

West Virginia  
*Energy*



DIVISION OF ENERGY



*West Virginia*  
WEST VIRGINIA



The West Virginia Division of Energy is responsible for the formulation and implementation of fossil, renewable and energy efficiency initiatives designed to advance energy resource development opportunities and provide energy services to businesses, communities and homeowners in West Virginia.

# Who we are



**Jeff Herholdt**  
Director  
[jherholdt@energywv.org](mailto:jherholdt@energywv.org)



**Bill Willis**  
Energy development  
specialist  
[bwillis@energywv.org](mailto:bwillis@energywv.org)

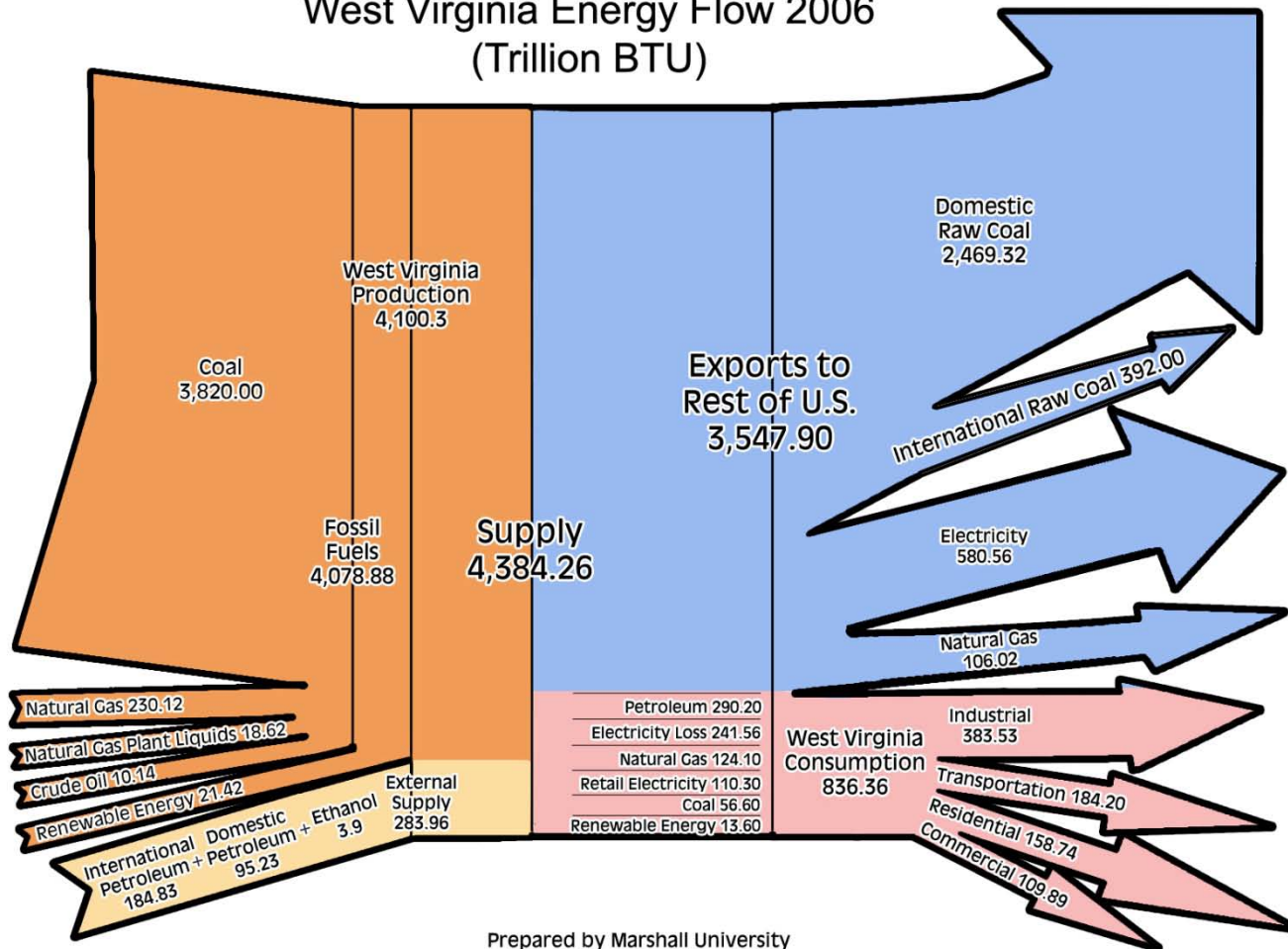


**Kelly A. Bragg**  
Energy development  
specialist  
[kbragg@energywv.org](mailto:kbragg@energywv.org)



**Jeff Wood**  
Energy development  
specialist  
[jwood@energywv.org](mailto:jwood@energywv.org)

## West Virginia Energy Flow 2006 (Trillion BTU)



Prepared by Marshall University  
under contract to WV Division of Energy

Renewable energy

## Biofuels

Biomass energy opportunities include:

- Cellulosic ethanol
- Wood-powered electric plants
- Wood pellet mills
- Bio oil
- Combined heat and power

Renewable energy

## Biofuels

- Energy Independence and Security Act (EISA) expands the Renewable Fuel Standard to 36 billion gal/yr of renewable fuel by 2022
- Corn ethanol limited to 15 billion of 36 billion gallons in 2022
- Remaining 21 billion gallons is advanced biofuels
- Biodiesel must be at least 1 billion gallons in 2022
- 1/3 of current U.S. corn crop now goes for 8 billion gallons of ethanol

Renewable energy

## Biofuels

Current activities:

- Appalachian Woody Biomass to Ethanol Conference presentations online at [www.energywv.org](http://www.energywv.org)
- W.Va. Division of Energy's Office of Coalfield Community Development cataloging suitable sites
- Provide residue and slash availability studies through WVU's Appalachian Hardwoods Center
- Assess site and input requirements for biomass energy production facilities

Renewable energy

## Hydroelectric energy

- 264 MW of hydroelectric power is operating in West Virginia. FERC has preliminarily licensed 127 MW more.

London/Marmet, Kanawha River

Winfield, Kanawha River

Millville, Shenandoah River

Lake Lynn, Monongahela River

Hawks Nest & Glen Ferris, New River

Dam No. 4 Hydro Station, Potomac River

Dam No. 5 Hydro Station, Potomac River

Racine L & D, Ohio River

New Martinsville, Ohio River

Belleville, Ohio River

Summersville, Gauley River

Renewable energy

## **Solar energy**

- W.Va. Division of Energy sponsors annual solar conference at Shepherd University
- More than 200 people attended Solar Solutions for West Virginia in September 2008
- Conference highlighted new solar technologies and techniques applicable to homes and businesses in the mid-Atlantic region
- Participants also installed an off-grid solar system at Shepherd University's Renewable Energy Demonstration Site

Renewable energy

## Liquid fuels

- West Virginia Clean State Program
- 28 county school systems are using biodiesel blends
- AC&S (Putnam County) is the state's first biodiesel producer
- Two public stations dispense E85 (Monongalia, Harrison)
- Two public stations dispense biodiesel (Berkeley, Jefferson)
- Public hydrogen fueling stations planned (Kanawha, Monongalia)



West Virginia  
*Energy*



DIVISION OF ENERGY



*West Virginia*  
WEST VIRGINIA