitman, president and CEO Fuel Cell Energy said 'We see this large water treatment application as further validation of our carbonate technology and its capability with multiple fuels for commercial applications.' Business Wire, 7/18/00WRI Urges G7 Governments to Stop

Undermining Commitments to Reduce Climate Change Threats in Developing Countries: "A new World Resources Institute study reveals that Canada, France, Germany, Italy, Japan, the United Kingdom and the United States, also known as the G7, privately continue to subsidize billions of dollars in exports and investments that encourage fossil fuel-intensive development [while] publicly assuring developing countries financial and technical assistance in reducing greenhouse gas emissions... 'It is the height of hypocrisy for the world's richest countries and their industries that oppose the Kyoto Protocol to finance new carbon emissions in developing countries while insisting that those same countries reduce their carbon emissions before the protocol can be ratified,' said Jose Maria Figueres, WRI board member and former president of Costa Rica." Business Wire, 7/18/00Dallas Declares Heat Emergency: "At least eight people have been killed by a week of temperatures above 100 degrees Fahrenheit in Texas and neighboring states… In Dallas health officials declared a heat emergency triggered by six consecutive days of temperatures over 100 degrees." Reuters, 7/18/00Heat Wave Continues in the South: "No relief was expected anytime soon from the deadly heat wave also baking Texas, Arizona, New Mexico, Arkansas, Louisiana, Oklahoma and Kansas." Dave Bryan, AP, 7/19/00Hot Weather Hits Alabama Hard: "All 67 Alabama counties have been declared federal disaster areas and many hospitals are reporting an increase in the number of patients checking in with heat-related problems… The hot weather and lack of rainfall have also caused wildfires, farming problems and pleas for people to cut back on water their lawns and gardens." MSNBC, 7/19/00Cal-ISO Declares Stage 2 Emergency: "[T]he California Independent System Operator (Cal-ISO)… declared a 'Stage 2 Emergency' and called upon Southern California Edison and other investor-owned utilities to begin voluntary 'load' curtailment programs… 'We're issuing a call to action, a call that everyone needs to take seriously,' said Pam Bass, SCE's senior vice president for customer service." PRNewswire, 7/19/00Heat Prompts Call for Energy Conservation: "With inland temperatures pushing 100 degrees and higher, the operators of the state's power grid are asking Southland residents to conserve energy… In Chatsworth… temperatures peaked at 105, breaking the old mark of 104 set in 1998." MSNBC, 7/19/00Greenland's Thinning Ice Signals Global Warming: "The massive ice sheet that blankets much of Greenland is thinning rapidly around its edges, a key sign of global warming, a NASA scientist said… [I]f all the ice sheet [is] melted, it could raise the world sea level by seven yards, according to an article published in the [same] journal Science, where the National Aeronautics and Space Administration team findings by were [presented]." Deborah Zabarenko, Reuters, 7/21/00French Compressed-Air Automobiles to Replace Mexico City Taxi Fleet: According to Rosa Zubizarreta, Mexico City has contracted to have 40,000 compressed air automobiles built in order to replace its taxi fleet. "The compressed air engine was designed by a French inventor … Guy Negre [and] uses about two dollar's worth of electricity to the tank with compressed air. [It] can power a car at speeds of up to 60 mph… A compressor driven by an electric motor connected to standard electric outlet [recharges] the compressed air tanks." In May of 1988, the first road tests of the prototypes "TOP" (Taxi Zero Pollution) were done in Brignoles, France. MID-NIGHT-SUN Trading Post/electrifyingtimes.com, 7/21/00U.S. Senate Support for Culm-to-Clean-Fuel Moves Schuylkill County Project Closer to Reality: "The nation's first project to convert coal wastes into a clean, zero-sulfur diesel fuel was endorsed twice this week in the United States Senate, including passage of a potential federal funding mechanism… 'Their recognition and support for an environmentally friendly culm and silt conversions process into a clean diesel fuel is both timely and welcomed,' said John W. Rich, Jr., project developer and president of Waste Management and Processors, Inc." PRNewswire, 7/21/00Report Reviews National Climate Change Programs of Five EU Countries and their Kyoto Targets: "Of five European Union countries reviewed in a newly-released report, only the United Kingdom is currently on track to achieve its Kyoto Protocol emissions reduction target." PR Newsire, 7/22/00Los Angeles Braced for Another Record Breaking Day: "The National Weather Service in San Diego has issued a special weather statement today, warning that record high temperatures are possible over a wide area today and tomorrow." KNBC, 7/23/00APS Sets All-Time Record Peak Electric Demand: "Arizona Public Service (APS) today established its fourth record peak demand for electricity consumption in a week… The record marked the ninth time in the past 10 years that the Company's peak demand exceeded the prior year's record." Business Wire, 7/24/00Conversion of Coal-Fired Generating Stations May Not Be Necessary: "'Technology exists today to effectively eliminate sulphur dioxide (SO2) and nitrogen oxides (NOx) from coal-fired generating stations at a fraction of the cost of conversion to natural gas,' [according to] Tom Hinke, President and CEO of Thermal Energy International Inc." Thermal Energy International Inc. Press Release, 7/24/00Bush Hauls in Coal Contributions: "'Through the end of May, coal [industry] contributions to [the] Bush [campaign] were ahead of industry donation to Democratic candidate and Vice-President Al Gore by a margin of 11-to-1… [Bush received \$150,144.00 compared to Gore who received \$13,500]. Bush opposes the Kyoto Protocol." Ken Ward Jr., The Charleston Gazette, 7/24/00More Power Cuts Likely in Kenya: "Energy officials in Kenya say more power cuts are likely during the next few days as engineers attempt to correct technical problems… [and that] the general shortages are the result of drought, which has caused water levels to fall in the country's hydroelectric dams… The government blames the crisis on the worst drought for 100 years." BBC, 7/24/00Study Shows Greenland Ice Cap is Melting: "A warming climate is eroding more than 50 billion tons of water a year from the Greenland ice sheet, adding to a nine-inch rise in sea level over the last century and increasing the risk of coastal flooding around the world, a new U.S. study shows… 11 cubic miles of ice is disappearing annually… 'When we can go back after five years and see 10 meters of glacier gone, there is something happening,' said William B. Krabill, first author of the study." Paul Recer, AP, 7/24/00New Study to Show Harmful Heat on the Rise Nationwide: "Physicians for Social Responsibility and Ozone Action [have examined] government weather station data from 1948-1999 and [have found] that the frequency and duration of excessive heat days are on the rise, and nighttime temperatures are above average, offering little relief from the excessive daytime heat… data from the new report [shows] that the growing frequency of harmful heat days and nights is consistent with prediction made by the world's top global warming scientists." U.S. Newswire, 7/25/00Virus Scare Shuts Central Park: "New York's Central Park has been temporarily closed to the public because of the discovery of mosquitoes carrying the potentially deadly West

Nile virus… The virus… was brought to the United States by mosquitoes for the first time last year, killing seven people in New York and causing panic in the city." This could be one of the first of many predicted ramifications of the unusual heat experienced in the United States since last year. (See First Three Months, 4/19/00). Mosquitoes thrive, multiply and expand their territory in warm environments. Jane Hughes, BBC, 7/25/00

IdaTech Delivers Fuel Cell Systems to BPA: "In early June, IdaTEch delivered the first of 110 fuel cell systems to Bonneville Power Administration… [T]wo additional units have been delivered with the final seven 'alpha' units scheduled to go out by the end of 2000… IdaTech is on schedule to demonstrate a natural gas fuel cell system later this summer and it continues to work on key alliances to meet the goal of commercializing fuel cell systems for home and small commercial applications by 2003." Idacorp, Inc., Press Release, 7/26/00

SolarHost.com Comes to Internet Market: "The world's first and only solar-powered web hosting service, Solar Host.com [has made its debut on the Internet]… SolarHost's high-density solar panels convert sunlight to electricity for its computer server and facility. A battery back stores excess power to keep thing running during the night, on rainy days and in times of technical difficulty… SolarHost has surprised its co-founders by drawing half its clientele from mainstream commercial businesses." Mark Dwortzan, ENN, 7/26/00

Ontario Canada Continues Fight Against Air Pollution From the United States: "Ontario is keeping the pressure on polluting American states to implement a tough new law that would cut smog coming across the US border into Canada… Ontario Environment Minister Dan Newman is fed up with US industry representatives who are putting the brakes on the new rules for clean air. 'It's high time for the industry to quit stalling and start cleaning up the air we all breathe.'" CNW, 7/26/00

FuelCell Energy to Expand Manufacturing Operations: "FuelCell Energy, Inc. has broken ground on a new manufacturing facility in Torrington to meet demand for its Direct FuelCell™ power plants… The decision to expand capacity is part of the Company's business plan… It reflects an increasing number of field trial and orders for the Direct FuelCell… from Germany, the U.S. Navy, the Los Angeles Department of Water and Power and Japan… 'These orders from around the globe validate our technology for producing clean energy,' said Christopher R. Bentley, executive vice president and head of manufacturing operations." Business Wire, 7/26/00

Heavy Rains Cause Floods in Khabarovsk: "Heavy rains have caused flood in the southern parts of the Khabarovsk region, the Far East… [T]he level of water in the local rivers is expected to rise by four or four and half meter n the two or three days." Itar-Tass News Agency, 7/27/00

Soldiers Called in to Fight Blazed Across West: "[F]ederal officials have called out the Army to help in ten states from Washington to Texas … 'The West is definitely blazing right now' said Don Smurthwaites, a spokesman for the National Interagency Fire Center. 'It's very hot and it's very dry.'" MSNBC, 7/27/00

Applied Power Installs 22kW Solar Carport for City of Colton Electric Utility: "Applied Power Corporation recently completed the installation of a 22kW solar electric system for the City of Colton Electric Utility (CEU) in Colton, California. The solar power system is integrated into a 120-foot long carport structure that provides shade for parked vehicles at the City's Public Works Administration Building… 'The Colton Electric Utility see renewable power to be increasingly effective and viable,' said Gerald Katz, project manager for the City." PRNewswire, 7/28/00

Nuclear Lab Threatened by Fire: [A] new fire threatening a nuclear lab in Idaho has resulted in the evacuation of 1,800 at the Idaho National Engineering and Environmental Laboratory. The small fire entered a reactor test areas before it was extinguished. MSNBC, 7/28/00

Heavy Floods in Yunnan Province: "Heavy floods have hit Hekou County in southwest China's Yunnan Province since July 21." Xinhua News, 7/28/00

Thai Floods Spread Rat Disease: "Floods sweeping through Thailand's northern regions have aided the spread of rat urine disease [killing] at least 70 people this year." AP, 7/28/00

Shanghai Fights Sinking Feeling: "The land under the skyscrapers [of Shanghai] and 13 million people is deflating… slowly settling as its shallow water table collapses after decades of overuse… Drought has complicated the efforts of Chinese officials [who] warn publicly about relying too heavily on wells. [With the drought], as rivers dry up, cities and farms drill more wells… [O]fficial projections say water levels could rise 19 to 27 inches by 1050, threatening waterfront areas." Joe McDonald, AP, 7/28/00

Continuing Hot Temperatures Narrow Energy Reserves Throughout West: "High temperatures throughout the western states for the third straight day have prompted the California Independent System Operator to declare tomorrow July 31st a Power Watch Day… The California ISO requests that California swatch their energy consumption, curtailing the use of electricity whenever possible." Business Wire, 7/30/00

Drought Threatens Fish Habitats in Wyoming and Neighboring States: "Two counties in Wyoming and three in Idaho have declared drought emergencies [with] half of Montana's major river stretches [being] rated moderately to extremely dry. 'We are concerned that the drought might add to the problems endangered fish currently face such as habitat degradation and invasive species,' said Kathy Buchner, director of the Wyoming Council of Trout Unlimited… 'As temperatures rise, there are more algae blooms due to nutrient concentration, [decreasing] the amount of oxygen available in the water,' explained Tom Rogers, fisheries hatchery supervisor for the Idaho Department of Fish and Game." Cold-water species are especially at risk. ENN, 7/31/00

Southern Idaho Continues to Bake: "Hot, dry weather continues to bake Southern Idaho, Gov. Dirk Kempthorne has declared a drought emergency in Lemhi and Lincoln Counties… [L]and mangers will impose tougher fire-related restrictions for recreationists… prohibiting motorized vehicles off designated roads and trails." Idaho Statesman.com, 7/31/00

Idaho's Fire Situation Gets Worse: "A red flag warning indicating a high risk of winds and conditions ripe for wildfires has been issued for much of the rest of eastern and central Idaho… More that \$18 milion ha been spent in Idaho alone since mid-July in what has quickly become the worst fires season since the mid-1990's." Idaho Statesman.com, 7/31/00

California Fire Consumes 60,000 Acres: "A tiny mountain town went up in flames and eight homes were destroyed as a 63,270-acre wildfire continued its weeklong rampage through the Sierra Nevada mountains. The blaze… was only 15 percent contained… will take two weeks to surround." MSNBC, 7/31/00

Seven People Die in Romania From Latest Heat Wave, Fires in Greece: "A heat wave sweeping southeastern Europe has triggered forest fires in Greece and Bulgaria and caused the deaths of at least seven people in Romania over the past three days." AP, 7/31/00

Episcopalians Take Stand on Energy: Rev. Sally Bingham head of the environmental ministry at Grace Cathedral in San Francisco has founded Episcopal Power and

Light, a California-based group that works with churches desiring to switch to green power: wind, solar or geothermal energy. Reverend Sally has said the covenant between God and Noah was for generations to come and that covenant was for every living thing, not just people. "The California Council of Churches plans to start California Interfaith Power and Light… patterned after the Episcopal group." Judith Kohler, AP, 7/31/00 {mospagebreak title=August}August Demand Increases for Automotive Fuel Cells: Ballard Power Systems reported receiving orders totaling \$2.1 million for the Ballard Mark 900 Series Fuel Cell Power Modules and support services." Business Wire, 8/1/00Shell Oil Chief Will Co-Chair Renewable Energy Task Force: Sir Mark Moody-Stuart, chairman of Shell Oil has agreed to assume leadership of a new global task force on renewable energy. "In their communiqué… the world leaders said they want increased use of renewable energy sources to improve the quality of life, particularly in developing countries [and in doing so] will prepare concrete recommendations… to better encourage the use of renewables in developing countries." ENS, 8/2/00Heat Prompts Stage II Emergency: "The heat… prompted another call to conserve electricity- and a Stage II Emergency… including 'rotating blackouts.'… High temperatures in the inland and valley areas are expected to top the century mark again." Demand is expected to top 46,245 megawatts, breaking last year's record of 45, 884 MW, set on July 12, 1999. MSNBC, 8/1/00Military Joins Battle Against Wildfires: Army soldiers will be helping out in the fight against wildfires in ten [U.S.] western states. "This year is shaping up to be the worst fire season since 1988, when 7.4. million acres were burned nationwide." MSNBC, 8/1/00EPA Finalizes Diesel Truck Rule: The Environmental Protection Agency has issued a final rule for its first phase regarding diesel emissions from heavy-duty trucks and buses. The first phase to take effect in 2004 "orders a 40 percent cut in vehicle emissions in all new trucks and buses." The second phase requires cleaner diesel fuels and to cleaner engines by 2007 and "will reduce air pollution from trucks and buses by another 90 percent." ENS, 8/2/00Clean Air Trust Blasts Six Diesel Engine Companies: The "Villain of the Month" award given by the nonprofit organization Clean Air Trust, went to Caterpillar Inc., Cummins Engine Co., Detroit Diesel Corp., Mack Trucks Inc., Renault and Volvo Truck Corporations. Clean Air charges that these six companies who had previously signed a consent decree with the Justice Department of California admitting that their engines had been rigged with illegal emission control defeat devices that allowed them to pass pre-sale emissions tests, but then turned off these devices during highway driving, resulting in the emission of 1.3 million tons of NOx - an amount equal to the emissions of 65 million cars, have managed to weasel out of much of the \$83 million settlement and gotten a reprieve from having to meet tougher emissions standards until 2007. " ENS, 8/2/00U.S. Proposes Using Agriculture to Fight Global Warming: "[T]he United States is proposing that countries get [equal] credit for using forests and farmer's fields to [absorb] carbon dioxide… as they would for cutting emissions from smokestacks and tail pipes… [Some] estimates are that it [would] be cheaper for a country to absorb pollution than to reduce the output." Andrew C. Revkin, New York Times, 8/2/00Ford and Purdue Join Forces to for Cleaner Air: "Purdue University and Ford Motor Company are teaming up to develop an advanced, onboard electronic system designed to monitor the health of aging engines and keep cars in compliance with exhaust emission standard." ENS, 8/2/00Solar Project Goes Online in Oregon: "The Bonneville Environmental Foundation (BEF) joined with the City of Ashland Oregon and other partner in dedicating the Northwest's newest and largest solar photovoltaic generation project… The system will produce enough energy to fully power the Ashland police station, and parts of the University and Festival. Surplus will flow into the Ashland electric grid where it is being purchased by 250 Ashland residential and business consumers who have signed up for the solar service." ENS, 8/2/00Water and Power Board of Commissioners Approves DWP Purchase of New Wind Energy: "The Board of Water and Power Commissioners approved a contract… for the purchase of new renewable wind energy under the Green for a Green LA program." This allows the DWP to purchase power from clean renewable natural sources instead of those generated by burning fossil fuels. Business Wire, 8/3/00Dry Heat Predicted to Continue Into October: "Dry windy conditions are expected to continue into October, prompting federal fire bosses to gird for a record fire season in Idaho and the rest of the West." Rocky Barker, Idaho Statesman, 8/3/00Tornado-Ravaged Tower Too Expensive to Restore: A 35-story office tower, valued at \$35 million, ravaged by a tornado on March 28, 2000, has proven to be too expensive to restore, and so is up for sale. Stephen Hawkins. AP, 8/3/00Heavy Rains Flood Homes in Russian Far East: "Several rivers in the Russian Far East have overflowed following four days of heavy rains, flooding hundreds of homes and surroundings farmland." AP, 8/3/00Clinton Orders Electricity Measures in California: "President Clinton… ordered federal agencies in California to cut their power use by an estimated five percent and told the Federal Power Marketing Administrations to maximize the amount of electricity available in the state… He told managers of federal buildings in the state to reduce power consumption [in order to] minimize power use in all government buildings." Reuters, 8/3/00More Unusual Summer Weather: "It's been cool in the Northeast where its should be sweltering, and sweltering in the upper Midwest where it should be cool." Deer are dying in the fields of Texas, striped bass have disappeared from the upper channel of the Flint River, both Georgia and Alabama have been declared agricultural disaster areas and "dry winds and weeks without rain have created a tinderbox so dry [in the West, creating] the worst fire season since 1988… Washington D.C., which is usually… humid… had the coolest July since 1918." Typically high temperatures began in the late spring, hitting the West in May, and rising above 100 degrees for the first time in that month since 1970." [These] are [all] in line with predictions that have been coming for years that global warming will affect the weather," according to Kert Davies of the Ozone Action group in Washington D.C. Laura Parker and Jessie Halladay, USA Today, 8/3/00Western Wildfires Costly to U.S. Federal Government: The worst wildfire season in 30 years has cost the federal government \$15 million to contain. Cat Lazaroff, ENS, 8/3/00Deforestation in Himalayas Blamed for Killer Flood: "[A]n unprecedented wave of flash floods swept across the banks of the Sutleg River in northern India… For four hours the Sutleg rose about 45 feet above normal and washed away everything in its path, changing the face of the riverbanks permanently… The floods are believed to have been caused by a cloud burst in Tibet. Environmentalists say that massive deforestation in the hills is the main reason for the severe flooding [as

well as summer monsoon landslides]." Tara Chand Malhotra, ENS, 8/3/00Morocco Stakes Energy Future on Wind Power: In an effort to develop a solar, wind and other renewable energy sources, Morocco is seeking bids to build two wind farms on the west coast of Africa, a 140-megawatt in Tangiers and a 60-megawatt in Tarfaya. "[Another] 50 MW farm at Koudia el Beida, expected to be operational this year, represents Africa's and the Arab world's first major wind farm, according to the Office National De l'Electricite." ENS, 8/4/00Thirst Grips Half the Population of Iran: "The Islamic Republic of Iran is facing a severe drought that has affected… about half the country's population… '[I]t is estimated that over 60 percent of the rural population might be forced to migrate to cities which are already experiencing the drought,' said Donato Kiniger-Passigli, spokesman of the Office for the Coordination of Humanitarian Affairs." ENS, 8/4/00Wind Energy Predicted to Increase: "The total generating capacity of wind power plants in the United States will increase by 30 to 50 percent by the end of next year [according to] the American Wind Energy Association… The cost of utility scale wind energy… dropped by more than 80 percent… allowing new wind farms to generate electricity at \$0.04/kWh, a price… competitive with many conventional energy technologies." ENS, 8/4/00Republican Presidential Nominee Ignores Environment: "In his nomination acceptance speech…at the Republican Convention, Texas Governor George W. Bush, mentioned the environment only twice." ENS, 8/4/00NASA Satellite Exposes Thin Snow Cover in North America: "The thinnest snow cover since 1966, a harbinger of flood or drought appeared across North America during the winter of 1999-2000, according to data recorded by NASA's Terra Satellite. 'Low snow cover can result in drier soil conditions, affect crop production and lead to wildfires,' said Dorothy Hall of NASA's Goddard Space Flight Center. [T]he cover in 1999-2000 was lower in every month from November through April." Robinson Shaw. ENN, 8/4/00Maritime Group Adds Hydrogen Powered Water Taxis and Mobile Dockside Hydrogen Fuelling Stations: "Maritime Hydrogen Technology Development Group is working with several private and public organizations to integrate and operate a hydrogen powered water transportation system utiliz[ing] both the proton exchange membrane (PEM) fuel cell and hydrogen turbine technology." PRNewswire, 8/4/00Pollution Rules Tighten Squeeze on Power Supply: "California's already severe electricity squeeze could tighten further… The states 1,000 power plants… have been running so hard and long… that many are close to spewing as much pollution as they are allowed for the year under their permits." Nancy Vogel, latimes.com, 8/5/00World Resources Institute, Business for Social Responsibility and Business Leaders Collaborate to Help Develop Green Power Markets: "Eleven major U.S. businesses announced… they are working with the WRI, and BSR, to develop corporate markets for 1000 megawatts of new 'green' energy capacity over 10 years… The partnership, calling itself the Green Power Market Development Group (GPMDG)… believes that [green] markets are essential to provide competitively priced energy that also protects the Earth's climate and reduces… air pollutants… [These] eleven companies account for about seven percent of industrial energy use in the United States… By working together, the GPMDG hopes to foster market demand for environmentally and economically sound energy." Business Wire, 8/7/00Fires Look Like Worst in 50 Years: More U.S. military are joining Canadian firefighters in "the worst fire season in a haf-century" in the West. "These conditions will only worsen," said Governor Dirk Kempthorne of Idaho. "[T]hey will not [be able to] extinguish them - not until [the snows of] October or November." MSNBC, 8/7/00Pistachio Shells Helpful in Absorbing Mercury Emissions: "Pistachio shells may help clean the environment according to Massoud Rostam-Abadi, professor of environmental engineering at the University of Illinois… Tests show that pistachio shells work as well if not better than current commercial products such as activated carbon, [used to absorb mercury emissions from coal-fired power plants], and are also less expensive to produce." Lucy Chubb. ENN, 8/7/00Man Killed as Desperate Animals Escape Kenyan Parks: "The severe drought parching the range sections of Kenya is bringing wildlife into dangerous conflict with human beings… [A] 52 year old farmer was trampled to death by marauding elephants Loitoktok, about 170 miles south of Nairobi… [T]hirsty and famished elephants, zebras, buffaloes and monkeys are breaking down fences to forage on farms in search of food and water." Tervil Okoko, ENS, 8/7/00Midges Thrive on Global Warming: "Global warming is threatening to trigger an explosion in Scotland's midge population… The hotter weather could enable midges [a type of mosquito] to breed three times a year instead of two [increasing] the number of super midges, which have longer lifespans than before." Helen Daniel, The Times, 8/7/00Millions Homeless as Floods Ravage India: "A two-week monsoon deluge has left about 2.5 million people homeless, hundreds dead or missing and many others facing disease as floods sweep through India's north and east, and neighboring Bangladesh and Bhutan… [T]he Kamlabalan, Kosi, Mahananada and Adhwara group of rivers, all originating from Nepal, were flowing above the danger mark… the Ganges and Bagmati rivers were… dangerously high." Reuters, 8/7/00Business Leaders Collaborate to Help Develop Green Power Markets: "Eleven major U.S. businesses announced … they are working with the World Resources Institute (WRI) and Business for Social Responsibility (BSR) to develop corporate markets for 1000 megawatts of new "green" energy capacity over 10 years." The corporate members of the Green Power Market Development Group (GPMDG) include Dupont, General Motors, IBM, Interface, Johnson & Johnson, Pitney Bowes and Kinko's. "We're beginning to see a trend in corporate America's willingness to participate in competitive electric markets," remarked Energy Secretary Bill Richardson. ENN, 8/7/00EPA and Gemtek to Collaborate on Green Laundry Detergent: "The EPA and Gemtek Products have signed an agreement to collaborate on the manufacture of a laundry detergent and a general purpose cleaner… formulated with compounds that will quickly biodegrade into nonpolluting byproducts, [without] strong solvents, bleaches, builders, or phosphorous." The integrity of such products as SC-Laundry and SC-1000 will be assured through continuous, thorough testing. ENS, 8/7/00EPA Air Quality Report Good, but not Great: According to the EPA's most recent air quality report, for the 10 year period (1990-1999), carbon monoxide concentrations decreased by 26 percent, lead concentrations decreased by 60 percent, nitrogen dioxide concentrations decreased by 10 percent, particulate matter concentrations decreased by 18 percent, sulfur dioxide concentrations decreased by 36 percent while smog concentrations decreased by only 4 percent. E-Wire, 8/7/00UN Low on Funds to Feed Drought Victims Worldwide: "The United Nations say today it had only half the \$700 million needed to provide food

aid to the soaring number of drought victims worldwide, mainly in the Horn of Africa and Asia, [and] will have to reduce food distribution in Kenya… due to poor donor response." Reuters, 8/8/00Deep Sea Current Could Influence Global Warming: "The equatorial undercurrent-a deep sea river originating in the Antarctic Ocean- exerts substantial control over marine life activity almost halfway around the globe near the equator,' says Paule Loubere, a professor of Geology and Environmental Geosciences at Northern Illinois University… Loubere believes the undercurrent may also provide a key to unraveling mysteries of climate change, including global warming. `My research… demonstrates how the climates of different regions of the earth-in this case the South Pole and the Pacific equator- are intrinsically linked.'" ENS, 8/7/00Watchdog Companies on Trail of Own Emissions: "A new report sponsored by the Pew Climate Center singles out 13 companies… making voluntary efforts to track their greenhouse gas emissions… 'An Overview of Greenhouse Gas Emissions Inventory Issues,' [by a team from] Arthur D. Little Inc… presents a set of principles for greenhouse gas emissions inventory and reporting [with] credible approaches by major companies… 'It's really a reflection of a changed attitude about environmental reporting and public disclosure,' said Chris Loreti, a senior manager at ADL and co-author of the report." Robinson Shaw, ENN, 8/8/00Hydrogen Powered Boats on the Horizon: "DCH Technology's Maritime Hydrogen Technology Development Group … is working with other companies to develop and operate a hydrogen powered water transportation system… Partners include the California Air Resources Board, [a] part of the California Environmental Protection Agency. The Group aims to operate the first useful hydrogen powered vessel of its type in the U.S. [offering] a clean and efficient alternative to the use of… fossil fuels." ENS, 8/8/00Anchorage Mail Processing Center Launches Own Fuel-cell Power System: "Alaska U.S. Senator Ted Steven and U.S. Postmaster General Bill Henderson inaugurated service of a one-megawatt fuel cell system now generating power at the the postal facility. It is the nation's largest assured-power commercial fuel cell system to date." E-Wire, 8/8/00Heavy Rains Threaten Further Flood Devastation in India, Bhutan: "Heavy rains… threatened to worsen the flood situation which has claimed at least 180 lives and left 3.5 million homeless in eastern India and the tiny Himalayan kingdom of Bhutan." AP, 8/9/00North Carolina Ends Resistance to Federal Clean Air Rules: "North Carolina has decided not to continue its challenge of a federal mandate for reducing ozone forming emissions… By working with the EPA, the state hopes to create an integrated approach to address air quality." ENS, 8/9/00Tens of Thousands of Firefighters Battle Blazes: "Tens of thousands of firefighters battled blazes raging across the western United States as evacuations and cost both mounted in the worst U.S. fire season to date in half a century." Reuters, 8/10/00Greenpeace Forms Unit for "Green" Technology: "The environmental group Greenpeace [is] forming a unit to spur the creation of "green" technologies. 'The objective… is to influence the development of technology towards sustainable solutions and promote their entry into the market,' Greenpeace Executive Director Thilo Dodes said." Reuters, 8/10/00Greenpeace Develops Greenfreeze: Greenpeace has announced that it has convinced Coca Cola to replace their refrigerants in their worldwide operations with "Greenfreeze," which uses hydrocarbon gases such as propane instead of hydrochlorofluorocarbons." Reuters, 8/10/00Wildfires Spread in Western U.S., Canada: "Wildfires raged across 13 western U.S. states and into western Canada on Monday, as tinder-dry conditions and high winds kept whipping up more blazes… 'When the fires get so big, they create their own weather, sucking oxygen and pushing winds around,' said E. Lynn Burkett of the National Fire Information Centre." Reuters, 8/14/00Arctic Warming Gather Pace: "U.S. researchers say they have found evidence of rapid warming in parts of the Arctic over the last 30 years. At the end of the 20th Century… Arctic temperatures were the warmest for four centuries… [F]indings support climate models which predict… the Arctic will be one of the first regions to respond to a global warming trend." Alex Kirby, BBC, 8/14/00Religious Groups Urge Action on Global Warming: "In a groundbreaking move, a statewide coalition of religious organizations [Texas Impact] is joining environmental groups in an historic call for Texas action on global warming. [The group] is partnering with the Sustainable Energy and Economic Development (SEED) Coalition and Public Citizen's Texas office as the "Cool Texas Network." PRNewswire, 8/15/00Global Warming: Bad for Allergies: "Higher carbon dioxide (CO2) levels associated with global warming may have doubled the amount of pollen that ragweed produces, the U.S. Department of Agriculture (USDA) said… The doubling has occurred over the past four or five decades, and another doubling could occur by the end of this century." ENS, 8/16/00Fires Sparked by Global Warming, or Just a Cycle?: Environmentalists and Scientists are debating the source of the recent record-breaking fire season. Some, like Stephen Corrick of Garden Earth Enterprise, argue the recent spate of fires was not the result of "lightning, lazy campers and a lush buildup of trees" which fueled more than 65 wildfires across 11 states, but rather "the warmest spring ever recorded in North America," which allowed early blooming foliage to dry out sooner than usual. Others, like Professor Richard Johnson of Colorado State University, chalk the season up to a cyclical change. According to Johnson there is a twenty year cycle of above-normal rainfall followed by drier than normal conditions. Tipping the scales of this argument is Corrick's observation that though the warm-dry season may be cyclical, effects of global warming create extremes in each swing; the wettest of the wet followed by the driest of the dry. Bill Briggs, Denver Post, 8/16/00Global Warming May Worsen Allergies: "Global warming could bring more hay fever, according to government research that show ragweed produces significantly more pollen as carbon dioxide increases. The… weed makes nearly twice as much pollen now as it did 100 years ago and will likely double its production again over the coming century with predicted increases in carbon dioxide levels, the Agriculture Department study suggests." Philip Brasher, AP, 8/16/00CSIRO - 30 Million Trees for Car Fuel, Greenhouse Cuts: Commonwealth Scientific and Industrial Research Organization (CSIRO), an Australian national science enquiry and referral service, "used a computer model to show that 30 million hectares of trees planted over the next 50 years could produce [enough] methanol to gradually replace liquid fuels currently produced from crude oil and its derivatives," reducing greenhouse gas emissions such as carbon dioxide by "400 million tons a year within the next 50 years." M2 Communications, 8/17/00Clean Coal Research Sponsored by Electric Power Institute: The Electric Power Research Institute (EPRI) is sponsoring a clean coal research project, "The Global Coal Initiative. It will promote research and development on "cleaner burning coal and advanced power plants that

generate electricity from coal with almost no air pollution. 'It is imperative that we burn coal more cleanly and efficiently with minimal carbon dioxide emissions to avoid the risk of global climate change,' said Stephen Gehl, director of strategic technology and alliances for EPRI." ENS, 8/17/00Lake Levels Continue to Drop as Drought Persists: Due to severe drought conditions, water levels of Alabama's Power's storage reservoirs will most likely remain well below normal through the Labor Day weekend. "Without significant, sustained rainfall, most of these lakes will be near their winter levels before October-about two months earlier than normal." Alabama Power Press Release, 8/18/00India and UK Partner to Explore Global Warming Impact: "India and the United Kingdom launched a joint three year study into the effects of global warming. Home to more than a billion people, many of whom depend on the land or the ocean for their survival, India needs to know how it will be affected by climate change." ENS, 8/18/00Wildfires Send Montana into Statewide Disaster: "Montana Governor Marc Racicot has declared a state of disaster across his entire state due to wildfires that have scorched tens of thousands of acres… More than 2,000 fires have burned 457,000 Montana acres this year." ENS, 8/18/00Starvation Claims Children in Drought Stricken Kenya: A worsening drought in addition to an inadequate response to appeals for aid in Kenya, "have led to a sharp rise in malnutrition among [its] children." The fourth consecutive failure of the rainy season has aggravated an already scarce supply of water in a pasture." ENS, 8/21/00Cutting Trees to Save the Forest: "[T]he U.S. government is proposing to protect 40 million National Forest acres from devastating flames-by chopping down some of their trees." The United States Forest Service and the Clinton administration "are expected to propose a massive 'thinning' project, intended to increase the distance between trees and clear underbrush to reduce the risk of wildfire." Cat Lazaroff, ENS, 8/24/00Greece and Southern Europe Under Siege by Wildfires: "[G]reek fires, fuelled by the prolonged heatwave, have engulfed the north-western provinces of Epirus and Arcadia in southern Peloponnese… Neighboring countries were unable to respond to Greek pleas for help because they were struggling with their own brush fires… As a heatwave continues in southern Europe, there have been wild fires in Italy, Bulgaria, Croatia and Corsica." BBC, 8/26/00Numbers Up for U.S. Wildfires: "[W]ell over 25,000 men and women are involved in the firefighting [across the Western U.S.], including more than 4,000 military personnel from the Army, Marines and the National Guard… [W]ith 1.4 million acres still burning… the current force is not nearly enough… and… cannot prudently be reinforced because of a shortage of trained supervisors… Across the United States, nearly six million acres of land have burned this year, and with hot, dry weather in the West showing no sign of abating, the devastation is on track to become the worst in at least half a century." Douglas Jehl, NY Times, 8/27/00Corfu Fires Prompt State of Emergency: "A state of emergency has been declared on the Greek island of Corfu after strong winds and high temperatures sparked a number of major forest fires… Greece [is suffering] its worst fire season for decades." BBC, 8/27/00Joined Fires Gaining Western Ground: "Wildfires have burned together in southwestern Montana's Bitterroot Valley and along the Continental Divide, forming the nation's largest fire group, a federal official said." AP, 8/27/00Heavy Rains Leave 136 Dead in Southern Indian State: "Four days of torrential monsoon rains have left 136 people dead and 100,000 homeless in what authorities are calling the heaviest 24-hour downpour in nearly half a century." Omer Farooq, AP, 8/28/00Unseasonable Rains Flood South Korea: Four days of heavy rains have soaked South Korea, "engulfing rivers and causing landslides… The unseasonable rain storms… drenched most of [the area], especially the country's southwestern region where rainfall measured up to 22.8 inches." AP, 8/28/00Typhoon Costs 500 Million Yuan Losses in South China: "Typhoon Bilis and torrential rains caused 500 million yuan in direct economic losses… in eastern Guangdong Province, south China… [T]orrential rains inundated farmland, collapsed houses and disrupted traffic the area [for five days]." Xinhua News, 8/28/00Green Mountain Energy Advocates Building Renewable Power Meet Energy Supply Demands of California Market: Julie Blunden of Green Mountain Energy said of the construction of a 132kW solar array, completed with the support of its California energy customers, "This facility is a real example of the benefit resulting from the power of customer choice in a deregulated market… Our future economic security and environmental quality can be shaped by the commitment we make today to transitions our power supply to cleaner renewable sources." PRNewswire, 8/28/00Texas to Use Gas from Landfills: "Waste Management Inc. and Reliant Energy have [agreed] to develop 12 landfill gas projects in Texas. Electricity produced from the landfill gas projects will be sold to the state's power grid, rural electric cooperatives and other retail energy providers." ENN, 8/28/00Fuel-Cells for Cel Phones: "Aluminum-Power of Toronto has successfully tested fuel-cell technology that can provide up to eight hours of [talk-time] on a cellular telephone." ENN, 8/28/00New Feature of Energy Bills Could Increase Greenhouse Gas Awareness: Engineers at the Idaho National Engineering and Environmental Laboratory (INEEL) have created a method to convert the numbers on an energy bill to so that they reflect the emission of greenhouse gases with the production of that energy. Awareness of how energy use contributes to greenhouse gas production could help consumers take proactive steps in combating climate change. Cat Lazaroff. ENN, 8/28/00Engine Additive Could Increase Efficiency, Decrease Pollution: "A gasoline additive that may be able to increase mileage and engine power with less pollution was described… at the 220th national meeting of the American Chemical Society. 'The additive, polyisobutylene… can produce a 10 percent increase in horsepower, a 20 percent increase in mileage, and a 70 percent decrease in emissions of… carbon monoxide, unburned hydrocarbons and nitrogen oxides,' said Paul Waters, Ph.D., a professor emeritus at American University in Washington, D.C." ENS, 8/28/00World's Largest Solar Parking Lot Opens in California: "The electric utility in Sacramento has commissioned the largest parking lot solar system in the world. The Sacramento Municipal Utility District (SMUD) has installed almost 14,000 solar photovoltaic (PV) modules in the main parking lot of the California State Fair… The 540 kilowatt (kW) solar system captures the sun's energy to generate sufficient electricity for 180 residential homes," and provides shade to the parked cars on the asphalt blacktop. ENS, 8/28/00Record-tying Dry Spell Hits Texas: "A 59-day dry spell surpassing the Dust Bowl days of the Great Depression has turned Texas lawns crispy brown, evaporated reservoirs and cost farmers and ranchers an estimated \$595 million." The north Texas dry spell began July 1st has set a record. "Monday was [also] the year's 36th day of 100-degree temperatures in Dallas-Fort Worth." AP, 8/29/00Huge

Ozone Hole Expected: "The hole in the ozone layer over the Antarctic is expected to increase in size this year… early measurements show significant ozone depletion, [according to] the United Nations Weather agency… 'We cannot be optimistic with these latest measurements,' said Taysir Al-Ghanem, spokesman for the World Meteorological Organization. 'We're expecting that the ozone hole this year is going to be quite large, probably more than last year.'" Even with the elimination of ozone depleting chemicals such as chlorine and bromine, by-products of chlorofluorocarbons, "it could be 20 twenty years before ozone levels recover noticeably." AP, 8/29/00

Global Warming Threatens One Third of All Habitat: "[E]xtinction is the forecast for vulnerable animals and plants across more than a third of the Earth's natural habitat, researchers report in a sweeping new study released today… 'Global Warming and Terrestrial Biodiversity Decline,' was released by [the] World Wildlife Fund Canada (WWF-Canada), the David Suzuki Foundation and the Inuit Tapirisat of Canada (ITC), [and] warns that many species of plants and animals will be unable to migrate fast enough to keep up with [the] changing habitat. 'In large areas, species would have to move 10 times faster than they did during the last ice age merely to survive,' said Dr. Jay Malcolm, assistant professor of forestry at the University of Toronto, and co-author of the report." ENS, 8/30/00

Texas Withering Under Record Breaking Drought: "Texas is suffering through one of the worst droughts in the state's history [with a] record 61 continuous days without rain [in the] Dallas-Fort worth area." This is the first time the previous record of 58 consecutive days set in 1934 was surpassed. Cat Lazaroff, ENS, 8/30/00

La Nina Exits Pacific but Effects Linger: "NASA scientists have concluded …even though El Nino and La Nina have finally dissipated, their impact… will likely continue for some time to come. 'It appears that the global climate system is finally recovering from the past three years of dramatic swings from the extra-large El Nino of 1997/98,' said William Patzert, an oceanographer at NASA's Jet Propulsion Laboratory in Pasadena, California. 'Unfortunately, in the longer term, the reality is that the PDO (Pacific Decadal Oscillation) pattern still dominates the Pacific… the atmosphere is acting as though La Nina remains." Reuters, 8/31/00

Drought, 100-degree Temperatures Take Toll in the U.S.: "Unrelenting triple-digit temperatures were roasting the U.S. Plains states… continuing a weather pattern that is devastating crops [and] threatening livestock… In Kansas City, the thermometer climbed to at least 100 degrees Fahrenheit every day for more than a week." Carey Gilliam, Reuters, 8/31/00

{mospagebreak title=September}September

Park Services Asks EPA for Help: "In an effort to improve air quality in America's national parks and wilderness areas, the National Park Service, through the Department of the Interior is asking the U.S. Environmental Protection Agency to implement new regulations to protect public lands from air pollution… 'Our main point is that new sources [of sulfur] are getting permits and old sources continue to emit pollutants and it's getting worse,' said John Bunyak of the DOI." ENN, 9/1/00

16.8 MW Foote Creek IV Wind Power Projects Nears Completion: SeaWest WindPower, Inc. announced… construction of its 16.8 MW Foote Creek IV wind power project is almost finished. "The Foote Creek IV windpower project will supply the federal agency with an additional 16.8 MW of wind energy… Each of the 28 new turbines will produce enough electricity for over 350 households, without emitting any greenhouse gases. E-Wire, 9/1/00

Germany and UK Issue Climate Change Challenge: "Two of the European Union's most proactive environment ministers have issued a joint plea to the United States and like minded nations to agree to strong rules implementing the United Nations Kyoto climate protocol at [the upcoming] November conference… in the Hague, Netherlands." ENS, 9/4/00

Texas New Focus for Wildfires: "Drought-stricken Texas has replaced Montana as the focus of wildfires in the United States… [There are presently 35 wildfires burning in Texas, 24 in Montana, 19 in Idaho and two in Wyoming." Xinhua, 9/6/00

Electric Postal Vehicle Delivers 50,000+ Letters to California Governor to Maintain Zero-Emission Program: "A zero-emission electric U.S. Postal truck [delivered] more than 50,000 letters to Governor Gray Davis, [indicating] a broad base of support from California consumers, local governments, businesses, labor unions and public interest groups for the California Zero-Emission Vehicle (ZEV) Program," Press Release, American Lung Association, 9/6/00

Blackfeet Indian Tribe to Build Commercial Utility-Scale Wind Power: The Blackfeet Tribal Business Council and SeaWest WindPower Inc. have agreed to construct a 22MW wind energy project on tribal lands which will produce and deliver affordable clean renewable energy. "This wind energy project will allow the Blackfeet Tribe to take advantage of one of our most plentiful natural resources on our Reservation," said Earl Old Person, Chairman of the Blackfeet Tribal Business Council. PRNewswire, 9/6/00

Farmers Can Benefit in Many Ways From Global Climate Change Reduction: A new report [by the Institute for Agriculture and Trade Policy] finds that farmers could benefit financially from efforts to reduce global climate change… Policies such as carbon sequestration and development of renewable energies from crops could produce significant benefits for farmers. "Addressing climate change not only helps protect the farmer from these changes, it can provide significant financial benefits for innovative farming practices," said Mark Muller, Senior Associate at IATP and lead author of the report." ENS, 9/7/00

President Clinton Strongly Committed to Strengthening Environmental Protections: A statement released by the White House today said "The United States is actively supporting the Millennium Ecosystem Assessment… and would contribute the first complete set of detailed, up-to-date satellite images of the world's forest ecosystems to the Assessment." U.S. Newswire, 9/7/00

MTBE Banned/Clean Fuels Program Established: "The U.S. Senate Environment and Public Works Committee, chaired by Senator Bob Smith (R-NH)… passed legislation to ban MTBE in four years and create a national Clean Alternative Fuel Program, which could triple the demand for ethanol over the next ten years." ENN/ Renewable Fuels Association, 9/7/00

Puna, Hawaii Geothermal Project Gets Approval From EPA: "The EPA has signed the final underground injection well permit for Puna Geothermal Venture (PGV)… require[ing] immediate safeguards to protect groundwater, ensur[ing] safe operation of the system, and protect[ing] public health and the environment." ENS, 9/8/00

PG&E and Waste Management to Replace 120 Diesel Trucks for New Power Plant Construction: In an effort to offset emissions from a new power plant to be constructed in San Diego County, PG&E Corporation and Waste Management, Inc. have agreed to replace 120 diesel fueled refuse collection trucks with clean burning natural gas new Mack trucks during construction. Tailpipe emissions from the fleet will be reduced by more than 50 percent, offsetting the emissions from the new plant. ENS, 9/8/00

Ozone Hole Largest Yet: "Nasa says this year's hole

in the ozone layer [over Antarctica]… measures 28.3 million square kilometers (11 milion square miles)." Dr. Michael Kurylo, BBC, 9/8/00 Drought in Armenia Costs Farmer 40 Million Dollars: "A drought afflicting Armenia will cost farmers about dlrs 40 million this year… the country will seek international aid to mitigate the loss." AP, 9/8/00 Heavy Rains in Honduras: "Four days of torrential rains have left one dead and 300 people without homes in Honduras… A river near Libertad, 90 miles north of the capital, overflowed its banks." AP, 9/8/00 Flood Threatens Mekong Delta: "Seasonal flooding hit southern Vietnam early this year, engulfing the country's rice bowl since July." AP, 9/8/00 Revolutionary Development in Separation of Oil From Water: Environmental Applied Research Tech House-Earth Canada (EARTH) has announced a revolutionary technological breakthrough in the de-emulsification of oily water, such as is needed in oil spills, oil pipeline cleanouts, steel production, and petroleum tank clean outs, among others. EARTH's new technology is designed to treat "substantial flows" of highly emulsified oily water, simultaneously removing and recovering oil from water while enabling the cleaned water to be discharged at level of very low PPM… "[T]he technology is economical and requires virtually no maintenance." Business Wire, 9/10/00 France's Jospin Urges Energy Conservation: "French Prime Minister Lionel Jospin announced… a massive new program of energy conservation… 'Saving consumption of fossil fuels constitutes not just a major contribution to fighting the greenhouse effect but is also a major contribution to maintaining strong and durable growth,' he added." UPI, 9/11/00 New Energies Come of Age Amid Fuel Crisis: The recent fuel crisis has acted as a catalyst in the development of new alternative energy sources such as hydrogen technologies, solar energy, fuel cells and wind power. "All of us want, if possible to quickly introduce hydrogen technologies and reap their benefits, environmental and financial," said Mark Moody-Stuart, chairman of the Royal Dutch/Shell Group and chairman of the G8 Renewable Energy Taskforce. BP Amoco, another oil giant has been diversifying its energy interests away from fossil fuels, with a new campaign "Beyond Petroleum," allocating enough funds to assure its position as "the world's [largest] producer of solar energy." Ballard Power continues to team up with the likes of DaimlerChrysler AG and Ford to develop fuel cells for use in ground transportation vehicles. Wind power is becoming commercially competitive and investment is pouring in now so that the United States and some Western European countries have set specific targets for a market share for renewable energy. According to Robin Batchelor of Merrill Lynch, promoting a new fund to invest in pure energy technology companies "This is forcing people's attention, particularly on the renewable side where it's all indigenous… As that grows, you're taking some of that power back from OPEC… All of which inspired Saudi Arabia's former oil minister Sheik Ahmed Zaki Yamani to say: "The stone age came to an end not for a lack of stones, and the oil age will end, but not for a lack of oil." Andrew Callus, Reuters, 9/12/00 Himalayan Ice Reveals Climate Warming, Catastrophic Drought: "Both the last decade and the last 50 years were the warmest in 1,000 years, a new analysis of centuries old ice has found." According to Lonnie Thompson, professor of geological sciences at Ohio State University and leader of the expedition, "[I]t clearly shows a serious warming during the late 20th century, one that was caused, at least in part, by human activity." Cat Lazaroff, ENS, 9/15/00 Landmark Report Validates Widespread Decline in World's Ecosystems: "A landmark assessment… called for a new approach to managing ecosystems in order to stem [their] widespread decline. 'Every measure used… to assess the health of the world's ecosystems tells us that we are drawing on them more than ever and degrading them at an accelerating pace,' said Dr. Klaus Toepfer, Executive Director of the United Nations Environment program." PRNewswire, 9/18/00 Southern California Aims to Reduce Bus Pollution: "[T]he South Coast Air Quality Management District is expected to soon propose rules that would force school districts to buy only the cleanest-burning buses. Diesel industry leaders are advocating the use of low-sulfur fuel and the installation of particulate traps in diesel buses as an alternative measure. Many environmentalists oppose this, saying technology is "failure-prone and not as clean as natural gas." Leon Drouin Keith, AP, 9/19/00 Drought Followed by Heavy Rains Hurts Southern Farmers: The recent heavy rains in the South have added insult to injury for farmers preparing to harvest their barely surviving crops, hit by a recent severe drought. Not only does the rain interrupt the harvest, but has the potential of drowning, degenerating or destroying what little crops are left. CNN, 9/22/00 Monsoon Floods Submerge Mekong Basin: "Flood levels on rivers in Vietnam's Mekong Basin, already at 40 year record heights, are still rising… Heavy monsoon rains since early July have inundated alarge part of the Mekong River watershed areas, covering nearly 800,000 square kilometers of land in Cambodia, Thailand, Laos and Vietnam, affecting millions of people." ENS, 9/22/00 China to Launch Project to Turn Coal into Oil: "China will invest heavily in two projects which can turn coal into petroleum to ease the shortage of petroleum resources, said sources from the State Development Planning Commission." Xinhua, 9/25/00{mospagebreak title=October}OctoberNew Power Plant Pitched to South Gate Community with Pollution Reducing Technology: Wayne Gould, president of Sunlaw Energy Partners, is pitching a power plant with a new revolutionary technology that would clean the air it takes in, as well as provide energy for the Los Angeles basin. Sunlaw has invented a technology that utilizes SCONox, a device whose function is to treat nitrogen oxide (NOx) one of the two main ingredients of smog, so that it is converted into a less harmful component, when released into the air as a by-product. However, Sunlaw still must contend with other emissions such as volatile organic compounds and soot, which it has yet to harness or neutralize in the same way. Sarah Catania, LA Weekly, 10/6/00 Siemens' Unit Gets OK for Solar Electric Kits: Siemens Solar Industries L.P. has received approval of its earthsafe™ solar electric kits for use in homes, schools and commercial buildings, from the Florida Solar Energy Center. This is the first UL listed system to receive this approval. Anil Kumar, BridgeNews, 10/9/00Drought Still Serious in Kenya: "The persisting drought in Kenya is expected to continue well into next year, [according to a report in the] Kenya Times, a government run newspaper." The prolonged drought is adding pressure to Kenyans already struggling with famine. Xinhua, 10/10/00Floods Spark Riots in Bangladesh: "Hundreds of people fought with shotguns, spears and kitchen knives to defend a mud embankment that protects dozens of villages from devastating monsoon floods… The four-hour battle pitted villagers against flood victims on the other side of who tried to cut through the 3-mile-long embankment… to ease flooding on their side." Farid Hossain, AP, 10/10/00Flood Threat Persists in South East England: "Flood waters have begun to subside in south east England, but

the threat of flooding remains high… Some insurers believe it will prove to be the most expensive natural disaster in British history… 'We seem to be having more violent weather patterns and we accept that it could be due to global warming,' said Countryside Minister Elliot Morley." BBC, 10/13/00Italy Floodwaters Force 12,000 to Flee: "Around 12,000 people are being evacuated from their homes in northwest Italy as rising flood waters threaten fresh devastation in the region… The floods have brought Italy's industrial heartland to a virtual standstill." CNN.com, 10/17/00Power Plant Pollution Linked to 30,000 Premature Deaths Each Year: "Pollution generated by U.S. power plants is responsible for cutting short the lives of over 30,000 Americans each year, more deaths than are caused by murderers or drunk drivers," according to the report *Death, Disease and Dirty Power : Mortality and Health Damage Due to Air Pollution from Powers Plants*. The report funded by the Pew Charitable Trusts and released by a consortium of Clear the Air, a national clean air campaign, the Clean Air Task Force, the National Environmental Trust, the U.S. Public Interest Research Group and the National Campaign Against Dirty Power. The full text can be found at <http://www.cleartheair.org>. Brian Hansen, ENS, 10/17/00Aborigines Drop Diesel, Embrace Solar Power: "Federal Environment Minister Robert Hill has announced the Pitjantjatjar Council and the South Australian department of Aboriginal Affairs will receive funds to install 10 solar concentrators in the Anangu Pitjantjatjara Lands in the Far North West of South Australia… The solar power station will send electricity to the grid, reducing diesel consumption by 136,000 litres, and displacing 1,800 tons of carbon dioxide each year." ENS, 10/17/00California's 10,000-vehicle Fleet Switching to Nonpolluting Cars: "The state's 10,000-vehicle fleet will be exchanged for low-polluting cars beginning next year… 2,500 of the state's fleet will convert to gasoline-powered cars that release up to 90 percent fewer pollutants." The other 7,500 vehicles will be powered by alternative fuels and electricity. An average of 1,400 cars will be replaced yearly. AP, 10/19/00New Water-filled Windows Good for Insulation: Frederick McKee, an engineer has designed double-glazed windows that have water between the panes instead of air. The water contains a chemical that absorbs infrared energy, while at the same time allowing light to pass through. "This system basically enables us to put up a building that doesn't need cooling in the summer or heating in the winter," he said. Reuters, 10/24/00 {mospagebreak title=November}NovemberU.S. Department of Energy to build Fuel Cell/Turbine Power Plant: "The U.S. DOE plans to build an on-site fuel cell/gas turbine power plant the U.S. Environmental Protection Agency's Environmental Science Center at Fort Meade, Maryland [promising] to be the most efficient on-site plant in the world [with] the lowest environmental impact of any power plant [using] fossil fuel." ENN, 11/2/00 Ice Energy Source Needs More Study on Gulf of Mexico Floor: More scientific work must be done before energy companies interested in harvesting fossil fuels trapped in yellow ice at the bottom of the Gulf of Mexico, can exploit this resource, according to oceanographer Ian MacDonald of Texas A&M University. Ben Iannotta, ENN, 12/2/00Canada Commits to Wind Power: "The Canadian government has allocated \$12.4 million to ensure that half of the power consumed by government facilities in Saskatchewan will be wind-powered by 2002." ENN, 11/2/00New Jersey Corn Growers Look to Ethanol For Help: "The Garden States corn farmers… hope a proposed ethanol plant in Jew Jersey would help them turn a profit. With many energy experts predicting that ethanol use in gasoline will increase dramatically in coming years, they believe now is the time to look into building such a plant." Peter Furey, New Jersey Farm Bureau Executive Director said, "It would be a constant market for corn, a steady demand." Critics of ethanol as a gasoline additive opposed to the plant, say the ethanol industry is an inefficient sham, surviving only with significant tax breaks, and that new developments in automobile technology already make the use of ethanol unnecessary. Jeff Diamant, Star-Ledger, 11/15/00Virginia Utility Agrees to Cut Pollution: Dominion Virginia Electric Power, accused of violating the U.S. Clean Air Act, has agreed to cut pollution from eight of its coal-fired plants in Virginia and West Virginia by 70 percent. "This successful legal action will bring cleaner air to New Jersey," State Department of Environmental Protection Commissioner Rover Shinn said. Anthony S. Twyman, Star Leger, 11/17/00Global Warming Seen Doubling Heat Deaths by 2020: "Deaths from heat waves in big cities worldwide are expected to double over the next two decades if nothing is done to curb global warming, the United Nations weather agency said." Reuters, 11/21/00LADWP Getting in the Black with Long-Range Master Plan: The Los Angeles Department of Water and Power has a \$1.7-billion plan that will ensure electricity supplies over this decade by refurbishing a few old power plants, and adding small generators. It has been doing so well with power outages this year, that it has been able to pay down its debt by selling its surplus power. James Flanigan, LATimes, 11/22/00New York Power Authority Announces Sites for Small, Clean Gas Turbines: "The New York Power Authority announced it has selected sites for nine small, clean electric generators [in order to] meet … increasing demand for electricity." Business Wire, 11/22/00Anchorage-Area Residents Still Waiting for Snow: "For the first time in 15 years… Anchorage experienced a snowless Thanksgiving. '[T]here has been only one other Thanksgiving in Anchorage when there was no snow on the ground,' said David Vonderheide, spokesman for the National Weather Service… [T]emperatures have been 9 degrees Fahrenheit over average… a 'pretty significant departure.'" Yereth Rosen, Reuters, 11/24/00Climate Change Could Bankrupt Us by 2065: "The sixth largest insurance company has warned that damage to property due to global warming could bankrupt the world by 2065… 'Property damage is rising very rapidly, at… 10 percent a year,' said De. Andrew Clugolecki, director of general insurance development at CGNU, a top five European life insurer and the United Kingdom's largest insurance group." ENS, 11/24/00Climate Meeting Ends Without Deal: "A U.N. climate conference [at the Hague, Netherlands] collapsed without an agreement… The negotiators broke off talks nearly 12 hours after going into seclusion to try to nail down details on the extent to which countries may meet their targets for reductions of greenhouse gas emissions without actually burning less fossil fuel… 'Governments have spent two weeks essential arguing about how they can do as little as possible to reduce the threat of global climate change,' said Tony Juniper, vice chairman of Friends of the Earth. The environmental group Greenpeace said the meeting `will be remembered as the moment when governments abandoned the promise of global cooperation to protect the planet Earth." Some lobbyists from environmental groups broke into tears as Dutch Minister Jan Pronk announced, " We have not reached an agreement. I am very disappointed... There were extremely high expectations of us." Arthur Max, AP, 11/25/00Floods, Landslides Kill 49 in Indonesia's

Sumatra: "Floods and landslides set off by torrential rains have killed at least 49 people in Indonesia's West Sumatra… [H]eavy rains and typhoons… Floodwaters isolated… West Sumatra." Reuters, 11/26/00

Climate Change to Hit Low-Income and Minority Communities Hardest: Joanne Kliejunas, executive director of Redefining Progress, told the Environmental Justice and Climate Change Forum [at] The Hague, "Buried beneath the headlines on global warming is this harsh reality-the heat deaths, infectious diseases, respiratory illnesses and economic dislocations that will result will harm low-income people and communities of color the most." Redefining Progress Press Release, 11/27/00

Odd Culprits in Collapse of Climate Talks: "[A] rift between branches of the environmental movement appeared to contributed to the failure of pivotal negotiations aimed at completing a pioneering climate treaty." One hot issue dealt with how much credit toward emissions targets countries should get for using forests or farmland to absorb carbon dioxide. The United States sought to use its forests as a way of gaining credits before taking any action, to which the European Union objected, interpreting it as a ruse to do nothing. The U.S. returned with a pared-down proposal, which was ultimately rejected and resulted in a stalemate. Noting the intensifying clash between environmentalists' agendas, Dr. Stephen H. Schneider, a climatologist at Stanford with a history of 20 years in the climate debate, lamented the Kyoto protocol may have only been a beginning but it was important to get started. Staunch environmentalists disagreed. "We're better off with no deal than a bad deal," said Bill Hare, top climate campaigner for Greenpeace International." Dr. Michael Grubb, professor of climate change and energy policy at Imperial College in London observed, "When something like this is killed, it is killed by an alliance of those who want too much and those who don't want anything." Andrew C. Revkin, NYTimes.com, 11/28/00 {mospagebreak title=December}December

Scores of Russians Die in Big Freeze: "Forty-one people have died of hypothermia in Moscow since early October, as power and heating cuts grip the eastern part of the country." It is not unusual for people in Russia to freeze to death every, but they are usually those without shelter. In this case people are dying in their homes, where power cuts have made it impossible for their apartments to achieve temperatures higher than 6 degrees Celsius. This has prompted hundred of enraged residents in Russia's Pacific coast region to block roads near the port of Vladivostok, creating vast traffic jams and disrupting the airport. CNN.com, 12/1/00

Space Station to Get Solar Array: "A pair of spacewalking astronauts and a their colleague working a 50-foo robotic arm gave the International Space Station a new solar-power system … The 17-ton solar array mast… will generate enough electricity to power 30 homes on Earth…will provide most of the \$60 billion space station's power as it continues to grow over the next five or six years." Brad Liston, Reuters, 12/3/00

European Union Meets in France to Discuss Restart of Climate Talks: European heads of government are meeting in Nice, France in an attempt to salvage and revive the recently failed climate change talks at The Hague. "If EU leaders secure a deal among themselves, British Prime Minister Tony Blair will tackle the issue with President Clinton during his farewell visit to the United Kingdom." Clinton has been reported as saying he believed negotiations only narrowly missed agreement. Reuters, 12/2/00

State Officials Shifting Away from Battery Powered Cars in Favor of Fuel Cells, Hybrid and Natural Gas Engines: "California air regulators are proposing a major shift in their strategy for smog-free cars: downplaying battery power in favor of other technologies… [M]ore consideration will be given to other clean technologies, such as fuel cells, hybrid and natural gas engines." Gary Polakovic, Times, 12/8/00

UK Energy Policy Yields to Wind Power: "Minister for Energy, Helen Liddell… officially [opened] the Blyth Offshore Wind Project in northeaster England… the largest ever erected offshore… The turbines began generating electricity in November and at full capacity, can power 3,000 households." ENS, 12/8/00

Western U.S. Power Grid Faces Critical Shortfall: "Power industry official warned… electricity shortfalls threatening to plunge California into darkness expose a supply problem across the entire Western power grid… 'We're nervous. There's no doubt about it,' said Mike Hansen, a spokesman for Bonneville Power Administration, the federal agency that markets up to 15,000 megawatts of power from giant hydroelectric dams on the Columbia and Snake Rivers." James Jelter, ENN, 12/9/00

Treacherous Weather for Plains: "Residents across the Plains coped with treacherous travel and widespread power failures… freezing rain, frigid conditions and heavy snowfall pounded the area. 'This is as much snow as we've seen in the last 15 years, and we got it all in one whack,' said Charles Ward, city superintendent… in Colony, Kansas." MSNBC, 12/14/00

Storm Prompts Clinton to Declare Wyoming a Disaster: "President Clinton … declared Wyoming a major disaster area because of severe winter storms that began hitting the state more than a month ago." AP, 12/12/00

U.S. Braces for More Rough Weather: "The nation braced for more severe weather… as it emerged from a weekend of deadly storms, heavy snow and quirkily unseasonable temperatures… A storm system spawned tornadoes that killed 12 people in Alabama… blowing down trees… causing flooding and scattered power outages in Tennessee, Mississippi and Georgia… 'Normally we don't start off with the copious amounts of precipitation and the numerous thunderstorms. This is very atypical weather for December,' said Charlie Foley, a weather service meteorologist in Taunton, Mass." U.S. Had Above-Normal Temperatures in 2000: "[T]he nation logged above-average temperatures for most of the year, government forecaster said… 'Although colder than normal temperatures have affected much of the U.S. recently, the trend to warmer temperatures which began more than a century ago continues,' The National Oceanic and Atmospheric Administration said." Reuters, 12/18/00

Boise State Radio Uses Wind to Boost Broadcast Power: "Boise State Radio is extending its reach to Jackpot, Nevada, with a transmitter powered mainly by wind-possible the only one in the nation." Charles Etlinger, Idaho Statesmen, 12/18/00

Environmental & Engineering Studies Get Underway for California High Speed Rail System: The California High Speed Rail Authority approved work plans for three teams of consultants to begin environmental and engineering studies for a 700-mile high-speed train that will connect the state's major population centers." Business Wire, 12/18/00

Electric Bus Comes to California Southland: A 32-foo-long, 20 passenger electric bus, built by Ballard Power Systems, using a fuel cell and an electric motor instead of an internal combustion engine is making its way through southland streets, thanks the South Coast Air Quality Management District. "This proves that we have the technology to put zero-emission buses on the street," said James M. Lents, executive officer of the South Coast Air Quality Management District. "Now we need to take steps to make them economically

viable." cbcharlie 2000. Yahoo! Message Boards:BLDP, 12/19/00World Still Gripped by Warming Trend: "The warming trend that has gripped our climate for the past 20 years will make 2000 one of the hottest years since 1860, despite La Nina's cooling effect on the tropical Pacific and other anomalies, the United Nations weather agency said." Stephanie Nebehay. Reuters, 12/19/00U.S. Turns Down Meeting on Climate Change: "The United States has rejected an offer to meet European Union ministers this week on the issue of global warming. U.S. chief negotiator, Frank Loy, said convening ministers, but then failing to reach agreement, would not advance common goals… The attempt to restart negotiations follows the collapse of last month's climate summit in The Hague, Netherlands." ENS, 12/19/00Ballard Power Systems Commissions First Manufacturing Facility: "Ballard Power Systems, recognized as the world leader in developing, manufacturing and marketing zero-emission proton exchange membrane fuel cells for use in transportation, electricity generation and portable power products, has commissioned its initial fuel cell manufacturing facility, Plant 1. 'The capacity of this facility will allow us to meet the requirements of our customers as we introduce initial commercial products in each of our target markets, starting in 2001,' said Eamonn Percy, Ballard's Vice-President, Operations." Business Wire, 12/20/00Much of U.S. Shivers in Arctic Air: "Arctic air spread bone-chilling cold across much of the United States… [B]elow-normal temperatures extended from the Northern Plains to the Florida Panhandle." Andrew Stern. Reuters, 12/22/00Deadly Storm Paralyzes Arkansas, Oklahoma: "A deadly storm bearing ice and snow moved across the mid-southern United States, paralyzing Arkansas and Oklahoma with widespread power outages and ice-coated roadway…. The storm caused Oklahoma Gov. Frank Keating to declare his state a disaster area… [D]evastation… so widespread… Arkansas Gov. Mike Huckabee dispatched National Guard troops… to search for people stuck in frozen buildings and disabled vehicles." Steve Barnes, Reuters, 12/27/00Heating Bills Double, Triple This Year: "Record-high natural gas prices coupled with the cold weather in the nation's heartland have doubled or tripled heating bills for homes and businesses… Winter heating bills were projected to climb more than 50 percent, with gas consumers paying a record \$834 to warm their homes compared to last winter's average of \$540, according to the U.S. Energy Information Administration." MSNBC, 12/28/00Europe to Remain Icy Cold and Wet: "Europe is set to remain in the grip of icy conditions and winter flooding until the New Year, weather forecasters predict. Britain… shivering its way through its frostiest winter since 1994, is set for more cold weather with temperatures dipping overnight… to minus 12 degrees Celsius in Scotland." CNN.com, 12/29/00Record Snowfall Eats at City Budget: Measured snowfall at Midway, Chicago is up nearly 39 inches, breaking a 1951 record of 33 inches. Chicago officials have estimated spending \$13 million dollars on snow removal already. MSNBC, 12/30/00Harsh Weather Delays Salt Supply to Frozen Cities: Salt suppliers are having difficulty delivering shipments to snow-stricken cities in the Midwest and East, causing delays in snow removal and road de-icing. All modes of transportation have been affected, including the railways. "This is shaping up to be one of the top years ever for rock salt usage," said Richard Hanneman, president of the Salt Institute, an industry group in Alexandria, Virginia. Roger Worthington, Oscar Avila, Chicago Tribune, 12/30/00Peoples Energy Announces a 43 Percent Gas Price Hike: "Peoples Energy announced… gas prices that have already rapidly escalated this winter will jump another 43 percent… The utility… said… average monthly gas bill will be about \$200 higher than it was a year ago today." Heather Vogell, Chicago Tribune, 12/30/00Snowfall Unofficially Breaks Record: "New snow on Saturday morning unofficially broke the record for the snowiest December in [Chicago]… The total snowfall in December also surpassed Chicago's average winter snowfall of 38.6 inches." Maria Kantzavelos, Chicago Tribune, 12/31/00