

Notes



ONE

The 80% Solution

- 3 **Dana Milbank sounded mystified.** Dana Milbank, “Burned Up About the Other Fossil Fuel,” *Washington Post*, June 24, 2008.
- 3 **Biographical background on James Hansen:** Mark Bowen, *Censoring Science: Inside the Political Attack on Dr. James Hansen and the Truth About Global Warming* (Dutton, 2007); Elizabeth Kolbert, *Field Notes From a Catastrophe: Man, Nature, and Climate Change* (Bloomsbury 2006); Elizabeth Kolbert, “The Catastrophist,” *The New Yorker*, June 29, 2009.
- 5 **In 1981 he published a paper in Science predicting:** James Hansen et al., “Climate impact of increasing atmospheric carbon dioxide.” *Science* 213 (1981), 957–966.
- 5 **Hansen’s predictions:** Elizabeth Kolbert, “The Catastrophist,” *The New Yorker*, June 29, 2009.
- 5 **In fact, the twelve-year period from 1997 to 2008 included the ten hottest years on record.** *Global Temperature Trends: 2008 Annual Summation*, Goddard Institute for Space Studies, updated January 13, 2009, data.giss.nasa.gov/gistemp/2008/.
- 5 **“The way I look at it, the great fun in science...”** Mark Bowen, *Censoring Science*, 274.
- 6 **“He’s transparently full of integrity....”** Mark Bowen, *Censoring Science*, 71.

- 6 **"The work that he did..."** Elizabeth Kolbert, "The Catastrophist," *The New Yorker*, June 29, 2009.
- 6 **"I have a whole folder in my drawer labeled 'Canonical Papers.' About half of them are Jim's."** Elizabeth Kolbert, "The Catastrophist," *The New Yorker*, June 29, 2009.
- 7 **"It is unequivocal that the climate is changing..."** Joint Science Academies' Statement on Growth and Responsibility: Sustainability, Energy Efficiency and Climate Protection, accessed August 7, 2009.
- 7 **Going even further, he had led a coordinated research effort by an international assembly of climate scientists...** The result of this investigation is the paper James Hansen et al., 2008: "Target atmospheric CO₂: Where should humanity aim?" *Open Atmos. Sci. J.*, 2 (2008), 217–231.
- 7 **In discussing the results of this new research, Hansen was now back in the public arena...** Hansen's commentaries, articles, and papers can be found on his Columbia University website at columbia.edu/~jeh1/.
- 9 **Ending emissions from coal, he said, "is 80% of the solution to the global warming crisis."** Letter from James Hansen to Nevada governor Gibbons, April 14, 2008, columbia.edu/~jeh1/.

T W O

151 Time Bombs

- 15 **Erik Shuster's list:** *Tracking New Coal-Fired Power Plants* (National Energy Technology Laboratory, May 31, 2007) is archived at cmNOW.org. The most recent release of the report is posted at netl.doe.gov/coal/refshelf/ncp.pdf.
- 18 **Existing fleet of about 600 coal plants:** For aerial photos and data on each coal plant in the United States, see "Existing U.S. Coal Plants," CoalSwarm wiki, sourcewatch.org/index.php?title=Existing_U.S._Coal_Plants.
- 19 **Burn its way through a 125-car trainload of coal in two days.** This calculation is based on Wyoming sub-bituminous coal rated at 9,000 Btu/lb and a 31 percent plant efficiency rate.
- 19 **Creating a quantity of carbon dioxide that weighs approximately twice as much as the original train.** This calculation is based on Wyoming sub-bituminous coal rated at 9,000 Btu/lb and a 31 percent plant efficiency rate. Note that the amount of carbon dioxide produced by the trainload of coal would be even higher if coal were pure carbon, since the atomic weight of a carbon atom is 16 and the atomic weight of a carbon dioxide molecule is 44. However, coal is not entirely carbon and not all the carbon in coal is transformed into heat. Also, a small portion of the heat value of coal comes from oxidizing hydrogen into water. Overall, researchers have calculated that typical Wyoming sub-bituminous

coal produces 212.7 pounds of carbon dioxide per million Btu. See B.D. Hong and E.R. Slatick, “Carbon Dioxide Emission Factors for Coal,” *Quarterly Coal Report*, January-April 1994, DOE/EIA-0121(94/Q1), eia/doe.gov/cneaf/coal/quarterly/co2_article/co2.html.

- 19 **850,000 SUV drivers would have to switch to Priuses.** Comparison based on a 2009 model 4-wheel-drive Ford Explorer driven 12,000 miles/year (14,673 pounds of carbon dioxide) and a 2009 Toyota Prius driven 12,000 miles/year (4,995 pounds of carbon dioxide). Source: Terrapass Carbon Footprint Calculator, terrapass.com/carbon-footprint-calculator/.
- 19 **Background on coal.** Three recent books are Barbara Freese, *Coal: A Human History* (Penguin 2003), Jeff Goodell, *Big Coal: The Dirty Secret Behind America's Energy Future* (Houghton Mifflin 2006), and Richard Heinberg, *Blackout* (New Society Publishers, 2009).
- 20 **Cheney task force:** Michael Abramowitz and Steven Mufson, “Papers Detail Industry’s Role in Cheney’s Energy Report,” *Washington Post*, July 18, 2007; Robert F. Kennedy, Jr., *Crimes Against Nature: How George W. Bush and His Corporate Pals Are Plundering the Country and Hijacking Our Democracy*, (HarperCollins, 2004), Chapter 7, “King Coal.”
- 20 **More on the plans to expand U.S. coal capacity from the perspective of the coal industry:** *Opportunities to Expedite the Construction of New Coal-Based Power Plants*, National Coal Council, December 2004.

THREE

Inside the Swarm

This chapter is based on Ted Nace, “Stopping Coal in Its Tracks,” *Orion Magazine*, January/February 2008. Adapted with permission of The Orion Society.

- 27 **As much as 88 percent of the coal’s carbon dioxide can be captured in an IGCC plant, along with 99 percent of its sulfur oxides and particulates and 95 percent of its mercury:** *The Future of Coal*, Massachusetts Institute of Technology, 2007.
- 28 **“What we are exploring...”** Bob Burton, “Australia Pursues Greenhouse Gas Burial as Climate Solution,” *Environment News Service*, March 1, 2004.
- 28 **According to a study by engineers at Massachusetts Institute of Technology:** *The Future of Coal*, Massachusetts Institute of Technology, 2007.
- 28 **The Department of Energy estimated that by the end of the century, the amount of liquified carbon dioxide needing to be permanently sequestered would be enough to fill Lake Erie twice over or cover the entire state of Utah with a blanket of liquified carbon dioxide 14 feet thick.** This calculation is based on an estimate of 6 billion tons per year of current U.S. carbon dioxide

emissions, and an estimate that cumulative emissions from 2004 to 2100 will be 1 trillion tons, under a reference case scenario. Assuming 68 pounds per cubic foot, such a scenario would produce 200 cubic miles of liquefied carbon dioxide. The volume of Lake Erie is 113 cubic miles. Source: Jay Braitsch, “Carbon Capture and Storage: DOE/Office of Fossil Energy Programs,” Presentation at Edison Foundation CCS Conference, March 4, 2008, edisonfoundation.net/events/2008-03-03/Braitsch_presentation.pdf.

- 29 **“The notion of coal as the solution to America’s energy problems is a technological fantasy on par with the dream of a manned mission to Mars.”** Jeff Goodell, “The Dirty Rock,” *The Nation*, April 19, 2007.
- 29 **The cost of building such plants was expected to be around 40 percent higher:** See for example *The Future of Coal*, Massachusetts Institute of Technology, 2007, Table 3.5: “Representative Performance and Economics for Oxy-Fuel Pulverized Coal and IGCC Power Generation,” which estimates construction costs for a conventional super-critical pulverized coal plant at \$1,330 per kilowatt and for an IGCC plant with carbon capture and storage at \$1,890 per kilowatt (a 42 percent increase).
- 29 **In all, each plant would have to burn about 25 percent more coal:** See for example *The Future of Coal*, Massachusetts Institute of Technology, 2007, Table 3.5: “Representative Performance and Economics for Oxy-Fuel Pulverized Coal and IGCC Power Generation,” which estimates fuel costs for a conventional super-critical pulverized coal plant at \$1.33 per kilowatt-hour and for an IGCC plant with carbon capture and storage at \$1.64 per kilowatt-hour (a 23 percent increase).
- 31 **Subsidies for the Mesaba project:** *The Economics of the Mesaba Energy Project*, Citizens Against Mesaba Project, December 17, 2006, camp-site.info/resources.html#cdocs.

FOUR

But We’ll Freeze in the Dark!

- 35 **Will Offensicht quote:** Will Offensicht, “Must We Freeze in the Dark?” Scragged.com, February 14, 2008.
- 36 **University of Delaware public opinion survey showed strong support for wind and strong opposition to increased coal generation:** Jeremy Firestone, Willett Kempton and Andrew Krueger, *Delaware Opinion on Offshore Wind Power: Interim Report* (January 16, 2007), University of Delaware College of Marine and Earth Studies. The study reported that 55.3% of Delaware residents agreed that wind farms in state oceanic waters should be “encouraged and promoted,” 36.7% said they should be “allowed in appropriate circumstances,” 3.1% said they should be “tolerated,” and 0.7% said they should be “prohibited

- in all instances.” When asked about wind farms sited in Delaware Bay, support dipped slightly to 47.3% for “encouraged and promoted, 39.1% for “allowed in appropriate circumstances,” 5.3% for “tolerated,” and 2.7% for “prohibited in all instances.” With respect to coal versus wind, the researchers reported: “91.1 percent of the responses would vote to expand electricity with offshore wind power rather than coal or natural gas, when told they would pay more for the wind power.”
- 37 **Lazard study:** *Levelized Cost of Energy Analysis, version 2.0*, Lazard, June 2008. Results summarized at “Comparative Electrical Generating Costs,” CoalSwarm wiki, sourcewatch.org/index.php?title=Comparative_electrical_generation_costs.
 - 37 **California Energy Commission study:** *CPUC GHG Modeling*, Energy and Environmental Economics, Inc., at http://www.ethree.com/cpuc_ghg_model.html. Accessed June 2008. For summary of results and details on accessing the spreadsheet containing cost components and assumptions, see “Comparative Electrical Generating Costs,” CoalSwarm wiki, sourcewatch.org/index.php?title=Comparative_electrical_generation_costs.
 - 37 **Department of Energy wind study:** *20% Wind Energy by 2030*, U.S. Department of Energy, May 12, 2008, 9–12.
 - 38 **During 2007, numerous solar thermal plants were moving forward:** For a current list of projects, see “List of solar thermal power stations,” Wikipedia, en.wikipedia.org/wiki/List_of_solar_thermal_power_stations.
 - 39 **Estimates of land area for solar thermal plants:** “Concentrating solar power land use,” CoalSwarm wiki, sourcewatch.org/index.php?title=Concentrating_solar_power_land_use; David R. Mills and Robert G. Morgan, “Solar Thermal Electricity as the Primary Replacement for Coal and Oil in U.S. Generation and Transportation,” wired.com/images_blogs/wiredscience/files/MillsMorganUSGridSupplyCorrected.pdf.
 - 39 **Comparison of land disturbed by solar thermal to land disturbed by coal mining:** The David Mills calculation for solar thermal land use amounts to 9,025 square miles. In contrast, the amount of land disturbed to date by coal mining operations has been estimated at 9,000 square miles, including 1,644 square miles disturbed by current operations. Source: *On the Rise: Solar Thermal Power and the Fight Against Global Warming*, Environment America, Spring 2008 (PDF file), p. 28. That study cites as the source for the 9,000-square-mile figure Adam Serchuk, *The Environmental Imperative for Renewable Energy: An Update*, Renewable Energy Policy Project, April 2000; as the source for the 1,644-square-mile figure the study cites U.S. Department of the Interior, Office of Surface Mining, “Answers to the 10 Most Frequently Asked Questions,” osmre.gov/answers.htm, March 26, 2008.
 - 40 **California and United States per capita electricity usage:** Anant Sudarshan and James Sweeney, “Deconstructing the ‘Rosenfeld Curve,’” Precourt Institute for Energy Efficiency Working Paper, July 1, 2008.

- 41 **Art Rosenfeld biographical information:** Arthur H. Rosenfeld, “The Art of Energy Efficiency: Protecting the Environment with Better Technology,” *Annual Rev. Energy Environ.* 24 (1999), 33–82; “President Bush Names Arthur Rosenfeld the 2005 Enrico Fermi Award Winner,” U.S. Department of Energy press release, April 27, 2006.
- 44 **Guy Caruso caused 132 coal plants to disappear:** Ted Nace, “The Magic Mouse of Guy Caruso,” *Grist*, March 21, 2008.
- 45 **Google Clean Energy 2030:** Jeffery Greenblatt, *Clean Energy 2030: Google’s proposal for reducing America’s dependence on fossil fuels*, Google knoll, knol.google.com/k/jeffery-greenblatt/clean-energy-2030/15x31uzlqe05n/1#.
- 45 **Eric Schmidt:** Alan Murray, “The Search for Change: Eric Schmidt of Google on why the company spends so much time worrying about energy,” *Wall Street Journal*, March 9, 2009.

FIVE

What About China?

- 47 **According to a frequently cited statistic, the country was building the equivalent of two mid-sized coal plants each week, amounting to a yearly increase equivalent to the entire U.K. power grid each year:** See, for example, “King Coal,” *National Geographic*, May 2008, 144.
- 47 **In 2008 annual coal output in China reached 2.76 billion metric tons:** *Coal Statistics 2008*, World Coal Institute, worldcoal.org/resources/coal-statistics/.
- 48 **an analysis of worldwide reserve figures completed in 2007:** *Coal: Resources and Future Production*, Energy Watch Group, EWG-Series No. 1/2007, March 2007.
- 49 **“[I]t is not possible to confirm the often-quoted suggestion that there is a sufficient supply of coal for the next 250 years”:** National Research Council, *Coal: Research and Development to Support National Energy Policy*, 2007, 44–45.
- 49 **USGS study of the Gillette field:** James Luppens et al., *Assessment of Coal Geology, Resources, and Reserves in the Gillette Coalfield, Powder River Basin, Wyoming*, U.S. Geological Survey Open-File Report 2008-1202, 2008.
- 51 **six large wind farms:** Keith Bradsher, “Drawing Critics, China Seeks to Dominate in Renewable Energy,” *New York Times*, July 14, 2009.
- 51 **China’s contribution to the greenhouse gases currently in the atmosphere, a reflection of historical consumption, remains lower than that of the United States not only on a per capita basis but on an absolute basis:** For the period 1751–2006, China contributed 8.2% of cumulative emissions while the United States contributed 27.5% of cumulative emissions. Source: Letter from James

Hansen to Australian prime minister Kevin Rudd, March 27, 2008, Figure 4: “Annual and cumulative fossil fuel CO₂ emissions by country of emission,” columbia.edu/~jeh1/.

SIX

Hurricane Politics

- 54 **In the Pacific Northwest, Washington governor Christine Gregoire signed a bill:** For details on the related emissions controls of Washington and California, see “Schwarzenegger clause,” CoalSwarm wiki.
- 54 **British Columbia, New Zealand, and Ontario initiatives:** For details see “Coal moratorium,” CoalSwarm wiki.
- 59 **A *St. Petersburg Times* poll released in May 2007:** Jennifer Liberto, “Poll: Most Floridians favor action on global warming,” *St. Petersburg Times*, May 14, 2007.
- 59 **“Sometimes, the political system is like the climate system...”** Will Dana, “Gore 3.0,” *Rolling Stone*, June 28, 2006.
- 60 **Meetings between Chris Kise and utility officials:** Steve Bousquet and Craig Pittman, “Fla. utilities dump coal-fired power plant: Gov. Charlie Crist says climate change played a role in plans,” *St. Petersburg Times*, July 4, 2007.
- 61 **Yale University and University of Miami poll:** Leiserowitz, A. and Broad, K., “Florida: Public opinion on climate change,” A Yale University / University of Miami / Columbia University Poll (New Haven, CT: Yale Project on Climate Change), 2008.

SEVEN

Kansas

- 64 **The Edison Electric Institute, which represented large power utilities, wrote, “only in the imagination ... does there exist any widespread demand for electricity on the farm or any general willingness to pay for it.”** Jack Doyle, *Lines Across the Land: Rural Electric Cooperatives—The Changing Politics of Energy in Rural America*, (Environmental Policy Institute, 1979), 4.
- 65 **In 1964 the rural electrics came under attack as communist institutions, and federal funding for the movement became an issue in the presidential campaign between Lyndon Johnson and Barry Goldwater:** Jack Doyle, *Lines Across the Land*, 10.
- 65 **Goldwater said that the Rural Electrification Administration had “outlived its usefulness.”** Jack Doyle, *Lines Across the Land*, 10.

- 66 **"Within your organization you have a much more potent force at your fingertips..."** Jack Doyle, *Lines Across the Land*, 11.
- 66 **As time passed, what had once been among the most progressive organizations in America became in many ways one of the least:** For a current critique of the rural electric cooperatives, see Jim Cooper, "Electric Co-operatives: From New Deal to Bad Deal?" *Harvard Journal on Legislation*, 2008. For a broader account of the anti-environmental positions taken by much of the rural electric establishment in response to the major environmental legislation of the 1960s and 1970s, see Jack Doyle, *Lines Across the Land*, which includes case studies of rural electric cooperatives in fourteen states (Alabama, Georgia, Illinois, Indiana, Kentucky, Michigan, Minnesota, Montana, Nebraska, North Dakota, South Dakota, Virginia, Wisconsin, and Wyoming).
- 66 **Letter from IREA urging support for Patrick Michaels:** "Helping a Global Warming Skeptic," *Inside Higher Education*, July 31, 2006.
- 67 **Congressman Jim Cooper of Tennessee wrote:** Jim Cooper, "Electric Co-operatives: From New Deal to Bad Deal?" *Harvard Journal on Legislation*, 2008.
- 68 **Early organizing by the Sierra Club on the Sunflower project, project hearings, and development of the coalition opposing the project:** Scott Martelle, "Killing King Coal," *Sierra Magazine*, March/April 2009.

E I G H T

Direct Action

- 73 **In Montana, Oklahoma, Kentucky, and Michigan, judges and regulators handed out rejection slips to coal plants:** Roundup Power Project (Montana), Red Rock Generating Station (Oklahoma), Thoroughbred Generating Station (Kentucky), Escanaba plant (Michigan). For details, see Appendix B, "Coal Plants Canceled, Abandoned, or Put on Hold."
- 73 **In North Dakota, Arizona, Washington, and New York, companies withdrew projects on their own initiative:** South Heart Power Project (North Dakota), Bowie IGCC Power Station (Arizona), Avista plant (Washington), Russell Station II (New York). For details, see Appendix B, "Coal Plants Canceled, Abandoned, or Put on Hold."
- 73 **Citigroup downgraded the stocks of mining companies:** Jim Jelter, "Coal Stocks Tumble on Citigroup Downgrade," *MarketWatch*, July 18, 2007.
- 73 **In August U.S. Senate Majority Leader Harry Reid became the highest-ranking federal official to speak out against the building of coal-fired power plants:** Sean Whaley, "Clean Energy Summit: Reid Opposes Coal-Fired Power

- Plants, Senate Majority Leader Says Sun Is an Untapped Resource for the Silver State,” *Las Vegas Review-Journal*, August 19, 2007.
- 74 **Ollie Combs:** Chad Montrie, *To Save the Land and People: A History of Opposition to Surface Coal Mining in Appalachia* (University of North Carolina Press, 2002). The account of Ollie Combs and others in Knott County is told in Chapter 5, “We Will Stop the Bulldozers: Opposition to Surface Coal Mining in Kentucky, 1967–1972.”
- 74 **Knott County strip mine occupation:** Stephen L. Fisher, editor, *Fighting Back in Appalachia* (Temple University Press, 1993).
- 75 **Knott County and Perry County sabotage; Mountaintop Gun Club:** Ibid.
- 75 **Minnesota power line uprising:** Paul Wellstone and Barry M. Casper, *Powerline: The First Battle in America’s Energy War* (University of Minnesota Press, 2003).
- 75 **Rocky Top affinity group action at Zeb Mountain:** John Johnson, “Don’t Chop Rocky Top: Katúah EF! Confronts Mountaintop Removal in Tennessee,” *Earth First! Journal*, Samhain/Yule, 2003.
- 76 **Agnone paper:** Jon Agnone, “Amplifying Public Opinion: The Policy Impact of the U.S. Environmental Movement,” *Social Forces*, June 2007.
- 78 **Radical cheerleading:** For more on radical cheerleading and other creative activist tactics, see Mike Hudema, *An Action a Day Keeps Global Capitalism Away* (Between the Lines, 2004).
- 79 **“I hope the impatience...”** Floyd Lilley, “Super Facilitator Prank Makes All Share Pain,” *WorldNetDaily*, November 24, 2000, sovereignty.net/p/clim/hague1100/updates.html.
- 80 **Inside/outside tactics:** For an extended discussion of inside/outside tactics, see Joshua Kahn-Russell, “Climate Justice and Coal’s Funeral Procession,” *Z Magazine*, May 2009.
- 82 **“High school and college students are red meat for banks.”** Mike Brune, *Coming Clean: Breaking America’s Addiction to Oil and Coal* (Sierra Club Books, 2008), 82.
- 83 **In Knoxville, Tennessee, police had used choke holds and pain compliance:** “First stockholders meeting of National Coal Corporation Disrupted,” Mountain Justice website, April 29, 2008.
- 83 **Company workers had threatened protesters and attempted to ram them with a car:** “Eleven Arrested Protesting ET Coal Mine,” WBIR website, August 15, 2005; “Tennessee Coal Road Blocked to Protest Mountaintop Removal Mining,” Mines & Communities website, August 15, 2005.
- 83 **In North Carolina, protesters at Dominion’s Cliffside Plant were tasered and placed in pain compliance holds.** “Eight Climate Protesters Arrested at U.S. Coal Plant,” Reuters, April 1, 2008; “Eight Arrested as North Carolina

Residents Shut Down Construction at Cliffside Coal Plant,” Fossil Fools Day blog, April 1, 2008.

- 83 **In Ohio, police pepper-sprayed protesters conducting a sit-in at the headquarters of American Municipal Power:** “Women Climb Flagpole In Power Plant Protest,” NBC 4 Columbus, July 7, 2008; “Police arrest protesters at Ohio power company,” WDTN 2 Dayton, July 8, 2008.
- 83 **In West Virginia, mine workers threatened and assaulted anti-coal activists:** Dave Cooper, “West Virginia Coal Thugs Disrupt July 4th Picnic (Video),” *Huffington Post*, July 7, 2009.
- 83 **Houses of activists were been shot at, vandalized, and even fire-bombed:** Kurt Pitzer, “Last Man on the Mountain,” *People Magazine*, October 20, 2008; Jeff Goodell, *Big Coal: The Dirty Secret Behind America’s Energy Future* (Houghton-Mifflin 2006), Chapter 2, “Coal Colonies.”
- 83 **Charges against Hannah Morgan and Kate Rooth:** James Hansen, “Obstruction of Justice: Virginian Coal Protesters Receive B-Minus Plea Bargain for Kingsnorth-Like Activism,” *Grist*, October 27, 2008.
- 84 **“If this case had gone to trial...”** James Hansen, “Obstruction of Justice,” *Grist*, October 27, 2008.

N I N E

The Education of Warren Buffett

This chapter is based on Ted Nace, “The Education of Warren Buffett: Why Did the Guru Cancel Six Coal Plants?” *Grist*, April 15, 2008.

- 85 **“Nothing is illegal if 100 businessmen decide to do it.”** Ironically, the quote was originally part of an assertion by Andrew Young that big business might play a progressive role in ending the apartheid system in South Africa, as recounted in Joseph Lelyveld, “New Voice of U.S. At United Nations,” *Ocala Star-Banner*, February 14, 1977, 7D:

Surprisingly, in Young’s vision, the catalyst that brings about change turns out to be that troublesome and maligned behemoth, the American multinational corporation. Thinking aloud one afternoon, Young wondered what would happen if the U.S. Government urged American corporations in South Africa to act on the assumption that they had five years to turn their management over to blacks. Hundreds of blacks would then have to be brought to the United States for management training, he said, imagining how the thin edge of this wedge might fit into the locked door of apartheid. Such a scheme might prove to be illegal under South African law, I pointed out. “I know,” Young answered, smiling, “but nothing is illegal if 100 businessmen decide to do it, and that’s true anywhere in the world.”

Young regularly summons “100 businessmen” into his conversation in

this way, whenever he wants to talk about moral suasion as a practical exercise. They are a kind of collective stock character but not entirely of his own imagining. In 1963, in Birmingham, Ala., the Rev. Andrew Young negotiated with 100 or so white businessmen to bring about the dismantling of the segregation laws. Atlanta was an even better example of reformist oligarchy. If Atlanta became a city “too busy to hate,” Young seems to be saying, then why not Johannesburg?

“My notion is,” he said, “that if revolution is the transfer of goods, services, and opportunities, then capitalism has produced a lot more in the way of revolution than Communism.” Whether we like it or not, he argued, the multinationals involve the United States in the affairs of other countries. That being so, he continued, “Why not incorporate a sense of political direction with the profit motive?”

- 86 **Table 1:** “Key private sector decision makers on coal,” CoalSwarm wiki.
- 87 **“CEOs of fossil energy companies...”** James Hansen: “Try Fossil Fuel CEOs for ‘High Crimes Against Humanity,’” *Environmental Leader*, June 24, 2008.
- 87 **Hansen letter to James E. Rogers:** Hansen’s commentaries, articles, letters to prominent businessmen and government officials, and papers can be found on his Columbia University website at www.columbia.edu/~jeh1/.
- 89 **MidAmerican Energy’s operations:** “MidAmerican Energy,” CoalSwarm wiki.
- 89 **At least four others would be built in the Rocky Mountain region:** In the fall of 2006, PacifiCorp developed 12 scenarios, which are shown in Table 7.37 of the company’s *2007 Integrated Resource Plan* (May 30, 2007 release). Of these scenarios, 8 showed the addition of 6 new coal plants in the 2012–2018 period, while 4 showed the addition of 7 new coal plants.
- 89 **Plans to build new coal plants were off the table:** Dustin Bleizeffer, “Utility snuffs coal projects,” *Casper Star-Tribune*, December 11, 2007.
- 91 **Four coal plants ... were now omitted:** In the May 30, 2007 release of the *2007 Integrated Resource Plan*, the scenario omitting four coal plants is referred to as “Group 2.” The company explained: “The feedback received on the [Group 1] resource proposal, as well as recent external events and an assessment of state resource policy directions, prompted the company to investigate portfolio alternatives that recognize existing and expected state resource acquisition constraints.” PacifiCorp, *2007 Integrated Resource Plan*, 153.
- 91 **“Oregon PUC rejection of the 2012 RFP...”:** PacifiCorp, *2007 Integrated Resource Plan*, 153.
- 91 **“[W]hat we are really talking about with global warming is dislocation...”** David Neubert, “Berkshire Hathaway on Global Warming,” *ThePanelist.com*, May 5, 2007.
- 92 **“Well, fortunately climate change, although it’s a huge challenge...”** Transcript of remarks by Bill Gates, Chairman, Microsoft Corporation; Craig

Mundie, Chief Research and Strategy Officer, Microsoft Corporation; Professor Muhammad Yunus, Founder—Grameen Bank, 2006 Nobel Peace Prize Laureate; Microsoft Government Leaders Forum—Asia 2007 at Beijing, People's Republic of China, April 19, 2007; transcript posted on Microsoft Web site, microsoft.com/Presspass/exec/billg/speeches/2007/04-19GLF_Asia_Keynote.mspx.

- 92 **"...perhaps a foot and a half."** This estimate of sea level rise is consistent with projections by the Intergovernmental Panel on Climate Change (IPCC): 7 to 23 inches by the end of the century. But the IPCC projection is generally regarded as conservative, since it does not include the impact on sea levels of the rapid ice sheet collapses that have accompanied previous meltings. For example, at the end of the last ice age about 14,000 years ago, sea levels rose an average of three feet every two decades for 400 years for a total of 60 feet. In his book *Censoring Science*, Mark Bowen notes: "The first three feet would be sufficient, incidentally, for the entire Mississippi River Delta, including New Orleans, to vanish into the Gulf of Mexico; for tens of millions of people in Bangladesh, one of the most densely populated regions on Earth, to be forced to migrate; and for rice-growing river deltas throughout Asia, a major source of food for the human species, to be inundated." Mark Bowen, *Censoring Science* (Dutton, 2007), 109.
- 92 **"Within the last few months..."** Dustin Bleizeffer, "Utility snuffs coal projects," *Casper Star-Tribune*, December 11, 2007.
- 94 **Text of Alexander Lofft petition:** thepetitionsite.com/takeaction/661721406#body.
- 95 **"I'll tell you why I like the cigarette business..."** Jennell Wallace, "Warren Buffett cools on his attraction to tobacco business," *Bloomberg News*, April 25, 1994.
- 95 **"fraught with questions..."** Ibid.

T E N

Progress Report: 59 Coal Plants Down

- 97 **Opposition by mayors:** Additional details: On December 19, 2007, Charlottesville passed the Charlottesville Clean Energy Resolution putting the city on record in support a moratorium. On October 13, 2007, Pocatello, Idaho, mayor Roger Chase told other mayors from across the state attending an Association of Idaho Cities legislative committee that he favored a moratorium on new coal plants in the state. On June 1, 2007, Park City, Utah, mayor Dana Wilson wrote a letter to Warren Buffett expressing the city's opposition to three coal plants proposed by Rocky Mountain Power. In November 2007, Salt Lake City mayor Rocky Anderson expressed his support for a coal moratorium at a rally

- organized by the Step It Up! campaign. Source: “Coal moratorium,” CoalSwarm wiki.
- 98 **“Coal is a double-edged sword.”** Steven Mufson, “Coal Rush Reverses, Power Firms Follow,” *Washington Post*, September 4, 2007
- 98 **Protests and referendum in Wiscasset, Maine:** “Lobstermen Protest Proposed Power Plant,” WCSH Portland website, October 11, 2007. For further details see “Maine and coal,” CoalSwarm wiki.
- 98 **Kalama Plant:** Erik Robinson, “State Rejects Proposal for Coal Plant in Kalama,” *Clark County Columbian*, November 28, 2007; Erik Robinson, “Power Plant Plant to Drop New Coal Technology,” *Vancouver Columbian*, December 23, 2007; Max Zygmunt, “Energy Northwest Walks Away From Pacific Mountain Energy Center,” Climate Change and Carbon Management blog, September 23, 2008. See also “Pacific Mountain Energy Center” and “Washington and coal,” CoalSwarm wiki.
- 99 **Protests against Fisk and Crawford:** Extensive background information on organizing efforts against these two Chicago plants may be found on the websites of LVEJO (Little Village Environmental Justice Organization) and PERRO (Pilsen Environmental Rights and Reform Organization PERRO). Also see “Fisk Generating Station,” “Crawford Generating Station,” and “Illinois and coal,” CoalSwarm wiki.
- 99 **Harvard School of Public Health:** Jonathan I. Levy et al., “Using CALPUFF to evaluate the impacts of power plant emissions in Illinois: model sensitivity and implications,” *Atmospheric Environment*, 2002.
- 100 **Step It Up!** Manny Fernandez, “For the Environment, Rallies Great and Small (and Unusual Attire),” *New York Times*, April 15, 2007. For details on November 2007 Step It Up! actions across the United States, see events.stepitup2007.org/november/reports.
- 101 **ten cancellations of “clean coal” projects:** Steve Raabe, “‘Clean coal’ plant setbacks mount in U.S.,” *Denver Post*, November 1, 2007.
- 102 **seventeen U.S. coal plants had been canceled:** “The Growing Trend Against Coal-Fired Power Plants (USA),” Palang Thai website, December 1, 2007.
- 105 **our list of projects ... had grown to fifty-nine:** Matt Leonard, “2007: A Rough Year for Coal,” *It’s Getting Hot In Here*, January 17, 2008. For the complete list, see “Coal plants cancelled in 2007,” CoalSwarm wiki. Also see Appendix B, “Coal Plants Canceled, Abandoned, or Put on Hold.”
- 105 **“This is part of a concerted effort to grossly exaggerate opposition...”** Steve James, “Coal’s time is up, say environmentalists,” *World Environment News*, February 15, 2008.
- 106 **“Reports of this project’s demise are greatly exaggerated.”** David Bertola, “Is Huntley project on hold—or simply delayed?” *Buffalo Business First*, January 18, 2008.

- 106 **"What began as a few local ripples..."** Lester Brown, "U.S. Moving Toward Ban on New Coal-Fired Power Plants," Earth Policy Institute, February 14, 2008.
- 107 **In a September 2007 national poll ... only 3 percent chose coal:** Opinion Research Corporation, "A Post Fossil-Fuel America," Executive Summary, National Opinion Survey Produced for Citizens Lead for Energy Action Now (CLEAN), A Project of the Civil Society Institute, October 18, 2007.
- 107 **Financial problems with nuclear power:** Jay M. Gould, "The future of nuclear power," *Monthly Review*, February 1984.

E L E V E N

Unicorns, Leprechauns, Clean Coal

- 112 **75 percent of the public supporting a five-year moratorium:** Opinion Research Corporation, "A Post Fossil-Fuel America," Executive Summary, National Opinion Survey Produced for Citizens Lead for Energy Action Now (CLEAN), A Project of the Civil Society Institute, October 18, 2007.
- 112 **Bob Henrie:** "Bob Henrie," CoalSwarm wiki on SourceWatch; Mike Gorrell, "Keeping coal in the Spotlight: High-Powered P.R. Firm Goes to Work Polishing the Image," *Salt Lake Tribune*, March 1, 2008; Joe Geiser and Cecelia Moriarity, "Company Greed Killed Coal Miners in Utah: 20 Years Since the Wilberg Mine Disaster; How Emery Mining Corp. Tried to Hide the Facts," *The Militant*, December 28, 2004.
- 113 **"Presidential Race Runs through the Heart of Coal County..."** Reuters, October 10, 2008.
- 113 **Memos leaked to the press:** Kevin Grandia, "Coal lobby PR firm memo boasts about manipulating Democrats and Republicans," *DeSmogBlog*, January 16, 2009; "American Coalition for Clean Coal Electricity" and "Clean Coal Marketing Campaign," CoalSwarm wiki.
- 114 **"The 'clean coal' PR people are running a scam..."** David Roberts, "The essential 'clean coal' scam: Politico lets shill get away with the basic dodge at the center of the 'clean coal' campaign," *Grist*, December 23, 2008.
- 114 **"the earliest possible deployment ... is not expected before 2030."** Emily Rochon, *False Hope: Why Carbon Capture and Storage Won't Save the Climate*, Greenpeace, 2008.
- 115 **Highwood pollution figures:** The figures for the Highwood Power Project are from "Cleanest in the Country? Highwood and Pollution," Montana Environmental Information Center, meic.org/energy/power/plants/highwood/highwood-facts. Notes on the public health impacts of pollutants are from "Environmental

Impacts Of Coal: Air Pollution,” Union of Concerned Scientists, ucsusa.org/clean_energy/coalvswind/cozc.html.

- 119 **ACCCE made a \$35 million commitment:** Steven Mufson, “Coal Industry Plugs Into the Campaign,” *Washington Post*, January 18, 2008.

T W E L V E

War Against the Mountains

- 124 **union organizers ... arrested, beaten, and even killed.** Robert Justin Goldstein, *Political Repression in Modern America: From 1870 to 1976* (University of Illinois Press, 1978, 2001), 189.
- 125 **In 1921 ... thirteen thousand West Virginia coal miners:** Robert Shogan, *The Battle of Blair Mountain: The Story of America's Largest Labor Uprising* (Westview Press, 2004); Jeff Biggers, *The United States of Appalachia* (Shoemaker & Hoard 2006); Lon Savage, *Thunder in the Mountains: The West Virginia Mine War, 1920–21* (University of Pittsburgh Press 1990).
- 126 **Formation of Save Our Cumberland Mountains (1972):** Chad Montrie, *To Save the Land and People: A History of Opposition to Surface Coal Mining in Appalachia* (The University of North Carolina Press, 2003), 186.
- 126 **Weakness of the Surface Mining Control and Reclamation Act; effect on the anti-mining movement:** Chad Montrie, *To Save the Land and People*, Chapter 9: “Against the Little Man Like Me: Legalized Destruction in the SMCRA Era.”
- 126 **The first such operation began in 1970:** Ken Ward, Jr., “Flattened: Most mountaintop mines left as pasture land in state,” *The Charleston Gazette*, August 9, 1998.
- 126 **No town was ever actually built:** Ken Ward Jr., “Flattened: Most mountaintop mines left as pasture land in state,” *Sunday Gazette-Mail*, August 9, 1998.
- 127 **James “Buck” Harless and the 2000 U.S. presidential election:** “James Harless,” CoalSwarm wiki; Thomas B. Edsall, Sarah Cohen and James V. Grimaldi, “Pioneers fill war chests, then capitalize,” *Washington Post*, May 16, 2004.
- 128 **“payback” from the new administration:** The full quote is: “You did everything you could to elect a Republican president. You are already seeing in his actions the payback, if you will, his gratitude for what you did.” Craig Aaron, “Bought and Paid For,” *In These Times*, March 26, 2004.
- 128 **Reclassification of “waste” to “fill”:** Joby Warrick, “Appalachia Is Paying Price for White House Rule Change,” *Washington Post*, August 17, 2004.
- 132 **Downstream Strategies wind study:** Evan Hansen et al., *The Long-Term Economic Benefits of Wind Versus Mountaintop Removal Coal on Coal River Mountain, West Virginia* (Downstream Strategies, 2008).

- 132 **Clean Water Protection Act:** The bill would add the following paragraph to Section 502 of the Federal Water Pollution Control Act:
- Fill Material.—The term “fill material” means any pollutant which replaces portions of the waters of the United States with dry land or which changes the bottom elevation of a water body for any purpose. The term does not include any pollutant discharged into the water primarily to dispose of waste.
- 133 **“As I write this letter, I brace myself...”** This is an abridged version of Bo Webb’s letter. The complete text can be found at Dave Cooper, “Letter From a Mountaineer to President Obama,” *Huffington Post*, February 23, 2009.
- 134 **By some estimates, only ten to twenty years of economically minable coal remained in Appalachia.** Leslie F. Ruppert, *Resource Assessment of Selected Coal Beds and Zones in the Northern and Central Appalachian Basin Coal Regions* (USGS Professional Paper 1625-C, 2000): “Sufficient high-quality, thick, bituminous resources remain in [Appalachian Basin] coal beds and coal zones to last for the next one to two decades at current production.”

THIRTEEN

The Grandmother Rebellion

- 136 **Background on the history of Black Mesa:** Judith Nies, “Black Mesa Syndrome: Indian Lands, Black Gold,” *Orion Magazine*, Summer 1998.
- 137 **“Somewhere far away from us, people have no understanding...”** Sean Patrick Riley, “Gathering Clouds,” *Los Angeles Times*, June 6, 2004.
- 137 **During his four years working, he had to fly five children:** Peter Montague, “Resistance at Desert Rock,” *Rachel’s Democracy and Health News* #889, January 11, 2007.
- 137 **More than five times as likely to be seen ... for respiratory complaints:** “Navajo Coal and Air Quality in Shiprock, New Mexico,” USGS Fact Sheet 2006-3094, July 2006.
- 137 **“as bright as daffodils”** Peter Montague, “Resistance at Desert Rock,” *Rachel’s Democracy and Health News* #889, January 11, 2007.
- 138 **The American Lung Association estimates 16,000 people:** Jeff Conant, “Speaking Diné to Dirty Power: Navajo Challenge New Coal-Fired Plant,” *CorpWatch*, April 3, 2007.
- 138 **San Juan and Four Corners emissions:** Ibid.
- 138 **150 million tons of coal combustion waste:** Ibid.
- 138 **In 1974 John Boyden and his coal industry allies pushed legislation through Congress:** Judith Nies, “Black Mesa Syndrome: Indian Lands, Black Gold,” *Orion Magazine*, Summer 1998.

- 139 **"...one of the worst cases of involuntary community resettlement that I have studied."** Letter from Thayer Scudder, Professor of Anthropology, California Institute of Technology, to Abdelfattah Amor, Special Rapporteur of the United Nations Commission on Human Rights, January 30, 1998.
- 139 **"I feel that in relocating these elderly people, we are as bad as the Nazis..."** *Women Transform The Mainstream: 18 Case Studies of Women Activists Challenging Industry, Demanding Clean Water and Calling for Gender Equality in Sustainable Development*, Sixth Session of the United Nations Commission on Sustainable Development (CSD-6), 1998.
- 139 **Enticed by the promise of a \$50 million annual payout to the Navajo Nation, the Tribal Council voted 66-7 in favor of inviting Síthe to build the plant:** "Navajo Speaker Morgan Reaffirms Commitment to Desert Rock," Desert Rock Energy Company press release, September 16, 2007.
- 140 **Ecos Consulting study:** *Renewable Energy and Economic Alternatives for the Navajo Nation* (Ecos Consulting, 2008).
- 141 **Desert Rock blockade:** Kathy Helms, "Protesters Blockade Desert Rock Site," *Gallup Independent*, December 13, 2006; Kathy Helms, "Resisters Move: No Arrests Made at Desert Rock's Future Location," *Gallup Independent*, December 22, 2006; Kathy Helms, "Spiritual Gathering to Heal the Earth Begins Thursday," *Gallup Independent*, November 7, 2007.
- 141 **"They had a small, white tent..."** Virginia L. Clark, "Resistance Leads to Human Blockade for Relatives of Taos Poets," *Call of the Wild*, January 1, 2007.
- 141 **Scores of local residents expressed vehement opposition:** Jason Begay, "Desert Rock Critics Flood Final Hearing," *Navajo Times*, September 26, 2007.
- 141 **Diné CARE sued the federal Office of Surface Mining:** Joe Hanel, "Judge Sets Timetable for Desert Rock Case," *Durango Herald*, December 8, 2007.
- 141 **Governor Richardson opposes plant:** Sue Major Holmes, "Richardson Speaks Out Against Coal Power Plant," Associated Press, July 27, 2007.
- 141 **Mountain Ute Tribal Council resolution:** Chuck Slothower, "Mountain Utes Oppose Desert Rock," *Durango Herald*, August 25, 2007.
- 141 **EPA expresses concerns:** "Desert Rock Energy Project: Power Plant Document Concerns EPA," *Santa Fe New Mexican*, September 16, 2007.
- 142 **Diné CARE presented Síthe with a report:** *Renewable Energy and Economic Alternatives for the Navajo Nation* (Ecos Consulting, 2008).
- 142 **Just Transition Coalition:** "Just Transition Coalition" on CoalSwarm wiki at SourceWatch.org; Christopher McLeod, "Seeking a Just Transition," *Earth Island Journal*, Summer 2006.
- 143 **Steve Schwarzman 99 percent pay cut and Blackstone \$1.33 billion loss:** "Blackstone CEO Takes 99 Percent Pay Cut," Reuters, March 3, 2009.

- 143 **Price escalation from \$1.5 billion to \$4 billion:** Will Sands, “Captured at Desert Rock: Power Plant Appeals for Federal Funds,” *Durango Telegraph*, August 13, 2009.
- 144 **Arizona Public Service stated its intention to move away from coal:** Ryan Randazzo, “2nd APS Solar Plant May Surpass Target Set for Green Energy,” *The Arizona Republic*, May 22, 2009.
- 144 **\$110,000 in legal fees:** “Discussion Points on the Desert Rock Power Plant,” Diné Citizens Against Ruining Our Environment, February 26, 2009.
- 144 **Joe Shirley Jr. continued to win key Tribal Council votes:** “Navajo President Joe Shirley, Jr., Pleased by Council Vote to Approve Desert Rock Energy Project Right-of-Way Permit,” Navajo Nation press release, February 28, 2009.
- 144 **“I worked on plenty of power plants...”** *Renewable Energy and Economic Alternatives for the Navajo Nation* (Ecos Consulting, 2008).

FOURTEEN

Cowboys Against Coal

- 146 **All ten of the largest coal mines:** “Major U.S. Coal Mines,” Energy Information Administration, eia.doe.gov/cneaf/coal/page/acr/table9.html.
- 146 **More coal than the entire state of West Virginia:** In 2007 West Virginia produced 153 million short tons of coal. North Antelope Rochelle produced 92 million short tons, and Black Thunder produced 86 million short tons. “Production and Number of Mines by State and Mine Type,” Energy Information Administration, eia.doe.gov/cneaf/coal/page/acr/table1.html; “Major U.S. Coal Mines,” Energy Information Administration, eia.doe.gov/cneaf/coal/page/acr/table9.html.
- 146 **According to some estimates they nearly equal the reserves of China:** Although China officially placed its coal reserves at 115 billion metric tons in 1992, California Institute of Technology professor David Rutledge estimates that the country’s remaining reserves had declined to about 71 billion metric tons as of 2006. Montana’s remaining reserves were 67.9 billion metric tons (74.9 billion short tons) in 2006, according to the Energy Information Administration. Source: David Rutledge, *Hubbert’s Peak, The Coal Question, and Climate Change*, Watson Lecture at Caltech, October 2007, rutledge.caltech.edu/. For further details, see “Coal reserves,” CoalSwarm wiki.
- 147 **North Central Power Study:** The study was released by the U.S. Bureau of Reclamation. Its conclusions are summarized in K. Ross Toole, *The Rape of the Great Plains: Northwest America, Cattle and Coal* (Atlantic Monthly Press and Little, Brown, 1976), 19–20.

- 147 **Founding of Northern Plains Resource Council; description of Boyd Charter:** K. Ross Toole, *The Rape of the Great Plains: Northwest America, Cattle and Coal* (Atlantic Monthly Press and Little, Brown, 1976), 122, 222–223.
- 149 **Opposition to Highwood plant in Helena and Missoula:** See Chapter Ten, “Progress Report: 59 Coal Plants Down.”
- 149 **RUS loan moratorium:** Letter from James M. Andrew, Administrator, United States Department of Agriculture Utilities Programs to Tim Gregori, Southern Montana Electric Generation and Transmission Cooperative, February 19, 2008.
- 149 **BER ordered more research on particulates smaller than 2.5 microns:** “State Orders More Study of Emissions,” *Great Falls Tribune*, April 22, 2008.
- 150 **Ron Segal:** “Rentech Announces Appointment of Former U.S. Air Force Under Secretary Ron Segal to Its Board of Directors,” *Business Wire*, December 18, 2007.
- 150 **Air Force synfuels plans:** Dave Montgomery, “Air Force pushing for liquefied coal to power its fleet,” *Lawrence Journal-World*, March 30, 2008; “Air Force Wants Coal for Fuel, But Will Idea Fly?” Associated Press, March 31, 2008.
- 151 **Air Force synfuels lobbying:** “Rentech Hires Lobbying Firm,” Associated Press, January 2, 2008.
- 151 **Malmstrom project:** “Malmstrom Air Force Base Coal-to-Liquids” and “U.S. Air Force and Coal,” CoalSwarm wiki.
- 151 **Waxman/Davis letter to Gates:** oversight.house.gov/documents/20080130112607.pdf.
- 152 **Air Force cancels Malmstrom:** Peter Johnson, “Officials Scrap Plans for Plant at Malmstrom,” *Great Falls Tribune*, January 30, 2009.
- 152 **Background on North Dakota:** “North Dakota and coal,” CoalSwarm wiki.
- 153 **Five North Dakota plants among the 50 worst emitters of carbon dioxide and mercury:** Measured in pounds of carbon dioxide or mercury per megawatt-hour. *Dirty Kilowatts: America’s Most Polluting Plants* (Environmental Integrity Project, July 2007).
- 153 **“The Bush gang finally gave up and we did not.”** Terrence Kardong, “A Win for the Mouse,” *Dakota Counsel*, December 10, 2008.
- 154 **Big Stone II chronology:** “Big Stone II,” CoalSwarm wiki.
- 154 **Eight Minnesota legislators:** Ron Way, “Big Stone II project faces increasing scrutiny,” *Minnesota Post*, April 29, 2008.
- 154 **David Schlissel testimony:** *Direct Testimony of David A. Schlissel and Anna Sommer, Synapse Energy Economics, Inc.*, (South Dakota Public Utilities Commission Case No ELO5-022, May 19, 2006).

- 155 **Leslie Glustrom's findings on limits to coal supplies:** Leslie Glustrom, *Coal Supply Constraints: Cheap & Abundant, Or Is It?* (Colorado Clean Energy Action, 2009).
- 156 **USGS study of the Gillette field:** James Luppens et al., *Assessment of Coal Geology, Resources, and Reserves in the Gillette Coalfield, Powder River Basin, Wyoming* (US Geological Survey Open-File Report 2008-1202, 2008).
- 156 **Two Big Stone II cosponsors withdrew:** Carissa Wyant, "Utilities Withdraw from Power Plant Project," *Minneapolis-St. Paul Business Journal*, September 18, 2007.
- 156 **Utilities underestimated construction costs:** "Big Stone II Power Plant Partners Study Independent Report," *West Central Tribune Online*, October 24, 2008.
- 156 **EPA filed objections to Big Stone II's air permit:** "Big Stone II Sent Back to the Drawing Board," Clean Water Action website, January 23, 2009.

F I F T E E N

Sierra

- 158 **Bruce Nilles:** Samara Kalk Derby, "A Season to Fight Coal: Madison Lawyer Piles Victories," *Madison Capital Times*, December 14, 2007.
- 159 **Development of Sierra Club National Coal Campaign:** Scott Martelle, "Killing King Coal," *Sierra Magazine*, March/April 2009; Matthew Brown, "Environmentalists Lead Charge Against Coal," Associated Press, January 15, 2008; *Sierra Club Foundation Annual Report 2008*.
- 160 **Erik Shuster's list of 151 proposed new coal plants:** *Tracking New Coal-Fired Power Plants* (National Energy Technology Laboratory, May 31, 2007) is archived at <http://cmNOW.org>. The most release of the report is posted at netl.doe.gov/coal/refshelf/ncp.pdf.
- 160 **Of the twenty-four thousand people estimated to die prematurely in the United States due to fine particles from power plants, a third are in the six industrial heartland states:** *Dirty Air, Dirty Power*, Clean Air Task Force, June 2004. The study estimates 7546 annual mortalities from power plant pollution in the following states: Pennsylvania 1825, Ohio 1743, Illinois 1356, Michigan 981, Indiana 887, Missouri 754.
- 160 **Illinois:** Peter Downs, "Addicted to Coal: The Battles Being Waged Here Will Shape the Nation's Energy Debate," *Illinois Times*, April 17, 2008; "Illinois and coal," CoalSwarm wiki.
- 160 **EnviroPower:** "Franklin County Power Plant," CoalSwarm wiki.

- 160 **"The Sierra Club's latest salvo..."** Peter Downs, "Addicted to Coal: The Battles Being Waged Here Will Shape the Nation's Energy Debate," *Illinois Times*, April 17, 2008.
- 161 **Taylorville Energy Center:** "Taylorville Energy Center," CoalSwarm wiki.
- 161 **Madison plants:** Samara Kalk Derby, "A Season to Fight Coal: Madison Lawyer Piles Victories," *Madison Capital Times*, December 14, 2007; "Stopping the Coal Rush," Sierra Club new coal plant proposal tracking list; "Doyle: No Coal at UW by 2012," *Badger Herald*, February 8, 2009; "Wisconsin and coal," CoalSwarm wiki; "Charter Street Heating Plant," CoalSwarm wiki.
- 162 **Texas, Missouri, Florida...** For a frequently updated status list of Sierra Club opposition to new coal plants across the country, see "Stopping the Coal Rush," sierraclub.org/environmentallaw/coal/plantlist.asp.
- 162 **Sierra's Dynegy campaign** Ted Nace, "Out of the Frying Pan: Dynegy Targeted by Sierra Club in New Anti-Coal Campaign," *Grist*, April 8, 2008; "Dynegy / LS Power," CoalSwarm wiki.
- 162 **In May, a hundred Sierra activists showed up at Dynegy's annual meeting and delivered 10,000 letters and emails:** Scott Martelle, "King Coal in Court," *Sierra Magazine*, May/June 2009.
- 164 **"Very little new power plant development is going on..."** Dynegy Inc. Q3 2008 Earnings Call Transcript, *Seeking Alpha*, November 6, 2008.
- 165 **Deseret petition:** Scott Martelle, "King Coal in Court," *Sierra Magazine*, May/June 2009.
- 166 **Seattle hearing:** Heather M., "Report From the Seattle EPA Global Warming Hearing," *Climate Crossroads*, May 22, 2009.

SIXTEEN

Taking It to the Streets

- 168 **Chris Copeland's account of the Harriman spill:** Chloe White, "TVA Ash Pond Breach: Resident Says Area Has 'Changed Forever'," *Knoxville News Sentinel*, December 23, 2008.
- 168 **It was one hundred times the reported size of the Exxon Valdez disaster:** "Tennessee sludge spill estimate grows to 1 billion gallons," CNN, December 26, 2008. The "one hundred times" figure is based on the eleven million gallon figure commonly cited for the size of the Exxon Valdez spill. In her account of the Exxon Valdez spill *Not One Drop* (Chelsea Green, 2008, 193-194), marine biologist Dr. Riki Ott points out that Exxon actually estimated the volume of the spill at between eleven and thirty-eight million gallons of oil, and the state of Alaska estimated the spill at thirty to thirty-five million gallons.

- 169 **Twitter was abuzz:** Sandra Diaz, “New Media Keeping Coal Ash Spill From Drowning in the Muck,” *Huffington Post*, January 8, 2009. According to Diaz, other crucial work in the early days to publicize the spill was done by the group United Mountain Defense, by Dave Cooper of the Mountaintop Removal Road Show, and by the Sierra Club.
- 169 **A Google search for the phrase “Tennessee spill”:** Ted Nace, “Blowback: Did the Coal Industry Create Its Own PR Nightmare?” *Grist*, December 31, 2008.
- 169 **“My worst nightmare”:** Steven Chu presentation at U.C. Berkeley, April 23, 2007. The quote, in context, is as follows: “Let me go to the supply side of the energy problem. Now, we have lots of fossil fuel. That’s really both good and bad news. We won’t run out of energy, but there’s enough carbon in the ground to really cook us. Coal is my worst nightmare. Carbon emission in the next thirty years is predicted in the current forecast to—we’ll be adding three times the amount of carbon dioxide in the previous history of all humanity if we continue on our present course.” Page Van Der Linden, “Nightmare on Coal Street: The Video,” *DeSmogBlog*, December 19, 2008.
- 171 **Capitol Power Plant:** Ted Nace, “Mean, Old, and Dirty: Climate Youth Activists Target the Capitol Power Plant,” *Grist*, December 24, 2008; “Capitol Power Plant,” CoalSwarm wiki; Jim Spellman and Andrea Koppel, “Effort to ‘green’ U.S. Capitol complicated by coal,” CNN.com, May 11, 2007; “The Capitol Power Plant,” *Hill Rag*, January 2006; Lyndsey Layton, “Capitol Hill’s polluting power plant resists green tide,” *Washington Post*, April 26, 2007; Lyndsey Layton, “Reliance on Coal Sullies ‘Green the Capitol’ Effort,” *Washington Post*, April 21, 2007.
- 173 **“We aim to create an action framework...”** Ted Nace, “Mean, Old, and Dirty: Climate Youth Activists Target the Capitol Power Plant,” *Grist*, December 24, 2008.
- 174 **“We can determine the fate of our generation...”** Ibid.
- 175 **“There are moments in a nation’s—and a planet’s—history...”** Mike Brune, “Wendell Berry and Bill McKibben Call for Mass Civil Disobedience Against Coal,” *Huffington Post*, December 12, 2008.
- 176 **Ayers reported that the switch had been accomplished:** Jordy Yager, “Capitol Power Plant to Stop Use of Coal,” *The Hill*, May 1, 2009.
- 177 **Following the Capitol Climate Action, the number of direct action protests against coal immediately increased both in frequency and size:** See Appendix A: “Protests Against Coal.”
- 180 **Assuming an average lifespan of fifty years, those 101 plants would have emitted 20 billion tons of carbon dioxide:** “100 Coal Plants Prevented or Abandoned: Movement Sparks Shift to Cleaner Energy and Over 400 Million Fewer Tons of CO₂,” Sierra Club press release, July 9, 2009. The Sierra estimate of 400 million tons of CO₂ per year is derived from the CARMA database of

power plants and proposed power plants. Details on the cancelled plants may be found on Sierra's "Stopping the Coal Rush" online tracking list of power plants at sierraclub.org/environmentallaw/coal/plantlist.asp.

- 180 **Virgin Earth Challenge:** Ted Nace, "Sir Richard Branson: Hand Over the \$25 Million! Why the No New Coal Plants Movement Should Be Awarded the Virgin Earth Challenge Prize," *Grist*, January 2, 2009.
- 181 **"In a few years, the backlash against coal power..."** Juliette Jowit, "Coal Plans Go Up in Smoke," *Manchester Guardian*, September 3, 2008.

APPENDIX A

Protests Against Coal

For further details on particular protests as well as information on protests that have taken place subsequent to the publication of this book, see "Non-violent direct actions against coal," CoalSwarm wiki, sourcewatch.org/index.php?title=Nonviolent_direct_actions_against_coal.

- 183 **Blockade at Zeb Mountain:** "Bannerhang and Blockade," Mountain Justice website, accessed April 2009; John Johnson, "Don't Chop Rocky Top: Katúah EF! Confronts Mountaintop Removal in Tennessee," *Earth First! Journal*, Samhain/Yule, 2003.
- 183 **Chesapeake Climate Action Network blockade of Dickerson Power Plant:** "Demonstrators Decry Mirant Corporation for Ignoring Public Health and Global Warming," Chesapeake Climate Action Network press release, November 10, 2004.
- 183 **Save Happy Valley Coalition occupation of Solid Energy headquarters:** "Anti-Coal Protestors Lock On to Solid Energy," Aotearoa Independent Media Centre, March 6, 2005.
- 184 **Mountain Justice Summer protest at National Coal Corporation:** "First Stockholders Meeting of National Coal Corporation Disrupted," Mountain Justice website, June 7, 2005.
- 184 **West Virginia citizens occupy Massey headquarters:** "Coalfield Citizens Arrested Delivering Demands to Massey Headquarters," Mountain Justice website, June 30, 2005; "Coalfield citizens arrested delivering demands to Massey headquarters," *Richmond Times Dispatch*, June 30, 2005.
- 184 **First Nations Mount Klappan mine blockade:** "Mine Road Blockade Rooted in Tahltan Dispute," *Toronto Globe & Mail*, September 7, 2005; "Fortune Miners Blocked From Entering the Mount Klappan Coal Fields," Ontario Coalition Against Poverty website, July 28, 2005; "Struggles of the Tahltan Nation," *Canadian Dimension*, December 2005.

- 184 **Save Happy Valley Coalition coal train blockade:** “Protesters Stop Solid Energy Coal Trains,” Save Happy Valley Coalition press release, August 13, 2005; “Save Happy Valley Members in Court,” Save Happy Valley Coalition press release, February 9, 2006.
- 185 **Earth First! and Mountain Justice Summer blockade of Campbell County mountaintop removal site:** “Eleven Arrested Protesting ET Coal Mine,” WBIR website, August 15, 2005; “Tennessee Coal Road Blocked to Protest Mountaintop Removal Mining,” Mines & Communities website, August 15, 2005.
- 185 **Rising Tide boat blockade of Newcastle, Australia, port:** “Exporting Climate Disaster: People Take Back the Port,” *It’s Getting Hot In Here*, June 8, 2006.
- 185 **Earth First!/Rising Tide blockade of Clinch River Power Plant:** “Earth First! Blockades Power Plant,” *Asheville Global Report*, July 26, 2007; “Resisting King Coal,” Rising Tide website, July 11, 2006.
- 185 **Drax Power Station blockade attempt:** “In the Shadow of Drax, Not So Much a Fight as a Festival,” *The Guardian*, September 1, 2006; “Green Protestors Mass to Close ‘Drax the Destroyer,’” Climate Ark website, August 31, 2006.
- 186 **Doodá Desert Rock blockade:** “Protesters Blockade Desert Rock Site,” *Gallup Independent*, December 13, 2006; “Resisters Move,” *Gallup Independent*, December 22, 2006.
- 186 **Rising Tide blockade of New South Wales Labor Party:** “Two Arrests in Coal Protest,” Fox News, February 27, 2007; “ALP HQ Blockade: Decision on Newcastle Coal Export Terminal Needed,” Rising Tide Australia website, accessed January 2008.
- 186 **Sit-in at West Virginia governor Joe Manchin’s office:** “11 Protesters Arrested at West Virginia Governor’s Office,” Mountain Justice Summer website, accessed January 2008.
- 186 **Blockade of Asheville Merrill Lynch:** “Climate Justice League Strikes Merrill Lynch,” April 13, 2007.
- 187 **ASEN Blockade of New South Wales Department of Planning:** “Polar Bear Locks On at Department of Planning Against Anvil Hill Mine,” Australian Student Environment Network website, June 8, 2007.
- 187 **Greenpeace blockade of New South Wales Department of Planning:** “Greenpeace Dawn Blockade: Climate Protestors Call for ‘No New Coal’ as NSW Water Crisis Worsens,” Greenpeace Australia press release, July 3, 2007.
- 187 **Southeast Convergence for Climate Action occupation of Asheville Bank of America:** “Protestors, Police Amass in Downtown Asheville,” *Mountain Xpress*, August 13, 2007; “Southeast Convergence for Climate Action Shuts Down Bank of America,” Blue Ridge Earth First! website, August 14, 2007.

- 187 **Occupation of Loy Yang Power Plant:** “Climate Protest Shuts Down Power Station,” ABC News, September 3, 2007; “Disrupting Loy Yang,” Real Action on Climate Change blog, September 3, 2007.
- 187 **ASEN Occupation of Newcastle coal port:** “11 Arrested at APEC Coal Protest,” ASEN website, September 4, 2007.
- 188 **Greenpeace occupation at Boxburg plant construction site:** “German Coal Plant Construction Site Occupied,” Greenpeace International, October 3 and 4, 2007.
- 188 **Greenpeace occupation of Kingsnorth Power Plant:** “Protestors Raid Coal Power Plant,” BBC News, October 8, 2007; “Greenpeace Shuts Down Coal Fired Power Station,” Greenpeace UK website, October 8, 2007.
- 188 **Rainforest Action Network banner hang at Bank of America corporate headquarters:** “Charlotte Banner Tells Bank of America: Stop Funding Coal!” Rainforest Action Network UnderStory blog, October 23, 2007.
- 188 **Rising Tide boat blockade of Newcastle port:** “Protestors Block Coal Ships in Newcastle,” *Sydney Morning Herald*, November 3, 2007; “Port Blockade a Success,” Rising Tide Australia website, accessed January 2008.
- 189 **Rainforest Action Network activists and allies blockade a Citibank branch in Washington, DC:** “Coalfield Residents, Activists and Students Close Down D.C. Citi Branch,” Rainforest Action Network press release, November 5, 2007.
- 189 **Rainforest Action Network Day of Action Against Coal Finance:** “Thousands Take to the Streets to Protest Citi and Bank of America’s Coal Investments,” Rainforest Action Network press release, November 16, 2007.
- 189 **Student blockade of Duke Energy headquarters:** “Students Chain Selves to Duke,” *Raleigh News & Observer*, November 16, 2007; “Direct Action at Duke Energy Over Proposed Coal Expansion,” *It’s Getting Hot In Here*, November 15, 2007.
- 189 **Greenpeace occupation of Munmorah Power Station:** “Chain Reaction: 15 Protestors Arrested,” *Sydney Morning Herald*, November 15, 2007.
- 190 **Rising Tide Kooragang Coal Terminal rail blockade:** “Coal Terminal Blockage Ended,” *Sydney Morning Herald*, November 19, 2007; “Coal Train Blockaded,” Rising Tide website, November 19, 2007.
- 190 **Blockade of Ffos-y-fran coal mine construction site:** “Activists Stop Welsh Coalmine Excavation,” *The Guardian*, December 5, 2007.
- 190 **Mountain Justice Spring Break action at AMP-Ohio headquarters:** “Mountain Justice Takes On King Coal in Columbus,” WattHead blog, March 28, 2008.
- 190 **Rising Tide and Earth First! occupation of Cliffside construction site:** “Eight Climate Protesters Arrested at U.S. Coal Plant,” Reuters, April 1, 2008; “Eight Arrested as North Carolina Residents Shut Down Construction at Cliffside Coal Plant,” Fossil Fools Day blog, April 1, 2008.

- 191 **Rainforest Action Network blockade of a Citibank office in New York City:** “Billionaires for Dirty Energy Blockade Citibank in New York, Two Arrested,” Fossil Fools Day blog, April 1, 2008.
- 191 **Rising Tide and Rainforest Action Network blockade of Boston Bank of America branch:** “An April Fools Protest,” *Boston Globe*, April 1, 2008; “Activists Blockade Bank of America to Protest Funding of Coal, Boston,” Fossil Fools Day blog, April 1, 2008.
- 191 **Occupation of Ffos-y-fran coal mine construction site:** “Making a Stand,” *Merthyr Express*, April 3, 2008; “Protestors Shut Down Open-Cast Mine in Wales, Two Arrests,” Fossil Fools Day blog, April 1, 2008.
- 191 **Eastside Climate Action blockade of E.ON headquarters, Nottingham, United Kingdom:** “Climate Protest in City Centre,” *Nottingham Evening Post*, April 1, 2008; “Eastside Climate Action Blockade E.ON Workers As Part of Fossil Fools Day,” *UK Indymedia*, April 1, 2008.
- 192 **Rising Tide occupation of Aberthaw Power Station:** “Aberthaw Power Station Successfully Blockaded This Morning,” *UK Indymedia*, April 3, 2008; “Direct Action Double Whammy Against Welsh Carbon Dinosaurs,” Luther ap Blissett blog, April 6, 2008.
- 192 **Blue Ridge Earth First! blockades Dominion Power’s headquarters:** “3 Arrested in Protest Near Dominion Office,” *Richmond Times Dispatch*, April 15, 2008; “We Shut Down a Major Corporation On an Hour of Sleep and So Can You!” Blue Ridge Earth First! website, April 15, 2008.
- 192 **Rising Tide blockade of coal terminal construction site in New South Wales:** “18 Arrested at Climate Change Protest,” *News.com.au*, April 19, 2008.
- 192 **Activists halt coal train on its way to United Kingdom’s largest power plant:** “Coal Train Ambushed Near Power Station in Climate Change Protest,” *The Guardian*, June 14, 2008; “Police Arrest 29 Coal Train Protesters,” Reuters UK, June 14, 2008.
- 193 **Protesters upstage Brisbane coal conference:** “Protesters picket Qld coal conference,” Australian Broadcasting Corporation, June 16, 2008.
- 193 **Activists demonstrate outside Bank of America headquarters:** “Bank of America’s Coal Investments Revisited,” Rainforest Action Network Understory blog, June 26, 2008.
- 193 **Activists blockade Dominion headquarters:** “Thirteen Arrested in Protest at Dominion Today,” *Richmond Times-Dispatch*, June 30, 2008.
- 193 **Greenpeace activists shut down a portion of Australia’s most polluting power station:** “Activists Protest at Australian Power Plant,” Reuters UK, July 3, 2008.
- 193 **Earth First! activists lock down at American Municipal Power headquarters, Columbus, Ohio:** “Women Climb Flagpole in Power Plant Protest,” *NBC*

- 4 *Columbus*, July 7, 2008; “Police arrest protesters at Ohio power company,” *WDTN 2 Dayton*, July 8, 2008.
- 194 **Mountain Justice activists protest approval of coal gasification plant, Boston, Massachusetts:** “Youth Protest State’s Approval of Coal Gasification Plant,” Mountain Justice website, July 10, 2008.
- 194 **Greenpeace activists occupy coal-fired power plant smokestack for thirty-three hours:** “Greenpeace Protesters Scale 140m Chimney,” *Sydney Morning Herald*, July 11, 2008; “It’s a Wrap: Watch a Video of the Occupation as It Unfolded,” Greenpeace Australia website, accessed July 15, 2008.
- 194 **Blockades at Kooragang and Carrington coal terminals:** “Protest halts coal train for six hours,” *Sydney Morning Herald*, July 14, 2008; “More coal protest arrests at Newcastle,” *Business Spectator*, July 14, 2008; “Time for Action! People take action to halt coal exports,” Camp for Climate Action, Australia, website, July 14, 2008.
- 195 **UK activists target coal-fired plant’s PR agency:** “Activists Target Edelman in Climate Change Protest,” *PR Week UK*, July 17, 2008; “Carbon Capture at E.ON’s Kingsnorth Coal Plant,” *Carbon Commentary*, January 14, 2008; “Oxford Climate Action Spin the Spinners!” *UK Indymedia*, July 16, 2008.
- 195 **Four arrested at Tennessee strip mine:** “Appalachian Residents Gather to March on Zeb Mountain,” *The Small Ax*, July 21, 2008; “More Anti-Coal Direct Action at Appalachian Mine Site,” Rainforest Action Network, July 21, 2008.
- 195 **Australian citizens blockade farm to stop coal exploration:** “People Power vs. Government Greed,” Caroon Coal Action Group website, July 22, 2008; “Bring It On: Caroon Says ‘No’ to the Big Australian,” *Northern Daily Leader*, July 22, 2008.
- 196 **Greenpeace paints anti-coal messages on twenty coal ships:** “Garrett Defends Coal Exports,” *Sydney Morning Herald*, July 28, 2008.
- 196 **Activists glue themselves to coal giant’s headquarters:** “Coal Protest Team Glued to Doors,” BBC News, August 11, 2008.
- 196 **Southeast Convergence for Climate Action locks down at Bank of America, Richmond, Virginia:** “50 Protesters Urge Energy Regulation,” *Richmond Times-Dispatch*, August 11, 2008; “SE Convergence Locks Down at Richmond Bank of America,” *It’s Getting Hot in Here*, August 11, 2008.
- 196 **Greenpeace Rainbow Warrior launches “Quit Coal” protest campaign in Israel:** “Israeli Police Arrest Greenpeace Rainbow Warrior Captain on ‘Quit Coal’ Protest,” Greenpeace website, accessed October 6, 2008.
- 196 **Twenty protesters lock down at Dominion coal plant construction site in Wise County, Virginia:** “Peaceful Protesters Lock Their Bodies to Dominion Power Plant,” Wise Up Dominion press release, September 15, 2008; “Dominion CEO Punkd!” Rainforest Action Network Understory blog, September 15, 2008.

- 197 **Prime minister's office occupied:** "PM's Brisbane Office Targeted By Green Protesters," *Brisbane Times*, September 22, 2008; "Climate Protesters Occupy PM's Office," news.com.au, September 22, 2008
- 197 **Protesters shut down a Citibank branch in Cambridge, Massachusetts:** "Protestors Tell Citi and Bank of America: Not With Our Money, End Your Destructive Investments," Rainforest Action Network, September 27, 2008.
- 197 **Greenpeace "Quit Coal" tour visits Spain, boards coal ship:** "Quit Coal' Action Against Coal Ship in Spain," *Scoop World Independent News*, October 6, 2008.
- 197 **Citizens rally at state capitol against new coal use, Little Rock:** "Arkansans Protest Against New Coal Use," KATV-6, October 18, 2008.
- 197 **Premier of Queensland's office occupied:** "Friends of Felton Occupy Anna Bligh's Office," Friends of Felton website, accessed November 12, 2008.
- 198 **Zombie March on top coal investors, Boston, Massachusetts:** "Zombie March on Coal's Top Investors, Copley Square, Boston," Ian MacLellan's Photo Blog, October 31, 2008.
- 198 **Rising Tide activists shut down Bayswater Power Station, New South Wales:** "25 Arrested at NSW Power Station Protest," *Sydney Morning Herald*, November 1, 2008; "29 Arrested After Six-Hour Climate Protest at Bayswater Power Station," Rising Tide Newcastle, November 1, 2008.
- 198 **Activists shut down Collie Power Station, Western Australia:** "Protesters Chained to Collie Power Conveyor," *West Australian*, November 5, 2008.
- 198 **Activists shut down Hazelwood power station:** "Hazelwood Tops List of Dirty Power Stations," World Wide Fund; "Protesters Target Hazelwood Power Station," Australian Broadcasting Corporation, November 6, 2008.
- 199 **Activists shut down Tarong Power Station, Queensland, Australia:** "Climate Activists Disrupt Australian Power Plant," Reuters, November 10, 2008; "Police Arrest Tarong Power Protesters," Australian Broadcasting Corporation, November 7, 2008.
- 199 **National Day of Action Against Coal Finance (November 14-15, 2008):** "Young Activists Fired Up in Fight Against Coal," *Post and Courier*, November 19, 2008.
- 199 **Greenpeace activists protest outside mine, Poznan, Poland:** "Polish Miners, Greens Clash on Eve of Climate Talks," *Planet Ark*, November 25, 2008.
- 199 **Activist shuts down Kingsnorth Power Station in the United Kingdom:** "Oldest Power Station 'Must Be Closed,'" *Central Coast Express Advocate*; "No New Coal—The Calling Card of the 'Green Banksy' Who Breached Fortress Kingsnorth," *The Guardian*, December 11, 2008.
- 199 **Santa Protest at TVA in Knoxville:** "Santa Protests TVA," dirtycoaltva.blogspot.com/2008/12/santa-protest-tva.html, December 6, 2008.

- 200 **Santa Detained at TVA in Chatanooga:** [youtube.com/watch?v=YECmuMFNcG8](https://www.youtube.com/watch?v=YECmuMFNcG8).
- 200 **Sludge Safety Lobby Day:** Jeff Biggers, “Takes a Village to Stop Razing Appalachia: Power Past Coal Fights Back,” March 12, 2009, Power Past Coal.
- 201 **Coal River Mountain activists arrested, Pettus, West Virginia:** Jeff Biggers, “Takes a Village to Stop Razing Appalachia: Power Past Coal Fights Back,” Power Past Coal website, March 12, 2009; “Coal River Mountain Can’t Wait,” *Grist*, February 3, 2009; “Fourteen Arrested Defending Coal River Mountain,” Power Past Coal website, February 3, 2009.
- 201 **Rising Tide Boston crashes Arch Coal CEO lecture, Cambridge, Massachusetts:** “Rising Tide Boston Crashes Talk by Arch Coal CEO,” Power Past Coal website, February 5, 2009.
- 201 **Billionaires for Coal visit Dominion headquarters in Richmond, Virginia:** “Billionaires for Coal Visit Dominion Resources HQ in Richmond February 7,” *RootsWire*, February 7, 2009.
- 201 **Ed Schultz action:** “Grassroots Rockin’ on Ed Schultz!” GrassrootsGrow blog, February 9, 2009.
- 202 **Santee Cooper protest:** Jeff Biggers, “Takes a Village to Stop Razing Appalachia: Power Past Coal Fights Back,” March 12, 2009, Power Past Coal.
- 202 **Activists close accounts with Bank of America, San Francisco, California:** “Rising Tide Bay Area: ‘Bank of America, Where’s Your Heart?’” Rainforest Action Network Understory blog, February 15, 2009.
- 202 **Two arrested for halting blasting at mountaintop removal site, Raleigh County, West Virginia:** “Blasting at Clays Branch” Climate Ground Zero press release, February 16, 2009.
- 202 **Frankfurt protest:** “Hundreds Call for End to Mining Damage,” *Courier-Journal*, February 18, 2009.
- 202 **March in Corpus Christi, Texas:** “Hundreds Call for End to Mining Damage,” *Courier-Journal*, February 18, 2009.
- 203 **Activists rally against coal in Massachusetts”** “Action en Mass!” Power Past Coal website, March 8, 2009.
- 203 **Thousands gather to protest coal and global warming, Washington, DC:** “Thousands Rally for Legislation on Climate Change,” Associated Press, March 2, 2009; “Pelosi/Reid Call to Switch Capitol Power Plant off of Coal!” *It’s Getting Hot in Here*, February 26, 2009; “Thousands Storm Capitol Hill in Largest Protest Against Global Warming,” *AlterNet*, March 3, 2009.
- 203 **United Mountain Defense volunteer arrested by TVA:** “Volunteer Arrested at TVA Ash Disaster Site,” Student Environmental Action Coalition, March 6, 2009, seac.org/node/174.

- 203 **Activists protest mountaintop removal, Pettus, West Virginia:** “Operation Appalachian Spring: Sit-in Coal Campaign Blooms,” Power Past Coal press release, March 5, 2009.
- 204 **Middlebury “Freeze on Coal”:** Jeff Biggers, “Takes a Village to Stop Razing Appalachia: Power Past Coal Fights Back,” March 12, 2009, Power Past Coal website.
- 204 **Council Building blockade in Brussels, Belgium:** “Over 300 Greenpeace Activists Arrested After Finance Ministers Blockade,” Greenpeace press release, March 10, 2009.
- 204 **Protesters march against coal in Palm Springs, California:** “March For Clean Energy Seeks to Curb Coal Use,” *Desert Sun*, March 15, 2009.
- 204 **Fourteen arrested at TVA headquarters in Knoxville, Tennessee:** “March 14, 2009: Fourteen Arrested at TVA Headquarters During March in March,” Mountain Justice website, March 15, 2009; youtube.com/watch?v=8hZhjd2dNBg.
- 205 **Anti-coal protesters gather outside statehouse in Topeka, Kansas:** “Anti-coal Groups Converge on KS Statehouse,” *Kansas City Star*, March 19, 2009.
- 205 **“Bluegrass at the Bank” hits Bank of America branch in Sarasota, Florida.** “Bluegrass at the Bank Strikes Again!” Mountain Justice website, March 20, 2009.
- 205 **Protesters blockade coal terminal in Newcastle, Australia:** “Protesters Close Newcastle Coal Terminal,” *Steel Guru*, March 23, 2009.
- 205 **Rising Tide disrupts coal-to-liquids conference in Washington, D.C.:** “DC Rising Tide Disrupts Coal-to-Liquids Conference,” *It’s Getting Hot in Here*, March 26, 2009.
- 206 **Students rally outside capitol in Austin, Texas:** “ReEnergize Texas!” Power Past Coal website, March 31, 2009.
- 206 **Inanimate activist with Mannequins for Climate Justice shuts down Bank of America branch in Boston, Massachusetts:** “Mannequins for Climate Justice Shut Down Bank of America,” Power Past Coal website, March 31, 2009.
- 206 **Greenpeace activists hold a “coal circus” on Boston Common:** “Clean Coal? April Fools Says Greenpeace,” *The Boston Globe*, April 1, 2009.
- 206 **Over a hundred arrested for allegedly planning direct action against coal plant in Nottingham, United Kingdom:** Juliette Jowit and Matthew Taylor, “Mass Arrests Over Power Station Protest Raise Civil Liberties Concerns,” *The Guardian*, April 14, 2009.
- 206 **Activists arrested at Massey Energy mine in West Virginia:** “Activists Hang “EPA Stop MTR” Banner on Massey Mine, Arrested,” Climate Ground Zero press release, April 16, 2009.

- 207 **Hundreds protest in Charlotte, North Carolina, against Duke's proposed Cliffside plant:** "Hundreds March and 44 Arrested to Stop Cliffside Power Plant," Power Past Coal press release, April 21, 2009.
- 207 **Activists begin fast to urge immediate action on global warming.** Fasting for our Future website, accessed May 4, 2009.
- 207 **Greenpeace activists hang banner at international climate meeting in Washington, D.C.:** "It's a Beautiful Day for a Banner Hang!," Greenpeace USA website, April 27, 2009.
- 207 **Activists protest Cliffside plant at Duke Energy shareholder meeting:** "Coal Debate Highlights Duke Meeting," *Triangle Business Journal*, May 8, 2009.
- 207 **Police remove eleven activists from mountaintop removal protests in West Virginia** "Removal Coal Mining; More Protestors Expected This Afternoon," Press Release, May 23, 2009; "Group Raising Money for Bail for Coal Protesters," Associated Press, May 26, 2009.
- 208 **Brushy Fork arrests:** "Non-violent Civil Disobedience in Coal River Valley, WV: Seventeen Arrested in Three Separate Actions," Mountain Justice website, May 23, 2009.
- 208 **Activists board coal ship in Kent, England:** "Protesters Leave Coal Cargo Ship," BBC News, June 22, 2009. "Thousands demonstrate against coal plant in Mainz," *The Local*, May 24, 2009.
- 209 **Mainz, Germany protest:** "Thousands demonstrate against coal plant in Mainz," *The Local*, May 24, 2009.
- 209 **Activists scale 20-story dragline at mountaintop removal site in Twilight, West Virginia:** Jeff Biggers, "Daring Dragline Protest Launches 7 Days That Will Shake Mountaintop Removal Operations," *Common Dreams*, June 18, 2009.
- 209 **Activist board ship in Kent, England:** "Protesters leave coal cargo ship," BBC News, June 22, 2009.
- 209 **Dozens arrested protesting at Massey Energy site in Coal River Valley, West Virginia:** Jeff Biggers, "Nonviolent Goldman Prize Winner Attacked by Massey Supporter: 94-Year-Old Hechler, Hannah, Hansen Arrested at Coal River," *Huffington Post*, June 23, 2009.
- 209 **More than 700 turn out against carbon sequestration:** "700 protest against carbon dioxide plan," *Dayton Daily News*, June 30, 2009.
- 210 **Banner drop at EPA, Boston:** "Boston Rising Tide Activists Drape Banner On EPA Building, Call on EPA to Stop Mountaintop Removal," Rainforest Action Network Understory blog, June 29, 2009.
- 210 **Mount Rushmore:** "Greenpeace Activists Arrested After Draping Banner on Mount Rushmore," *Washington Post*, July 8, 2009.
- 210 **Greenpeace activists spray-paint coal ship and power station in Italy:** Jani Myer, "Greenpeace Red-Flags Ship Carrying SA Coal," *Independent Online*, July

- 11, 2009; “BHP Coal Berth Blocked by Greenpeace Ship as Protest Continues,” *Bloomberg*, August 6, 2009.
- 210 **Boulder rally:** “Public packs Valmont power plant hearing,” Clean Energy Action, July 14, 2009.
- 210 **Lansing rally:** “Crowd rallies at Capitol for renewable energy,” *Lansing State Journal*, July 29, 2009.
- 211 **Hay Pt. terminal blockade:** “BHP Coal Berth Blocked by Greenpeace Ship as Protest Continues,” *Bloomberg*, August 6, 2009.
- 211 **Hamilton, UK protest:** “Coal protest outside council HQ,” BBC News, August 10, 2009.
- 211 **Charleston, WV lockdown:** “4 Lockdown at WV Dept. of Environmental (No) Protection,” *It’s Getting Hot In Here*, August 11, 2009.
- 211 **National Coal “Going Away Party”:** “Hug and Love National Coal Number 2 protest 8 0001,” [youtube.com/watch?v=9JFFrJ9NCoU](https://www.youtube.com/watch?v=9JFFrJ9NCoU); “Love and Hug National Coal Protest 3 Stockholders 8 20 09,” [youtube.com/watch?v=Kcu5d18b1PQ](https://www.youtube.com/watch?v=Kcu5d18b1PQ).
- 212 **Activists occupy trees in Coal River Valley:** “Treesit stopping blasts above Pettry Bottom, Coal River Valley,” Climate Ground Zero, August 25, 2009; “Tree-sitting protest of mountaintop removal ends in W.Va. after 6 days; activists arrested,” Taragana blog, August 31, 2009.

APPENDIX B

Coal Plants Canceled, Abandoned, or Put on Hold

For further details on particular plants, see “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list, sierraclub.org/environmentallaw/coal/plantlist.asp, or CoalSwarm’s wiki pages organized by year: “Coal plants cancelled in 2007,” sourcewatch.org/index.php?title=Coal_plants_cancelled_in_2007; “Coal plants cancelled in 2008,” sourcewatch.org/index.php?title=Coal_plants_cancelled_in_2008; “Coal plants cancelled in 2008,” sourcewatch.org/index.php?title=Coal_plants_cancelled_in_2009;

- 213 **Hunter Unit 4:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 213 **Big Brown 3, Morgan Creek 7, Tradinghouse 3 and 4, Sandow 5, Monticello 4, Martin Lake 4, Lake Creek 3:** Andrew Ross Sorkin, “A buyout deal that has many shades of green,” *New York Times*, February 26, 2007.
- 213 **Cliffside second unit:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.

- 213 **Corn Belt plant:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 213 **Indian River Power Plant:** “Indian River,” CoalSwarm wiki.
- 214 **Escanaba plant:** “WPPI Stows Earlier Coal Plant Proposal,” *Platts Coal Outlook*, May 14, 2007.
- 214 **PacifiCorp plants:** See Chapter Nine, “The Education of Warren Buffett.”
- 214 **Nueces IGCC plant:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 214 **Taylor Energy Center:** “Taylor Energy Center,” CoalSwarm wiki.
- 214 **Glades Power Plant:** “Glades,” CoalSwarm wiki.
- 214 **Sallisaw Electric Generating Plant:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 214 **LS Power Sussex proposal.** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 214 **Thoroughbred Generating Station:** “Court Says No to Peabody Coal,” *Media Island International*, August 9, 2007.
- 214 **Seminole 3 Generating Station:** “Seminole 3,” CoalSwarm wiki.
- 214 **Nelson Creek Project:** “Nelson Creek Project,” CoalSwarm wiki.
- 215 **South Heart Power Project:** “South Heart on Life Support,” *Dakota Counsel*, August 2007.
- 215 **Mesaba Energy Project:** “State Agency Blocks Coal Plant,” Minnesota Center for Environmental Advocacy, August 3, 2007.
- 215 **Holcomb Unit 3:** Tim Carpenter, “Holcomb Plant at Center of Emissions Conflict,” *Topeka Capital-Journal*, September 23, 2007.
- 215 **Russell Station II:** Daniel Wallace, “Russell Station Plans Change,” *Rochester Democrat and Chronicle*, September 29, 2007.
- 215 **Gascoyne 175 Project:** “MDU Shelving Gascoyne Power Plant,” *Bismarck Tribune*, May 29, 2006.
- 215 **Roundup Power Project:** Clair Johnson, “Roundup Power Permit Invalid,” *Billings Gazette*, July 17, 2007.
- 215 **Red Rock Generating Station:** “OCC Denies Application for Red Rock Plant,” AEP website, September 10, 2007.
- 215 **Avista plant:** “Avista Issues Resource Plan,” Avista press release, September 4, 2007.
- 215 **Bowie IGCC Power Station:** “Bowie IGCC Power Station,” CoalSwarm wiki.
- 215 **Holcomb Units 1 and 2:** Steven Mufson, “Power Plant Rejected Over Carbon Dioxide for First Time,” *Washington Post*, October 10, 2007.

- 216 **Marion Gasification Plant:** Alex Klein, “TECO, Nuon Cancellations Underscore IGCC’s Woes,” Emerging Energy Research, October 5, 2007, Exhibit 2.
- 216 **Huntley Generating Station:** Alex Klein, “TECO, Nuon Cancellations Underscore IGCC’s Woes,” Emerging Energy Research, October 5, 2007, Exhibit 2.
- 216 **Buffalo Energy Project:** Alex Klein, “TECO, Nuon Cancellations Underscore IGCC’s Woes,” Emerging Energy Research, October 5, 2007, Exhibit 2.
- 216 **Xcel IGCC plant:** “Unnamed Xcel Energy Plant,” CoalSwarm wiki.
- 216 **Polk Power Station:** “Polk Power Station Unit 6,” CoalSwarm wiki.
- 216 **West Deptford Project:** “West Deptford Project,” CoalSwarm wiki.
- 216 **Stanton Energy Center:** “Stanton Energy Center,” CoalSwarm wiki.
- 216 **Pacific Mountain Energy Center:** “Pacific Mountain Energy Center,” CoalSwarm wiki.
- 216 **Twin River Energy Center:** “Twin River Energy Center,” CoalSwarm wiki.
- 217 **Matanuska Power Plant:** “Matanuska Power Plant,” CoalSwarm wiki.
- 217 **Idaho Power project:** John Miller, “Idaho Power gives up on coal-fired plant,” *Idaho Statesman*, November 7, 2007.
- 217 **Elmwood Energy Center:** “Elmwood Energy Center,” CoalSwarm wiki.
- 217 **Rentech Energy Midwest:** “Rentech Energy Midwest Corporation,” CoalSwarm wiki.
- 217 **Alcoa project:** Alan Brody, “Power Plant Plug Pulled,” *Southern Maryland News Online*, December 14, 2007.
- 217 **Jim Bridger Station expansion:** “PacifiCorp Cancels Wyoming Coal Projects,” *Wyoming Tribune-Eagle*, December 11, 2007.
- 217 **Southern Illinois Clean Energy Center:** “Stopping the Coal Rush,” Sierra Club status list.
- 217 **Soda Springs project:** “Stopping the Coal Rush,” Sierra Club status list.
- 217 **Jim Bridger IGCC demonstration project:** “PacifiCorp Cancels Wyoming Coal Projects,” *Wyoming Tribune-Eagle*, December 11, 2007.
- 218 **Intermountain Power Project expansion:** Jasen Lee, “PacifiCorp to fuel plant with wind, gas—not coal,” *Deseret Morning News*, December 8, 2007; “Intermountain Power Project Unit 3,” CoalSwarm wiki.
- 218 **Kansas City Board of Public Utilities project:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 218 **Bethel Power Plant:** “Bethel Power Plant,” CoalSwarm wiki.
- 218 **Rosemount Project:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 218 **Ray D. Nixon Power Plant:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.

- 218 **Fayette County Economic Development Project:** “Fayette County Economic Development Project,” CoalSwarm wiki.
- 218 **Baldwin Energy Complex:** “Baldwin Energy Complex,” CoalSwarm wiki.
- 218 **Illinois Energy Group project:** “Illinois Energy Group,” CoalSwarm wiki.
- 219 **Elkhart Proposal (Turris):** “Elkhart Proposal (Turris Coal),” CoalSwarm wiki.
- 219 **AES Colorado Power Project:** “AES Colorado Power Project,” CoalSwarm wiki.
- 219 **High Plains Energy Station:** “High Plains Energy Station,” CoalSwarm wiki.
- 219 **Buick Coal and Power Project:** “Buick Coal and Power Project,” CoalSwarm wiki.
- 219 **FutureGen:** “FutureGen,” CoalSwarm wiki.
- 219 **Big Cajun II Unit 4:** “NRG Energy, Inc. Q4 2007 Earnings Call Transcript,” Seeking Alpha website, Feb. 28, 2008.
- 219 **Kenai Blue Sky Project:** “Kenai Blue Sky Project,” CoalSwarm wiki.
- 219 **Norborne Baseload Plant:** “Norborne Baseload Plant,” CoalSwarm wiki.
- 220 **Mountaineer IGCC:** “Mountaineer,” CoalSwarm wiki.
- 220 **SIU Power Plant:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 220 **Gascoyne 500 Project:** “Coal Company Suspends Effort to Build N.D. Power Plant,” *Bismarck Tribune*, May 21, 2008.
- 220 **Milton Young 3:** “Minnkota, FPL Announce Wind Farm Plans,” Minnkota press release, March 29, 2007; Lauren Donovan, “Economic Pinwheels Spinning in Oliver,” *Bismarck Tribune*, June 25, 2008.
- 220 **Gilberton Coal-to-Clean-Fuels and Power Project:** “Gilberton Coal-to-Clean-Fuels and Power Project,” CoalSwarm wiki.
- 220 **Sithe Shade Township Project:** “Sithe Shade Township Project,” CoalSwarm wiki.
- 221 **Lower Columbia Clean Energy Center:** “Lower Columbia Clean Energy Center,” CoalSwarm wiki.
- 221 **Twin Oaks Power Unit 3:** “PNM Resources Drops Texas Coal-Plant Expansion,” Reuters, August 12, 2008.
- 221 **Western Greenbrier Co-Production Demonstration Project:** “Western Greenbrier Co-Production Demonstration Project,” CoalSwarm wiki.
- 221 **Buffalo Energy Project:** “Buffalo Energy Project,” CoalSwarm wiki..
- 221 **Benwood Plant:** “Benwood Project,” CoalSwarm wiki.
- 221 **Nelson Dewey Generating Facility expansion:** “PSC Rejects Alliant Energy’s Proposed Coal Plant,” *Journal Sentinel*, November 11, 2008.

- 222 **Indiana SNG:** “Indiana SNG,” CoalSwarm wiki.
- 222 **Kentucky Mountain Power:** “Kentucky Mountain Power,” CoalSwarm wiki.
- 222 **Lima Energy Plant.** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 222 **Thoroughbred:** “Thoroughbred Generating Station,” CoalSwarm wiki.
- 222 **Elk Run Energy Station:** “Elk Run Energy Station,” CoalSwarm wiki.
- 222 **Highwood Generating Station:** “Highwood Generating Station,” CoalSwarm wiki.
- 222 **Malmstrom Air Force Base Coal-to-Liquids:** “Malmstrom Air Force Base Coal-to-Liquids,” CoalSwarm wiki.
- 223 **AES Shady Point:** “AES Shady Point II,” CoalSwarm wiki.
- 223 **Ely Energy Center:** “Ely Energy Center, Phase I,” CoalSwarm wiki.
- 223 **Little Gypsy Repowering project:** “Little Gypsy Repowering,” CoalSwarm wiki.
- 223 **White Pine Energy Station:** “White Pine Energy Station,” CoalSwarm wiki.
- 223 **Sutherland Generating Station Unit 4:** “Sutherland Generating Station Unit 4,” CoalSwarm wiki.
- 223 **Unnamed Tri-State plant:** “Tri-State to Review Coal-Fired Power Plant Prospects,” *Power Engineering*, April 13, 2009.
- 223 **NextGen Energy Facility:** Letter from Lyle Witham to Lynn Gustafson, South Dakota Department of Environment and Natural Resources website, May 18, 2009.
- 224 **Midland Power Plant:** Tina Lam, “Plan for Coal Plant in Midland Cancelled,” FreeP.com.
- 224 **Northern Michigan University Ripley Addition:** “Stopping the Coal Rush,” Sierra Club new coal plant proposal tracking list.
- 224 **Intermountain Power Project Unit 3:** Jasen Lee “PacifiCorp to Fuel Plant with Wind, Gas—Not Coal,” *Deseret Morning News*, December 8, 2007.



Index



151 proposed coal plants 15, 20, 100
2008 Presidential campaign 113, 121
“80% of the solution” 9

A

Abel, Gregory 86, 94
Aberthaw Power Station 192
Abingdon strategy meeting on
 mountaintop removal 128, 131
ACCCE 113, 167, 201
acid rain 19, 115, 142. *See also* air
 pollution, sulfur dioxide
AEP 86, 219, 223
AES 86
 Colorado Power Project 219
 Shady Point 223
Agnone, Jon 76, 85
Agrium Corp. 219
Air Force. *See* U.S. Air Force
air pollution 115, 172
 acid rain 19, 115, 142
 air pollution 172
 arsenic 116, 138
 asthma 137, 144, 145
 beryllium 116
 best available control technology 165
 black lung disease 134
 cadmium 116
 California carbon dioxide standard 144
 carbon monoxide 115
 Class I air 153
 emissions from “clean coal” plant 115
 emissions from Four Corners and
 San Juan generating station 138
 heavy metals 116
 hydrocarbons 115
 illnesses and premature deaths 115, 116
 lead 116, 138
 manganese 116
 mercury 115, 118, 138, 154
 nitrogen oxide 115
 particulates 115, 149, 160
 PM_{2.5} 150, 172
 respiratory illnesses 137, 138
 smog in the Grand Canyon 138
 soot 138
 See also carbon dioxide, coal and
 environmental impacts, global
 warming
Alaskan Native corporations 97
Alexander, Anthony J. 86
Allegheny Energy 86
Alliance for Appalachia 124, 178
Alliance for Climate Protection 170
Alliant Energy 86, 223
Ameren 86

America's Energy Futures Forum 110
 American Coalition for Clean Coal
 Electricity (ACCCE) 113
 American Electric Power 185, 215
 American Lung Association 138, 161
 American Municipal Power 24, 83,
 193, 194
 amplification model of protest 76, 85
 AMP-Ohio 190
 Andasol 1 solar thermal plant 38
 Anderson, Dan 75, 183
 Andrews, Mano 23
 anti-coal movement, 106, 155, 181, 182
 100 plants blocked 180
 Big Green 26
 Christian anti-coal groups 131, 208
 comparison with anti-nuclear
 movement 101
 direct action tactics 73–84
 grassroots nature of 181
 inside/outside tactics 174
 litigation 96, 180
 No New Coal Plants campaign 106,
 155, 181, 182
 No New Coal Plants listserv 21–32,
 35, 36
 Not in My Backyard (NIMBY) 119
 stigmatizing coal executives 95
 success of 181
 swarm tactics 26, 96
 tactics 26, 85, 95, 96
 targeting project financing. *See* coal
 project financing
 Web 2.0 networking 180
 Anvil Hill coal mine 187
 Apollo Alliance 143
 Appalachia 123–134
 history of coal company violence
 124–125
 Appalachian Citizens Law Center 23, 132
 Appalachian Group to Save the Land
 and People 74
 Appalachian Mountains 124, 126
 Appalachian Power Company 220
 Appalachian Voices 132, 189
 Appalshop 132

Arch Coal 73, 201
 Are You Connected? campaign 133
 Arizona 73, 162
 Arizona Public Service 144
 Arkansas 163, 197
 arsenic 116, 138
 Ashkelon power plant 196
 Associated Electric Cooperative 218
 Audobon Society 16, 57
 Ausra 39
 Australia 50, 185–190, 193–196, 198, 199,
 205, 211
 Australian Student Environmental
 Network (ASEN) 187
 Avista Utilities 215
 Ayers, Stephen 176

B

Baker, Vicki 116, 117, 118
 Baldwin Energy Complex 218
 bank protests. *See* Bank of America,
 Citibank
 Bank of America 81, 82, 177, 178, 187–189,
 191, 193, 196–198, 202, 205
 Banner Busters affinity group 183
 banner hangs 188
 Barbas, Paul 86
 Basin Electric Power Cooperative 66, 223
 Bayswater Power Station 198
 Beerling, David 11
 Bendinskas, Kestas 119
 Benwood Plant 221
 Berkshire Hathaway 89–96
 Berner, Robert 11
 Bernotat, Wulf H. 86
 Berry, Wendell 175
 beryllium 116
 best available control technology 165
 BHP Billiton 195, 196
 Big Brown plant 213
 Big Cajun 219
 Big Coal. *See* coal industry
 Big Green 25, 56, 159
 Big Stone II plant 54, 153–157, 170
 Biggers, Jeff 169
 Bill and Melinda Gates Foundation 92

- Billionaires for Coal 88, 89, 191, 201
 - black lung disease 134
 - Black Mesa 79, 135–136, 177
 - Black Mesa Mine 137, 138
 - Black Mesa Water Coalition 135, 143, 178
 - Black Thunder Mine 146
 - Blackstone 139, 143
 - Blagojevich, Rod 160
 - Blair, John 25
 - Blankenship, Don 1
 - Blount Street facility 161
 - Blue Ridge Earth First 192
 - Bluegrass at the Bank 205
 - Blewater Wind 36
 - bolt weevils 75
 - Bonds, Judy 123, 129, 209
 - Bookbinder, David 165
 - Boston Pacific Co. 156
 - Botswana 49
 - Bowen, Mark 5
 - Bowie IGCC Power Station 215
 - Boxburg Plant 188
 - Boyden, John 136, 138
 - Branson, Richard 179–181
 - Bremby, Rod 62
 - Britain. *See* United Kingdom
 - British Columbia 54, 184
 - Brower, David 159
 - Brown, Elouise 141
 - Brown, Gordon 190
 - Brown, Lester 106
 - Brune, Mike 82
 - Brushy Fork impoundment 207
 - Buffalo Creek Dam disaster 129
 - Buffalo Energy Project 216, 221
 - Buffett, Warren 85–96
 - Buick Coal and Power Project 219
 - Bull Mountain Development 215
 - Bullpush Mountain mine 126
 - Burton, Bob 28, 105
 - Bush, George W., 20
 - Bush administration support for coal 53, 61, 128, 165
 - Bush-Gore 2000 Presidential campaign 127
 - Bush Rangers 127
 - Cheney energy task force 20
 - coal industry support for 127
 - “payback” for coal industry support 128
 - Byrd, Robert 130, 172
- C**
- cadmium 116, 138
 - California 40, 41, 90, 91, 189
 - greenhouse gas standards 92, 144
 - Public Utilities Commission 143
 - Camp for Climate Action Scotland 211
 - Campbell, David 86
 - Campbell, Gordon 54
 - Canary Coalition 178
 - cancer 25
 - Cannelton Industries 126
 - cap-and-trade 120
 - Caperton Coal Company 74
 - Capitol Climate Action 177, 203
 - Capitol Power Plant 171–176, 203
 - carbon capture and sequestration. *See*
 - carbon capture and storage
 - carbon capture and storage (CCS) 28, 30
 - costs of 38
 - geological unsuitability in Maine 98
 - geological unsuitability in Minnesota 30
 - Greenville, Ohio, protest 209
 - See also* integrated gasification combined cycle, clean coal
 - carbon dioxide 165
 - California carbon dioxide standard 144
 - corporate disclosure requirements 163
 - emission limit 54
 - emissions by proposed new coal plants 180
 - emissions from “clean coal” plant 115
 - regulation of 53, 62, 73, 96, 165, 170
 - state regulation of 54, 59
 - carbon footprint. *See* greenhouse gases per capita
 - Carbon Monitoring for Action (CARMA) 102
 - carbon monoxide 115
 - Carbon Principles 129
 - carbon tax 54

- Carrington coal terminal 187,194
- Caruso, Guy 44
- Cascade Investments 221
- Cascadia Rising Tide 93
- Cash Creek plant 27
- CCS. *See* carbon capture and storage
- Center for Media and Democracy 103
- Central Minnesota Municipal Power Agency 153, 156
- Chameides, Bill 16
- Chandra, Michelle 101
- Charter Street plant 161, 162
- Charter, Boyd 147
- Cheney energy task force 20
- Cherin, Mike 178
- Chesapeake Climate Action 173, 183
- Chevron 205
- China 47–52
- Chinn, Meilin 101
- Christians for the Mountains 131, 208
- Chu, Stephen 169
- Citi 107
- Citibank 73, 81, 82, 107, 129, 189, 197, 198
- Citizens Against the Mesaba Project (CAMP) 31, 33
- Citizens Lead for Energy Action Now (CLEAN) 121
- Citizens' Utility Board of Oregon 93
- civil disobedience. *See* direct action
- Class I air 153
- Clean Air Act 62, 142, 166, 170
- Clean Air Task Force 27, 57, 161
- clean coal 16, 167, 170
 - clean coal carolers 167
 - cadmium, selenium, arsenic, and lead in coal waste 138
 - commercial deployment not near-term 114
 - definition of 114
 - emissions from 115
 - enforcement problems 114
 - "I believe" advertising campaign 113
 - media campaign 113–116, 119
 - Obama support for 120
 - unsolved technical, legal, and institutional problems 114
- Clean Coal Power Resources 218
- Clean Energy Action 210
- Clean Up Our River Environment (CURE) 154
- Clean Water Act 128
- Clean Water Action 210
- Clean Water Protection Act 132
- Cliffside plant 83, 88, 177, 290, 207, 213
- climate change. *See* global warming
- Climate Convergences 77–81, 93 187, 196
- Climate Ground Zero 206–208, 212
- Clinch River Power Plant 185
- Clinton, Hillary 110
- coal
 - abundance relative to oil and gas 9, 10 and Wall Street 107
 - as main cause of global warming 8–10
 - asthma 137
 - Big Coal. *See* coal industry public relations and political activity
 - black lung disease 134
 - cancer 25
 - carbon intensity of 9
 - Chinese consumption 47–52
 - comparison to financial problems of nuclear power 107–108
 - phasing out emissions as "80% of the solution" to global warming 9
 - exports 50
 - exports from Australia 50
 - financing. *See* coal project financing
 - fly ash. *See* coal waste
 - gasification 118–119
 - history 19–20
 - lignite 152
 - longwall mining 112
 - mining impacts. *See* coal mining
 - moratorium on new plants 9, 15, 18, 53, 73, 112, 206
 - peak coal 155
 - phasing out existing plants 11
 - power plants. *See* coal plants
 - proposed coal plants 15
 - public opinion and polls 36, 59, 61, 112
 - relation with peak oil 13
 - reserves. *See* coal reserves 9, 10

- respiratory problems 137, 138
- shift from underground to surface mining 19
- shift to/from natural gas 20
- shift toward Western mines 19
- subsidies 31
- sulfur content 19
- waste 138
- See also* air pollution, anti-coal movement, clean coal, coal mining, coal's health and environmental impacts, coal reserves, integrated gasification combined cycle, mountaintop removal, protests, regulations and statutes, transmission lines
- coal combustion waste. *See* coal waste
- coal exports 50
- coal's health and environmental impacts
 - acid rain 19
 - air pollution 172
 - arsenic 116, 138
 - asthma 137, 144, 145
 - beryllium 116
 - black lung disease 134
 - cadmium 116, 138
 - cancer 25
 - carbon monoxide 115
 - "clean coal" emissions 115
 - coal waste 138
 - global warming 1, 4–6, 8
 - heavy metals 116
 - hurricanes 58, 59, 61
 - hydrocarbons 115
 - illnesses and premature deaths 115, 116
 - lead 116, 138
 - manganese 116
 - mercury 115, 118, 154
 - nitrogen oxide 115
 - particulates 115, 149, 160, 172
 - PM_{2.5} 150, 172
 - respiratory illnesses 137
 - selenium 138
 - smog in the Grand Canyon 138
 - soot 138
 - sulfur dioxide 19, 115, 142
 - toxic metals 116
 - water pipelines 148
 - water pollution 200
 - waste 138
 - See also* carbon dioxide, global warming
- coal industry public relations and political activity
 - American Coalition for Clean Coal Electricity (ACCCE) 113, 167, 201
 - chief executive officers of power companies 74
 - Edelman Public Relations 195
 - Henrie, Bob 112
 - Lucas, Joe 167–201
 - National Mining Association 20, 105, 112, 119
 - National Rural Electric Cooperative Association 66
 - political clout 121, 179
 - political contributions 172
 - R&R Partners 113
 - Raney, William 127
 - West Virginia Coal Association 127
- coal mining
 - black lung disease 134
 - Crandall Canyon mine collapse 112
 - repression of union organizing 124
 - environmental effects in Meigs County, Ohio 24
 - explosives 126
 - mountaintop removal 123–134, 202
 - strip mines 14, 19, 24, 66, 74, 75, 126, 136, 138
 - United Mine Workers 125
 - Wilburg Mine fire 112
 - See also* Anvil Hill Mine, Black Mesa Mine, Black Thunder Mine, Bullpush Mountain, Edwight, Ffos-y-fran, Kanawha Eagle, Kayenta Mine, Kayford Mountain, Marfork, Mount Klappan, Navajo, North Antelope Rochelle, Patriot, Twilight mine

- coal moratorium, 9, 15, 18, 53, 73, 112, 206
 - Coal Moratorium Now! 18, 21, 110
 - Florida 60
 - march in Palm Springs 204
 - mayors supporting 94, 97
 - New Zealand 54
 - Ontario 54
 - Progress Energy 55
 - public opinion 112
 - Washington state 54
- coal plant cancellations 73, 97, 101, 111, 164
 - cancellation of projects by Warren Buffett 85–96
 - Coal Plant Deathwatch Map 101
 - fifty-nine plants cancelled 105, 106
 - reasons for cancellations 106
- coal plants 9, 15, 86
 - age of 18
 - air emissions 115, 172
 - California carbon dioxide standard 144
 - carbon dioxide emissions regulation 165
 - cancellations. *See* coal plant cancellations
 - Chinese coal plant construction boom 47
 - consumption of coal by 19
 - Energy Department list of 151
 - proposed new coal plants 15, 19, 20, 100, 108, 160, 179
 - escalation in construction costs 32–33
 - existing plants 171
 - integrated gasification combined cycle (IGCC) 26–33, 215
 - moratorium on. *See* coal moratorium, No New Coal Plants
 - private sector decision makers 74
 - public opposition 73
 - rising construction costs 96
 - size of 18
 - See also* synfuels
- Coal Plant Deathwatch Map 101
- coal project financing 44, 72, 73, 82, 106, 107, 149, 160, 189, 199, 213, 220, 221
 - See also* Bank of America, Blackstone, Chase, Citibank, Cascade Investments, J.P. Morgan, Merrill Lynch, Morgan Stanley, Rainforest Action Network
- coal reserves 9, 10, 155
 - Botswana 49
 - China 47–51
 - Germany 48
 - Montana's larger than Wyoming's 146
 - Montana's nearly equal China's 146
 - United Kingdom 48
- Coal River Mountain 201
- Coal River Mountain Watch 123, 129, 132, 134, 178, 184, 189, 199, 209
- Coal River Valley 134, 184, 212
- Coal River Wind Project 201
- coal slurry pipeline 137
- coal waste 24, 138
- coal-fired power plants. *See* coal plants
- CoalSwarm 104, 171, 181
- coal-to-liquids 150–152, 222. *See also* synfuels
- Coalypmics 99
- Colombia 197
- Colorado 210
- Colorado Springs Utilities 218
- Coloradoans for Clean Energy 22
- Colstrip 148
- Combs, Ollie 74
- community organizing 80, 180
- concentrating solar power. *See* solar power
- conservation 40, 45
- CONSOL Energy 205, 221
- Consumers Power 107
- Convergences 77–81, 93, 187, 196
- COP-14 protest 199
- Coop America 121
- Cooper, Dave 128
- Cooper, Jim
- Copeland, Chris 168
- Corn Belt plant 213
- Corporate Scrooge award 96
- corporate influence on energy policy 85
- Corpus Christi march 202

Council Bluffs plant 95
 Crandall Canyon mine collapse 112
 Crane, David 86
 Crawford plant 99
 CREDO Mobile 121
 “crimes against humanity and nature” 87
 Crispin Porter & Bogusky 170
 Crist, Charlie 59, 60, 74
 Cuomo, Andrew 163
 Curly, Liz 117
 Cutajar, Michael Zammit 79–80

D

Dakota Resource Council 21, 147
 Dakota Rural Action 148
 Daley, Richard M. 99
 Dave Cooper’s Mountaintop Removal
 Road Show 128
 Delaware 36–38, 53, 69
 Densmore, John 175
 Dershowitz, Alan 160
 Deseret Plant 165
 Desert Lands Act of 1877 136
 Desert Rock plant 139, 140, 143, 144, 186
 blockade 141
 public opinion 140
 Dickerson Power Plant 183
 Diné CARE 139, 142
 Diné people 140
 Dine, Marie Gladue 178
 direct action 73–84, 183–212
 effect on public opinion 76
 See also protest
Dirty Kilowatts 102, 153
 District of Columbia 172
 Dominion 83, 86, 88, 192, 193, 196, 201
 doodá 140
 Doodá Desert Rock 140, 186
 Downstream Strategies 132
 DPL 86
 dragline occupation 209
 Draw Power Station 79, 185, 192
 DTE Energy 86
 Duke 86, 88, 96, 189, 207, 213,
 Dynegy 86, 96, 162–164, 214, 216, 218, 219
 Stop Dynegy Campaign 162–164

E

E.ON 86, 188, 191, 195, 199
 Earley, Anthony, Jr. 86
 Earth First! 93, 185, 190, 192–195, 199,
 Blue Ridge Earth First 192
 Katúah Earth First 75, 183
 Stumptown Earth First 93
 Three Rivers Earth First 195, 199
 Earth Policy Institute 106
 Ecos Consulting 140
 Edelman Public Relations 195
 EDF 55, 56
 Edison Electric Institute 64
 Edwards, John 100
 Edwardsport 88
 Edwight mine 177, 202, 203, 206, 212
 efficiency 40–43, 45, 59
 electricity
 cost comparisons with renewables 37
 role of coal in production of 9
 Elk Run Energy Station 222
 Elkhart proposal 218
 Ellsaesser, Hugh 5
 Elmwood Energy Center 217
 Ely Energy Center 223
 Emery Mining Corporation 112
 emissions. *See* air pollution
 Energy Action Coalition 88
 Energy Department (DOE). *See* U.S.
 Department of Energy
 Energy Independence and Security Act
 of 2007 (EISA) 151
 Energy Information Administration
 (EIA). *See* U.S. Energy Information
 Administration
 Energy Justice Network 23
 Energy Northwest 98, 216
 Energy Watch Group 48–50
 Engen, John 98
 England. *See* United Kingdom
 Entergy 86, 223
 Environmental Defense Fund 16, 27
 Environmental Integrity Project 102
 environmental movement. *See* anti-coal
 movement
 EnviroPower 160–161, 222

EPA. *See* U.S. Environmental Protection Agency
 Eraring Power Station 193
 Escanaba plant 214
 European Union 204
 Eurora Group 27
 Evanson, Paul 86
 Ewall, Mike 23
 Excelsior Energy 30, 215
 Exelon 86
 existing coal plants. *See* coal plants

F

Farrell, Thomas F., II 86, 197
 Fast for Our Future action 207
 Faulkner, William 125
 Fayette County, West Virginia 126
 Federal Water Pollution Control Act 132
 Ffos-y-fran coal mine 190, 191
 “First they ignore you...” 111
 FirstEnergy 86
 Fisk plant 99
 Florida 54–61, 64, 161, 162, 189, 205,
 Department of Environmental
 Protection 60
 Municipal Power Agency 60, 214
 Public Service Commission 54, 57,
 58, 59
 fly ash. *See* coal waste
 Fortune Minerals 184
 Fossil Fool awards 96
 Fossil Fools International Day of Action
 88, 191, 192
 Foundation Coal Holdings 73
 Four Corners Power Plant 136, 138, 140
 Fowler, Erich 137
 FPL 57
 Frank, Thomas 63
Future of Coal study 28
 FutureGen 219

G

G&Ts. *See* generation and transmission
 coops
 Gahrn, Amy 169
 Garnaut, Ross 193

Gascoyne 175 project 215
 Gascoyne 500 Project 220
 gasification 118–119. *See also* integrated
 gasification combined cycle
 Gates Foundation 92
 Gates, Bill 92, 154, 221
 generation and transmission
 coops 66–67
 Georgia 162, 163
 geothermal power 35, 39, 45
 Gerard, Jack N. 20
 Gerken, Marc 190
 Germany 48, 51, 188
 Gandhi 111
 Gibson, Larry 135
 Gilberton Coal-to-Clean-Fuels and
 Power Project 220
 Gillette coal field 49, 146, 156. *See also*
 Powder River Basin
 Giuliani, Rudolph 80
 Glades Power Plant 54, 57, 60, 214
 Gleneagles camp 79
 Glick, Ted 23, 174
 Glimour, Alice 141
 global warming 1, 4–6
 Bill Gates attitude toward 92
 Charles Munger attitude toward 91
 coal as main cause 8
 deniers and skeptics 6, 66
 disclosure of corporate emissions 163
 hurricanes caused by 58, 59, 61
 Patrick Michaels 66
 public opinion and polling 58, 59, 61
 scientific consensus 6–7
 Glustrom, Leslie 24, 155
 Goddard Institute for Space Studies 3
 Golden Spread Electric Cooperative 67
 Goldman Award 123, 133
 Goodell, Jeff 29
 Google 45
 “Google juice” 103
 Gore, Al 59, 66, 121
 Grand Canyon smog 138
 Grand Canyon Trust 143
 grassroots organizing, as technology for
 preventing climate change 179

- Great Northern Power 214, 215
 Great River Energy 153, 156
 Green Delaware 25, 35
 greenhouse gases
 corporate disclosure requirements 163
 Massachusetts v. EPA 53, 62, 164, 165
 per capita emissions 51
 regulation and standards 62, 91, 165
 regulation by states 59
 Greenpeace 114, 173, 187, 188, 193, 194,
 196, 199, 206, 207, 210, 211
 Greenpeace Australia 189
 Greenpeace UK 188
 Greenville, Ohio, CCS protest 209
 Griles, Stephen 128
 Gunnoe, Maria 131, 133
- H**
- Hamilton, Matthew 75, 183
 Hannah, Daryl 175, 209
 Hanrahan, Paul 86
 Hansen, James 1, 2, 53, 154, 159, 175, 209
 background of 3–6
 defense of Kate Ruth and Hannah
 Morgan 84
 ending coal emissions is “80% of the
 solution” to climate change 9
 global warming predictions 5
 “Implications of ‘Peak Oil’ for
 Atmospheric CO₂ and Climate”
 13
 letter to James Rogers 87–88
 peak oil analysis 13
 proposal for a moratorium on new
 coal plants 15, 18
 “Target Atmospheric CO₂: Where
 Should Humanity Aim?” 10, 11
 testimony on behalf of Kingsnorth 6
 defendants 84
 Venus climate research 6
 Happy Valley protests 79
 Harless, James “Buck” 127
 Harriman sludge spill. *See* Tennessee
 sludge spill
 Harvey, William D. 86
 Hawkins, David 28
 Hazelwood power station 198
 Heartland Consumers Power
 District 153
 Heartwood 132
 heavy metals 116, 138
 Hechler, Ken 1, 208, 209
 Helena, Montana 97, 98, 149
 Henrie, Bob 112
 High Plains Energy Station 219
 high voltage transmission lines. *See*
 transmission lines
 Highwood Generating Station 97, 115,
 149, 222
 Higi, Marcus 137
 Hill Residents for Steam Plant
 Conversion 172
 Holcomb Plant 62–72, 162, 215
 Honor the Earth Foundation 143
 Hopi Nation 135, 137
 Horse Hollow Wind Energy Center 421
 Horsherder, Nicole 137
 Howard, Greg 23
 Howard, John 187
 Hudema, Mike 78
 Huffman, Randy 211
 Hunter Unit 4 project 213
 Huntley Generating Station 106, 216
 Hurricane Katrina 59
 hurricanes 58, 59, 61
- I**
- “I believe” clean coal media campaign
 113
 I Love Mountains 130, 202
 Idaho 90
 Idaho Power Project 217
 Idaho Rural Council 148
 IGCC. *See* integrated gasification
 combined cycle
 Illinois 158, 160, 162, 163,
 Illinois Energy Group 218
 I Love Mountains 130, 202
 “Implications of ‘Peak Oil’ for
 Atmospheric CO₂ and Climate” 13
An Inconvenient Truth 66
 Indeck Energy Services 217

Indian River plant 36–38, 213
 Indiana 88, 160
 Indiana SNG 222
 Indigenous Environmental
 Network 143
 inside/outside tactics 174
 integrated gasification combined cycle
 (IGCC) 26–33, 57, 161
 plants 217, 220, 221
 See also Bowie IGCC, Cash Creek,
 Nueces IGCC, Mountaineer,
 Xcel IGCC
 integrated resource plans 91, 96
 Intergovernmental Panel on Climate
 Change (IPCC), 10
 Intermountain Power Project 92,
 218, 224
 Intermountain Rural Electric
 Association 66
 International Resource Inc. 172
 Iowa 89, 162–164, 222
 IPCC. *See* Intergovernmental Panel on
 Climate Change
 Iron Range Resources 30–31
 Israel 196
 Italy 210
 Izaak Walton League 154

J

J.P. Morgan Chase 107, 129
 Jackson, Lisa 165
 Jacobs, Mark M. 86
 Jamesville Positive Action Committee
 (JAM-PAC) 117
 Jim Bridger Station 93, 217
 jobs, 68, 83, 98, 100, 113, 118, 131, 132, 142,
 143, 197, 206, 208
 Johnson, William D. 86
 Jorgensen, Julie 30
 Jowit, Juliette 181
 JP Morgan Chase 107, 129
 Just Transition Coalition 142

K

Kalama Plant 98, 99, 216
 Kanawha Eagle Mine 172

Kansas 62–72, 161, 162, 205
 Department of Health and
 Environment 62, 71, 72
 Natural Resources Council 68
 See also Holcomb Plant, Sierra Club,
 Sunflower Electric
 Kansas City Board of Public Utilities 218
 Karas, Tom 25
 Kardong, Terrence 153
 Kayenta Mine 136
 Kayford Mountain 135, 208
 Kelly, Richard C. 86
 Kenai Blue Sky Project 219
 Kentuckians for the Commonwealth
 130, 132, 202
 Kentucky 73, 74, 162
 Kentucky Mountain Power 222
 key private sector decision makers on
 coal 86
 Kharecha, Pushker 11
 Kilgore, Tom 86, 96
 Killian, Earl 102
 Kingsnorth 188, 199, 209
 Kingston Fossil Plant 168–169, 203
 See also Tennessee sludge spill
 Kise, Chris 60
 Kohm, Lenny 132
 Kooragang coal terminal 194
 Krasowski, Bob and Jan 57–58
 Krill, Jennifer 128, 129
 Kuhnline, Dana 178
 Kyoto Protocol 79

L

Land Stewardship Project 154
 Landon, Matt 168, 203
 LaPlaca, Nancy 22
 Large Combustion Plant Directive 195
 lawful excuse defense 84
 Lazard Ltd. study of electricity
 generating costs for coal and
 renewables 37
 lead 116, 138
 League of Conservation Voters 170
 Leer, Steve 201
 Leonard, J. Wayne 66

- Leonard, Matt 23, 55, 101, 105, 173
 Leucadia National Corporation 222
 Levy, Jeffrey 169
 Lewis, Roger 139
 lignite 152
 Lima Energy plant 222
 litigation 96, 180
 Little Gypsy 223
 Little Village Environmental Justice
 Organization (LVEJO) 99–100, 178
 Lofft, Alexander 94
 Long Island Lighting Company 107
 Long, Dáilan 139, 144
 Longleaf coal plant 163
 longwall mining 112
 Los Angeles Department of Water and
 Power 224
 Louisiana 162, 223
 Love and Hug National Coal Month 211
 Lower Columbia Clean Energy
 Center 221
 Loy Yang Power Plant 187
 LS Power 162, 164, 214, 216, 219, 222–224
 Lucas, Joe 167–201
 Luminant 86. *See also* TXU
- M**
- Machin, Joe 186
 Madison Power 216
 Madison Gas & Electric 161
 Maine 69, 98, 216
 Malmstrom coal-to-liquids project
 150–152, 170, 222
 manganese 116. *See also* coal impacts
 Mannequins for Climate Justice 177, 206
 Marfork mining complex 207
 Marion Gasification Plant 216
 Marsh Fork Elementary School 129, 130,
 184, 186, 202, 209
 Martin Act 163
 Maryland 183
 Massachusetts 194, 203
Massachusetts v. EPA 53, 62, 164, 165
 Massey Energy 1, 129, 177, 184, 201–203,
 206, 207, 209, 212
 Masson-Delmotte, Valerie 11
 Matanuska Power Plant 217
 Mattea, Kathy 175
 mayors opposing coal plants and
 mountaintop removal
 Charlottesville, North Carolina 97
 Park City, Utah 97
 Pocatello, Idaho 97
 McCain, John 61, 121
 McConnell, Mitch 172
 McGuinty, Dalton 54
 McIlmoil, Rory 132
 McKibben, Bill 100, 175
 Meigs Citizens Action Now! 24
 Meigs County, Ohio 116, 190
 mercury 27, 102, 115–116, 153–154, 168, 202
 Merrill Lynch 88, 107, 186
 Mesaba Energy Project 30–34, 36, 215
 Michaels, Patrick 66
 Micheletti, Tom 30
 Michigan 73, 160, 162–164, 210, 224
 Michigan Interfaith Power and Light 210
 Michigan Land Use Institute 211
 MidAmerican Energy 89–96
 Middlebury College 100, 204
 Midland plant 163, 164, 224
 Mid-Michigan Energy 224
 Midwest Generation 99
 Milbank, Dana 3, 7
 Miller, James H. 86
 Miller, Steve 68
 Milton Young plant 220
 mining. *See* coal mining
 Minnesota 30–34, 53, 75, 153–157
 Public Utilities Commission 33, 156
 power line controversy 75
 Minnesota Center for Environmental
 Advocacy 154
 Minnkota Power Cooperative 220
 Mirant Corporation 86, 183
 Missouri 160, 162
 Missouri River Energy Services 153
 Mohave Generating Station 137, 138, 142
 Montana 73, 97, 146–152, 162, 222
 Board of Environmental Review 149
 Montana Environmental Information
 Center (MEIC) 149, 152

- Montana-Dakota Utilities 153
 Monticello 4 plant 213
 Moon, Sarah 133
 Morgan Creek plant 213
 Morgan Stanley 129
 Morgan, Hannah 83
 Morris, Michael G. 86
 Mount Klappan Mine 184
 Mount Rushmore banner hang 210
 Mountain Island Energy 217
 Mountain Justice 83, 184, 194, 195, 199, 204, 207, 208, 212
 Mountain Justice Spring Break 190
 Mountain Justice Summer 129, 185, 186, 189
Mountain Mourning (DVD) 131
 Mountaineer IGCC plant 220
 Mountaintop Gun Club 75
 mountaintop removal 123–134, 202
 Bullpush Mountain 126
 Christian opposition 131
 Clean Water Protection Act 132
 definition of “fill” 132
 Mountaintop Removal (film) 130
 origins of 126
 Mountaintop Removal Road Show 128
 Muller, Alan 25, 35–37, 58
 Muller, Edward R. 86
 Munger, Charles 91
 Munmorah power plant 189
 Murdoch, Sierra 178
- N**
- National Audobon Society 57
 National Coal Corporation 83, 184, 185, 195
 National Day of Action against Coal Finance 199
 National Mining Association 20, 105, 112, 119
 National Parks Conservation Association 121
 National Research Council 49
 National Rural Electric Cooperative Association 66
 National Wildlife Federation 16, 27, 57, 170
 Native Americans and coal 176
 natural gas and coal 20
 Natural Resources Defense Council (NRDC) 16, 27, 28, 55, 56, 57, 170
 Nature Conservancy 16
 Navajo Aquifer 138
 Navajo Generating Station 136
 Navajo Mine 141
 Navajo Nation 135–144
 relocation 138–139
 See also Black Mesa
 negawatts 40
 Nelson Creek project 214
 Nelson Dewey Generating Facility 221
 Nevada 137, 161–164
 Nevada Power 223
 New Jersey 163
 New Mexico 134, 141, 143
 New York 163, 191
 New York Loves Mountains 133
 New Zealand 54, 79, 184
 Newcastle Port blockades 187, 188, 192, 205
 NextGen 223
 Nieto, Kimberly Wasserman 100
 Nilles, Bruce 158–159, 161, 165
 NIMBY 119
 NiSource 86
 nitrogen oxide 115, 138
 No New Coal Plants
 listserve 21–32, 35, 36
 organization 56, 100
 See also anti-coal movement, coal moratorium
 No Nukes! movement 101
 non-violent direct action. *See* direct action
 Norborne Baseload Plant 219
 Norris, David 97
 North Antelope Rochelle Mine 146
 North Carolina 88, 177, 186, 187, 189, 190, 193, 207
North Central Power Study 147
 North Dakota 21, 66, 73, 75, 152–153
 Northern Cheyenne 148

- Northern Michigan University Ripley Addition 224
- Northern Plains Resource Council 147
- Northwest Energy Coalition 93, 96, 98
- Not in My Backyard (NIMBY) 119
- Nottingham preemptive arrests 177, 206
- NRDC. *See* Natural Resources Defense Council
- NRG Energy 36–37, 86, 106, 213, 216, 219
- nuclear power 107–108
- Nueces IGCC plant 214
- O**
- Obama, Barack 61, 110, 133, 152, 156, 169, 174
- administration actions on coal 165, 170
 - statement on cap-and-trade 120
 - support for clean coal 120
- Office of Surface Mining 141
- Ohio 83, 116, 160, 190, 209
- Ohio Valley Environmental Coalition 132, 199
- oil shale 13
- Oklahoma 54, 73, 162, 163
- Oklahoma Gas & Electric 215
- Ontario 54
- OPEC 8
- Oppenheimer, Michael 6
- Oregon 90–92, 189, 221,
- Oregon Rural Action 148
- Orlando Utilities Commission 60, 216
- Otter Tail Power 153–157
- Ouray Indian Reservation 165
- Overland, Carol 29–33, 35, 36, 58
- Oxford Climate Action 195
- P**
- Pacific Mountain Energy Center 216
- PacifiCorp 89–96, 213, 214, 217, 218
- Paganini, Mark 11
- Palin, Sarah 80
- Parkinson, Mark 71–72
- particulates 115, 149, 172
- illnesses and premature deaths 115, 116
 - PM_{2.5} regulation 150, 172
- Pasley, Don 202
- Patriot Coal mine 208
- Pawlenty, Tim 154
- Peabody Energy 73, 136, 214, 222
- peak coal 155
- peak oil 13
- Pee Dee Generating Facility 202
- Pelosi, Nancy 172, 176, 203
- Pennies of Promise campaign 130
- Pennsylvania 160
- pepper-spray 83
- petition drives
- Salt Lake City 94
- photovoltaic power, 45, 51
- Plum Point plant 163
- PM_{2.5} regulation. *See* particulates
- Poland 199
- police retaliation against protesters 83
- Polk Power Station 60, 216
- polls. *See* public opinion and polls
- Popovich, Luke 105, 106
- Powder River Basin 49, 146, 148, 155, 156
- Powder River Basin Resource Council 147
- power companies and agencies 86
- power lines. *See* transmission lines
- Power Elk Run plant 163, 164
- Power Past Coal campaign 177–179
- PowerShift 203
- Poznan Council of Parties (COP-14)
- protest 199
- Presidential campaign of 2008 113
- Progress Energy 55, 86
- protests
- American Municipal Power headquarters 83
 - banner hangs 188
 - Bluegrass at the Bank 205
 - bolt weevils 75
 - Capitol Climate Action 177, 203
 - Capitol Power Plant 171–176, 203
 - Chicago 99
 - Cliffside 83, 177
 - Coalypmics 99
 - Corpus Christi march 202
 - Desert Rock blockade 141
 - Dominion Cliffside Plant 83

protests (*continued*)

dragline occupation 209
 Fast for Our Future action 207
 Fisk and Crawford plants 100
 Foolie awards 96
 Fossil Fools International Day of Action 88, 191, 192
 Gleneagles camp 79
 Greenville, Ohio, CCS protest 209
 Happy Valley protests 79
 Hay Pt. coal terminal blockade 211
 Houston demonstration 110
 Kooragang coal terminal blockades 194
 “lawful excuse defense” 84
 lobstermen protest 98
 Love and Hug National Coal Month 211
 Mainz, Germany protest 209
 Mannequins for Climate Justice 177, 206
 Massey Energy 177
 Minnesota power line controversy 75
 Mount Rushmore banner hang 210
 National Coal Corporation shareholders meeting 83
 National Coal Corporation going away party 211
 National Day of Action against Coal Finance 199
 Newcastle Port blockades 187, 188, 192, 205
 PacifiCorp “human dam” action 93
 Pennies of Promise campaign 130
 pepper spray 83
 police retaliation against protesters 83
 Poznan COP-14 199
 Quit Coal tour 196–197
 Ratcliff-on-Soar coal plant 177
 Rossport Five 79
 sabotage 74–75
 Salt Lake City petition drive 94
 San Francisco 81, 83
 Santa Claus 189, 199, 200
 ship occupations 209
 street theater 82

tree-sit in Coal River Valley 212
 Tennessee Valley Authority headquarters 177
 Valentine’s Day Action for Black Mesa 177
 violence against protesters 83
 Wiscasset lobstermen 98
 worldwide fast 177
 YouTube anti-mercury protest 154
 zombie march 198
See also Bank of America, Citibank, direct action
 Public Law 93–531 139
 public opinion and polls 36, 59, 61, 112
 and direct action tactics 76
 Desert Rock 160
 Public Service of New Hampshire 107

Q

Queensland, Australia 193, 197–199
 Quit Coal tour 196–197

R

R&R Partners 113
 Radar Acquisitions 219
 railroads 148
 Rainbow Warrior 196
 Rainforest Action Network 17, 81, 82, 101, 102, 105, 107, 128, 172, 188, 189, 191, 199
 rainforest logging campaign 82
 Rainwater, Gary L. 86
 Rampton, Sheldon 103
 Raney, William 127
The Rape of the Great Plains 147
 Ratcliffe, David M. 86
 Ratcliff-on-Soar coal plant 177
 Ray D. Nixon Power Plant 218
 Raymo, Maureen 11
 Reality Campaign and Coalition 170
 RECs. *See* rural electric cooperatives
 Red Rock Generating Station 215
 ReEnergize Texas 206
 regulations and statutes
 Clean Air Act 62, 142, 166, 170
 Clean Water Act 128

- Energy Independence and Security Act of 2007 (EISA) 151
 - Martin Act 163
 - renewable portfolio standards (RPS) 59, 91, 96
 - Surface Mining Control and Reclamation Act (SMCRA) 126
 - U.S. Acid Rain program 142
 - Reid, Harry 73, 74, 176, 203
 - Reliant Energy 86
 - religious group opposition to coal 131, 208
 - renewable energy
 - China 51
 - costs 37
 - geothermal power 35, 39, 45
 - Germany 51
 - public opinion 112
 - solar power 35, 38, 45, 106
 - wind power 35, 37, 45, 51, 106, 111, 132
 - Renewable Northwest Project 93
 - renewable portfolio standards (RPS) 59, 91, 96
 - Rentech 150, 217
 - Republican Party 63
 - request for proposals (RFP) 91
 - reserves of coal. *See* coal reserves
 - respiratory illnesses from coal 137. *See also* coal health and environmental impacts
 - Rich, John 220
 - Richardson, New Mexico Governor Bill 141
 - Rising Tide 77–81, 88, 93, 185, 186, 188–192, 199, 205
 - Cascadia Rising Tide 93
 - Rising Tide Australia 192
 - Rising Tide BayArea 202
 - Rising Tide Boston 198, 201
 - Rising Tide Newcastle 198
 - Rising Tide North America 185, 186, 189
 - Roberts, David 113
 - Rochester Gas and Electric 215
 - Rockefeller, Jay 121
 - Rocky Mountain Power 90
 - Rocky Top affinity group 75, 183
 - Rogers, James 86, 87, 96
 - Rowe, John W. 86
 - Romm, Joe 167
 - Rooth, Kate 83
 - Rosenfeld, Art 41–42
 - Rosenfeld Effect 41
 - Rosspport Five 79
 - Roundup Power Project 215
 - Royer, Dana L. 11
 - RPS. *See* Renewable Portfolio Standard
 - Rudd, Kevin 197
 - rural electric cooperatives 64–67
 - Rural Utilities Service (RUS) 149
 - Russell Station 215
 - Russo, Bob “Sage” 208
- ## S
- sabotage 74–75
 - Sallisaw Electric Generating Plant 214
 - Salt Lake City 94
 - San Juan Plant 137–138
 - Sandow 5 plant 213
 - Sandy Creek plant 163
 - Santa Claus protests 189, 199, 200
 - Santee Cooper plant 202
 - Sato, Makiko 11
 - Save Our Cumberland Mountains 126, 132
 - Save the Land and People 74
 - Scarbro, Lorelei 132, 178
 - Schlissel, David 154–155
 - Schmidt, Eric 45–46
 - Schultz, Ed 201
 - Schwarzman, Steve 143
 - Schweitzer, Brian 150
 - Sebelius, Kathleen 62–72, 74
 - Seeds of Peace 77
 - Sega, Ron 150
 - selenium 138
 - Seminole 3 Generating Station 60, 214
 - Seminole Electric Power Cooperative 214
 - Sevier Citizens for Clean Air and Power 93
 - Shabaz, John 162
 - ship occupations 209

Shirley, Joe, Jr. 144
 Shumate sludge dam 202
 Shuster, Erik 15, 20, 100, 108, 160, 179
 Sierra Club 16, 17, 93, 102, 143, 158–166, 180, 211
 Dynergy Campaign 162
 Environmental Justice Program 132
 Kansas Chapter 67–72
 Northstar Chapter 154
 Utah Chapter 93
 Sithe Global Power 139, 141, 142, 186, 220
 Skaggs, Robert C., Jr. 86
 sludge ponds 200
 Sludge Safety Lobby Day 200
 Soda Springs project 217
 Sokol, David 94, 95
 solar power 35, 38, 45, 106
 Solid Energy 183–184
 soot 138
 SourceWatch 103
 South Carolina 163, 202
 South Dakota 153–157
 South Dakota Clean Water Action 21, 154
 South Heart Power Project 215
 Southeast Convergence for Climate Action 187, 196
 Southern Appalachian Mountain Stewards 133
 Southern Company 60, 86, 216
 Southern Energy Network 199
 Southern Illinois Clean Energy Center 217
 Southern Illinois University Power Plant 220
 Southern Minnesota Municipal Power Agency 154
 Southern Montana G&T 97, 149, 150
 Southwestern Power Group 215
 Southwings 131, 133
 Spain 197
 Spalding, Joanne 165
 Speth, Gus 175
 Stanton Energy Center 61, 216
 statutes. *See* regulations and statutes
 Stauber, John 103

Step It Up! 100
 Stueve, Mary Jo 21
 strip mining 14, 19, 24, 66, 74, 75, 126, 136, 138. *See also* coal mining, mountaintop removal
 strip mining abolition movement 126
 Student Environmental Action Coalition 189, 199
 sulfur dioxide 19, 115, 138, 142
 illnesses and premature deaths 115
 sulfuric acid 118
 Sunflower Electric 62–72, 215
 surface mining. *See* strip mining, mountaintop removal
 Surface Mining Control and Reclamation Act (SMCRA) 126
 Sussex County proposal 214
 Sutherland Generating Station 223
 swarm tactics 26, 96
 Synapse Energy Associates 154
 synfuels 148, 150–152
 coal-to-liquids 150–152, 222
 federal restrictions on greenhouse gas emissions 151
 gasification 118–119
 Gilberton Coal-to-Clean-Fuels and Power Project 220
 Indiana SNG 222
 Malmstrom coal-to-liquids project 150–152, 170, 222
 Marion Gasification Plant 216
 plants 221, 222
 Rentech 150, 217
See also Chevron

T

Tampa Electric 60, 216
 tar sands 13
Target Atmospheric CO₂: Where Should Humanity Aim? 10, 11
 Tarong Power Station 199
 Taylor Energy Center 60, 214
 Taylor, Kayla 130
 Taylorville Energy Center 161
 Tenaska 214

- Tennessee 75, 83, 168–169, 184, 185, 195, 199, 200, 204
- Tennessee sludge spill 168–169, 170
- Tennessee Valley Authority 86, 96, 177, 199, 200, 203, 204
- See also* Tennessee sludge spill
- Texas 55, 56, 110, 111, 162, 163, 202, 206, 221
- Theodore Roosevelt National Memorial Park 153
- Thoroughbred Generating Station 214, 222
- Three Rivers Earth First 195, 199
- tipping point 59
- Tondu Corp 214
- toxic metals 116
- Tradinghouse 3 and 4 plants 213
- transmission lines 24, 29, 33, 74, 137, 144, 148, 156, 216, 223
- sabotage of 75
- Trechock, Mark 21
- tree-sit in Coal River Valley 212
- Tri-State G&T 67, 223
- Turner, L. J. 178
- Turris Coal Company 218
- TVA. *See* Tennessee Valley Authority
- TVA coal ash sludge spill. *See* Tennessee sludge spill
- Twigs 26
- Twilight mine 209
- Twin Oaks Power Unit 221
- Twin River Energy Center 216
- Twitter 169
- TXU 55, 56, 213. *See also* Luminant
- U**
- U.N. Council of Parties (COP) 198, 199
- U.S. Acid Rain program 142
- U.S. Air Force 150–152, 170, 222
- U.S. Climate Emergency Council 23
- U.S. Department of Energy 15, 31, 37, 219
- U.S. Environmental Protection Agency 53, 141, 142, 156, 170
- air quality modeling 153
- EPA Boston banner drop 210
- U.S. Energy Information Administration (EIA) 44
- U.S. Geological Survey 48, 137, 155
- U.S. Office of Surface Mining 141
- U.S. Supreme Court ruling on greenhouse gases. *See* *Massachusetts v. EPA*
- Utah Indian Reservation 165
- Union of Concerned Scientists 107, 154
- United Kingdom 48, 185, 188, 191, 192, 206
- United Mine Workers 125
- repression of union organizing 124–125
- United Mountain Defense 168, 195, 199, 203, 204, 211
- Utah 89, 90, 92, 93, 94, 112, 162, 165, 224
- Ute Tribal Council 141
- V**
- Valley Watch 25
- Valmont Station 210
- Victor, Adam 116, 118
- Villaseñor, Samuel 99, 178
- violence against anti-coal activists 135
- Virgin Earth Challenge 179–181
- Virginia 83, 163, 184, 185, 193, 196, 201
- W**
- Wall Street and coal 55, 107, 108
- Washington Public Power Supply System 108
- Washington state 54, 73, 90, 98, 99, 162, 216
- Energy Facility Site Evaluation Council 99
- water pollution 138, 200
- Watts Bar Lake 168. *See also* Tennessee sludge spill
- Waxman, Henry 151
- We Campaign 121
- We Love Money String Band 88, 201
- Web, Bo 133–134
- Werrt, Spencer 6
- West Coast Climate Convergence 77–81
- West Deptford Project 216

West Virginia 83, 124–131, 184, 186, 200–202, 206–209, 221
 attacks on coal activists 83
 Department of Environmental Protection 211
See also Coal River Valley, Coal River Mountain, Massey Energy
 West Virginia Coal Association 127
 West Virginia Highlands Conservancy 133
 Westar Energy 218
 Western Colorado Congress 148
 Western Greenbrier Demonstration Project 221
 Western Organization of Resource Councils (WORC) 147, 178
 Western Resource Advocates 93
 Western Shoshone Defense Project 23–24
 Westmoreland Power 220
 Westward Energy 221
What's the Matter with Kansas? 63
 White Pine Energy Station 163–164, 223
 Wikipedia 104
 Wilberg Mine fire 112
 Wilderness Society 16
 Wiley, Ed 130
 Williamson, Bruce 86, 96, 162–164
 Wilson, Adrian 101
 Wilson, Dana 94
 Wind on the Wires 154

wind power 35, 37, 45, 51, 106, 111, 132
 China 51
 economics of 37
 Horse Hollow Wind Energy Center 111
 Wiscasset plant 98, 216
 Wisconsin 158, 161, 162
 Department of Natural Resources 162
 Wisconsin Public Power 214
 Wise County plant 83, 192, 193, 196, 197
 Wolverine Clean Energy Venture 25
 Working Assets 121
 World Coal Institute 205
 World Petroleum Council 205
 Wyoming 49, 89, 90, 93, 146, 149, 221

X

Xcel Energy 30, 86, 218
 Xcel IGCC plant 216

Y

Yepa, Towana 178
 Young, Andrew 85
 Young, Elisa 24, 116
 youth climate movement 78
 YouTube 154

Z

Zachos, James C. 11
 Zeb Mountain 75, 183, 195
 zombie march 198

ABOUT COALSWARM

Citizens are mobilizing. In the United States and around the world, over 375 groups are now working on coal issues. Most of these are locally based organizations whose effectiveness is often underestimated. The mission of CoalSwarm is to assist this movement by building shared resources. The CoalSwarm wiki (<http://CoalSwarm.org>), created in collaboration with the Center for Media and Democracy, provides a constantly expanding information clearinghouse on coal, including over 2,000 articles. Anyone can contribute information, and scores of people have participated in developing the website. The only requirement is that all facts must be linked to published sources. The following are some of the resources provided by CoalSwarm:

Coal plants and mines

- Proposed coal plants (over 375 projects in 26 countries)
- Existing coal plants (over 600 facilities)
- Coal plant cancellations
- Campus coal plants
- Coal plant conversion projects
- Mines

Citizen activism

- Citizen groups involved in coal issues:
- Nonviolent direct action and other protests
- Coal issues calendar
- Coal plant litigation
- Coal activist videos
- Expert testimony

Coal-related companies and agencies

- Power companies and agencies
- Rural electric cooperatives
- Mining companies
- Synfuels companies
- Railroads

Coal and power industry data

- Coal reserves
- Coal exports
- Plant capacity and output statistics
- Emissions data
- Coal and jobs

Politics and coal

- Coal money in politics
- Lobby groups and trade associations
- Obama administration statements and policies

Coal-related environmental issues

- Coal waste
- Mountaintop removal
- Air emissions

Alternatives to coal

- Solar, wind, geothermal, efficiency; comparative economics; legislation and policy options



ABOUT THE COVER

The cover photograph, which depicts an unidentified protester approaching a twenty-story dragline in an attempt to hang a banner reading “Stop Mountaintop Removal: Clean Energy Now!” is excerpted from video footage recorded by filmmaker Kurt Mann before dawn on June 19, 2009, at Massey Energy’s Twilight mine in Boone County, West Virginia.

Fourteen protesters affiliated with Rainforest Action Network and Climate Ground Zero entered the mine, one of the largest mountaintop removal coal mines in North America. Mann and the other protesters were arrested for trespassing after occupying the dragline. Mann was released on bail later in the day but his camera gear and media of the event were detained as “evidence.” Nevertheless, Mann managed to have some extraordinary footage taken off site when it was clear the police would force filming to stop.

Mann’s documentary *Planet Ground Zero*, produced by American Green, is scheduled for release in 2010.

The Twilight mine produced over five million tons of coal in 2007. Coal from the mine is transported via underground conveyer to the Elk Run Resource Group for processing and shipment on the CSX railway.