

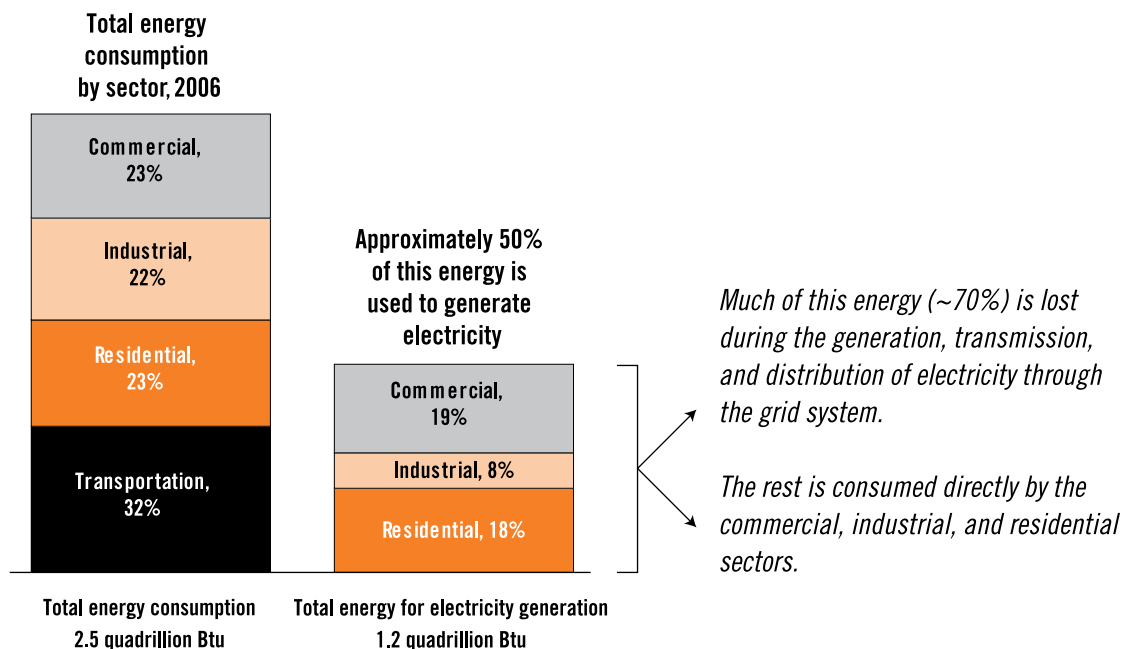
SOUTHEAST ENERGY OPPORTUNITIES

ENERGY BY THE NUMBERS

April 2009

VIRGINIA

ENERGY USE



ENERGY SOURCES

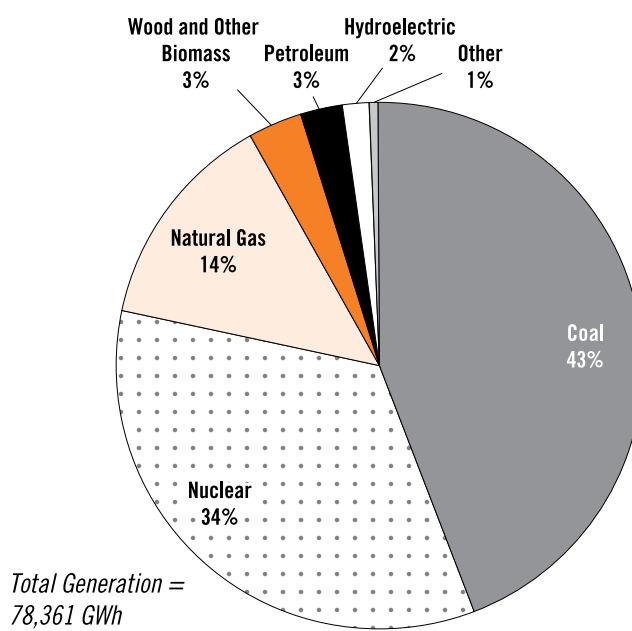
As of 2006, fossil fuels accounted for 68% of state energy consumption, up slightly from 67% in 1990.

Fossil fuel consumption has increased in certain sectors, particularly in the demand for petroleum for transportation and industry and natural gas for electricity generation – the largest energy-consuming sector.

Electricity is primarily generated from coal and nuclear power (see figure).

Fossil fuels account for approximately 78% of electricity generation.

Net Electricity Generation by Source, 2007



Fact sheet based on WRI's April 2009 issue brief "Energy by the Numbers" (www.wri.org/publication/southeast-energy-policy).



WORLD
RESOURCES
INSTITUTE

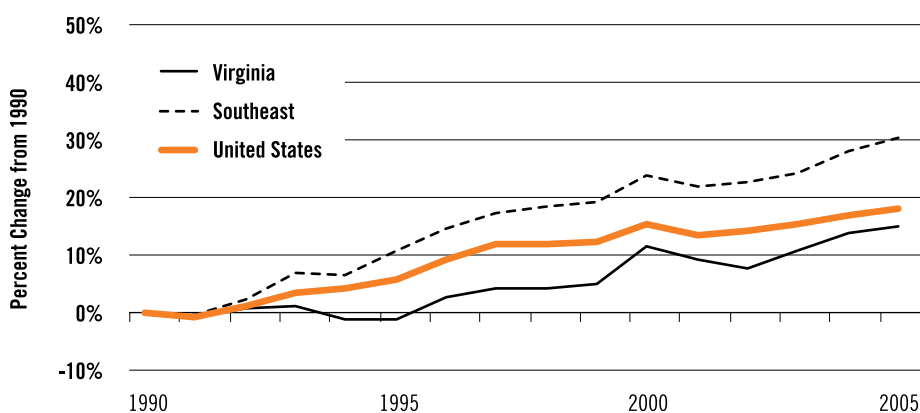
www.wri.org

Data Source: Energy Information Administration, 2008, 2009.
Full notes are available on the reverse.

GHG TRENDS

Between 1990 and 2005, state greenhouse gas (GHG) emissions increased 15%, slower than the U.S. average rate of growth. This trend is largely due to an increase in emissions from the transportation and electric generation sectors.

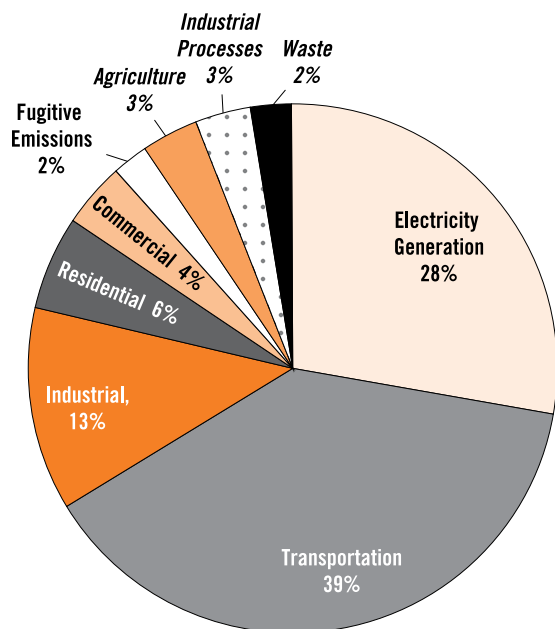
GHG Emissions, 1990-2005



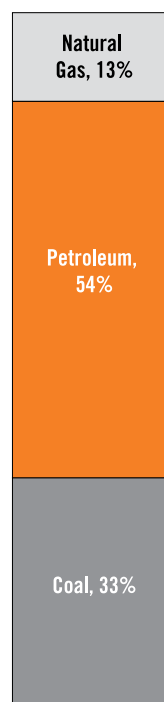
GHG SOURCES

As of 2005, approximately 91% of total GHG emissions were a result of energy consumption.

GHG Emissions by Sector, 2005



CO₂ Emissions from Energy Consumption by Fuel, 2005



Energy emissions derive mostly from the combustion of petroleum and coal.

'ENERGY'

Source: EIA, 2008, 2009 (<http://eia.doe.gov>). Notes: 'Energy Use' — Electricity generation totals exclude electricity consumption allocated to the transportation sector, which accounts for less than 1% of total energy consumed. 'Energy Sources' — "Wood and Other Biomass" includes wood and wood derived fuels, as well as biogenic municipal solid waste, landfill gas, and other biomass sources. "Other" includes non-biogenic municipal solid waste and other waste gases derived from fossil fuels, among other sources. Electricity generated by pumped storage is excluded from the chart if value is negative, but included in the total generation value. Totals may not add to 100% due to rounding.

'GHGS'

Source: CAIT-US, 2008 (<http://cait.wri.org>). Notes: Totals exclude GHG emissions from (or sequestered by) land-use change and forestry and international bunker fuels. Fugitive emissions from the extraction and distribution of petroleum and natural gas are also excluded. 'GHG Trends' — Southeast includes Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, Tennessee, and Virginia. 'GHG Sources' (emissions by sector) — Industrial, residential, and commercial sector totals include only emissions from the direct combustion of fossil fuels. The industrial processes sector includes activities such as cement and semiconductor manufacturing. Non-energy sectors in italics. Totals may not add to 100% due to rounding.