



Coal Generation in Maryland

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Summary

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Talen's Position

- Coal-fired generation:
 - Serves a vital role in maintaining electricity reliability in Maryland;
 - Supports jobs and the economy;
 - Is well controlled and regulated;
- GHG policies should be market-based and allow for business to transition
- RGGI has a track record of helping achieve regional goals.

Background

- Electricity in Maryland is a deregulated market, meaning all generation is produced in a competitive market. Reliability is managed by PJM, the Regional Transmission Operator (RTO).
- All producers are independent businesses managing risks with no guarantee of revenue or survival.

Plant	Owner	County	Generation Capacity (MW)
Brandon Shores	Talen	Anne Arundel	• 1,270
Wagner	Talen	Anne Arundel	• 958 (423 MW coal – 118 MW retiring in June 2020)
Morgantown	GenOn	Charles	• 1,477 (1229 MW coal)
Chalk Point	GenOn	Prince Georges	• 2,279 (667 MW coal)
Dickerson	GenOn	Montgomery	• 84 (537 MW coal)
Warrior Run	AES	Washington	• 180

Background

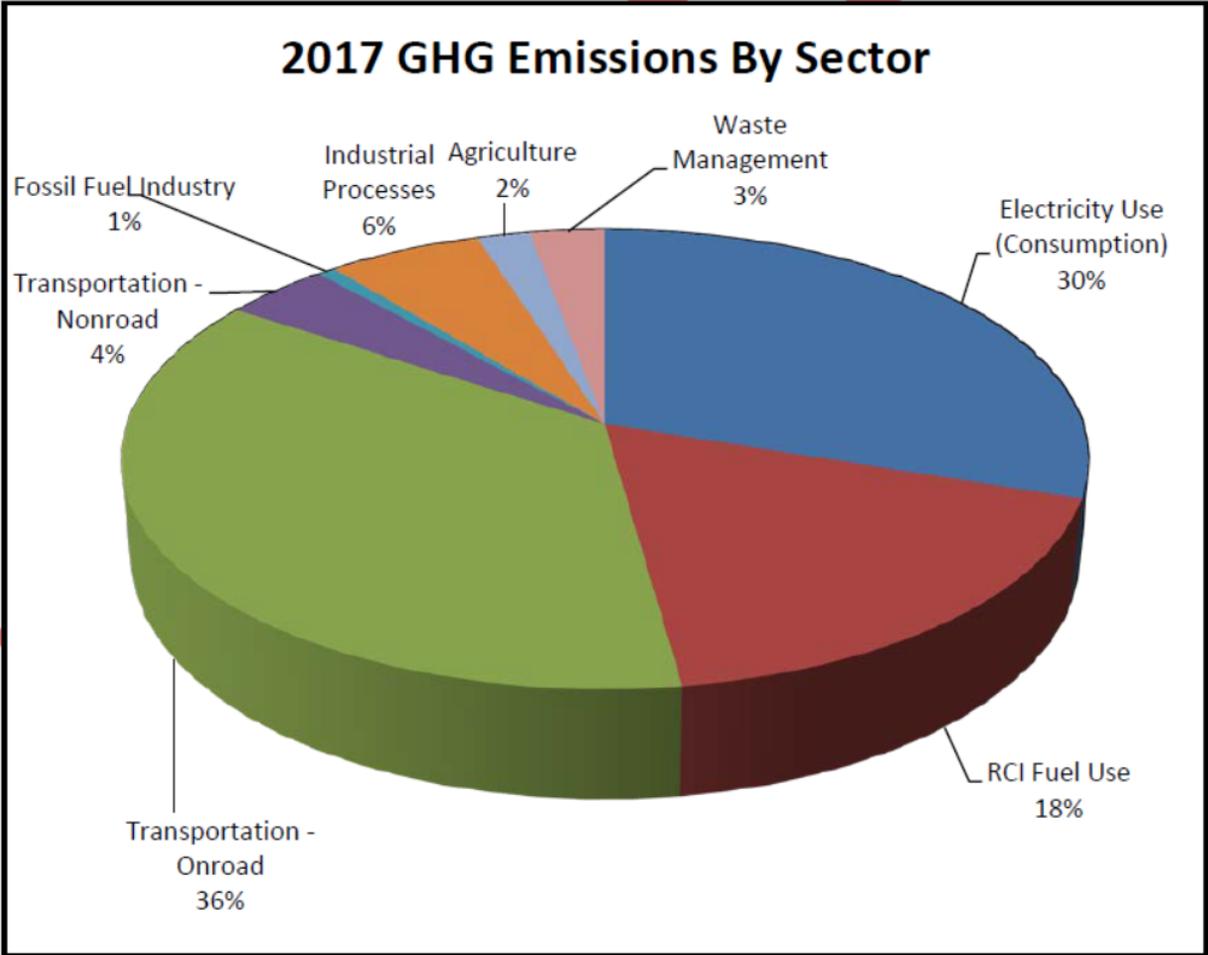


Figure 3.1-1. Gross GHG Emissions by Sector, 2017, Maryland.

Background

- Approximately half of Maryland's electricity is provided by out-of-state sources (15% of Economy-wide CO2 produced in-state).
- Maryland's In-state Generation Profile:

2018 MD Generation (%)	
Coal	23
Natural Gas	32
Nuclear	34
Renewables	11

source: EIA 2019 MD Profile

- Prior to 2012 > 50% of in-state generation came from coal.

Background

- Coal-fired generation CO2 Emissions have dropped significantly since the 2006 baseline year.
- Reductions far exceed the economy-wide goal.
- Forced reductions will likely drive further increases in imported power.

	CO2e (MMt/yr)		% change
	2006	2017	
Electricity Consumption	42.5	23.7	-44%
In-State Generation	32.2	11.7	-64%
In-state Coal Gen.	28.3	8.8	-69%
Imported Electricity	10.3	12	17%

source: MD GGRA Draft Report

Talen's Coal plants – Key Benefits

- Maryland coal plants are an insurance policy for blackouts; They are projected to run very little, but provide critical capacity.
- The BGE transmission zone (Baltimore region) within PJM is considered “constrained” (limited import capacity)
 - In the 2018 PJM Base Residual Capacity Auction for delivery years 2021/2022, Brandon Shores and H.A. Wagner represented approximately 80% of the available generation within the BGE zone.
- Although they may be infrequent, reliability events occur where Brandon Shores and Wagner have been able to generate power to avoid brown/blackouts (e.g., Polar Vortex and Oct. 2019 event).
- Brandon Shores and Wagner employ ~260 people directly.
- There are countless indirect jobs paid for by the \$50M/year O&M budget.
- There are up to 500 labor contractors on site for annual major maintenance projects.
- Talen pays \$7M annually in State and local taxes.

Emissions Controls

- Talen has invested close to \$1B in environmental controls since 2010.
- Brandon Shores and Wagner together are some of the cleanest coal fired generation with average emission reductions since 2009 of:
 - 95% SO₂;
 - 80% NO_x ; and
 - 70 % CO₂.
- Further reductions will take place this June (Wagner 2 will retire for NO_x RACT) and in January 2021, new SO₂ limits will be implemented across all units.

The Future

- Between market forces, energy efficiency standards, renewable development and RGGI, generation (and associated CO2 emissions) from these plants continues to drop. Plants have not run in 2020.
 - RGGI is and can continue to be an effective market-based mechanism for driving CO2 emissions lower.
 - Emissions from RGGI sources have dropped by 57 % since the baseline period of 2006-2008.
 - Allowances auctioned across all of RGGI have dropped by 67% in the same period
 - From 2021 to 2030, available allowances will drop 2.3% per year further.
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- In order to achieve a reduction in global CO2 emissions, it is more appropriate to utilize economy-wide policies and market-based approaches to maintain grid reliability and a thriving Maryland economy.