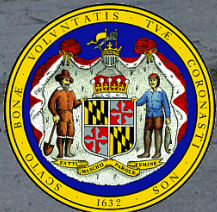


Agency Climate Implementation Plan

Maryland Department of Commerce

November 1st, 2024





Agency Climate Implementation Plan

Department of Commerce/Maryland Energy Administration Climate Implementation Plan required by Executive Order, “Leadership by State Government: Implementing Maryland's Climate Pollution Reduction Plan”.

In accordance with Governor Moore’s [Executive Order 01.01.2024.19](#) Department of Commerce affirms its commitment to:

- Work to address climate change and ensure a just transition to a clean economy.
- Advance environmental justice by working to address the disproportionate impacts of climate change for underserved and overburdened communities, including the application of Justice40 goals, initiatives, and funding.
- Equitably implement all existing laws, regulations, and policies related to climate change, incorporating robust community and stakeholder engagement.
- Continue to maximize federal funding opportunities on climate.

The Department of Commerce hereby submits its own Climate Implementation Plan (CIP) to demonstrate its commitment to a whole-of-government approach to addressing climate change and fully implementing Maryland’s Climate Pollution Reduction Plan.

Part 1: Agency Actions Under the Climate Pollution Reduction Plan

Maryland's Climate Pollution Reduction Plan calls on the Department of Commerce to effect changes that impact internal facilities operations and external work Commerce does in the Maryland energy ecosystem. The external work is currently implemented through the Energy Program Manager in the Office of Strategic Industries and Entrepreneurship. Below are the primary actions Commerce will implement as part of this plan.

1. Adopt a Zero-Emission Heating Equipment Standard if appropriate.
2. Work with MDE as requested to determine if Maryland should adopt the Advanced Clean Fleets regulation.
3. Support the growth and development of the energy sector to help achieve the Governor's 100% clean energy goal.
4. Encourage the formation and growth of clean energy startups and technology development.
5. Attract clean energy companies to Maryland.
6. Apply for federal funding - Under the leadership and coordination of the Governor's Federal Office, all agencies will apply for federal funding to implement actions that support the achievement of this plan. State agencies will work closely with local governments, nonprofits, and community-based organizations to ensure Maryland is competitive for federal climate action implementation funds and to build capacity for local-level implementation. State agencies will offer support to Maryland's businesses and private sector to ensure they are competitive for historic federal investments.

Part 2: Recommending Actions to Address Climate Change

State law (MD Code, Environment, § 2-1305) requires that each State agency shall review its planning, regulatory, and fiscal programs to identify and recommend actions to more fully integrate the consideration of Maryland's greenhouse gas reduction goal and the impacts of climate change. The review shall include the consideration of (i) sea level rise; (ii) storm surges and flooding; (iii) increased precipitation and temperature; and (iv) extreme weather events. Furthermore, each State agency shall identify and recommend specific policy, planning, regulatory, and fiscal changes to existing programs that do not

currently support the State's greenhouse gas reduction efforts or address climate change.

In compliance with the law, the Department of Commerce is taking or recommending the following actions to more fully integrate the consideration of Maryland's greenhouse gas reduction goal and the impacts of climate change.

COMMERCE DEPARTMENT INTERIM REDUCTION TARGETS

The following plan includes many near-term actions. The relative contribution of these actions to reducing Commerce's internal greenhouse gas emissions remains undetermined at this point. As such, piloting potential action projects and quantifying the reductions achieved should stay top priorities for Commerce.

We have established ambitious, yet achievable, 5-year targets to reduce our internal greenhouse gas emissions. In 2024, after implementing and tracking projects, Commerce will establish additional interim targets to create checkpoints leading to the 2029 carbon neutrality goal.

We also have external goals that focus on how the Department of Commerce can work to address climate change as part of our work in supporting businesses.

NEAR-TERM INTERNAL EMISSIONS TARGETS FOR COMMERCE

By 2029, Commerce will achieve a:

- 10% reduction from a 2024 baseline in electricity emissions.
- 10% reduction from a 2024 baseline in funded travel emissions.
- 10% reduction from a 2024 baseline in other Five Floor emissions

KEY INTERNAL COMMERCE STRATEGIES

The following represent the overarching strategies Commerce plans to pursue in each of the major areas identified in the plan.

ENERGY EFFICIENCY

- Improve the performance and efficiency of Commerce current floor configuration (Five Floors) located in the World Trade Center (WTC) 401 E. Pratt Street, Baltimore, MD 21202 building systems.

- Increase the use of energy-saving, energy-efficient, Commerce renewable technologies and operational best practices.
- Increase energy awareness and energy conservation efforts by staff.

TRANSPORTATION

- Improve tracking of funded travel for mileage and associated emissions and evaluation of reduction potential.
- Improve the performance and reduce emissions associated with the Commerce fleet.
- Increase awareness of emissions associated with Commerce Fleet choices by staff.

PURCHASING

- Establish sustainable purchasing guidelines and/or best practices.
- Monitor and analyze Commerce purchasing trends to identify areas for emissions reductions.
- Increase awareness of emissions associated with purchasing choices by staff.

CURRENT FLOOR CONFIGURATION | Five (5) Floors

- Evaluate the potential for reducing building cooling loads by reducing Commerce (*The heat island effect is a phenomenon that occurs when urban areas are significantly warmer than the surrounding rural areas.*) heat-island effect.
- Reduce peripheral emissions associated with water infrastructure by targeting water reduction measures.

COMMUNITY ENGAGEMENT

- Increase understanding and awareness of climate change and the impact of behavioral choices on Commerce operations and WTC emissions.
- Increase depth of information and availability of Commerce current floor configuration (Five Floors) resource use to the WTC community.
- Expand inclusion of climate issues and emissions solutions into the WTC community outreach.

KEY EXTERNAL COMMERCE STRATEGIES

CATALYZE RENEWABLE ENERGY BUSINESS GROWTH

- Connect energy businesses with internal and external financial resources (grants/loans/tax credits).
- Work closely with existing agencies like the Maryland Energy Administration to ensure that businesses are aware of new programs that they may qualify for.
- Make business-to-business and business-to-customer connections as appropriate to accelerate business growth.
- Connect researchers developing new clean energy technologies to business incubator programs and other resources to accelerate startup business development.
- Help startup energy businesses raise capital via utilization of Commerce's existing subscription to Pitchbook, and investor/company/deal database.
- Help MD based renewable energy business expand overseas and help overseas businesses relocate to MD by utilizing the Commerce Office of International Investment and Trade.
- Work with regulatory agencies including the Maryland Department of the Environment and the Public Services Commission to ensure regulations are cognizant of business needs and new technologies.
- Work with the renewable energy ecosystem to identify problems that need to be addressed and help identify solutions to those problems.
- Bring more funding to the state by applying for federal grants.
- Work to develop legislation to support renewable energy companies.

Part 3: Considering Greenhouse Gas Emissions Reductions and Impacts on Disproportionately Affected Communities

State law (MD Code, Environment, § 2-1305) requires that each State agency, when conducting long-term planning, developing policy, and drafting regulations, shall take into consideration: (1) the likely climate impact of the agency's decisions relative to Maryland's greenhouse gas emissions reduction goals; and (2) the likely impact of the agency's decisions on disproportionately affected communities identified according to the methodology adopted under § 1-702 of the Environment article. Furthermore, Governor Moore's Executive Order 01.01.2024.19 requires each agency to report on how the agency will advance environmental justice by working to address the

disproportionate impacts of climate change for underserved and overburdened communities. In compliance with the law and Executive Order 01.01.2024.19, the Department of Commerce is taking the following steps to meet these requirements.

COMMERCE ENERGY BACKGROUND

The Commerce Department located at The World Trade Center (WTC), 401 E. Pratt Street, Baltimore, MD 21202 is comprised of floors 5, 9, 10,14 and 17 their related energy usage continues to represent the largest portion of Commerce carbon footprint. In order to counteract Commerce's contribution to WTC building-related emissions, rising energy costs and rising consumption. It must be noted that the Commerce costs have decreased due to a decrease in Commerce WTC square footage. The following recommendations stress energy conservation through new technology and behavior change.

Fortunately, Commerce has already made a good start in reducing Commerce Floor energy intensity by developing and implementing an Energy Reduction Strategy (ERS). The ERS aligns with the CIP and targets reductions in purchased electricity, and water through Commerce's utilization of all spaces/square footage allotted to each of the Five Floors.

Reduction in our facilities' emissions will contribute a small but measurable reduction to overall emissions which will benefit these communities. Our work in supporting renewable energy companies will positively impact these communities through further reductions in emissions and through the generation of new jobs.

Part 4: Resources for Implementation

Implementing Maryland's Climate Pollution Reduction Plan

The Commerce Department has no current funding, including State, federal, or additional funding, that can be directed or redirected, toward accomplishing Commerce actions in the department's CIP. Commerce has one employee, the Energy Program Manager, whose role is to support Renewable Energy Businesses in the state. Steps to implement this plan are highlighted in Part 2 and Part 3 of this document.

Implementing this Climate Implementation Plan

Currently, the Commerce Department has no current funding, including State, federal, or additional funding, that can be specifically directed or redirected, toward accomplishing Commerce actions in the department's CIP. Current funds can and are used to support climate related companies but cannot be specifically directed preferentially toward those companies. Commerce has one employee, the Energy Program Manager, whose role is to support Renewable Energy Businesses in the state. Commerce believes that the initial outcomes can be achieved with zero-dollar funding as the majority of our efforts require behavior change, no infrastructure changes for our department and use of existing personnel. To expand or accelerate Commerce's role in the Climate Pollution Reduction Plan further support in the form of funding for a contract grant writer could enable the Department to secure Federal funding.

Part 5: Outcomes from Implementation

The outcomes associated with Commerce's Climate Implementation Plan (CIP), could evolve from Commerce's near-term actions and recommendations that take into account information garnered from Commerce current floor configuration maintained in the WTC to include 5th Floor (Attorney General, EEO & Fair Practices and Information Technology,) 9th Floor (Office of the Secretary, Deputy Secretary, Policy, Research & Government Affairs and Internal Audits), 10th Floor (Administration & Technology, International, Investment & Trade and Military & Federal Affairs) 14th Floor (Tourism , Film & The Arts, Maryland Film Office, Maryland State Arts Council) and 17th Floor (Business & Industry Sector Development, Business Services, Business Retention Finance Programs) these floors are the drivers to Commerce energy usage within the WTC. The following plan is contingent upon Commerce starting CIP with a zero-dollar budget with the desire to procure adequate funding, once an accurate accounting of the long-term costs and benefits of any mitigation action.

External economic outcomes include the creation of more renewable energy companies, increased success of those companies, more jobs in Maryland and acceleration of the state toward meeting its renewable energy goals. Connecting existing businesses to funding resources will help them grow and implement new climate friendly practices such as installing EV charging stations.

CURRENT REALITY

Commerce established in 2024 as its baseline year for measuring progress toward the carbon neutrality goal. Commerce has been unable to derive a greenhouse gas as its current footprint of approximately 55,500 square feet is included in within the World Trade Center building. As of this writing we do not have data as to how Commerce's footprint is incorporated into the other sixteen floors of the building.

Even though Commerce's commitment represents an absolute, rather than normalized, goal, contextualizing the progress made provides a greater appreciation for gains achieved thus far. **In the time since 2020, Commerce square footage has decreased by roughly 37% and Commerce in office population has shrunk to 119 employees.** Such reductions will pose challenges to Commerce efforts if Commerce is granted funding to increase its square footage. But the current reductions achieved show an increasing level of efficiency across Commerce current floor configuration.

GOALS & TARGETS

Commerce understands the scientific community currently recommends a 100% reduction in carbon pollution by 2050 to stay within the global target of limiting warming to a 1.5° Celsius increase and to avoid the worst consequences of climate change. Other predictions of concern include rising energy costs (both electricity and gasoline) and the growing scarcity of resources. Commerce will use these and other current recommendations from the scientific community as the basis for goal and target development.

Based on comparisons from other **WTC tenants**, evaluation of potential on Commerce, and the current scientific recommendations, the following targets and goals have been established.

By 2029, Commerce will reduce total emissions by 50% from a 2024 baseline. This will be achieved, in part, as a result of reaching the following targets:

10% reduction from a 2024 baseline in electricity emissions.

10% reduction from a 2024 baseline in funded travel emissions.

10% reduction from a 2024 baseline in other Five Floors emissions.

By 2029, Commerce will reduce total emissions by 10% from a 2024 baseline.

By 2050, Commerce will reduce total scope 1, 2, and 3 emissions by 30% from a 2024 baseline.

Progress toward these goals and targets will be examined annually and will be updated at a minimum of every 5 years.

EVALUATION & TRACKING

Because of the uncertainty surrounding technological potentials, financial considerations, and the likelihood of new global targets based on scientific evidence, Commerce's CIP should be regularly re-evaluated. Ideally, the Commerce CIP should be evaluated with stakeholder input at least every three (3) years and an emissions inventory should be conducted every fiscal year.

In addition, the financial costs and savings of the actions within this plan must be regularly evaluated and accurately quantified. Traditional financial analyses, such as simple or discounted payback periods, often do not capture the long-term costs and savings of the project itself or those found in other sub-systems (e.g. the effects of lighting (WTC Lobby) retrofits on heating and cooling systems). As such, using life-cycle cost analysis to evaluate both CIP-recommended and projects, in general, would be a better approach to capture the full range of implications.

Interactions with businesses and the energy ecosystem are tracked within Commerce's Salesforce system.

COMMUNITY ENGAGEMENT

ENGAGEMENT BACKGROUND

While the specific percentages remain unknown, a considerable link between individual behaviors and Commerce's carbon footprint exists, as well as the connection to costs associated with utilities and transportation. Conservation through behavior change also goes hand in hand with recommendations for deploying the best efficiency technology and the introduction of renewable energy production to Commerce.

NEAR-TERM ENGAGEMENT GOAL

- By 2029, Commerce will increase its understanding of and participation in Commerce emissions reduction programs.

OVERARCHING ENGAGEMENT STRATEGY

Throughout CIP implementation, Commerce will work to engage the Commerce community to reduce Commerce’s carbon footprint by utilizing the following strategies:

- Increase understanding and awareness of climate change and the impact of behavioral choices Commerce emissions.
- Increase depth of information to the Commerce community.
- Increase participation from the Commerce community in creating and implementing solutions to reduce Commerce emissions.

A consistent and steady stream of information will need to be created and distributed to successfully implement this strategy.

ADDITIONAL EMISSION REDUCTION STRATEGIES

NEAR-TERM ADDITIONAL EMISSIONS GOAL

By 2029, Commerce will achieve a 10% reduction from a 2024 baseline in other Commerce emissions.

WASTE ACTIONS

Waste contributes directly to the Commerce’s carbon footprint through indirect emissions associated with the processing and transport of wastes also occur and can be reduced by eliminating the need to process them at all via source-reduction efforts.

INITIATIVE 1: REDUCE WASTE AT THE SOURCE BY INCLUDING WASTE REDUCTION MANDATES IN PURCHASING.

- Include waste minimization in purchasing decisions and contracts.
- Evaluate creating a “disposal” fund for items by including a small fee at the time of purchase.