

Department of Legislative Services  
Maryland General Assembly  
2021 Session

FISCAL AND POLICY NOTE  
First Reader

House Bill 40 (Delegate Charkoudian)  
Economic Matters

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Maryland Energy Administration Study on Geothermal Heating and Cooling  
Systems and Geothermal Energy Workgroup

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This bill requires the Maryland Energy Administration (MEA) to conduct a specified study on geothermal heating and cooling systems and submit the study results to a Geothermal Energy Workgroup created by the bill (and staffed by MEA). The workgroup must develop recommendations to encourage and incentivize the use of geothermal heating and cooling systems in the State, and MEA, in consultation with the workgroup, must develop recommendations for an incentive structure. A report on the study, the workgroup's findings and recommendations, and the incentive recommendations is due by December 1, 2021. **The bill takes effect June 1, 2021, and terminates June 30, 2022.**

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Fiscal Summary

**State Effect:** General fund expenditures increase by between \$150,000 and \$200,000 in FY 2022 only. Revenues are not affected.

**Local Effect:** None.

**Small Business Effect:** None.

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Analysis

**Bill Summary:** The bill requires MEA to conduct a comprehensive technical study on (1) the status of geothermal heating and cooling systems in the State and (2) the potential impact of expanding and incentivizing the use of geothermal heating and cooling systems in the State. The bill specifies, in more detail, information that must be included in the study with respect to the potential to increase the use of geothermal heating and cooling

systems in the State and the potential benefits of such increased use. MEA may contract with a third party to conduct the study.

MEA must submit the results of the study to the Geothermal Energy Workgroup (created by the bill) by October 1, 2021. MEA must provide staff for the workgroup. The newly created workgroup must:

- study the status and impact of increasing the use of geothermal heating and cooling systems in the State;
- examine methods for growing the geothermal industry in the State, with a focus on increasing the use of the systems in environmental justice communities;
- examine methods for ensuring that any jobs created in the geothermal industry offer benefits and family-sustaining wages; and
- develop recommendations for legislation that will encourage and incentivize the use of geothermal heating and cooling systems in the State.

MEA, in consultation with the workgroup, must develop recommendations for a specified incentive structure that will increase the deployment of geothermal heating and cooling systems in Maryland.

The Director of MEA, or the director's designee, must report to the General Assembly by December 1, 2021, on the results of the required MEA study, the workgroup's findings and recommendations, and the incentive recommendations.

Members of the workgroup may not receive compensation as members of the workgroup, but are entitled to reimbursement for expenses.

### **Current Law:**

#### *Strategic Energy Investment Fund*

MEA administers the Strategic Energy Investment Fund (SEIF), which receives proceeds from the auction of carbon allowances to power plants and other market participants under the Regional Greenhouse Gas Initiative. A portion of that funding is allocated to a renewable and clean energy programs account that can be used for, among other forms of support for renewable and clean energy, expansion of solar, geothermal, and wind grant programs.

## *Renewable Energy Portfolio Standard*

Geothermal energy is an eligible “Tier 1” renewable source under the State’s Renewable Energy Portfolio Standard (RPS), which was enacted in 2004 to facilitate a gradual transition to renewable sources of energy. Under the RPS, electric companies (utilities) and other electricity suppliers must submit renewable energy credits (REC) equal to a percentage of electricity sales specified in statute each year or else pay an alternative compliance payment equivalent to their shortfall. An REC is a tradable commodity equal to one megawatt-hour of electricity generated or obtained from a renewable energy generation resource.

## *EmPOWER Maryland*

In 2008, the General Assembly passed the EmPOWER Maryland Energy Efficiency Act, which set target reductions in per capita electricity consumption and peak demand. Legislation in 2017 extended the program and established a new annual energy savings goal. Approved program costs are recovered by electric companies on customer bills. The Public Service Commission advises that the electric utilities that participate in EmPOWER were approved on December 18, 2020, via Commission Order No. 89679 to offer geothermal rebates via their heating, ventilation, and air conditioning programs for the 2021-2023 program cycle.

**State Fiscal Effect:** General fund expenditures increase by between \$150,000 and \$200,000 in fiscal 2022 only, which assumes the full cost of the bill is incurred in fiscal 2022, despite the bill’s June 1, 2021 effective date. The estimate reflects the cost for MEA to contract with a third party to conduct the study required by the bill; it is based on MEA’s experience with past procurements and an expectation that the short timeframe in which the study must be completed will increase costs. The requirements of providing staff for the workgroup and developing an incentive structure are expected to be handled by existing MEA staff, potentially with assistance from the third party who conducts the study. Any expense reimbursements for workgroup members are assumed to be minimal and absorbable within existing budgeted resources.

While MEA’s budget is largely supported by SEIF, it is assumed, for the purposes of this fiscal and policy note, that general fund expenditures are needed to pay for the study. MEA indicates that use of SEIF funding diverts funding from existing programs.

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## **Additional Information**

**Prior Introductions:** None.

**Designated Cross File:** None.

**Information Source(s):** Maryland Energy Administration; Office of People's Counsel;  
Public Service Commission; Department of Legislative Services

**Fiscal Note History:** First Reader - January 22, 2021  
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