Managing Maryland's Transition Beyond Coal

Maryland Commission on Climate Change – Mitigation Work Group

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David Smedick
Senior Campaign Representative
Sierra Club

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Agenda Overview

Coal's Decline
- National Trends & Headwinds

Coal in Maryland
- Maryland's coal plants & climate contribution

How are state's managing coal transition?
- State examples
- What can Maryland do?

Q&A

Coal's National Decline

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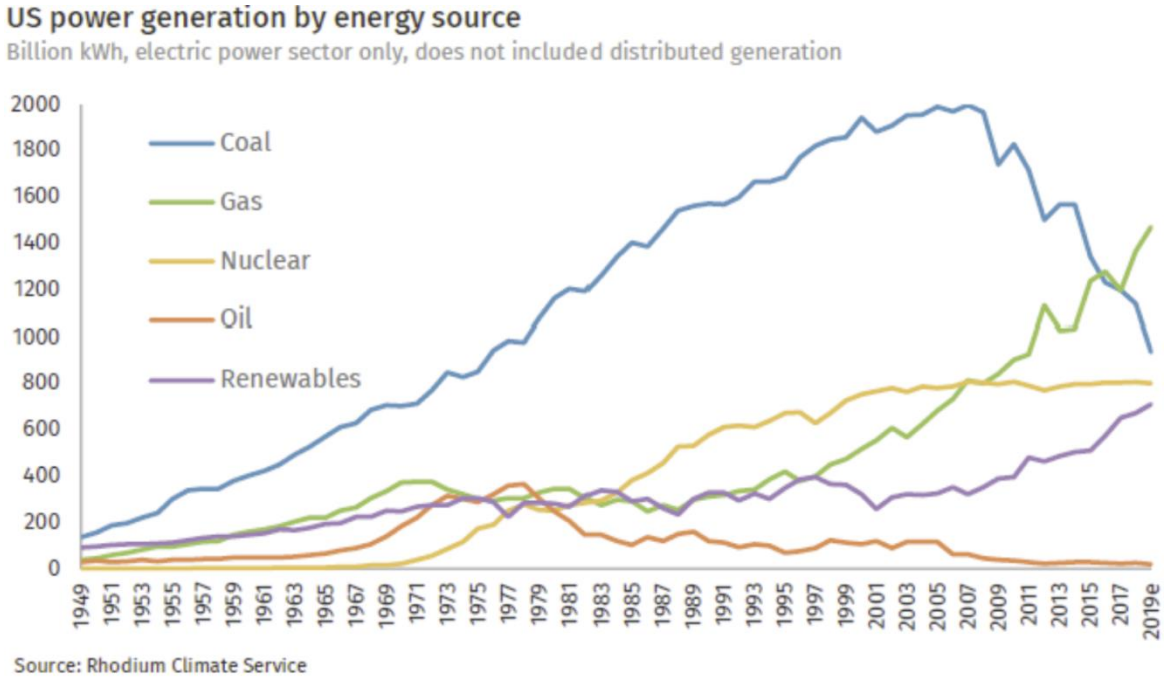
Coal's Steep Decline



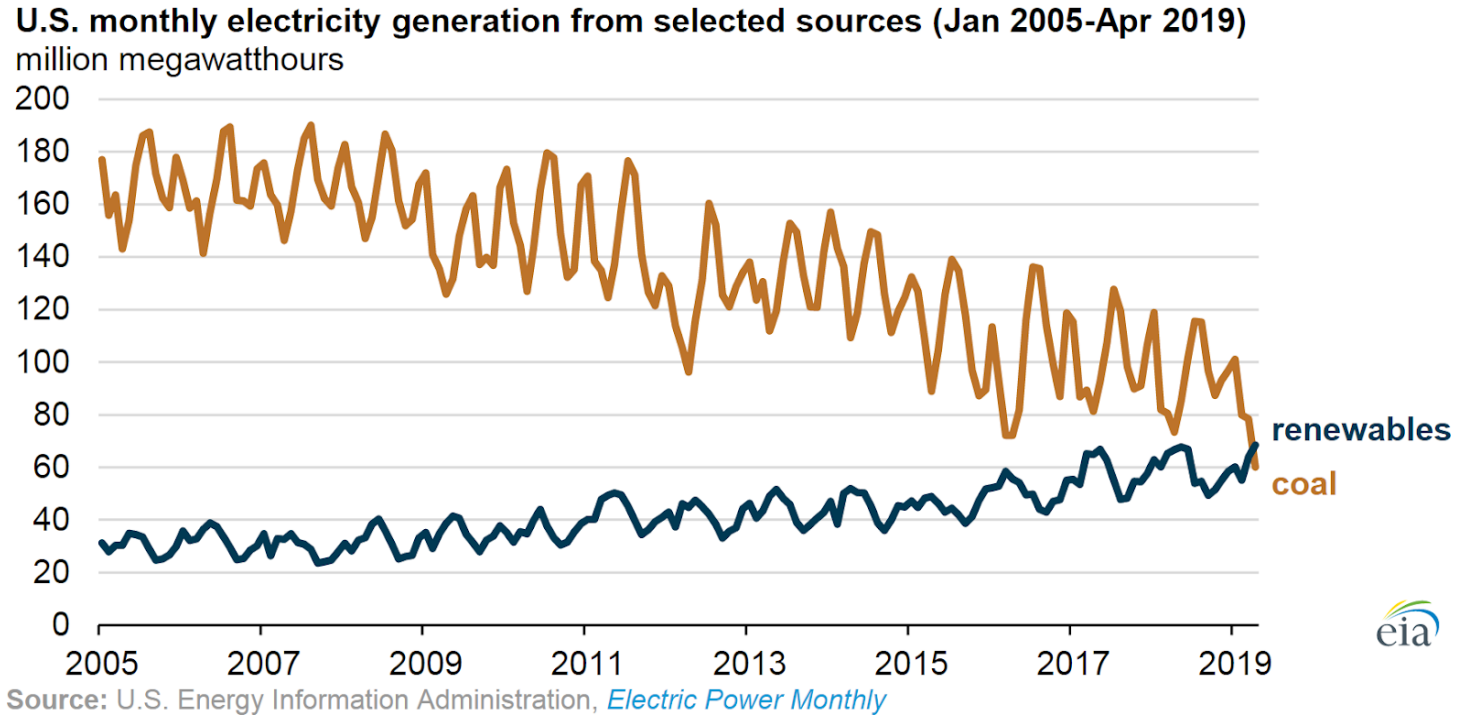
2019 coal generation at lowest level since 1975

Coal generation dropped 18% from 2018-2019 representing the largest drop in history

Coal generation has been cut nearly in half since its 2007 peak

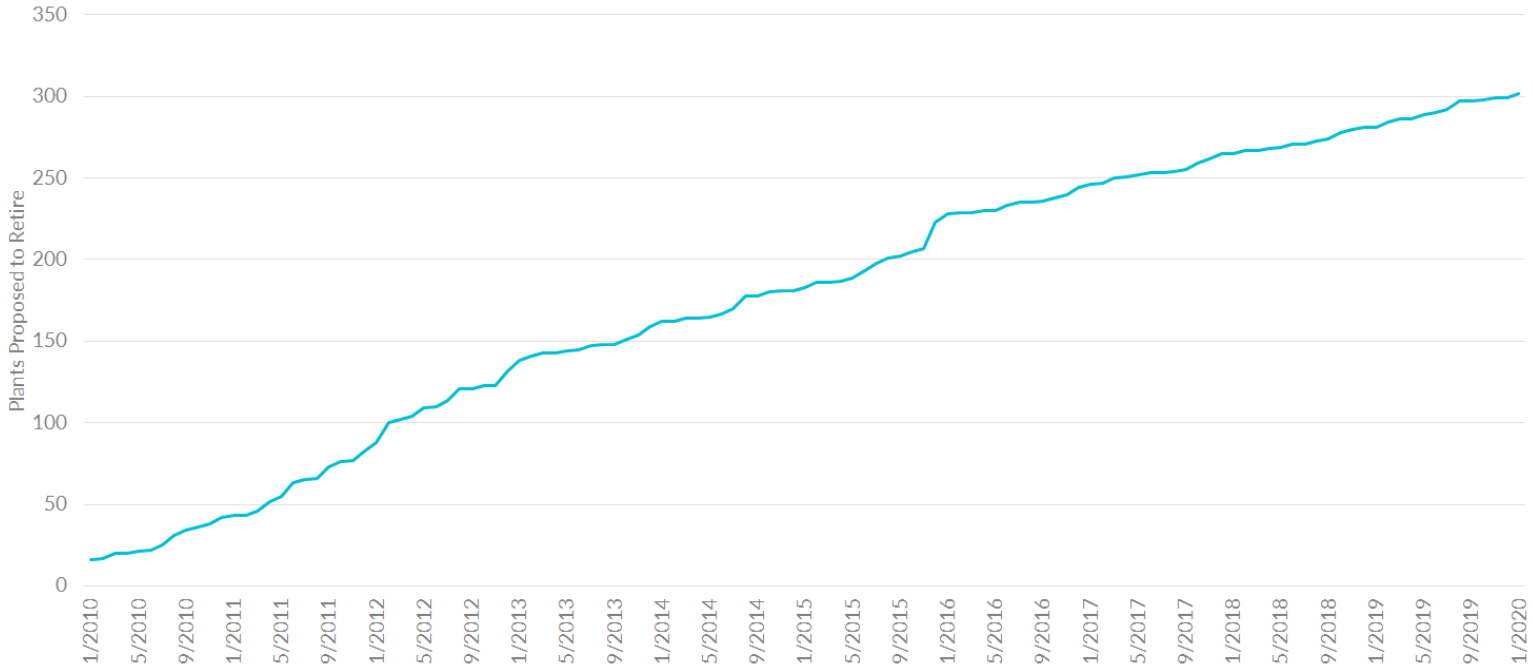
From 2009-2017, 77 percent of the reduction in U.S. economy-wide greenhouse gas emissions has been due to the decline in coal

Coal's Steep Decline – Renewables Are Winning Out



Source: U.S. Energy Information Administration, *Electric Power Monthly*

Coal's Steep Decline – Plant Retirements



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Maryland Coal-Fired Power Plants

An Accelerated Decline That Remains a Climate & Public Health Problem

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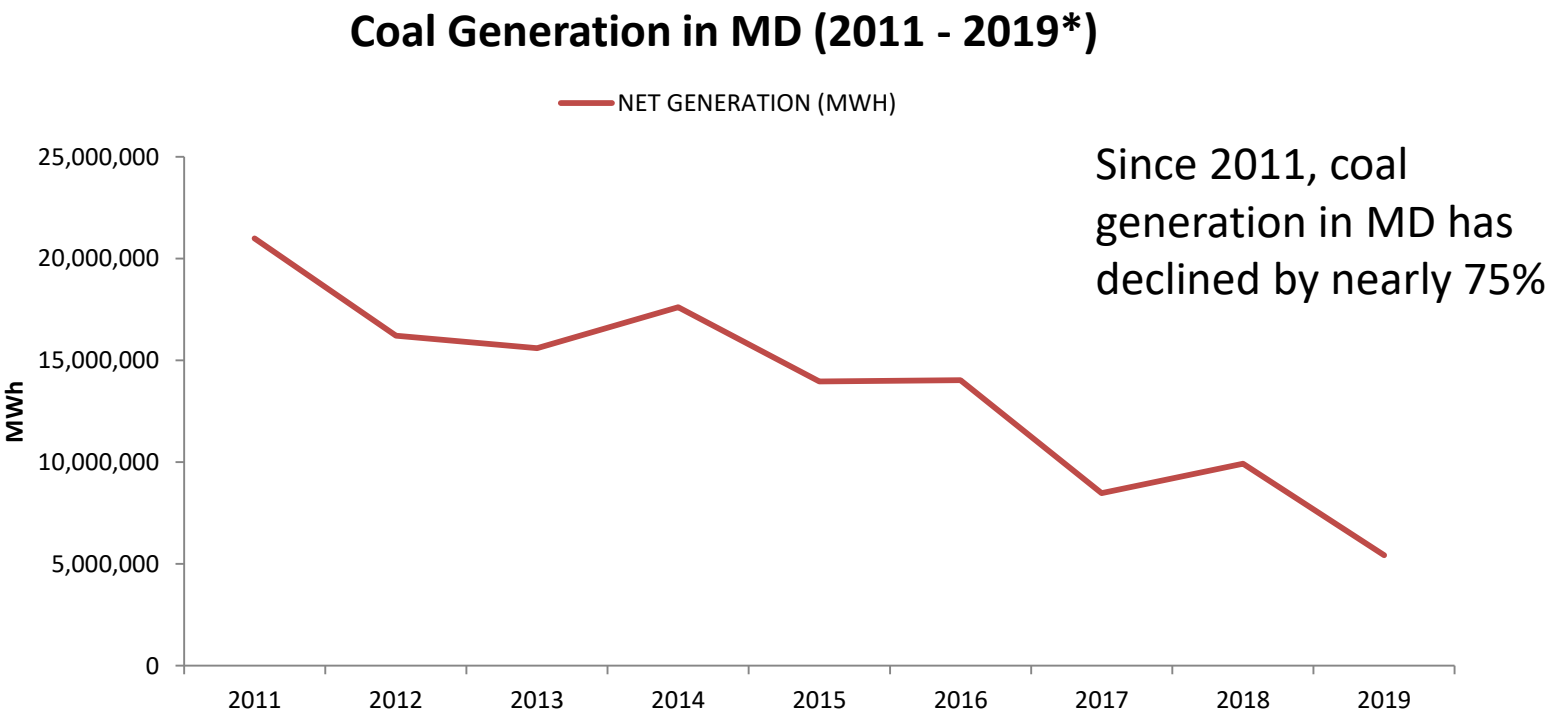
Indicators of Accelerated Transition



Indicators of Accelerated Transition

Year	GGRA Draft Plan Coal Generation (GWh)	Actual Coal Generation (GWh)
2017	15.37	8.47
2018	13.96	9.92
2019	12.51	5.43*
2020	10.10	?
2021	9.18	?
2022	8.63	?
2023	7.92	?

Indicators of Accelerated Transition

Plant	Location (County)	Capacity (MW)	Age in 2020 (yrs)	2019 Capacity Factor (%)
Warrior Run	Allegany	180	20	70%
Brandon Shores	Anne Arundel	1278	36	21%
Morgantown	Charles	1205	50*	16%
Chalk Point	Prince Georges	668	56*	8%
Dickerson	Montgomery	519	61*	2%
Wagner	Anne Arundel	495	61*	3%

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*The average age of a coal plant announcing retirement is 49 years; average age of coal plant deactivating is 52 years.

Coal Plants in Maryland – Need to Manage Transition

In 2017 Maryland's coal plants generated 13.5% of the gross electricity consumption of the state but were responsible for 75% of the climate pollution from in-state power generators.

MDE's 2017 GHG Inventory records over 8.7 MMtCO2e from coal-fired power plants in Maryland – the equivalent of over 1.8 million cars – putting in-state coal-fired power as the third largest contributor in the inventory behind only on-road gasoline and imported electricity.

Coal-fired power is an outsized contribution to the climate crisis that must be mitigated.

Need for a Managed Transition

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Coal Plants in Maryland – Need to Manage Transition

Best practices for transition according to GGRA Draft Plan

- "…several aspects that should be considered when formulating a transition effort, including:
  - Receiving input from workers early in planning stages,
  - Responding to questions from workers,
  - Providing a timeline for the phase-out of activities, and
  - Creating worker training programs that facilitate the transfer of employees to new jobs."

Where do the funds for a transition come from?

- Coal companies?
- Reallocation of existing funds like tax credits or the Strategic Energy Investment Fund?
- New sources of revenue to the state?

How are funds managed & what do they pay for?

- Impacted stakeholders!
- Wage Differential Benefits?
- Paid Retraining?
- Property Tax Loss?
- New investment in impacted communities?

Coal Plants in Maryland – Need to Manage Transition

Other States Provide Examples of Pathways Forward

- New York
  - Administrative Regulation to set date to end coal-burning by 2020
  - Electric Generation Facility Cessation Mitigation Program
- Washington State
  - Legislative action to manage cessation of coal burning at Centralia Power Plant and establish community transition account
- Colorado & New Mexico
  - Securitization legislation and community transition legislation
  - Colorado Just Transition Legislation
  - New Mexico Energy Transition Act
- Virginia
  - Climate action legislation with specific dates for coal transition

Coal Plants in Maryland – Need to Manage Transition

The Maryland Commission on Climate Change's Mitigation Work Group should formally recommend that the state adopt or enact a managed coal transition that follows the best practices identified in Appendix I of the Draft Greenhouse Gas Reduction Plan, including specific dates for facility transitions and funded workforce and community transition programs.

The 2030 Maryland Greenhouse Gas Reduction Plan should follow the best practices within the Draft Plan, Appendix I and establish a managed transition off coal-fired power in the state. This should include specific dates for facility transition and funded workforce and community transition programs.

The Sierra Club has joined over 50 other organizations calling for the transition off of coal-fired power in Maryland by 2025 and asks the MWG and GGRA Plan to adopt this goal.

Thank you

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Resources

- US Energy Information Administration – Electric Power Monthly Reports
- S&P Global Intelligence database
- US Clean Air Markets Data Resources – Air Markets Program Data
- MDE 2017 Greenhouse Gas Emissions Inventory
- MDE Draft Greenhouse Gas Reduction Plan - Appendix I
- MDE Draft Greenhouse Gas Reduction Plan – Excel Emissions Data
- EPA Greenhouse Gas Equivalencies Calculator