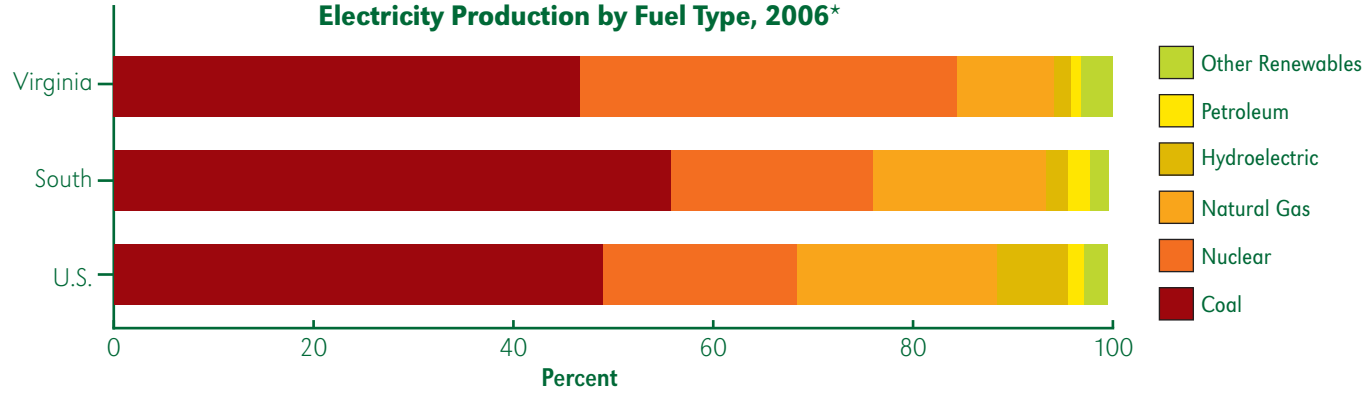
Bioenergy in Virginia

from the Southern Bioenergy Roadmap

The Southern Bioenergy Roadmap established that the South is in a unique position to create thousands of jobs through applying abundant natural resources and intellectual capital to the production of electricity and automotive fuel from plants, trees and waste — also known as biomass. Download the report at http://www.saferalliance.net/projects/roadmap.html.

Electricity Production by Fuel Type, 2006*

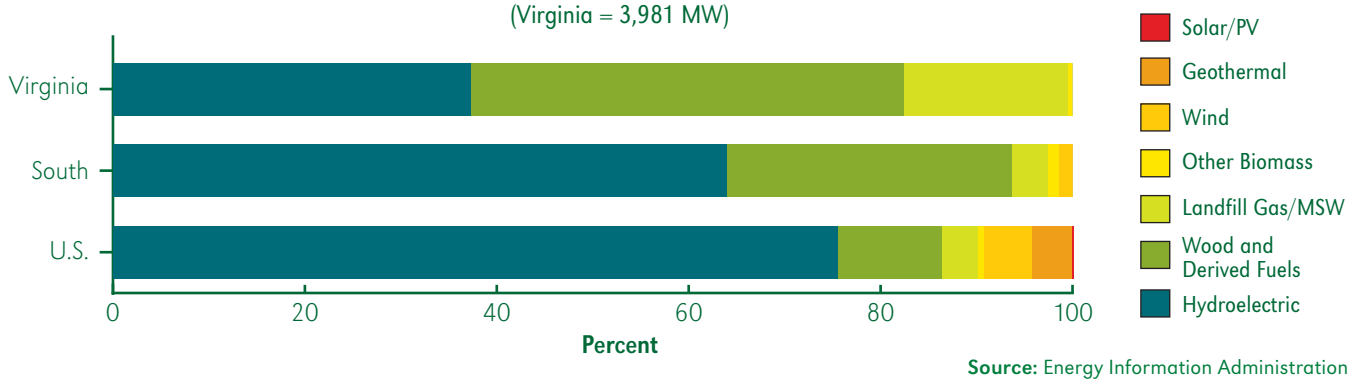


*Other gases or pumped storage were negligible.

Source: Energy Information Administration

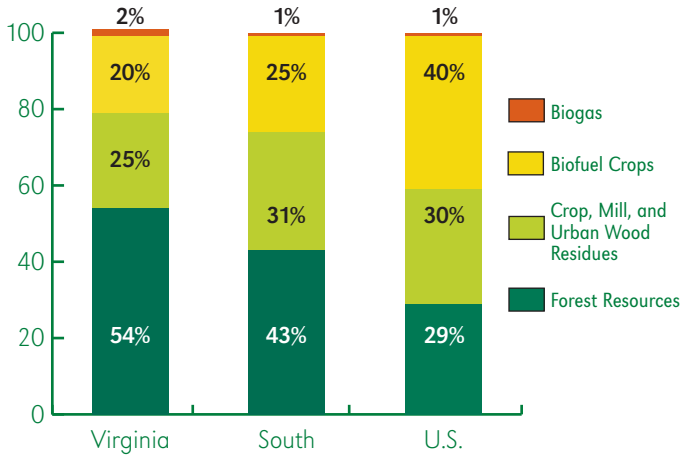
Renewable Electricity Production, 2005

(Virginia = 3,981 MW)



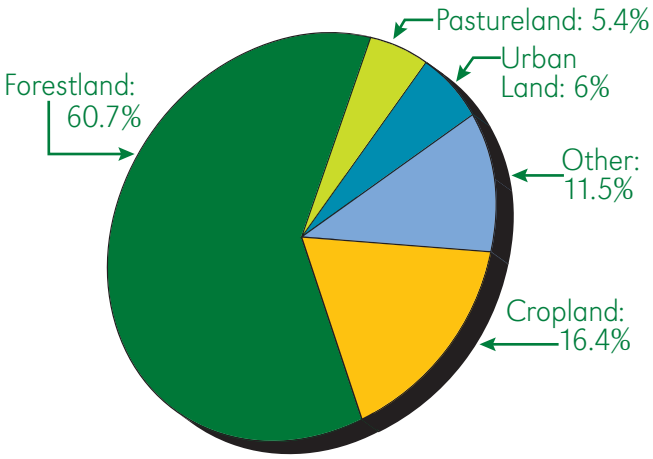
Source: Energy Information Administration

Breakdown of Biomass Resources, 2002



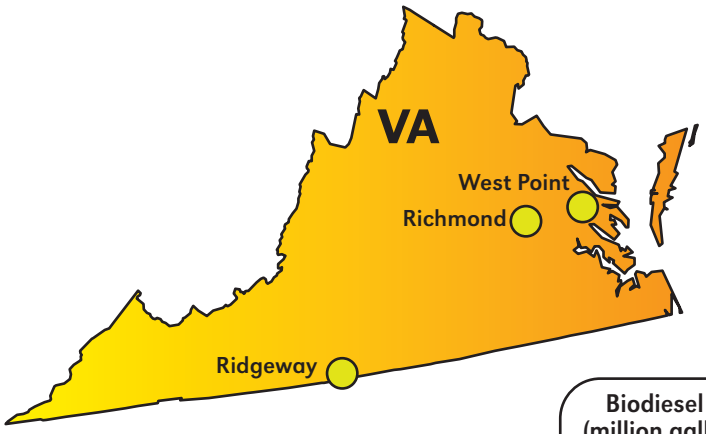
Source: University of Florida

Percent Land Use, 2002



Source: U.S. Department of Agriculture

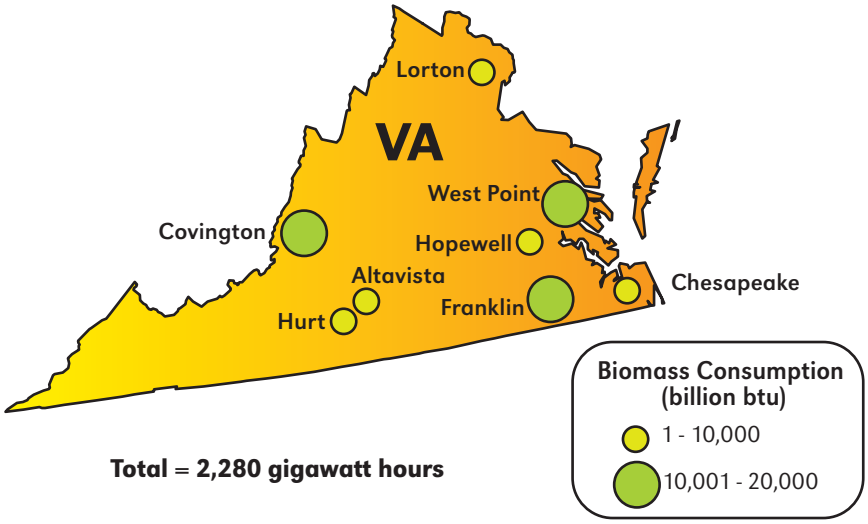
Locations and capacities of current biodiesel plants



There are no ethanol plants in Virginia.

Source: National Biodiesel Board, March 2009

Locations and capacities of biomass fueled combined heat and electric power plants, 2007



Total = 2,280 gigawatt hours

Source: U.S. Department of Energy

Bioenergy Research Assets

- Center for Energy and Environmental Sustainability, James Madison University
- Division of Forestry and Natural Resources
- Institute for Advanced Learning & Research
- University of Virginia
- Virginia Polytechnic Institute and State University

Projected Population Growth 2007-2030

Virginia — 27%

South — 26%

U.S. — 21%

Source: U.S. Census Bureau

Direct and indirect economic contributions of biopower generation by heat and electric plants in Virginia, 2007*

Revenues (Million $)	Personal & Business Income (Million $)	Employment (Jobs)
615	369	9,729

*Additional research needs to be done to assess current and potential economic impacts of biofuel plants.

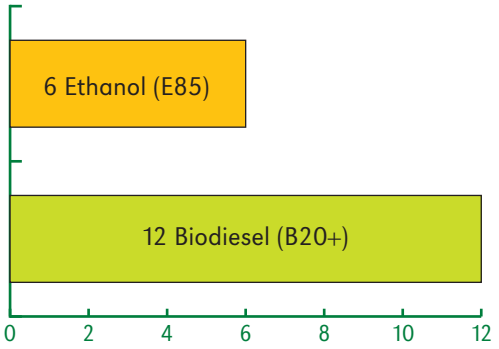
Source: University of Florida

State Bioenergy Policies, 2008

	Yes	No
State Energy Plan	X	
Renewable Fuels Standard		X
Renewable Portfolio Standard	X (voluntary)	
Financial Support	X	

Source: University of Florida

Alternative Fueling Stations in Virginia, 2008



Source: Alternative Fuels Data Center