

Endnotes

Executive Summary

- 1 2006. Calculated from Energy Information Administration, Table P3. Energy Production and Consumption Estimates in Trillion Btu by State, 2006, http://www.eia.doe.gov/emeu/states/sep_prod/P3/PDF/P3.pdf, downloaded July 6, 2009.
- 2 Nuclear: 2008. Calculated from Energy Information Administration, Capacity-EIA Survey Form 860, "Annual Electric Generator Report;" Generation-EIA Survey Form 906, "Power Plant Report." http://www.eia.doe.gov/cneaf/nuclear/page/nuc_generation/usreact08.xls.
Coal: 2007. Report No. DOE/EIA 0584 (2007), Coal Mining Productivity and Number of Mines by State and Mine Type, 2007-2006, www.eia.doe.gov/cneaf/coal/page/acr/table21.xls.
Population: 2007. U.S. Census Bureau, *2007 American Community Survey*, Table B01003: Total Population, <http://factfinder.census.gov/>. Downloaded July 6, 2009.
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- 4 Email exchange with Dr. Gerald R. Hill, Senior Technical Advisor, Southern States Energy Board, May 4, 2009.
- 5 Energy Information Administration, Table S1: Energy Consumption Estimates by Source and End-Use Sector, 2006, http://www.eia.doe.gov/emeu/states/sep_sum/html/pdf/sum_btu_1.pdf, downloaded July 7, 2009.
- 6 Ibid.
- 7 Composite data from *Southern Bioenergy Roadmap*, 2009, <http://www.saferalliance.net/projects/roadmap.html>.
- 8 Composite data from *Southern Bioenergy Roadmap*, 2009, <http://www.saferalliance.net/projects/roadmap.html>.
- 9 Email from Hakan Ekstrom, Wood Resources International, LLC, May 12, 2009, www.woodprices.com.
- 10 Presentation at Southern Technology Council meeting, February 11, 2009, by Dr. Thom Mason, Director, Oak Ridge National Laboratory. Presentation at http://www.southern.org/stc/meetings/feb09_Future_of_Energy_Mason.pdf.
- 11 American Council for an Energy-Efficient Economy, *The 2008 State Energy Efficiency Scorecard*, <http://www.aceee.org/pubs/e086.htm>.
- 12 Composite data from *Southern Bioenergy Roadmap*, 2009, <http://www.saferalliance.net/projects/roadmap.html>.
- 13 2006-2008. Based on Exhibit 1: *The Clean Energy Economy: Repowering Jobs, Businesses, and Investments Across America*, The Pew Charitable Trusts, 2009, http://www.pewcenteronthestates.org/uploadedFiles/Clean_Economy_Report_Web.pdf, 2006-2008.
- 14 Since oil is quoted at a world price, price differences of petroleum products such as gasoline vary due to country incentives and subsidies.
- 15 Many terms are used for non-traditional sources — sources that don't usually include oil, gas, coal and nuclear. Many of the statistics in the report result from sources that define non-traditional in their own peculiar way. Generally, we refer to non-traditional sources of energy such as wind, solar, and biomass as "alternative energy."
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- 17 *Clean Edge Views*, <http://www.cleandedge.com/views/index.php?id=5953>, downloaded July 7, 2009.
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- 20 Based on Exhibit 1: *The Clean Energy Economy: Repowering Jobs, Businesses, and Investments Across America*, The Pew Charitable Trusts, 2009, http://www.pewcenteronthestates.org/uploadedFiles/Clean_Economy_Report_Web.pdf, 2006-2008.
- 21 Clean Edge, *Clean Energy Trends 2009*, <http://www.cleandedge.com/reports/pdf/Trends2009.pdf>, downloaded July 7, 2009.
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- 23 Figures in this section taken from *SSTI Weekly Digest, Federal Stimulus Special Issue*, <http://www.ssti.org/Digest/2009/headlines09.htm>.
- 24 Renewable Energy Policy Network for the 21st Century, *Renewable 2007: Global Status Report*, http://www.ren21.net/pdf/RE2007_Global_Status_Report.pdf, downloaded July 7, 2009.
- 25 *Energy Efficiency in Buildings: Transforming the Market*, World Business Council for Sustainable Development, http://www.wbcsd.org/DocRoot/a2BHh5kMFSTPPGSif1fk/transforming_the_market.pdf, accessed July 21, 2009.

Listening to the South

- 26 The Southeastern Universities Research Association (SURA) is a consortium of over 60 universities in the South. SURA members share a common interest in exploring and developing ways to advance science and to strengthen their institutions and organizations through collaborative efforts.

Listening to the South's State Energy Policies

- 27 This section consists of an analysis of Southern governors' State of the State speeches and official state energy plans. These documents capture the intent of the executive branch towards energy initiatives and serve as markers of present and future activity in this area.
- 28 *Southern Bioenergy Roadmap*, SAFER & University of Florida, 2009, <http://www.saferalliance.net/projects/roadmap.html>.
- 29 Table P3, Energy Production and Consumption Estimates in Trillion Btu by State, 2006, Energy Information Administration, http://www.eia.doe.gov/emeu/states/sep_prod/P3/PDF/P3.pdf.

- 30 *West Virginia Energy Opportunities: A Blueprint for the Future*, http://www.legis.state.wv.us/Reports/Agency_Reports/Agency_Reports_Docs/E08_CY_2008_161.pdf.
- 31 *North Carolina State Energy Plan*, June 2, 2003, Revised Edition January, 2005, <http://www.energync.net/epc/docs/Energy%20Plan%202005.pdf>. New plan currently being developed.
- 32 *Intelligent Energy Choices for Kentucky's Future*, Governor Steve Beshear, <http://governor.ky.gov/NR/rdonlyres/32B6DCAF-57F5-49DC-B9F3-4E889746CBB0/0/20081120energyFactSheet.pdf>.
- 33 *Virginia State Energy Plan 2007*, http://www.governor.virginia.gov/TempContent/2007_VA_Energy_Plan-Full_Document.pdf.
- 34 *State Energy Strategy 2009*, Governor's Energy Policy Council, <https://www.gefa.org/index.aspx?recordid=24&page=205>.
- 35 *Climate, Energy, and Commerce Action Plan*, Governor's Climate, Energy, and Commerce Advisory Committee, <http://www.sccclimatechange.us/ewebeditpro/items/O60F19029.PDF>.
- 36 *Virginia State Energy Plan 2007*, http://www.governor.virginia.gov/TempContent/2007_VA_Energy_Plan-Full_Document.pdf.
- 37 *North Carolina State Energy Plan*, June 22003, Revised Edition January, 2005, <http://www.energync.net/epc/docs/Energy%20Plan%202005.pdf>. New plan currently being developed.
- 38 *Virginia State Energy Plan 2007*, http://www.governor.virginia.gov/TempContent/2007_VA_Energy_Plan-Full_Document.pdf.
- 39 *State Energy Strategy 2009*, Governor's Energy Policy Council, <https://www.gefa.org/index.aspx?recordid=24&page=205>.
- 40 *Climate, Energy, and Commerce Action Plan*, Governor's Climate, Energy, and Commerce Advisory Committee, <http://www.sccclimatechange.us/ewebeditpro/items/O60F19029.PDF>.
- 41 Available State of the State addresses were examined for the SGPB states for the last three years, 2007-2009. Statistics are based on mentions from 36 addresses. All addresses appeared at Stateline.org at <http://www.stateline.org/live/ViewPage.action?siteNodId=152&languageId=1&contentId=-1>.

State Contributions to Total Southern Energy Production; Southern and non-South Contributions to Total U.S. Energy Production

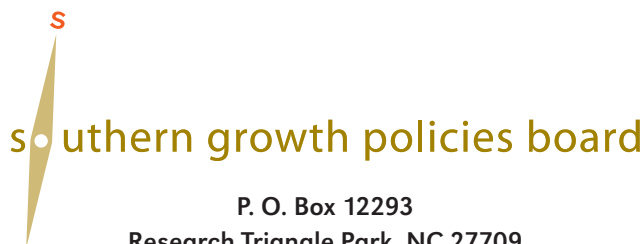
- 42 **Coal:** Energy Information Administration. Table 1. Coal Production and Number of Mines by State and Mine Type, 2007-2006. Retrieved from <http://www.eia.doe.gov/cneaf/coal/page/acr/table1.html>.
- 43 **Petroleum:** Energy Information Administration. Crude Oil Production. Retrieved from http://tonto.eia.doe.gov/dnav/pet/pet_crd_crpdn_adc_mbb1_a.htm.
- 44 **Natural Gas:** Energy Information Administration. Natural Gas Gross Withdrawal and Production. Retrieved from http://tonto.eia.doe.gov/dnav/ng/ng_prod_sum_a_EPG0_FGW_mmc_f_a.htm.
- 45 **Nuclear:** Energy Information Administration. Monthly Nuclear Generation by State, 2008. Retrieved from http://www.eia.doe.gov/cneaf/nuclear/page/nuc_generation/gensum.html (see February 2009 link).
- 46 **Hydroelectric:** Energy Information Administration. Table 1.13.B. Net Generation from Hydroelectric (Conventional) Power by State by Sector, Year-to-Date through March 2009 and 2008. Retrieved from <http://www.eia.doe.gov/cneaf/solar.renewables/page/hydroelec/hydroelec.html>.
- 47 **Renewables:** Energy Information Administration. Table 1.17 Total Renewable Net Generation by Energy Source and State, 2006. Retrieved from <http://www.eia.doe.gov/cneaf/solar.renewables/page/trends/table17.html>.
- 48 **Coal:** Energy Information Administration. Table 1. Coal Production and Number of Mines by State and Mine Type, 2007-2006. Retrieved from <http://www.eia.doe.gov/cneaf/coal/page/acr/table1.html>.
- 49 **Petroleum:** Energy Information Administration. Crude Oil Production. Retrieved from http://tonto.eia.doe.gov/dnav/pet/pet_crd_crpdn_adc_mbb1_a.htm.
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- 51 **Nuclear:** Energy Information Administration. Monthly Nuclear Generation by State, 2008. Retrieved from http://www.eia.doe.gov/cneaf/nuclear/page/nuc_generation/gensum.html (see February 2009 link).
- 52 **Hydroelectric:** Energy Information Administration. Table 1.13.B. Net Generation from Hydroelectric (Conventional) Power by State by Sector, Year-to-Date through March 2009 and 2008. Retrieved from <http://www.eia.doe.gov/cneaf/solar.renewables/page/hydroelec/hydroelec.html>.
- 53 **Renewables:** Energy Information Administration. Table 1.17 Total Renewable Net Generation by Energy Source and State, 2006. Retrieved from <http://www.eia.doe.gov/cneaf/solar.renewables/page/trends/table17.html>.

State Energy Profiles

- 54 **Graphic: 2006 Energy Deficit/2006 Energy Surplus**
Source: Energy Information Administration. Table P3. Energy Production and Consumption Estimates in Trillion Btu by State, 2006. Retrieved from http://www.eia.doe.gov/emeu/states/sep_prod/P3/PDF/P3.pdf.
- 55 **Graphic: 'Cost of Energy Imported from Outside State' or 'Value of Energy Exported from State'**
 To determine the cost of imported energy or value of exported energy, the ratio of a state's energy consumption to its energy production was calculated (see 2006 Energy Deficit/Surplus above for source). That ratio was then applied to the state's energy expenditures in 2006 to estimate the cost of importing energy or revenue from exporting energy. This estimate does not account for variations in prices among different forms of energy – rather it assumes an average price for all energy bought and sold.
Source for energy expenditures: Energy Information Administration. Table S1b. Energy Expenditure Estimates by Source 2006. Retrieved from http://www.eia.doe.gov/emeu/states/sep_sum/html/sum_ex_tot.html.

- 56 **Graphic: State Share of U.S. Population, U.S. Energy Consumption, and U.S. Energy Production**
Source for U.S. and state populations: US Bureau of the Census. *2006 American Community Survey*. S0201. Selected Population Profile in the United States. Retrieved from <http://factfinder.census.gov>.
Source for state energy consumption and production: *Energy Information Administration Comprehensive State Energy Profiles*, April 2, 2009 updates. Retrieved from <http://tonto.eia.doe.gov/state/>.
- 57 Ibid.
- 58 Ibid.
- 59 Ibid.
- 60 **Graphic: Original Sources of Consumed Energy**
 Graphic represents the original sources of all energy, including transportation and power generation, consumed within a state, and includes energy sources imported from other states (e.g., coal imported from an outside state that is used to create electricity). State interflows of electricity are not included in the tabulations. Percentages may not add up to 100 due to rounding, and the omission of the category “other” as an energy source.
Source: Energy Information Administration. Table S3. Energy Consumption Estimates by Source, 2006. Retrieved from http://www.eia.doe.gov/emeu/states/sep_sum/html/sum_btu_tot.html.
- 61 **Graphic: Sources of Energy Consumption by End User**
Energy Information Administration Comprehensive State Energy Profiles, April 2, 2009 updates. Retrieved from <http://tonto.eia.doe.gov/state/>.
 Percentages may not add up to 100 due to rounding.
- 62 **Graphic: Projected New Green Jobs**
 New green jobs represent the difference between the number of green jobs existing in a state in 2006 and projected green jobs in that state in 2038 by U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy. The report projects growth at the metropolitan level, and may thus neglect changes in green jobs in rural areas. In cases where metropolitan regions cross state lines, all projected growth in green jobs was applied to the state in which the urban center of the metro area is located.
Source: U.S. Metro Economies: Current and Potential Green Jobs in the U.S. Economy. Prepared for The United States Conference of Mayors and the Mayors Climate Protection Center. October 2008.
- 63 **Graphic: Potential Savings From Energy Efficiency, 2009 - 2030**
 To determine potential multiyear savings from energy efficiency, state sales revenues for electricity was obtained for the year 2007. The Electric Power Research Institute estimates that electricity consumption will increase at a rate of 1.07 percent from 2008 to 2030. They also estimate that energy efficiency programs could reduce the growth in consumption from 1.07 percent to .083 percent over the same time period. Electricity consumption was then estimated at growth rates of 1.07 and .083 percent from 2008 to 2030, using 2007 consumption as the baseline figure. Potential savings, then, represent the difference in the cost (in 2007 dollars) of energy between the status quo growth rate in consumption and the growth rate under adopted efficiency measures from 2009 to 2030.
Source for 2007 electricity consumption and sales revenue: Energy Information Administration, Electric Sales, Revenue, and Average Price 2007, Table 3. Revenues for Sales to Bundled and Unbundled Consumers (Including Delivery Service Revenue) by Sector, Census Division, and State. Retrieved from http://www.eia.doe.gov/cneaf/electricity/esr/esr_sum.html.
Source for projected growth rates of electricity consumption: *Assessment of Achievable Potential from Energy Efficiency and Demand Response Programs in the U.S.* (2010 – 2030): Executive Summary. EPRI, Palo Alto, CA: 2009. 1018363.

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