

## **APPENDIX D: OPTIONAL DOCUMENTS**

### **APPENDIX D1: GHG EMISSION REDUCTION CALCULATIONS**

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## GHG Reduction Calculations and Estimates

Based on the regional GHGI, we estimated per capita MTCO<sub>2</sub>e, VMT, and per household emissions to determine the number of people, households or communities that would need to participate in REDUCE programming to reach the target 14 MM TCO<sub>2</sub>e. Using per capita emissions provides a starting point to better understand how the activities in Table 12, Appendix B are driving down emissions, and which activities are leading the greatest behavior changes which yield the greatest and most enduring emission reductions. These estimates reference relevant national averages, where applicable. During the course of REDUCE implementation, the Baltimore MSA will partner with the BSEC project and area universities to leverage more precise models for correlating behavior change to climate pollution reduction.

### Summary of Per capita Emissions

Per Capita Emissions Overall = 32,198,072 MTCO<sub>2</sub>e / 2,848,932 people = **11.3 MTCO<sub>2</sub>e** per person per year

### Per Capita Emissions by Primary Sector

We estimated the per person MTCO<sub>2</sub> emitted based on population and GHGI data in the residential energy, on road transportation and waste sectors. Other sectors emissions associated with commercial industrial or other public sector emissions, would skew the per capita emissions. We include both overall (including all sectors) per capita estimates and sector specific per capita emission for the residential energy, on road transportation and waste sectors.

**Residential Energy** = 6,737,838 MTCO<sub>2</sub>e / 2,848,932 people = **2.37 MTCO<sub>2</sub>e** per person per year

**On Road Transportation** (Gasoline) = 10,455,598 MTCO<sub>2</sub>e / 2,848,932 people = **3.67 MTCO<sub>2</sub>e** per person per year

**Waste and Wastewater** = 1,044,743 MTCO<sub>2</sub>e / 2,848,932 people = **0.366 MTCO<sub>2</sub>e** per person per year

Average Target Per Capita Reduction Rate from REDUCE Implementation in Target Zip codes: 30%

### Per Household Emissions by Primary Sector

**Residential Energy** = 6,737,838 MTCO<sub>2</sub>e / 1,126,216 households = **5.98 MTCO<sub>2</sub>e** household per year

**On Road Transportation** (Gasoline) = 10,455,598 MTCO<sub>2</sub>e / 1,126,216 households = **9.28 MTCO<sub>2</sub>e** per household per year

**Waste and Wastewater** = 1,044,743 MTCO<sub>2</sub>e / 1,126,216 = **0.93 MTCO<sub>2</sub>e** per household per year

Average Target Per Household Reduction Rate from REDUCE Implementation in Target Zip codes: 30%

### **Estimated Total MTCO<sub>2</sub> Reduction Among Target Population in Priority Zip codes in Primary Sectors**

= 1,012,356 total target population \* 2.37 \* 3.67 \* 0.366 MTCO<sub>2</sub>e among each primary sector

= 3,222,299 total estimates MTCO<sub>2</sub> among population in targeted zip codes

= 3,222,299 MTCO<sub>2</sub> \* 33% (average estimated per capita reduction) = **1,063,358 estimated MTCO<sub>2</sub> reduction among target zip codes**

### Estimated Total MTCO2 Reduction Among Target Households in Priority Zip codes in Primary Sectors

Using these per capita and per household estimates, we calculate actions in Table 12 will lead to reductions the following reduction for each unit of engagement. Units of engagement include people, people hours (hours spent engaging in desired climate behavior change), VMT, or other activity-specific units.

**Person-Hours:** Total hours in a year = 8,760 \* 2,848,932 total regional population = 24,956,644,320 person hours across the region

= 404,977 total households in target area \* 5.98\* 9.28 \* 0.93 MTCO2e

= 20,866,232 total estimated household emission in target zip codes

= 20,866,232 \* 30% (average estimated per household reduction) = **6,885,857 estimated MTCO2 reduction among target zip codes**

**Person-Hours:** Total hours in a year = 8,760 \* 2,848,932 total regional population = 24,956,644,320 person hours across the region

**Person-Hour Per unit of MTCO2** = 32,198.072/24,956,644,320 =  $1. \times 10^{-3}$  MTCO2 for each person-hour

We estimate each person-hour of engagement supported under CPRG will lead to a corresponding 10-person hours of MTCO2e reduction. In Table 12, People Engaged reflect the number of estimated person hours, or number of people impacted. This assumption is used as the basis for the MTCO2e reductions in table 12.

10-person-hours \*  $1. \times 10^{-3}$  MTCO2 for each person-hour =

Estimated MTCO2 Change from Measure 1-6 Activities are Listed in Table 12-D

TABLE 12-D: ECOLOGIC AMENITIES FOR COMMUNITIES GHG REDUCTION ESTIMATES		
Number	Action Item	Estimated GHG Reduction (MTCO2e)
M1 - F	Increase Telework Days/Hours	1,032,128
M1 - E	Increase Maryland Commuter Choice Participation	64,508
M1 - D	Deploy Free Transit Passes	32,254
M1 - C	Deploy 'Cool Bus Stops'	19,352
<b>M1 - B</b>	<b>Build Infrastructure to Advance Complete Streets</b>	<b>1,935,240</b>
<b>M1 - A</b>	<b>Provide Micro Mobility Incentives/Rebates</b>	<b>18,836</b>
M2 - F	Connect Households with EV Adoption Incentives	645,080
M2 - E	Train EV Maintenance Workforce	1,290
M2 - D	Install Community-Based EV Charging Infrastructure	32,254
M2 - C	Provide EV Charging Rebates	12,902

<b>M2 - B</b>	<b>Establish EV Car Sharing Programs</b>	19,352
<b>M2 - A</b>	<b>Provide EV Rebates for the Purchase of Used EVs</b>	96,762
M3 - F	Expand Energy Conservation Education	96,762
M3 - E	Cool Roof Installations*	1,290
M3 - D	Community Resiliency Hubs Support*	1,290
M3 - C	Energy Efficiency Upgrades	96,762
<b>M3 - B</b>	<b>Household Electrification Upgrades</b>	258,032
<b>M3 - A</b>	<b>Rooftop Solar for LMI Households</b>	645,080
M4 - F	Community-Based Waste Reduction Workshops	9,676
M4 - E	Receive Household Food Waste Reduction Package	6,451
M4 - D	Receive Backyard Composting Bin + Composting Training	10,321
M4 - C	In-Home Waste Waste Audits	10,321
<b>M4 - B</b>	<b>Host Fix-it and Repair Clinics</b>	10,321
<b>M4 - A</b>	<b>Host an In-vessel composting unit</b>	64,508
M5 - F	Deploy Tree Plantings and Maintenance	9,676
M5 - E	Remove Impervious Surfaces	9,676
M5 - D	Scale Weed Warriors Programming	9,676
M5 - C	Green Space Enhancements	9,676
<b>M5 - B</b>	<b>Vegetated Cooling Hubs</b>	129,016
<b>M5 - A</b>	<b>Community Cooling Implementation</b>	193,524
M6 - F	Embed REDUCE Ambassadors in Communities	38,705
	Total	5,520,727

In total we estimate a **13,469,942 MTCO<sub>2</sub>e** (5,520,727 + 6,885,857 + 1,063,358 ) will be cumulatively reduced through the implementation of activities under Measures 1-6 during the period of performance under Strategy B, or 94% of the total cumulative projected reductions. The remaining estimated cumulative emission reductions (853,126 MTCO<sub>2</sub>e) will result from the implementation of other activities in the REDUCE proposal including Strategies C, D and E.

**Additional future considerations for tracking GHG reductions attributed to CPRG implementation include:**

In addition to bottom-up inventories, REDUCE will include top-down GHG emissions analysis using direct measurement of GHG emissions over time. This is possible because the REDUCE region falls within the National Institute of Standards and Technologies (NIST) Northeast Corridor (NEC) Urban Test Bed for Greenhouse Gas Emissions. The NEC was established in 2015 as the third NIST urban testbed following

those for Indianapolis and Los Angeles. The NEC project is currently quantifying GHG fluxes throughout the Washington and Baltimore urban regions and has plans to include Philadelphia and New York. The REDUCE Coalition is already in communication with NIST NEC via our academic partnerships, and NEC monitoring will be applied to track GHG emission trends over the course of the project." [No additional funding requested]

In addition to bottom-up inventories, REDUCE will include top-down GHG emissions analysis using direct measurement of GHG emissions over time. This will primarily be accomplished by leveraging existing efforts within Baltimore City by the Baltimore Social-Environmental Collaborative (BSEC) project of the Department of Energy, which includes stratified GHG emissions and concentration sampling across the City, and by the National Institute of Standards and Technologies (NIST), which has established a Northeast Corridor (NEC) urban testbed for regional GHG monitoring in the Baltimore to Washington DC corridor. To supplement these efforts, we will coordinate with NIST to enhance CO2 measurements at their regional site and expand the BSEC monitoring effort to include all jurisdictions participating in the REDUCE coalition." We have requested \$1,000,000 in funding to support program evaluation of REDUCE.

Tables 13-A-F list all activities associated with each geographic Tier organized by each Tier.

TABLE 13-A: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity	Quantity Description
TIER A			
M1 - A	Provide Micro mobility Incentives/Rebates	10,000	Individual Rebates*
M2 - A	Provide EV Rebates for the Purchase of Used EVs	1,000	Individual Rebates
M3 - A	Rooftop Solar for LMI Households	10,000	Households
M4 - A	Host an In-vessel composting unit	5	# of units
M5 - A	Community Cooling Planning	15	Plans implemented
M6 - A	REDUCE Ambassadors Engagement	500	Ambassadors Employed

TABLE 13-B: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity	Quantity Description
TIER B			
M1 - B	Build Infrastructure to Advance Complete Streets	15	Miles of Paved People Paths
M2 - B	Establish EV Car Sharing Programs	50	Programs in LIDAC Areas
M3 - B	Household Electrification Upgrades	10,000	Households
M4 - B	Host Fix-it and Repair Clinics	25	Events Hosted (2,500 people engaged)
M5 - B	Vegetated Cooling Hubs	100	Hubs Built
M6 - B	REDUCE Ambassadors Engagement	400	Ambassadors Employed

TABLE 13-C: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity	Quantity Description
TIER C			
M1 - C	Deploy 'Cool Bus Stops'	50	Bus Stops Cooled
M2 - C	Provide EV Charging Rebates	1,000	Individual Rebates
M3 - C	Energy Efficiency Upgrades	10,000	Households
M4 - C	Food Scrap Drop Off Locations	75	Drop-off sites
M5 - C	Green Space Enhancements	100	Green Spaced Enhanced

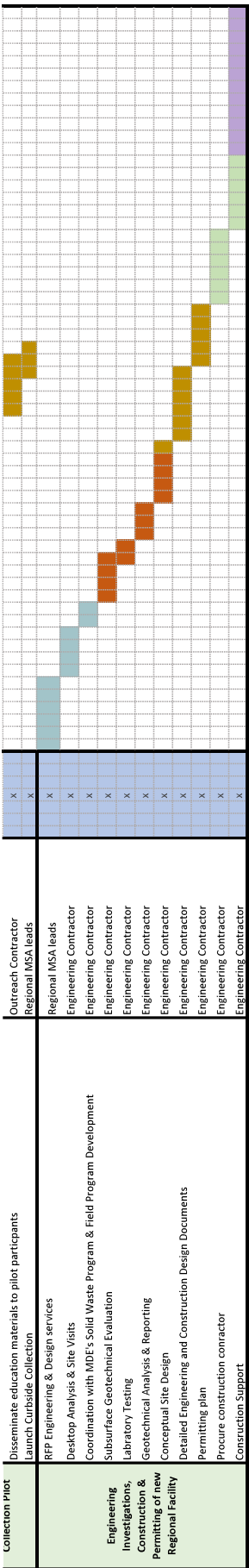
M6 - C	REDUCE Ambassadors Engagement	300	Ambassadors Employed
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TABLE 13-D: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity	Quantity Description
TIER D			
M1 - D	Deploy Free Transit Passes	2,500,000	Individual Passes
M2 - D	Install Community-Based EV Charging Infrastructure	155	Level 1-3 Charging Ports
M3 - D	Community Resiliency Hubs Support*	50	Hubs Established
M4 - D	Receive Backyard Composting Bin + Composting Training	750	Households supported
M5 - D	Scale Weed Warrior Program	10,000	People Trained
M6 - D	REDUCE Ambassadors Engagement	200	Ambassadors Employed

TABLE 13-E: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity	Quantity Description
TIER E			
M1 - E	Increase Maryland Commuter Choice Participation	500,000	Individuals
M2 - E	Train EV Maintenance Workforce	100	Individuals Trained
M3 - E	Cool Roof Installations*	1,000	Households Supported
M4 - E	Provide Household Reuse Packages	2,500	Packets Provided to Households
M5 - E	Remove Impervious Surfaces	1,000,000	Sq. Ft.
M6 - E	REDUCE Ambassadors Engagement	100	Ambassadors Employed

TABLE 13-F: CLIMATE POLLUTION REDUCTION ACTIONS & INVESTMENTS			
Number	Action	Quantity (2025-30)	Quantity Description
TIER F			
M1 - F	Increase Telework Days/Hours	5,200,000	Telework Person Hours
M2 - F	Connect Households with EV Adoption Incentives	10,000	Households
M3 - F	Expand Energy Conservation Education	10,000	Households
M4 - F	Host Community-Based Waste Reduction Workshops	25	Workshops (2,500 people engaged)
M5 - F	Deploy Tree Planting and Maintenance	1,000,000	Trees Planted
M6 - F	Embed REDUCE Ambassadors in Communities	50	Ambassadors Employed







## SECTION 3C: SCOPES OF WORK & TASKS:

### **Outreach Contract :**

- **Purpose:** Outreach efforts are geared towards engaging with the community, building partnerships, and fostering support for the adoption of solar energy solutions.
- **Scope of Work:**
  - Organizing community events, fairs, or demonstrations where individuals can interact with solar energy products, meet industry experts, and learn about available incentives or financing programs.
  - Facilitating workshops or seminars to educate homeowners, businesses, and communities about the science behind REDUCE programs, its environmental benefits, and how it can have long-term lasting positive impacts on residents.
  - Partnering with local organizations, environmental groups, and government agencies to expand the project's reach and leverage existing networks for outreach activities.
  - Conducting door-to-door outreach campaigns or neighborhood canvassing to directly engage with residents, answer questions, and address concerns about solar energy adoption.

### **Marketing Contract:**

- **Purpose:** The marketing aspect of the project focuses on promoting specific solar energy products or services, generating leads, and ultimately driving conversions.
- **Scope of Work**
  - Developing educational materials such as brochures, fact sheets, and online resources to explain the technology, installation process, financing options, and long-term savings associated with REDUCE programs.
  - Developing targeted advertising campaigns across various channels such as social media, search engines, and local newspapers to raise awareness and generate interest in REDUCE programs.
  - Creating visually appealing marketing materials, including brochures, flyers, and online ads, that highlight the benefits of REDUCE programs and showcase successful case studies.
  - Offering promotional incentives or discounts for those who sign up for REDUCE programs within a specified timeframe to create a sense of urgency and encourage action.

### **Inactive Landfill Geotechnical Assessment:**

- **Task 1: Desktop Analysis & Site Visits**
  - Coordination with the City as to details associated with the proposed facilities;
  - Analysis of GIS and historic photogrammetric data;
  - Review of existing site-specific documentation, as provided by the City and publicly available;
  - Performance of site visits;
  - Preparation of a comprehensive report detailing the tasks performed including discussion of the analyses; and
  - Providing a decision matrix denoting pros and cons associated with the identified feasible

- site uses
- Task 2: Coordination with MDE's Solid Waste Program and Field Program Development
  - Hold two meetings with MDE to review scope of work for the field assessments to capture engineering due-diligence associated with proposed facilities.
  - Deliver letter of report detailing determinations made for each site and proposed field evaluation scope of work including sampling location mapping
- Task 3: Subsurface Geotechnical Evaluation
  - Perform geotechnical evaluations for composting facility for 2 potential locations
- Task 4: Laboratory Testing
  - Laboratory testing to classify soils encountered, assign engineering design parameters and facilitate the preparation of the geotechnical engineering report
  - Investigation of Derived Waste to characterize material and test for toxicity
- Task 4: Geotechnical Analysis & Reporting
  - Prepare narrative report which summarizes the existing site conditions, field observations/data, and laboratory testing results. Our report will include "draft" test boring logs, creation of generalized soil profiles and cross-sections (or model templates), as well as preparation of geologic and sample location mapping

**Design Procurement Contract for New Regional Compost Facility:**

- Task 1. Project Management – Phase 1
  - Detailed schedule of planned activities – updated monthly
  - Weekly update emails of completed actions, planned work, schedule compliance, potential issues, etc.
  - Online meetings of one hour duration (Weekly or Bi-weekly) with agenda and minutes created and distributed by Offeror
  - Monthly activities/progress/planning report
  - Monthly invoice
  - Technical support to the City staff for presentations
  - Bond
  - Insurance
  - Deliverables -
    - Electronic files of project schedule, meeting minutes, progress reports, and presentation materials
- Task 2. Stakeholder Engagement – Phase 1
  - Meet with facility operations and management staff
  - Facilitate community meetings (3) at 2 hours each, with 10-hour of preparation and follow-up for each to present concept plans (2) and final plans (1)
  - Provide technical support for City staff to prepare for political meetings (3) at 2 hours each, with 10-hour of preparation and follow-up for each to present concept plans (2) and final plans (1)
  - Provide technical support for City staff to prepare for regulatory meetings other than MDE (e.g., Planning Commission, Health Department)

- It is anticipated that the Offeror will not interact with the public, therefore, a communications subcontractor should be proposed. The Offeror should include 30 hours of time beyond the estimate for the preparation of content for this coordination effort.
- Deliverables -
  - Electronic files of meeting minutes and presentation materials
- Task 3. Comprehensive Site Design Drawing – Phase 1
  - Conduct an environmental resources inventory of the project area, including identification and delineation of all jurisdictional wetlands and waters of the US within the project area, as well as a forest stand delineation.
  - Perform property boundary survey of the project site, including adjacent areas owned by Baltimore City.
  - Perform aerial and/or field topographic surveys of the project site including adjacent areas necessary for the design. The surveys shall include all pertinent surface topographic features including woods lines, surface and subsurface drainage features, utility inventory and roadway features. (See NOTE 1)
  - Review existing and update or conduct geologic, hydrogeologic and geotechnical reports, borings, and/or tests (See NOTE 2)
  - Perform a National Environmental Policy Act (NEPA) study
  - Review tonnage reports for the quadrants that would feed into the facility
  - Based upon available data and professional judgment, provide projections of customer usage, vehicle traffic, traffic flow, and material handling requirements for each activity
  - Identify Facility entrance and exit
  - Perform a traffic impact study
  - Identify all existing utilities and all necessary utility upgrades
  - Design required stormwater facilities
  - Design solar array
    - Deliverables –
      - i. Site Design narrative for above tasks of sufficient detail and reliability to plan facility requirements (including expandability) for the next 20 years for residential, small hauler, and commercial vehicles and tons
      - ii. Develop three conceptual plans at the 15% level, two at the 30% level, and one plan at the 60% level with all components and interconnections including aerial photographs and contour mapping (five hardcopies and one PDF) indicating:
        - General site arrangement
        - Building/infrastructure layout
        - Traffic movement into and within the facility
      - iii. Budget level implementation costs
      - iv. Summary memorandum of relevant permits
        - Table of required permits including level of effort, cost, lead time, and approvals required to obtain each Phase 1: Conceptual Site Design Deliverables
- Task 4: Design new compost yard (pad and relevant infrastructure only)

- General configuration of offloading, grinding, processing, screening, and storage facilities of organics and yard trim materials into mulch, compost, and other products as provided by the City or other outside parties.
  - General configuration of offloading and processing of food scrap for composting
  - Equipment staging areas
  - Equipment maintenance area/facility
  - Material storage and distribution methods
  - Provisions for expandability
  - Ancillary structures (e.g., additional stormwater controls) or equipment (e.g., blowers, piping, barriers, biofilters)
- Phase 2: Site Design Documents Deliverables
    - Phase 1-3 reports as required under COMAR 26.04.07.06 through COMAR 26.04.07.08 if needed
    - Comprehensive site design drawing
      - Based upon feedback from Phase 1, provide Engineering/Construction drawings and specifications
      - Assure a constructible design with sound economic materials and components.
      - Prepare Construction Documents including final plans, profiles, sections, computations, details, and specifications necessary for construction of all components and features as determined during the development of the design.
      - Prepare a combined set of construction specifications to include technical specifications, special provisions, and conditions, bid forms, and other City contract documents.
      - Ensure that the project design and construction documents are prepared in accordance with the City Design Manual.
      - Include engineer's cost estimate with each drawing
      - Deliverables –
        - Provide one Site Design Drawing at the 90% level with all components and interconnections including aerial photographs and contour mapping (five hardcopies and one PDF)
        - Provide one Final Site Design Drawing at the 100% level (five hardcopies and one PDF). This set shall be suitable for issuance by the City.
        - Site Design narrative including usage projections of sufficient detail and reliability to plan facility requirements (including expandability) for the next 20 years for residential, small hauler, and commercial vehicles and tons
  - Component drawings
    - 90% and 100% Design for Phase 1 & 2
    - Include engineer's cost estimate with each drawing
  - Construction planning
    - Permits
      - Summary memorandum of relevant permits including table of required permits, level of effort, cost, lead time, and approvals required to obtain each

- Conduct an on-site pre-application meeting with Maryland Department of the Environment (MDE) and U.S. Army Corps of Engineers
  - Apply for all permits as required under COMAR 26.04.07.09 and the Site Refuse Disposal Permit, including DPW for review and signatures
  - Manage permit process through issuance including comments, responses, and revisions
  - Complete NOI application
- Plans
  - Stormwater Management
  - Forest Conservation
  - Forest Delineation
  - Grading and Sediment Erosion Control
  - Sensitive Area Report (SAR) with coordination with the Office of Research and Environmental Protection
  - Manage plan process through issuance including comments, responses, and revisions
- Summary memorandum and tables of Costs for Permitting, Construction capital (by component), and Annual costs to operate and maintain
- Construction Sequence including full site or partial site closure and minimizing site impact
- Phase 3: Procurement Support
  - RFP for construction contractor
- Phase 4: Construction Support
  - Provide consulting services to the lead municipality during the construction phase. Consulting services shall include, but are not limited to, interpreting the intent of the Contract Documents; resolving discrepancies in the Contract Documents; reviewing RFI submittals of shop drawings, material certificates and/or samples to ensure that they meet the requirements of the Contract Documents; attending pre-construction and progress meetings; reviewing change orders as prepared by the contractor; answering permit related questions on the design as they arise in the field.

# Work Group Survey: Common Grounds & Trade-offs Example

Evaluating Work Group: Buildings & Energy		
Goal / initiative/project: State Building Energy Performance Standard – How Should the City Respond?		
Outcome: What does the group/agency hope to accomplish with this goal/initiative?		
Timeline: State BEPS standards need to be met by 2030, which includes: <ul style="list-style-type: none"> <li>2025 – Eligible Buildings required to report data to the state on energy use, which the state will use to determine the benchmark average building by type (exemptions: historic buildings,</li> <li>2030: Achieve a 20% reduction in net direct GHG emissions by Jan 2030 compared to the comparable benchmark</li> <li>Net zero by Jan 1, 2040</li></ul>		
The Wicked Problem: The requirement will include all buildings in Maryland with a gross floor area greater than 35,000 SF (excluding parking), and will exempt historic buildings, elementary & secondary schools, manufacturing buildings, and agricultural buildings. On average, DGS has identified this is a 30-40% increase in energy costs for the respective sites if no action taken.		
The requirement is going to be put into place – but how will it impact City businesses and non-profits, and how can Baltimore help mitigate negative impacts and support positive results?		
Tradeoffs Analysis & Common Ground		
Consideration	Benefits/Pros	Challenges/Tradeoffs
Environmental:	Meets city & state carbon neutrality goals. Aligns with general decarbonization goals for the state	<ul style="list-style-type: none"> <li>Generates waste as systems are replaced early</li> <li>Infrastructure changes needed are complex, and in some cases too costly to pursue.</li> <li>Businesses disinvest in older urban core due to cost of renovation or burden of fees vs. New construction already built to new standards</li></ul>
<b>Policy:</b> How can the City help businesses to meet these standards and continue to invest in the downtown core?		

<b>Public Health:</b>	<ul style="list-style-type: none"> <li>Helps city meet GHG emission reduction targets which can lead to improve air quality and an overall transition from fossil fuels.</li> <li>Reduce sources of indoor air pollution and triggers for asthma and the related costs</li> </ul> <p><u>Questions to consider:</u> When is the right time for the transition to electric? When is the technology cost effective? Now – or wait until 2040?</p>	<ul style="list-style-type: none"> <li>In the short-term, the BEPS may increase emissions from electricity generation as demand surges– although it would significantly reduce on-site emissions and indoor air quality pollutants</li> <li></li> <li>Understanding of where our liability is as a city</li> </ul>
<b>Economic:</b>	<p>Consequence: Alternative Compliance Payments based on social cost of carbon, currently pegged by EPA at \$150-\$250/MT of CO2</p>	<ul style="list-style-type: none"> <li>Cost: Technology isn't cost effective yet for all applications. Owners are likely to defer changes in the short term.</li> <li>Contractor network will need to grow, get trained</li> <li>Businesses do not have an incentive to invest in electrification because the payback on the replacement of their systems will longer than most businesses may plan for</li> <li>Penalty can be a 35-50% increase on a building's energy costs today</li> </ul>
<b>Equity/Environmental Justice Impact:</b>	<p>Could lead to lower cost for solar/community solar and or more renewable energy options, but this is not guaranteed.</p>	<ul style="list-style-type: none"> <li>If large businesses go off natural gas, but no solution for residential – only low income residential will be left on natural gas and the burden of the rate payer cost. Policy can't succeed on its own.</li> <li>Burden for religious organizations and community organizations to complete the major capital investment necessary for this project</li> </ul> <p><i>Policy: How do we support essential non-profits, small businesses and religious organizations?</i></p>