



Maryland Biofuels Task Force Report

Leadership & Media Briefing Document: Updated December 15, 2025

- **Task Force Objective:** Assess the Challenges, Costs, Benefits, Risks, and Feasibility of Utilizing Higher Blends of Biofuels to Help Decarbonize Maryland's Transportation Sector.
- **Purpose of the Task Force Report:** The Task Force report assesses the challenges and benefits of using higher blends of biofuels to help Maryland meet its Climate Solutions Now Act (CSNA) goal of a 60% reduction in greenhouse gas (GHG) emissions by 2031. Transportation is Maryland's largest source of emissions, accounting for 35-36% of the state's total, making it a key sector for immediate action.
- **Potential Outcomes:** The Maryland Department of the Environment estimates that achieving the CSNA targets will generate \$135 billion in total societal benefits, including reduced healthcare costs, avoided climate damages, and greater economic resilience. This valuation is based on reducing 646 million metric tons of CO₂ between now and 2050, which implies an estimated carbon reduction value of about \$209 per metric ton. If Maryland adopts a Clean Fuel Standard, it will immediately reduce carbon and mobile-source air-toxic emissions from every gallon of fuel in every internal-combustion vehicle in the state.

Table of Contents

| | |
|---|----|
| About the Maryland Biofuels Task Force | 3 |
| Maryland’s Challenges: Carbon Reduction and Budgetary Gaps | 5 |
| Assessing Maryland’s Opportunity to Leverage a CFS and the Benefits of Increasing the Amount of Biofuels in Gasoline and Diesel Fuel | 5 |
| Vehicle Compatibility | 5 |
| Refueling Infrastructure Compatibility | 5 |
| Global Acceptance | 6 |
| Impact of a CFS on Consumer Pricing | 6 |
| A CFS’s Impact on Economic, Energy, Environmental, Personal, and Food Security in Maryland | 7 |
| Economic Security | 7 |
| Energy Security | 7 |
| Environmental & Personal Security | 8 |
| Food Security | 9 |
| Challenges That May Prevent Maryland from Realizing the Benefits of a CFS | 10 |
| Recommendations to Support a CFS in Maryland | 11 |
| Goalkeeper Scorecard | 11 |
| Summary | 12 |
| Key Objectives | 12 |

About the Maryland Biofuels Task Force

The Maryland Biofuels Task Force (Task Force) is a diverse group of ~50 stakeholders from 35 non-governmental, governmental, and private organizations with expertise in economic, energy, and environmental policy and technologies. The objective of the Task Force is to:

1. Assess the challenges, costs, benefits, risks, and feasibility of utilizing higher blends of biofuels to help decarbonize Maryland's transportation sector.
2. Quantify how increased use of biofuels can serve as an additional decarbonization tool that supplements—not replaces—emission reductions expected from EVs and other viable alternative fuel options.
3. Identify existing and potential economic, energy, environmental, public health, and national security benefits associated with expanded biofuel use.
4. Identify the barriers and challenges preventing the state from achieving its carbon-reduction goals.
5. Identify opportunities and provide recommendations to overcome barriers and challenges.
6. Evaluate the role of biofuels (ethanol and biodiesel) in reducing emissions, considering feasibility, safety, cost-effectiveness, and impacts on Maryland's economic, energy, environmental, and public health objectives.
7. Quantify the total societal costs and benefits that could be gained if the recommendations are implemented—and the costs or losses that could occur if no action is taken to change the status quo.

Table 1: Maryland Biofuels Task Force

| Agency / Company | Description |
|--|---|
| <i>(Sponsoring Organization)</i> Greater Washington Region Clean Cities Coalition | DOE Clean Cities coalition |
| Advanced Biofuels USA | Biofuels education nonprofit |
| Alchemity | Biofuels technology developer |
| Biorefineries International | Biofuel technology/engineering firm |
| Burch Oil & Burch Propane | Maryland fuel distributor |
| Clean Fuels Alliance America | Biodiesel/renewable diesel trade association |
| Clean Fuels Development Coalition | Clean fuels advocacy organization |
| Dixie Land Energy, LLC | Maryland fuel distributor |
| Environmental & Energy Study Institute | Environmental and energy policy nonprofit |
| Ethanol Project Developer | Technology/project developer |
| EVerged | EV infrastructure provider |
| Americans for Affordable Energy | Energy advocacy group |
| Frederick County Division of Energy & Environment | Local government agency |
| GeaVance Energi Solutions | Research and Development Firm |
| Gevo | Renewable fuels/SAF producer |
| GHG Engineering, LLC | GHG emissions consulting |
| Sustainable Energy Strategies, Inc. | Sustainable transportation consulting firm |
| Groundwork Elizabeth | Environmental/community development nonprofit |
| Growth Energy | Ethanol trade association |
| Low Carbon Fuels Coalition | Low-carbon fuels advocacy coalition. |
| Renewable Natural Gas Coalition | RNG industry association |
| Maryland Clean Energy Center | State clean energy entity |
| Maryland Department of Agriculture | State agency |
| Maryland Department of the Environment | State environmental agency |
| Maryland Energy Administration | State energy agency |
| Maryland Grain Producers & Utilization Board | Agricultural commodity board |
| Maryland Soybean Producers Board | Agricultural commodity board |
| Ohio Clean Fuels | State Clean Energy/Environmental NGO |
| Ohio Soybean Board | Agricultural commodity board |
| Optimus Technologies | Biodiesel flexible fuel technology company |
| Renewable Fuels Association | Ethanol industry trade association |
| SEDC, LLC | Technology development firm |
| USAFI Technologies LLC | Research and technology company |
| Virginia Clean Cities Coalition | DOE Clean Cities coalition |

Maryland's Challenges: Carbon Reduction and Budgetary Gaps

1. Maryland is currently projected to fall short of its 2031 climate goal by 10.6 MMT of CO₂e under current policies. Biofuels offer a direct way to help close this gap by about 3MMT.
2. CSNA projected an investment of \$1 billion per year to achieve carbon reduction goals. The state faces a projected \$3 billion budget deficit, making cost-effective climate solutions that also generate revenue particularly urgent.
3. Maryland's current GHG accounting framework relies on the EPA's MOVES model, which only measures tailpipe emissions and does not account for the full lifecycle benefits of biofuels. This undervalues biofuels compared to electric vehicles (EVs).
4. Major state climate policies, including the CSNA, do not mention or provide an implementation pathway for ethanol, and only mention biodiesel for "consideration."

Assessing Maryland's Opportunity to Leverage a CFS and the Benefits of Increasing the Amount of Biofuels in Gasoline and Diesel Fuel

Baseline Assumption: A Maryland Clean Fuel Standard would be equivalent to a statewide transition from E10 to E15 (year-round) and from B Zero to B20.

Vehicle Compatibility

1. 97% of the fuel sold in the U.S. is for cars that the EPA approves to use E15.
2. All diesel OEMs approve the use of B20.

Refueling Infrastructure Compatibility

1. Due to underground storage regulations, credit cards, marketing, and the life cycle of equipment, it is estimated that 70-90% of retail gasoline stations can sell E15 or B20.
2. There are 1,767 station locations in the U.S. selling Biodiesel (B20 and above) or Renewable Diesel (R20 and above).
3. There are 4,361 station locations selling E85, 1,816 stations selling E15, and 299 of those stations selling E20-E40.
4. All states allow for the sale of E15 statewide. CA was the last holdout but changed in October 2025.

Global Acceptance

Globally, more than 60 countries have some form of biofuel blending mandate, but perhaps only 15–20 countries currently use E15 or higher ethanol blends in road gasoline on a significant scale. The most critical high-blend markets today are Brazil (E27–30), India (E20), the United States (E10 with growing E15/E85), Thailand (E20/E85), and several EU members offering E85 and similar high-ethanol fuels.

Impact of a CFS on Consumer Pricing

Ethanol's Impact on Gasoline Prices

Increasing the supply of ethanol, particularly through higher blends like E15 (15% ethanol), consistently lowers retail gasoline prices by expanding fuel supplies and displacing more expensive petroleum components.

1. **Consumer Savings:** E15 is typically 10 to 30 cents per gallon cheaper than the standard E10 blend, with some locations reporting savings of up to \$1 per gallon during specific periods.
2. **Aggregate Economic Impact:** If the U.S. transitioned from E10 to E15 as the standard fuel, consumers nationwide could save over \$20 billion annually. For Maryland specifically, this transition is estimated to save drivers between \$250 million and \$750 million per year.
3. **Refining Efficiency:** Ethanol's high-octane rating allows refiners to produce lower-octane gasoline blendstocks, which increases the volume of gasoline produced from a barrel of oil by 3.2% to 6.7% (depending on the blend). This efficiency helps avoid the costs associated with building additional refining capacity.

Biodiesel's Impact on Diesel Fuel Prices

The introduction of biomass-based diesel has historically suppressed diesel fuel prices by adding significant volume to the global and domestic supply.

1. **Price Reduction:** From 2010 to 2021, the global introduction of biomass-based diesel reduced diesel prices by 8% to nearly 19% annually. U.S. production alone is credited with lowering diesel prices by 1% to 4%.
2. **Retail Differentials:** Biodiesel blends like B20 often retail at a discount compared to petroleum diesel. Reports indicate B20 can cost \$0.30 to \$0.50 less per gallon in some regions, with one Clean Cities report noting an average savings of \$0.44 per gallon.
3. **Maryland Savings:** A 4% reduction in diesel prices would save Maryland's trucking industry, farmers, and consumers approximately \$104.7 million annually.

Maryland CFS's Impact on Crude Oil and Macroeconomics

1. **Energy and National Security:** Biofuels serve as a buffer against crude oil price volatility and the geopolitical leverage of OPEC/OPEC+ nations, which control roughly 70–76% of global oil reserves.
2. **Strategic Fuel Reserve:** The U.S. produces 21 billion gallons of biofuel annually, a volume three times larger than the U.S. Strategic Petroleum Reserve (SPR). Just as SPR releases have historically lowered prices (e.g., by up to 31 cents per gallon in 2022), consistent biofuel production acts as a permanent strategic reserve, stabilizing markets.

3. **Inflation and Recessions:** High crude oil prices directly impact economic stability. Historically, every \$ 10-per-barrel increase in oil prices raises inflation by roughly 0.2% in the short run and reduces GNP by approximately 0.5%.
4. **Market Deterrent:** By reducing demand for crude oil, biofuels lower the price of petroleum-based products. This capacity makes biofuels a valuable deterrent against market manipulation by foreign oil entities.

A CFS's Impact on Economic, Energy, Environmental, Personal, and Food Security in Maryland

Economic Security

Section 1: Economic Security. Details on how biofuels can lower consumer costs, increase state revenue, and stabilize farm income amid Maryland's budget deficit and federal dependency.

Economic Benefits

1. The annual 3.0 MMT CO₂ reduction is valued at more than \$624 million in avoided societal costs each year, based on Maryland's official valuation of carbon.
2. Consumers could see gasoline costs lowered by \$0.20–\$0.40 per gallon, saving Maryland drivers between \$569 million and \$1 billion annually.
3. The total economic activity stimulated by a shift to E15 and B20, including processing, farm income, and consumer savings, could reach nearly \$4.7 billion annually.

Energy Security

Section 2: Energy Security: Explains Maryland's vulnerability to fuel supply shocks and how biofuels serve as a domestic "strategic reserve."

Energy and National Security

1. Maryland has no in-state production of crude oil or gasoline and no strategic liquid fuel reserves, making it highly vulnerable to supply disruptions like the 2021 Colonial Pipeline cyberattack, which left 34% of the state's gas stations without fuel.
2. The U.S. has an annual biofuel production capacity of 21 billion gallons, which is three times larger than the U.S. Strategic Petroleum Reserve, offering a domestic, resilient alternative to foreign oil dependence.

Environmental & Personal Security

Section 4: Environmental Security: Addresses the "double-whipsaw" effect of farmland loss and counters the myth of Indirect Land Use Change (ILUC) penalties.

Environmental Security: Carbon Reduction

Reduction from Biofuels: The transition to E15 and B20 would avoid nearly 3.0 million metric tons (MMT) of CO₂ annually, equivalent to removing almost 1 million gasoline-powered cars from the road each year.

Reduction from Preserving Farmland: Farmland conversion creates a double hit on the climate: domestically, it eliminates the land's ability to store carbon and replaces it with high-emission development, shifting farmland from a potential carbon sink to a net source of +0.5 to +2.5 tons of CO₂e per hectare per year. Globally, this lost U.S. production must be replaced, and the resulting "leakage" often comes from higher-carbon-intensity producers such as Brazil or Argentina, where expanded agriculture can drive additional emissions and even deforestation, ultimately increasing total global greenhouse-gas emissions rather than reducing them.

Personal Security: Air Toxic Reductions

Section 6: Personal Security: Connects petroleum fuel pollution to direct health threats in Maryland, especially in communities like Baltimore, and highlights the billions in healthcare savings achieved by California's clean fuel policies.

1. A transition to E15 gasoline and B20 biodiesel could prevent approximately 30 premature deaths annually in Maryland, primarily due to reductions in fine particulate matter (PM_{2.5}) exposure.
2. Higher ethanol blends dilute harmful aromatics like benzene, a known carcinogen, reducing cancer risk from mobile sources.

Maryland "Tons-Complete" Emissions Comparison: RVP Strategy (–1 psi on 28% of gasoline) vs. E15 Strategy (E10→E15 on 72% of gasoline). Baseline gasoline: 2.8B gal/yr | EPA NEI on-road VOC baseline: 68,000 tons/yr

Annual Statewide Emission Reductions

Table 2: Additional Air Toxic Reduction from E15

| Pollutant | RVP –1 psi (28% of fuel, June–Aug) | E15 + 5% Aromatics Reduction (72% of fuel, Yr-Round) |
|--|--|--|
| Total VOC (mass) | 571–1,523 tons/yr (1.14–3.05M lb) | 245–734 tons/yr (0.49–1.47M lb) |
| BTEX / Benzene toxics | ~0 | 245–734 tons/yr (0.49–1.47M lb) |
| PM2.5 / SOA (gasoline-attributable) | ~0 | 34–232 tons/yr (68k–464k lb) |
| CO₂e (GHG) | ~0 | 258,048 tons CO₂e/yr (516M lb) |

Outcome: E15 + aromatics reduction delivers much greater annual health and climate benefits: ~245–734 tons of BTEX, ~34–232 tons of PM/SOA, and ~258,048 tons of CO₂e avoided each year.

Food Security

Section 5: Food Security: Shows how biofuel demand is critical to sustaining farmland values and preventing price collapses that threaten Maryland's agricultural sector.

Maryland Farmland Loss

Maryland has experienced a significant decline in agricultural land due to urbanization, economic pressures, and regulatory challenges. Between 2017 and 2022 alone, the state lost over 12,000 acres of farmland. This recent decline continues a long-term trend; between 1959 and 2007, Maryland lost roughly 41.7% of its farmland (1.4 million acres), primarily to urbanization.

1. **Current Rate of Loss:** The state is losing approximately 2,400 acres per year. If this trend persists, Maryland is projected to lose an additional 24,000 acres by 2035, threatening the critical mass required for a viable agricultural industry.
2. **Drivers:** The primary drivers of this loss are suburban expansion, particularly along the Baltimore-Washington corridors, combined with weak commodity prices and high regulatory burdens.
3. **Economic Impact:** The loss of farmland to development results in estimated annual revenue losses exceeding \$7.4 million. Furthermore, a 14% drop in corn prices or a 13% drop in soybean prices could cost Maryland farmers between \$26 million and \$60 million annually, placing financial pressure on farmers that often forces the sale of land for development.

National Farmland Loss

Nationally, the United States is experiencing a rapid conversion of agricultural land to other uses. From 2017 to 2022, the U.S. lost over **20 million acres** of farmland and 141,733 farms. Looking at a broader timeline, farmland in the U.S. decreased by **66 million acres** between 2000 and 2023.

1. **Daily Loss Rate:** Between 2001 and 2016, approximately 11 million acres of U.S. farmland were converted to urban and commercial development, equating to a loss of about **2,000 acres per day**.
2. **Misconceptions of Land Use:** Contrary to the "food vs. fuel" myth, the amount of land planted by farmers has remained relatively stable. Farmers planted an average of 322 million acres per year before the Renewable Fuel Standard (RFS) and plant roughly 318 million acres today.
3. **Real Competition for Land:** The source notes that the actual competition for farmland is not biofuel crops, but development and leisure spaces. For context, the **U.S. has 45 million acres of lawns and up to 99 million acres of urban green space, which dwarfs the 20 million acres of corn used for ethanol.**

Environmental and Economic Consequences of Farmland Loss

The conversion of farmland to commercial or residential development creates a "Double-Whipsaw" carbon effect, where emissions rise in two distinct ways:

1. **Increases Carbon Emissions Domestically:** Converting farmland to development eliminates the land's ability to sequester carbon and replaces it with high-emission infrastructure. Farmland conversion typically results in net annual emissions of +0.5 to +2.5 tons of CO₂e per hectare, whereas climate-smart agriculture can serve as a carbon sink.

2. **Global Carbon Increases:** When U.S. production drops due to land loss, global demand is met by imports from countries with higher carbon intensities (such as Brazil or Argentina), leading to increased global emissions and deforestation risks abroad.

Biofuels as a Farmland Preservation Tool

Biofuels play a critical role in slowing farmland loss by stabilizing agricultural economics.

1. **Stabilizing Value:** Demand for ethanol and biodiesel supports crop prices, which are capitalized into farmland values. Research indicates that biofuel plants increase local farmland values by approximately 4% per 100 million gallons of capacity.
2. **Prevention:** By maintaining farm profitability, biofuel demand prevents land from being sold for high-carbon commercial and residential development. The sources argue that there are alternatives to fossil fuels, but "no alternatives to food," making the preservation of productive farmland a matter of national and food security.

Challenges That May Prevent Maryland from Realizing the Benefits of a CFS

Combating Misinformation and Building Support

Public Perception: A significant challenge is the lack of public awareness and persistent misinformation about biofuels. A 2025 survey found that 60-90% of Maryland consumers were unaware of the benefits of biofuels, such as cost savings and health improvements.

Common Myths vs. Facts

Myth: Biofuels increase GHG emissions.

- **Fact:** Corn ethanol has about 50% less carbon than gasoline, and biodiesel can reduce carbon by 40-86%.

Myth: Biofuels drive up food prices ("Food vs. Fuel").

- **Fact:** The U.S. now produces more fuel, food, and animal feed on less land than before the Renewable Fuel Standard (RFS) was established. Biofuel production stabilizes crop prices, which, in turn, protects farmland from conversion to commercial uses. A 14% drop in corn prices would cost Maryland farmers \$34–\$60 million annually.

Building a Broad-Based Bipartisan Coalition

A diverse coalition of farmers, fuel retailers, health advocates, and national security experts is needed to reframe biofuels as a practical, bipartisan solution that complements other clean technologies, such as EVs.

Recommendations to Support a CFS in Maryland

Section 11: Recommendations: Provides actionable recommendations for Maryland, including adopting a clean fuel standard, increasing consumer education, and creating a "B20 Club" to promote biodiesel use among fleets.

1. Adopt a Clean Fuel Standard aligned with MCCC guidance, modeled on California's year-round E15, delivering lower fuel prices, \$500–\$750M in annual consumer savings, faster Climate Solutions Now Act compliance, and strengthened farmland and food security.
2. Set statewide blend requirements for ethanol (E10/E15) and biodiesel (B10/B20), including mandates for state fleets, transit, and possibly private fleets.
3. Improve fuel quality and transparency with enhanced pump labeling for blend level, biofuel content, aromatics/BTEX reductions, and regular laboratory testing.
4. Launch statewide consumer education campaigns through coordinated state agencies, supported by a new Maryland Biofuels Information Center and outreach via MVA/VEIP channels.
5. Integrate biofuels into driver and fleet training, including driver's education, testing, FFV identification, and safety-style messaging campaigns.
6. Expand fueling infrastructure using grants, revolving funds, and low-interest loans for E15/E85 and B20/B100 equipment, targeting high-volume areas via fleet card data.
7. Support production facility development through grants, loan guarantees, tax incentives, and streamlined permitting for ethanol and biodiesel plants.
8. Invest in advanced biofuel R&D, including cellulosic, algae, waste oils, and climate-smart feedstocks, leveraging programs like the 45Z tax credit.
9. Strengthen partnerships across the supply chain, explore checkoff programs for marketing and infrastructure, and expand B20 Club recognition for high-blend fleets.
10. Increase and formalize collaboration between state government officials and federal elected representatives to align economic growth, environmental protection, energy security, and public safety strategies, maximizing impact and return on public investment across Maryland.

Goalkeeper Scorecard

Purpose, Objectives, and Process

Section 12: Goalkeeper Scorecard: Serves as a living, working management tool that will be updated periodically as new findings, operational insights, and challenges emerge. Designed as a dynamic framework for implementation and oversight, the Scorecard enables agencies and policymakers to track

milestones, identify gaps and barriers, align budgets and legislative strategies, and report measurable progress toward CSNA and MCCC targets.

- It enables agencies and policymakers to:
- Monitor implementation milestones.
- Identify gaps and barriers.
- Align budgets and legislative strategies.
- Report measurable progress toward CSNA and MCCC targets.

The scorecard establishes a transparent system for accountability by:

- **Defining Key Metrics:** Aligning each recommendation with clear, measurable indicators such as policy adoption, funding levels, gallons of low-carbon fuels deployed, carbon reductions achieved, or stakeholder engagement milestones.
- **Track Progress Quarterly and Annually:** Documenting achievements, setbacks, and changes in real time, so the Task Force can monitor whether Maryland is moving toward its clean energy and carbon-reduction goals.
- **Highlighting Adjustments:** Capturing new developments—whether legislative, economic, or technological—that may require revisiting priorities or adapting strategies.
- **Communicating Results:** Providing policymakers, stakeholders, and the public with a straightforward way to track progress, similar to a dashboard, which fosters transparency and builds momentum.
- **Process:** Each year, Task Force staff or designated partners update the scorecard by reviewing data, agency reports, and stakeholder input. Progress for each recommendation is rated (e.g., using a traffic-light or scoring system) to indicate whether the state is on track, lagging, or requiring *attention*. This allows the Task Force to celebrate successes, identify barriers, and recommend course corrections in subsequent annual reports.

Summary

Maryland is positioned to accelerate progress toward its Climate Solutions Now Act (CSNA) goals by implementing a coordinated, cross-agency strategy to expand the production, distribution, and use of low-carbon biofuels. The Goalkeeper Scorecard consolidates recommendations from the Maryland Biofuels Task Force to provide a clear roadmap for statewide implementation, accountability, and performance tracking.

Key Objectives

1. **Adopt a Clean Fuel Standard (CFS)** aligned with Maryland Commission on Climate Change (MCCC) guidance to reduce carbon intensity, strengthen energy security, and generate an estimated **\$500–\$750 million in annual consumer fuel savings**.
2. **Increase statewide availability and adoption of cleaner fuels**, including E10/E15 ethanol blends and B10/B20 biodiesel blends, across state, transit, and commercial fleets.
3. **Improve fuel quality, transparency, and public trust** through enhanced labeling, BTEX/aromatics disclosure, and regular laboratory fuel testing.
4. **Expand infrastructure** for ethanol and biodiesel through grants, low-interest loans, and targeted investments guided by state fleet fueling data.
5. **Support in-state production and innovation**, including advanced biofuels, Climate-Smart Agriculture, and feedstock development supported by 45Z tax credits.

6. **Elevate statewide consumer awareness** through education campaigns, the Maryland Biofuels Information Center, and integration of biofuel knowledge into driver’s education and public health messaging.
7. **Establish structured state–federal coordination mechanisms** to align economic, environmental, energy, and public safety strategies and drive measurable results for Maryland.

Table 3: MDBTF Goalkeeper Scorecard

| Agency / Office | Recommendation | Action Taken |
|---|--|--------------|
| Governor’s Office / General Assembly | Issue Executive Orders and/or enact statutes to adopt a Clean Fuel Standard aligned with MCCC Mitigation Working Group guidance. | |
| Governor’s Office / General Assembly | Coordinate cross-agency collaboration for CFS implementation and public service announcements. | |
| Governor’s Office / General Assembly | Provide resources for research and the implementation of statewide biofuel programs. | |
| Governor’s Office / General Assembly | Support statewide blend requirements for ethanol (E10/E15) and biodiesel (B10/B20). | |
| Maryland Department of Agriculture (MDA) | Launch and manage the Maryland Biofuels Information Center. | |
| MDA | Collaborate on Fuel Retailer Engagement Survey with Weights & Measures. | |
| MDA | Establish and enforce labeling for blend level, country of origin, aromatics, and BTEX content. | |
| MDA | Conduct regular laboratory testing for octane and BTEX. | |
| MDA | Update the Priority Investment List for dispensers and USTs compatible with higher blends. | |
| MDA | Provide R&D grants for feedstock innovation (algae, waste oils, non-edible crops). | |
| MDA | Support and help implement the 45Z Climate-Smart Clean Fuel Producer Tax Credit. | |
| MDA | Study the feasibility of a “biofuels check-off” program for retailers and producers. | |
| MDA | Support and expand participation in a Maryland B20 Club. | |
| Maryland Department of the Environment (MDE) | Lead rulemaking for the Clean Fuel Standard and Clean Heat Standard. | |

| | | |
|---|---|--|
| MDE | Conduct street-level air quality monitoring, including aromatics/BTEX tracking. | |
| MDE | Accelerate environmental permitting for infrastructure upgrades, production facilities, and fueling sites. | |
| MDE | Support VEIP integration of FFV identification and consumer education. | |
| MDE | Make biofuels eligible for incentives currently targeted to EV programs for hard-to-decarbonize sectors. | |
| MDE | Participate in public engagement and statewide PSA campaigns. | |
| MDE | Support and expand B20 Club recognition. | |
| Maryland Department of Health (MDH) | Provide public health information on emissions, BTEX exposure, and the benefits of reduced aromatics via biofuel use. | |
| MDH | Conduct BTEX blood testing for high-exposure occupations (garage attendants, drive-thru workers, highway corridor workers). | |
| MDH | Collaborate on cross-agency PSA campaigns linked to emissions and health. | |
| Maryland Department of Energy (MEA) | Administer grants and incentives for E15/E85, B20/B100, and terminal/depot infrastructure upgrades. | |
| MEA | Develop and run public education campaigns about fuel competition and the economics of supply/demand. | |
| MEA | Support and expand B20 Club recognition. | |
| Maryland Comptroller / DBM / DGS / Field Enforcement | Study and implement biofuel purchasing requirements for state fleets, transit, and state facilities. | |
| Comptroller – Field Enforcement | Enforce fuel dispenser labeling for blend level, biofuels content, aromatics, BTEX reductions, and volumetric disclosure. | |
| Comptroller – Field Enforcement | Conduct laboratory testing of retail fuels (octane, oxygenates, contaminants). | |
| DBM Fleet & Travel | Collaborate on a statewide Fleet Administrator Survey to expand B20/E15 adoption. | |
| DGS / Procurement | Expand procurement of biobased products and biofuel-based products. | |

| | | |
|---|---|--|
| Maryland Department of Transportation (MDOT) | Use state fuel card data to identify strategic locations for new biofuel infrastructure. | |
| MDOT | Prioritize procurement of biofuel-compatible vehicles. | |
| MDOT | Install or upgrade biofuel infrastructure at rest stops, depots, and maintenance facilities. | |
| MDOT | Participate in pilot programs and demonstration fleets, including the B20 Club. | |
| MDOT | Lead transportation-related public awareness campaigns on biofuels. | |
| Maryland Motor Vehicle Administration (MVA) | Incorporate FFV identification and biofuel education into inspections and registration. | |
| MVA | Add sections on biofuels, emissions, and energy security to the driver education curriculum. | |
| MVA | Include biofuel-related questions in driver's license testing. | |
| MVA | Coordinate “safety-style messaging” campaigns promoting biofuel benefits. | |
| Department of General Services (DGS) | Adopt procurement requirements for biobased and biofuel-based products. | |
| Maryland Department of Commerce | Support revolving funds and financial incentives for biofuel production and infrastructure development. | |
| Other Recommendations for Consideration | Adopt a statewide Clean Fuel Standard modeled after California’s year-round E15 authorization. | |
| Other Recommendations for Consideration | Establish statewide ethanol (E10/E15) and biodiesel (B10/B20) minimum blend standards. | |
| Other Recommendations for Consideration | Expand fueling infrastructure via grants, low-interest loans, and revolving funds. | |
| Other Recommendations for Consideration | Support the development of ethanol and biodiesel production facilities through incentives and permitting. | |
| Other Recommendations for Consideration | Invest in advanced biofuels R&D and climate-smart feedstocks. | |
| Other Recommendations for Consideration | Strengthen supply chain partnerships and explore checkoff funding mechanisms. | |

For more information or to schedule a personal or team briefing, contact Burl Haigwood, GWRCCC, Maryland Biofuels Task Force Coordinator, burlhaigwood@gwrccc.org