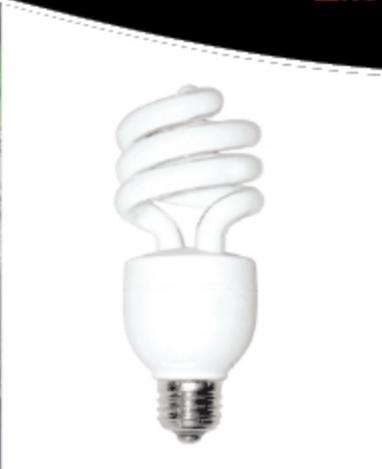


West Virginia  
*Energy*



DIVISION OF ENERGY



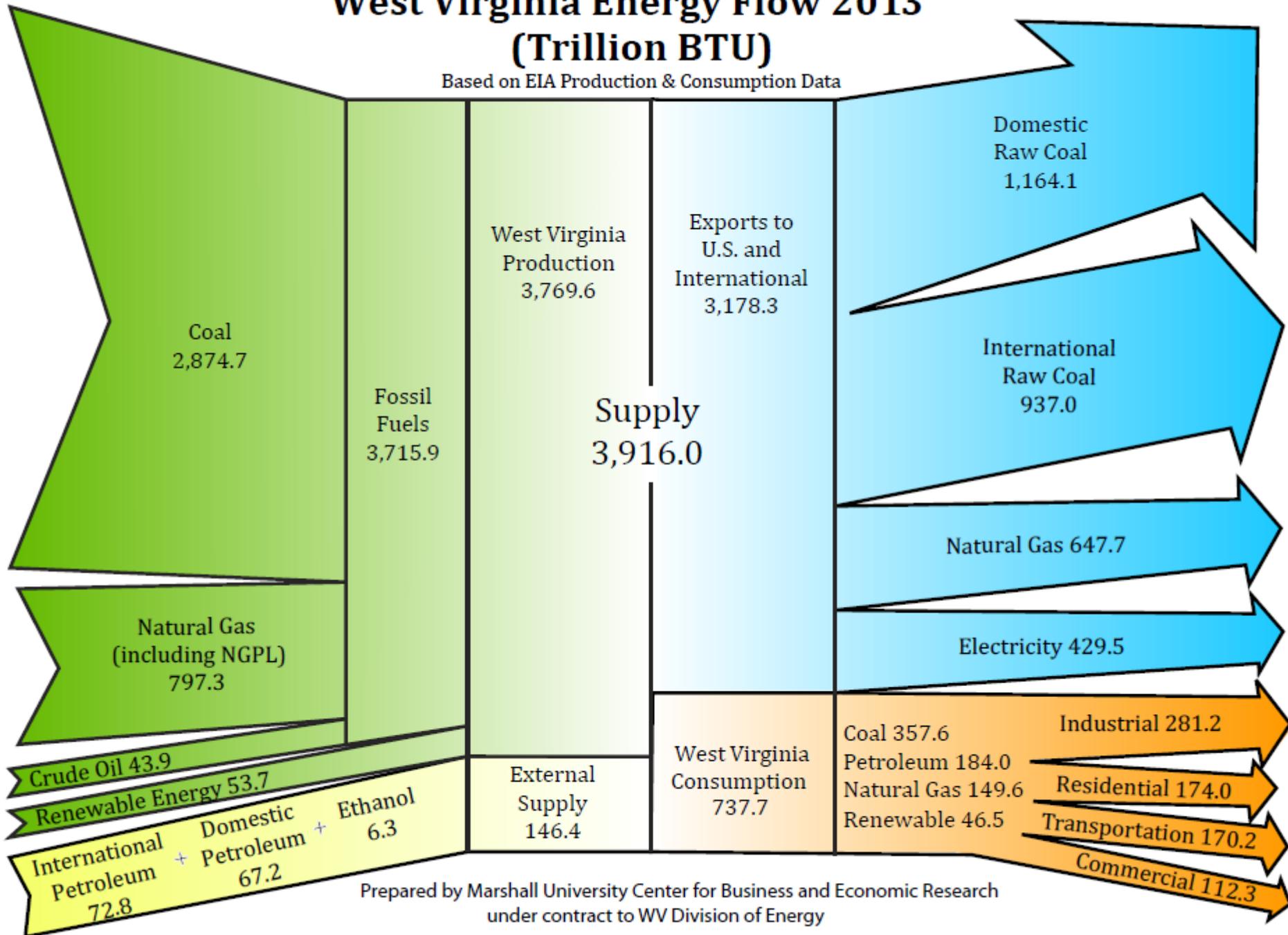
*West Virginia*  
WEST VIRGINIA

# Renewable Energy in the State of West Virginia

May 12, 2016  
Huntington, WV

# West Virginia Energy Flow 2013 (Trillion BTU)

Based on EIA Production & Consumption Data

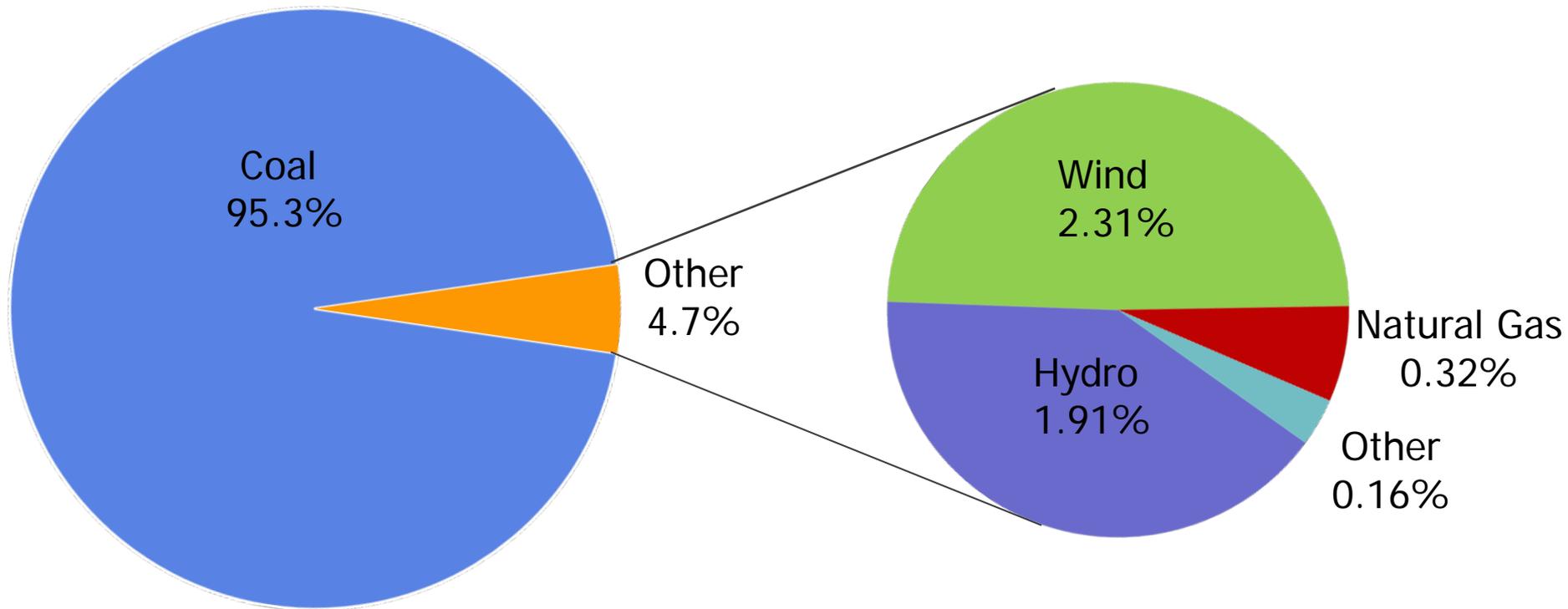


Prepared by Marshall University Center for Business and Economic Research

under contract to WV Division of Energy

Numbers may not sum to total due to rounding.

## West Virginia Net Electric Generation, 2015



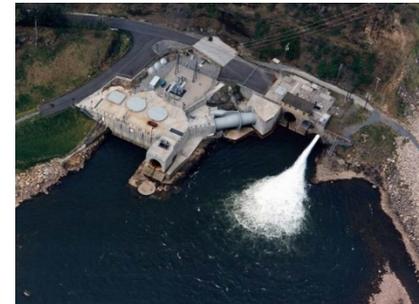
# Hydro Power

## Licensed WV Hydro Facilities

Name	Capacity (MW)	Licensee	Waterway
Belleville	42.0	American Minicipal Power, Inc	Ohio River
Dam No. 4	1.9	PE Hydro Generation LLC	Potomac River
Dam No. 5	1.2	PE Hydro Generation LLC	Potomac River
Hawks Nest & Glen Ferris	108.2	Hawks Nest Hydro, LLC	New River
Jennings Randolph	14.0	Fairlawn Hydroelectric Co., LLC	Potomac River
Lake Lynn	51.2	Lake Lynn Generation, LLC	Monongahela River
London/Marmet	28.8	Appalachian Power Co. (VA)	Kanawha River
Millville	2.8	PE Hydro Generation LLC	Shenandoah River
New Martinsville	35.7	City of New Martinsville (WV)	Ohio River
Racine	47.5	AEP Generation Resources, Inc.	Ohio River
Summersville	80.0	City of Summersville (WV)	Gauley River
Willow Island L&D	35.0	American Minicipal Power, Inc	Ohio River
Winfield	14.8	Appalachian Power Co. (VA)	Kanawha River

Total Capacity:  
463.1 MW

Hawks Nest Hydro Facility



# Hydro Power, Continued

## Preliminary Permitted WV Hydro Facilities

Name	Capacity (MW)	Licensee	Waterway
Hildebrand Lock & Dam	7.5	Lock+Hydro Friends Fund XLVI	Monongahela River
New Cumberland Locks & Dam	49.8	FFP Project 121 LLC	Ohio River
Stonewall Jackson	0.3	Mahoning Hydropower, LLC	West Fork River
Sutton	9.2	James R. Robertson	Elk River
Jennings Randolph	14	Fairlawn Hydroelectric Co.	North Branch Potomac
Tygart	30	Tygart LLC	Tygart River



Opekiska Lock and Dam

Total Preliminary Permit Capacity:  
110.8 MW

# Wind Power

## WV Wind Farms

Name	Operating		
	Capacity (MW)	Operator	County
Beech Ridge Energy, LLC	100.5	Invenergy Services, LLC	Greenbrier
Laurel Mountain	97.6	AES Wind Generation, Inc.	Randolph
Mountaineer Wind Energy Center	66.0	FPL Energy, LLC	Tucker
NedPower Mount Storm	264.0	Shell Wind Energy, Inc.	Grant
Pinnacle Wind Force, LLC	55.0	Edison Mission Energy	Mineral

Name	Under Construction		
	Capacity (MW)	Operator	County
New Creek*	103.0	Enbridge	Grant

\*A construction extension was granted by the PSC in September 2014. AES Wind Generation, Inc. is looking for a buyer for the project. (Construction has been stalled since early 2012.)

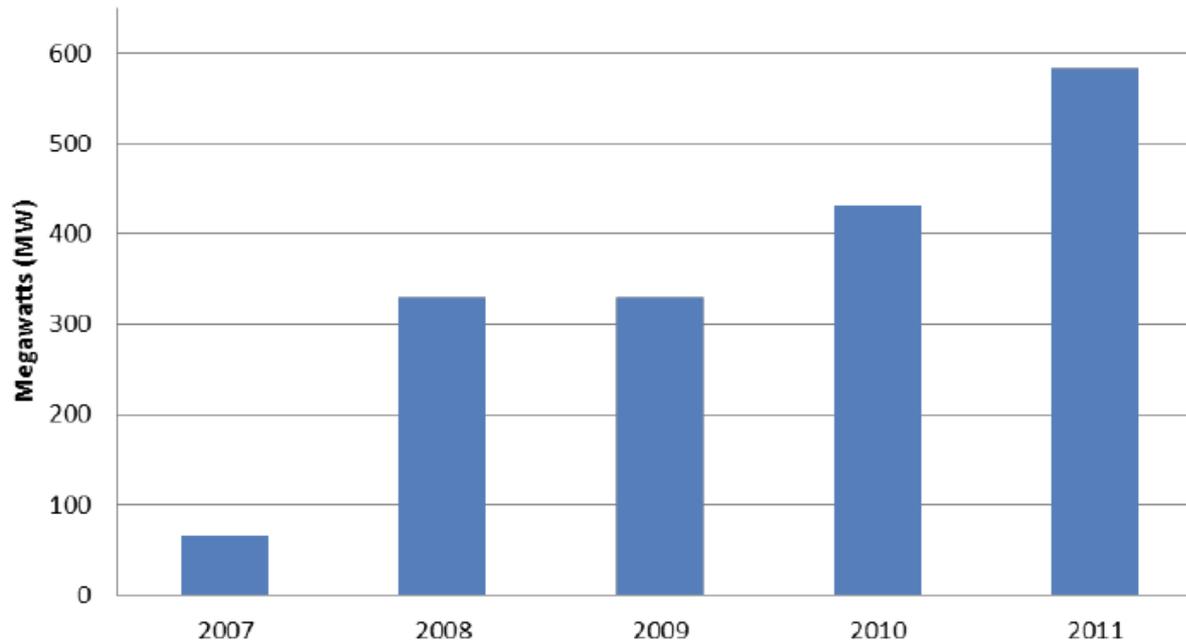
Operating Capacity:  
583.1 MW



NedPower Mount Storm

# Wind Capacity

WV Wind Electric Generating Capacity  
2007-2011



Source: <https://gats.pjm-eis.com/myModule/rpt/myrpt.asp?r=501>

# Solar

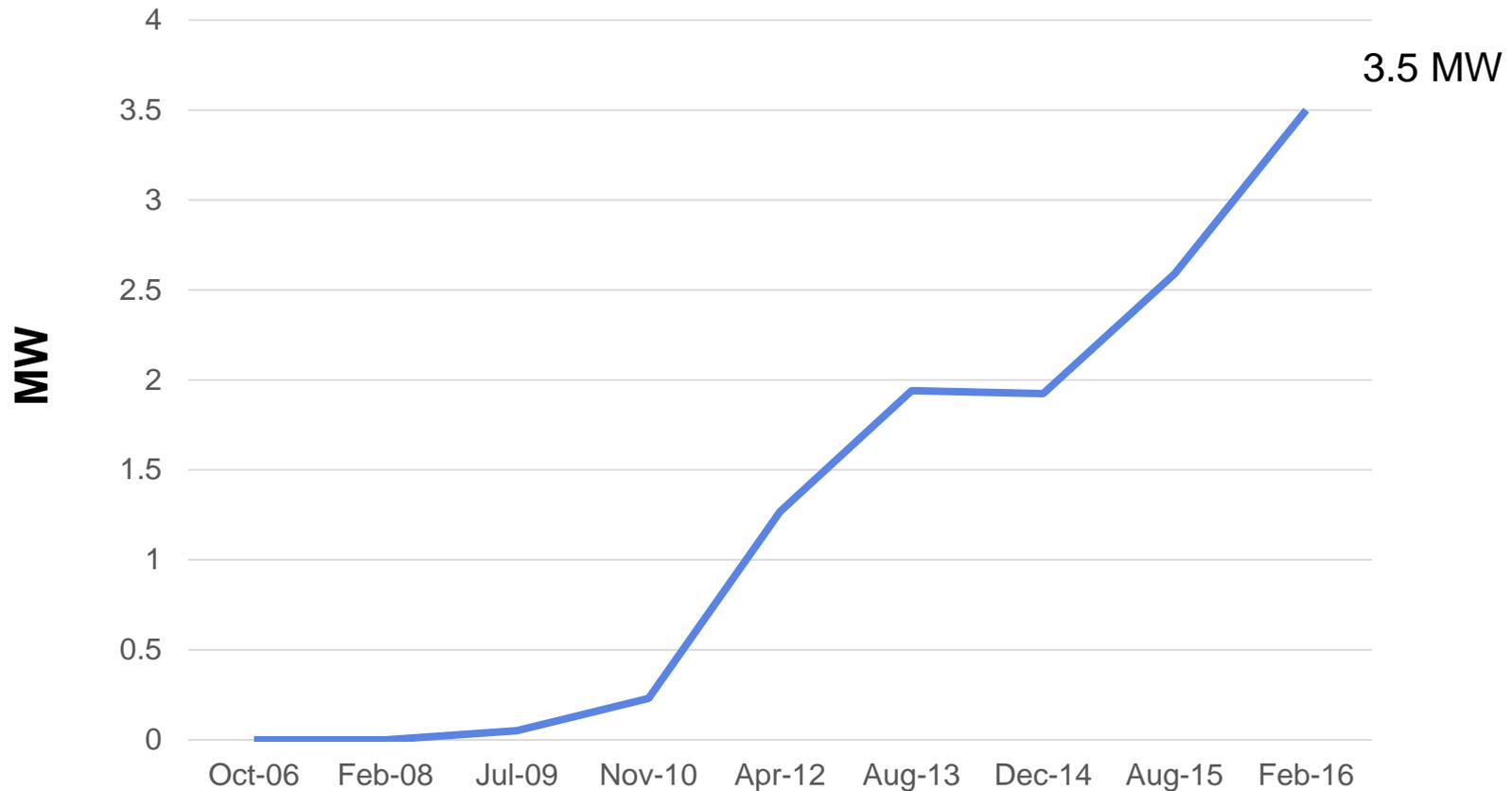
Examples of state and local government installations supported by WV Division of Energy

- Morgan County Courthouse
- Town of Man
- Village of Beech Bottom
- Hurricane Municipal Waste Water Treatment
- Mt. View High School
- University High School
- Cameron High School
- West Virginia DEP Headquarters



# Solar Generation

West Virginia Solar Capacity Growth  
October 2006 – February 2016



Source: PJM GATS Database

# Biomass

- West Virginia wood pellet producers:
  - Appalachian Wood Pellets
  - Hamer Pellet Fuel Company
  - Lignetics of West Virginia
- West Virginia is the third most heavily forested state in the nation with more than 78% of the land covered with forest.
- Wood for residential purposes: 130,308 cords
- Wood for boiler fuels: 5,000 cords
- Total wood pellet production capacity: 300,000 tons/year
- 150,000 acres harvested annually represents 1.25% of our 12 million forested acres

Thank you.