

MARYLAND CLIMATE SOLUTIONS NOW ACT

SESSION DESCRIPTION

Have questions about the 2022 Climate Solutions Now act and how it may affect your Maryland buildings. We're hosting a presentation and Q&A session with Ben Roush, PE, Chris Parts, AIA, and Lisa Ferretto, AIA, who were a key part of the AIA Maryland and USGBC Maryland Legislative push for the buildings portion of the bill. They will explain the bill requirements for buildings, talk about current and upcoming heating technology, take your questions, and talk about what future changes are possible.

LEARNING OBJECTIVES

1. Summary of Climate Solutions legislation and relevance to Housing, learn about upcoming regulations
2. Update on progress of Climate Solutions actions and what to watch for and timeline (i.e. BEPS guidelines), learn what guidelines are likely to include
3. Impact on Building systems for housing, discussion of building systems and building electrification technologies
4. New legislation/actions from 2023 session tagging on to or relevant to climate solutions legislation.

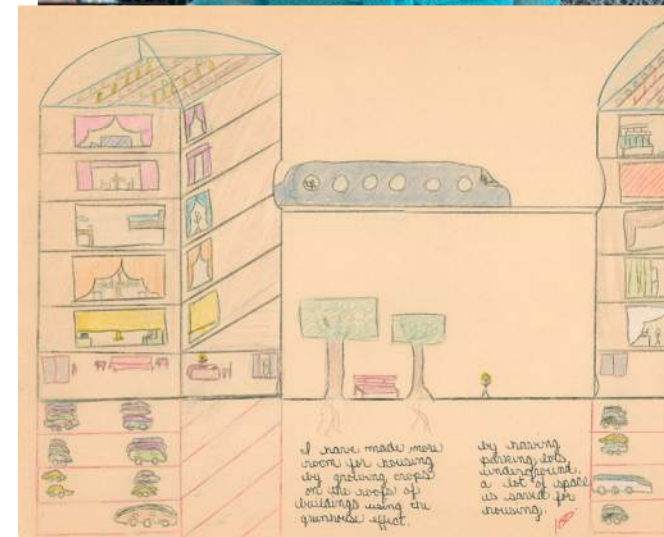
AGENDA

- Introductions
- Overview
- Details
- What's next

Lisa M. Ferretto

AIA, LEED AP BD+C, WELL AP, Eco-districts AP

- Architect
- Sr. Director of Sustainable Practice + Knowledge, AIA National
- *Sustainability Director,*
 - *Hord Coplan Macht (2005 – 2022)*
 - *9 million SF of LEED Certified space*
- AIA Large Firm Roundtable, Sustainability Group
- Commissioner, Baltimore Sustainability Commission
- *Member, MD Green Building Council*



Ben Roush

Principal, PE (Mech & FP), LEED AP BD+C ASHRAE BEMP & BEAP, CCP, CEPE

- Mechanical & FP Engineer
- Board Chair Emeritus, USGBC-MD
- AIA Baltimore COTE chair
- Sustainable Mechanical Engineering
- Energy Modeling and Auditing
- 140+ LEED Projects
- 3 Certified Living Buildings
- 9 Current Projects Targeting Net Zero
- Code Nerd



Chris Parts

AIA, LEED AP BD+C

- Architect
- AIA Maryland Director, Legislative Lead
- AIA Architects in Action Network
- Baltimore County Planning, Landmarks Preservation Commission
- Hord Coplan Macht – Housing Mixed Use & Planning – Sustainability Champion
- Extensive experience with Preservation, Renovation and Nonprofit Clientele

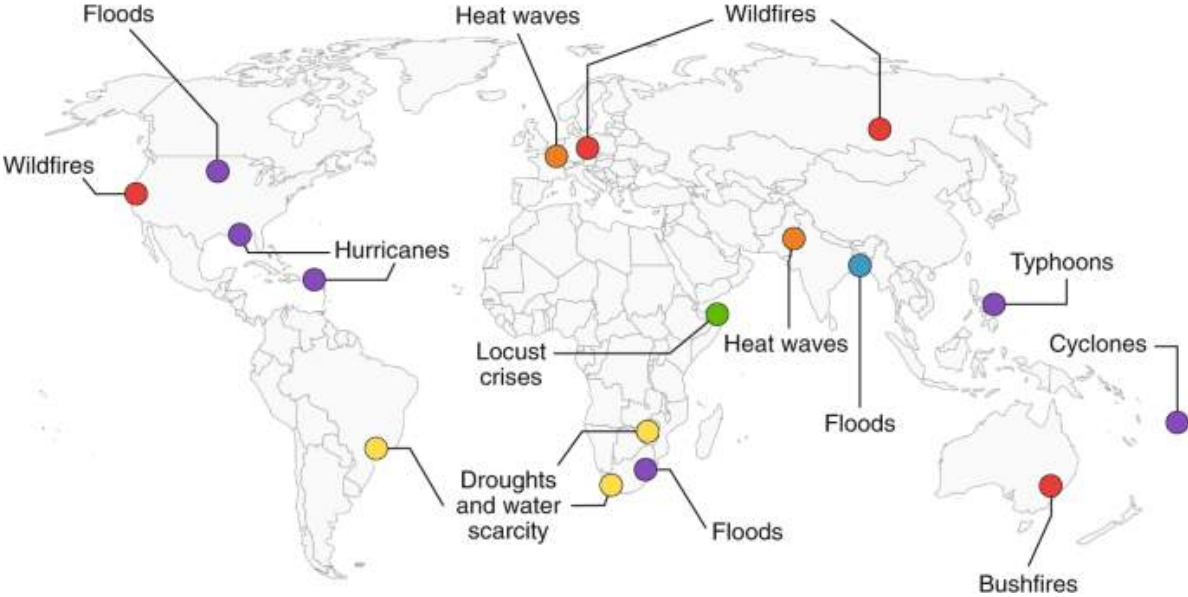


THE OVERVIEW

COMPREHENSIVE CLIMATE CHANGE LEGISLATION

CLIMATE CHANGE_IMPACTS

CLIMATE EXTREMES



CLIMATE CHANGE_IMPACTS

2022

5th Warmest Year since 1880 and last 9 years, warmest on record (NASA, 2023)

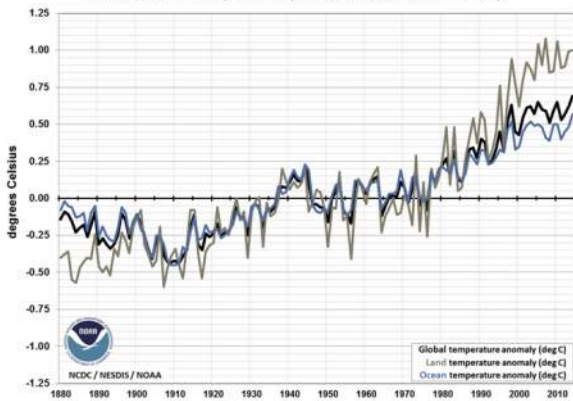
1"

SEA LEVEL RISE EVERY 7-8 YEARS IN MD (2018 DP3 in Balt. Sust. Plan)

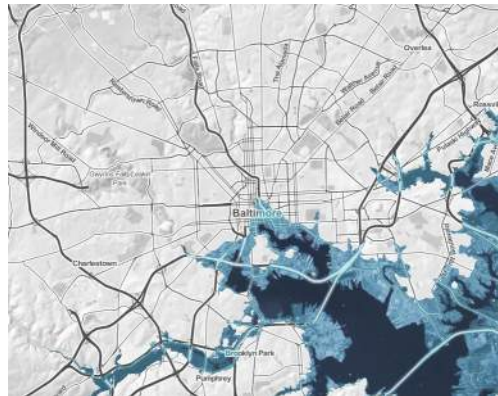
50%

PROJECTED GROWTH OF WORLD ENERGY CONSUMPTION (2018 – 2050) (U.S. EIA)

Annual Global Temperature (Land, Ocean, and Combined)



www.ncdc.noaa.gov/sotc/summary-info/global/201412



<http://sealevel.climatecentral.org>



THE FUNDAMENTAL DESIGN PROBLEM OF OUR TIME.

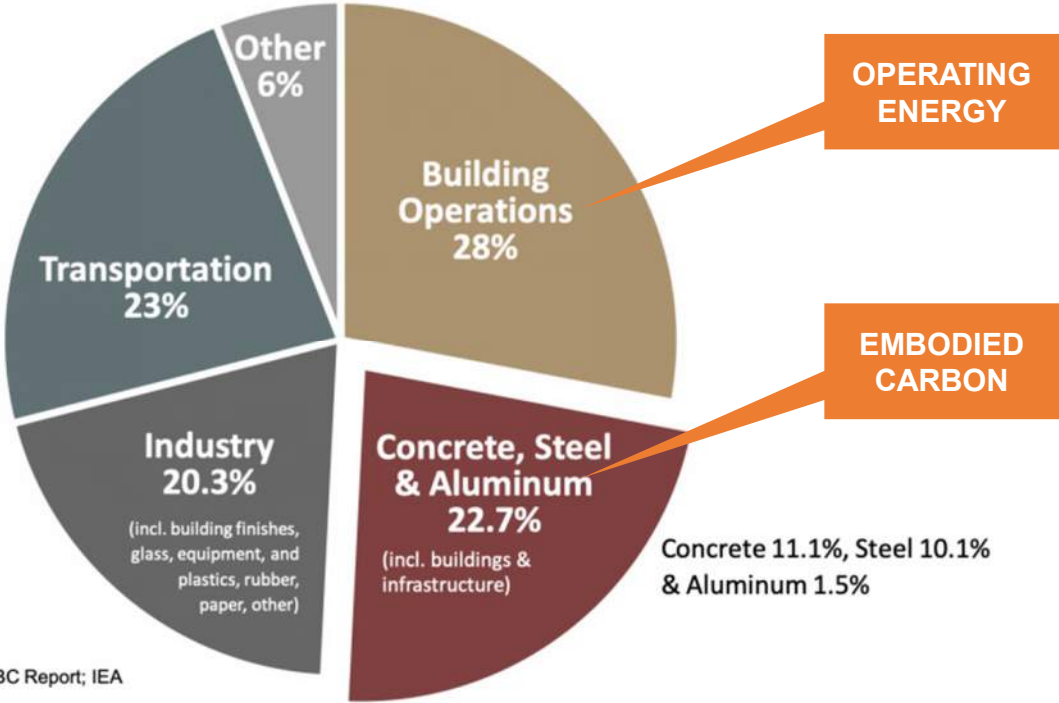
**“Climate change
is a health, safety,
and welfare crisis.**

**Ignoring it would undermine our
most critical professional
responsibility: to protect our
clients, our communities, and
our earth.”**

CLIMATE CHANGE_BUILDINGS

EMISSIONS (CO2)

- Transportation
- Industry
- **Buildings**



GLOBAL CO2 EMISSIONS

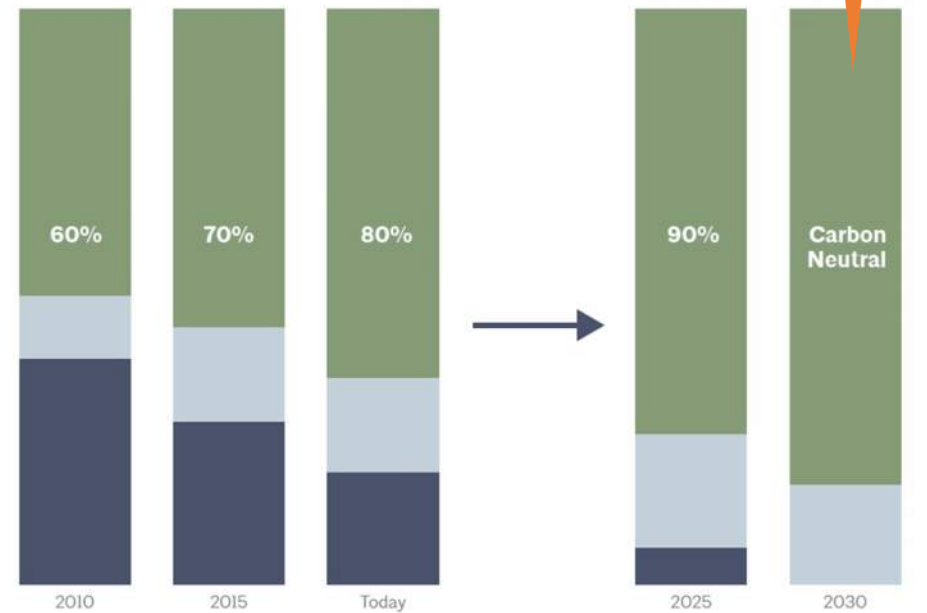
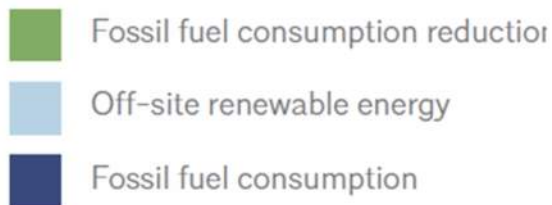
CLIMATE CHANGE_ARCHITECT RESPONSE

2030 CHALLENGE/ COMMITMENT

- Architecture 2030
- American Institute of Architects

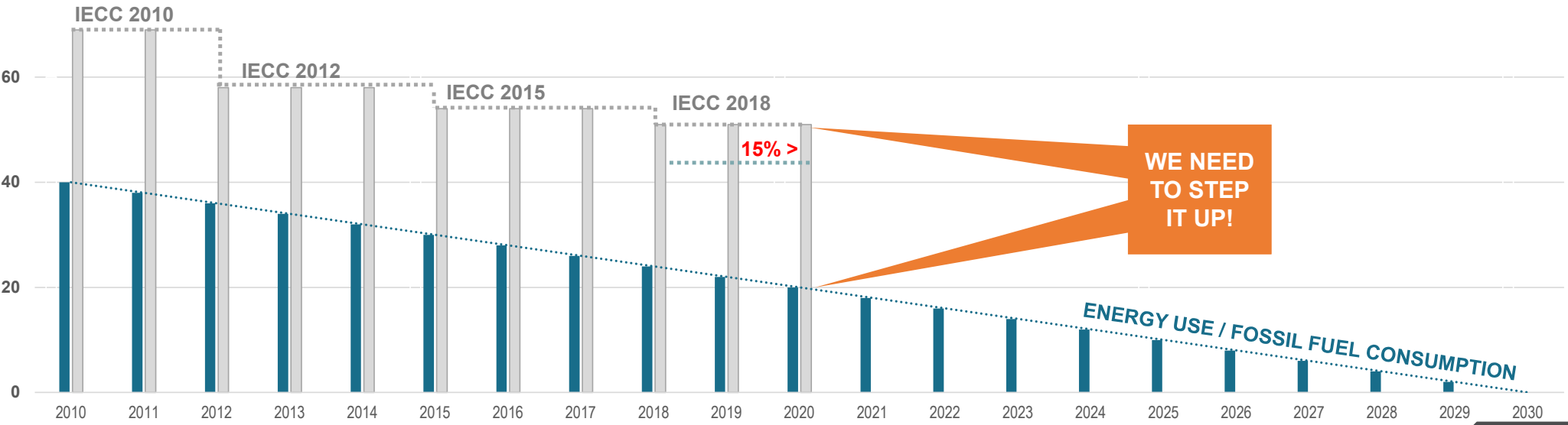
EFFICIENCY REDUCTION TARGETS

- Operating Energy



CARBON NEUTRALITY!

CLIMATE CHANGE_ ENERGY CODES



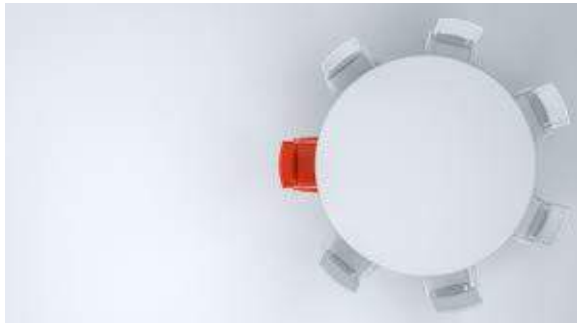
CLIMATE CHANGE_ LEGISLATIVE RESPONSE

COMPREHENSIVE CLIMATE LEGISLATION!

Title	Climate Solutions Now Act of 2022	
Sponsored by	Senators Pinsky , Ferguson , Kelley , Guzzone , Smith , Kagan , Waldstreicher , Lam , Washington , Patterson , Hester , Ellis , Zucker , Kramer , Hettleman , Young , Sydnor , Hayes , Watson , Beidle , Carter , Augustine , Elfreth , Feldman , Jackson , King , and Lee	
Status	Enacted under Article II, Section 17(b) of the Maryland Constitution - Chapter 38	
Analysis	Fiscal and Policy Note (Revised)	
Synopsis	Requiring the State to reduce statewide greenhouse gas emissions by altering statewide greenhouse gas emissions goals, establishing of a net-zero statewide greenhouse gas emissions goal, developing certain energy efficiency and emissions reduction requirements for certain buildings, requiring electric companies to increase their annual incremental gross energy savings, establishing certain zero-emission vehicle requirements for the State fleet, and establishing an electric school bus pilot program; etc.	
Committees	Original: Education, Health, and Environmental Affairs  Budget and Taxation	Opposite: Environment and Transportation  Economic Matters
Committee Testimony	Witness List	
Details	Bill File Type: Regular Effective Date(s): June 1, 2022 Bill imposes a mandated appropriation in the annual State Budget Bill Creates a Task Force or Commission	

CLIMATE SOLUTIONS NOW ACT

buildings, project types, ghg emissions,
carbon, solar, electrification



**NO ARCHITECT OR ENGINEER
AT THE BUILDINGS TABLE!**

marylandclimateaction

CASA	League of Women Voters Maryland
Cedar Lane Environmental Justice Ministry	Maryland League of Conservation Voters
Chesapeake Bay Foundation	Maryland Legislative Coalition
Chesapeake Climate Action Network	Maryland Sierra Club
CCAN Action Fund	MaryPIRG Student Climate Action Coalition
Chesapeake Physicians for Social Responsibility	Maxed Out Solar
Climate Law & Policy Project	MD Campaign for Environmental Human Rights
Climate Reality, Montgomery County Chapter	MLC Climate Justice Wing
Climate Reality, Baltimore Area Chapter	Strong Future Maryland
Downtown Residents Advocacy Network (Baltimore)	Sunrise Movement Baltimore
Elders Climate Action DMV	Takoma Park Mobilization Environment Committee
Environment Maryland	Unitarian Universalist Legislative Ministry of Maryland
Greenbelt Climate Action Network	Waterkeepers Chesapeake
Howard County Climate Action	Women Indivisible Strong Effective (WISE)
Indivisible Howard County	350MoCo
Interfaith Power & Light (DC, MD, NoVa)	

BUILDINGS IN CLIMATE LEGISLATION

TARGET GOAL TO CARBON NEUTRALITY

- Carbon neutrality by a date (% interim steps)

ENERGY EFFICIENCY / CONSERVATION

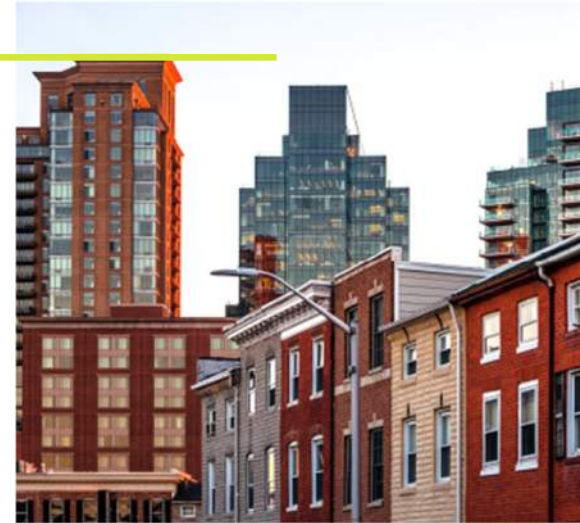
- New Buildings
 - New Construction - Energy Use Reduction Target Steps
 - Major Renovations - Compliance Path Options
- Existing - Building Energy Performance Standard (BEPS)

ELECTRIFICATION

RENEWABLE ENERGY

- Solar Set Aside + Solar Ready
- Zero Energy Ready

BENCHMARKING

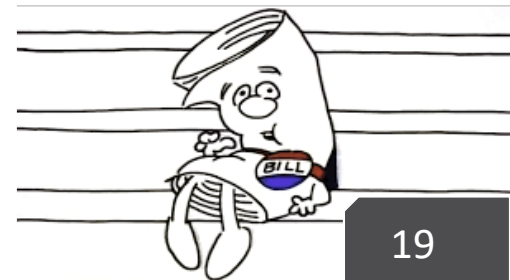


LEGISLATIVE PROCESS

ENERGY & ENVIRONMENT

Maryland Senate Democrats Pass Sweeping Climate Change Legislation

By Elizabeth Shwe • March 14, 2022



WHAT PASSED

TARGET GOAL TO CARBON NEUTRALITY

- Carbon neutrality by 2045 (60% by 2031) ag. 2006 levels

ENERGY EFFICIENCY / CONSERVATION

- ~~New Buildings~~
 - ~~New Construction~~ – Energy Use Reduction Target Steps
 - ~~Major Renovations~~ – Compliance Path Options

- Existing - Building Energy Performance Standard (BEPS)

~~ELECTRIFICATION~~

~~RENEWABLE ENERGY~~

- ~~Solar Set Aside + Solar Ready~~
- ~~Zero Energy Ready~~

BENCHMARKING



A group of environmental advocates projected "electrify everything now" onto the State House on Monday evening to urge senators to pass the Climate Solutions Now Act. Courtesy by Jamie Demarco of the Chesapeake Climate Action Network.

WHAT PASSED

Other items

- Environmental Justice and Agency Actions
 - Funding for low-income projects and households
- Climate Catalytic Fund (aka Green Bank)
 - +5% funding for net zero schools
- Electric Vehicles (State Fleet and Schools)
- Empower Maryland Program
- Adoption of most current IgCC
- Building energy Transition Implementation Task Force
- Other Workgroups: Just Transition and Retraining, Energy Industry Revitalization, Energy Resilience and Energy Efficiency, Solar PV systems Recovery Reuse and Recycling



CARBON NEUTRALITY GOAL

60% reduction in GHG by 2031
Net Zero / Carbon neutrality by 2045
(against 2006 levels)

Baltimore City – 60% by 2030



Baltimore City Aims To Go Carbon Neutral By 2045, Scott Says - CBS Baltimore

THE DETAILS

I want to read the code myself!

SB0528:

<https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0528>

DC Building Energy Performance Standards (BEPS):

<https://doee.dc.gov/service/building-energy-performance-standards-beps>

Montgomery County BEPS:

<https://www.montgomerycountymd.gov/green/energy/beps.html>

DC Green Code:

<https://codes.iccsafe.org/content/DCGCC2017P1/preface>

Maryland Commission on Climate Change (MCCC)

annual report:



<https://mde.maryland.gov/programs/air/ClimateChange/MCCC/Pages/index.aspx>

ASHRAE Position Paper on Climate Change:

<https://www.ashrae.org/about/news/2022/ashrae-commits-to-broad-building-decarbonization-initiatives-in-new-position-document>



Building Energy Performance Standards, MD

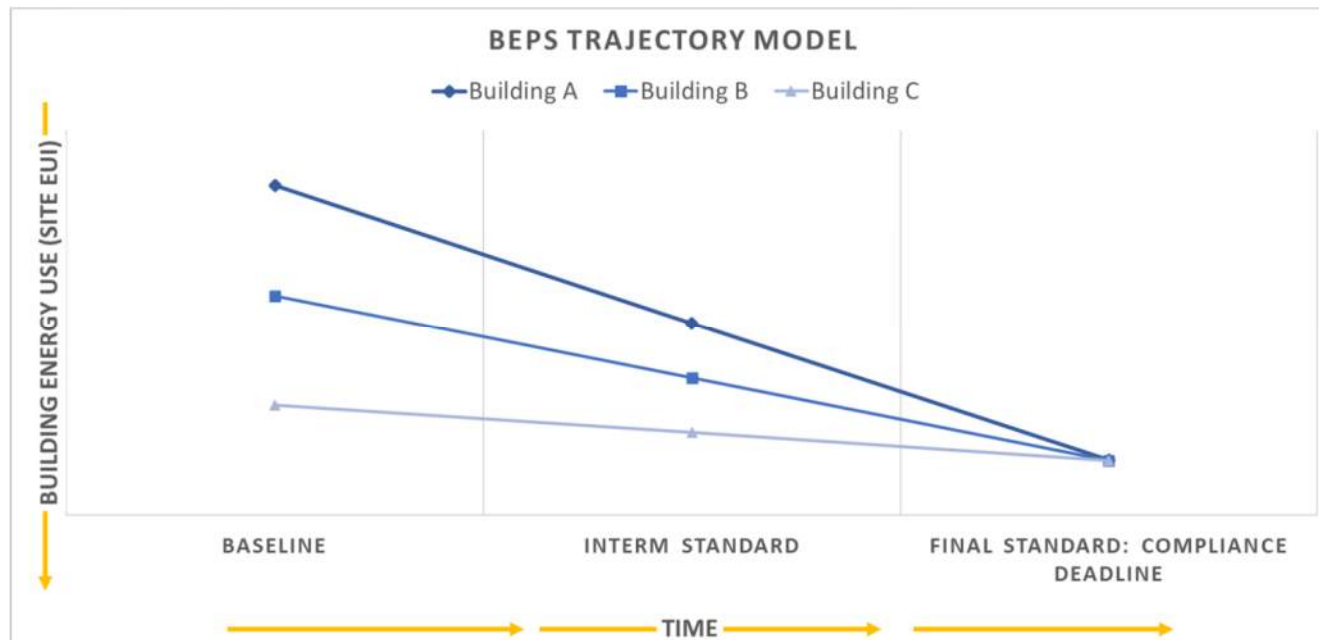
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Committees	Original: Education, Health, and Environmental Affairs  Budget and Taxation	Opposite: Environment and Transportation  Economic Matters
Committee Testimony	Witness List	
Details	Bill File Type: Regular Effective Date(s): June 1, 2022 Bill imposes a mandated appropriation in the annual State Budget Bill Creates a Task Force or Commission	
History	▼	
File Code	▼	
Subjects	▼	
Statutes	▼	

Building Energy Performance Standards, DC

- 50% reduction in greenhouse gases by 2032
- Carbon neutrality by 2050
- 50% reduction in District-wide energy use by 2032
- 100% renewable electricity in the District by 2032

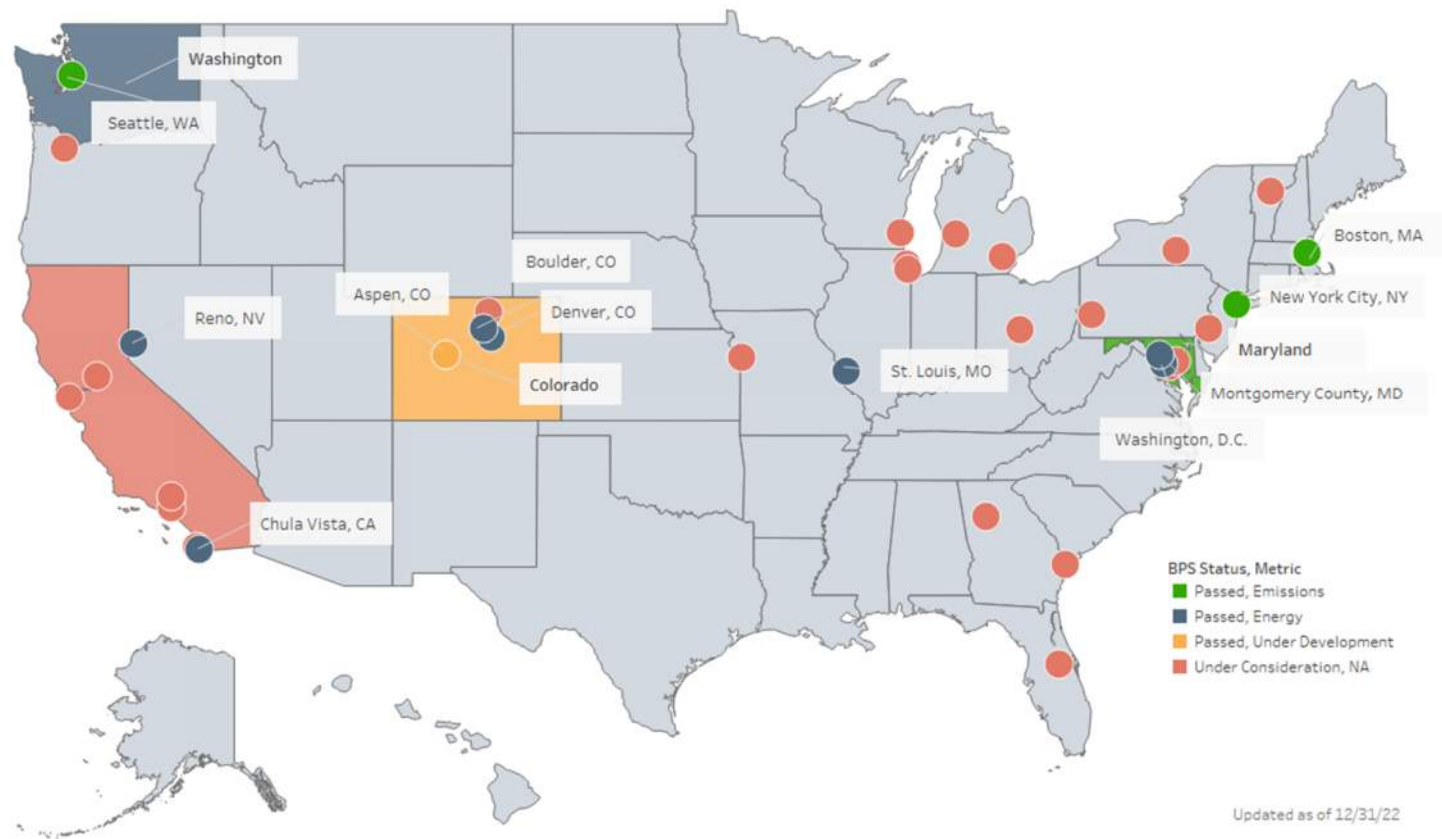
Property Type	2021 Building Energy Performance Standard	
	ENERGY STAR Score	Source EUI
Adult Education		110.4
Ambulatory Surgical Center		426.9
Aquarium		240.2
Automobile Dealership		124.1
Bank Branch	71	153.7
Bar/Nightclub		297
Barracks	56	141.4
Bowling Alley		206.6
Casino		240.2
College/University		180.6
Convenience Store with Gas Station		592.6
Convenience Store without Gas Station		592.6
Convention Center		192
Courthouse	71	153.7
Data Center	50	1.8 Total Energy kBtu/IT Energy kBtu
Distribution Center	19	103.7
Drinking Water Treatment & Distribution		5.9 kBtu/gallons per day
Enclosed Mall		170.7
Energy/Power Station		229.4
Fast Food Restaurant		886.4
Financial Office	71	153.7
Fire Station		185.5
Fitness Center/Health Club/Gym		206.6
Food Sales		592.6
Food Service		527.7
Hospital (General Medical & Surgical)	50	426.9
Hotel	54	183.9
Ice/Curling Rink		206.6
Indoor Arena		240.2
K-12 School	36	139
Laboratory		318.2
Library		206.4
Lifestyle Center		228.8
Mailing Center/Post Office		242.6
Medical Office	62	172
Mixed Use Property		229.4
Movie Theater		240.2
Multifamily Housing	66	110.7
Museum		240.2
Non-Refrigerated Warehouse	19	103.7
Office	71	153.7

Building Energy Performance Standards, MOCO



Building Energy Performance Standards

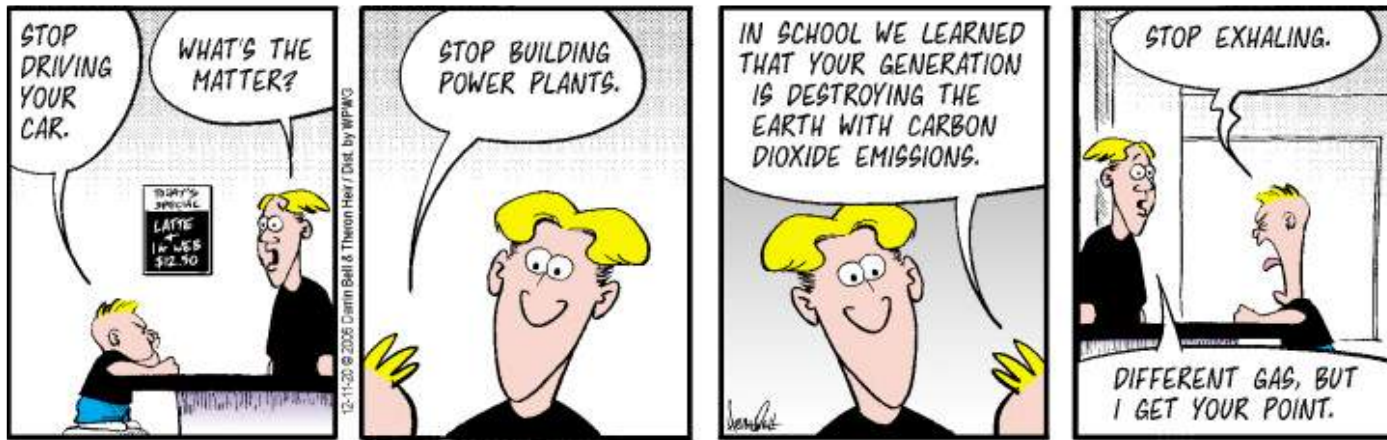
State and Local Building Performance Standards



MD All Electric Requirement HB1134

Title	Maryland Building Performance Standards – Fossil Fuel Use and Electric-Ready Standards
Sponsored by	Delegates Acevero , Bridges , and Ivey
Status	In the House - Hearing 3/08 at 1:00 p.m. (Environment and Transportation)
Analysis	
Synopsis	Requiring the Maryland Department of Labor to adopt, on or before January 1, 2024, and as part of the Maryland Building Performance Standards, a requirement that new buildings meet all energy demands of the building without the use of fossil fuels and an electric-ready standard for certain buildings.
Committees	Original: Environment and Transportation Economic Matters
Details	Bill File Type: Regular Effective Date(s): October 1, 2023

Let's talk about Carbon (emissions)



C407, Welcome to ASHRAE 90.1

Table C407.3(1)
Carbon Emissions Factors

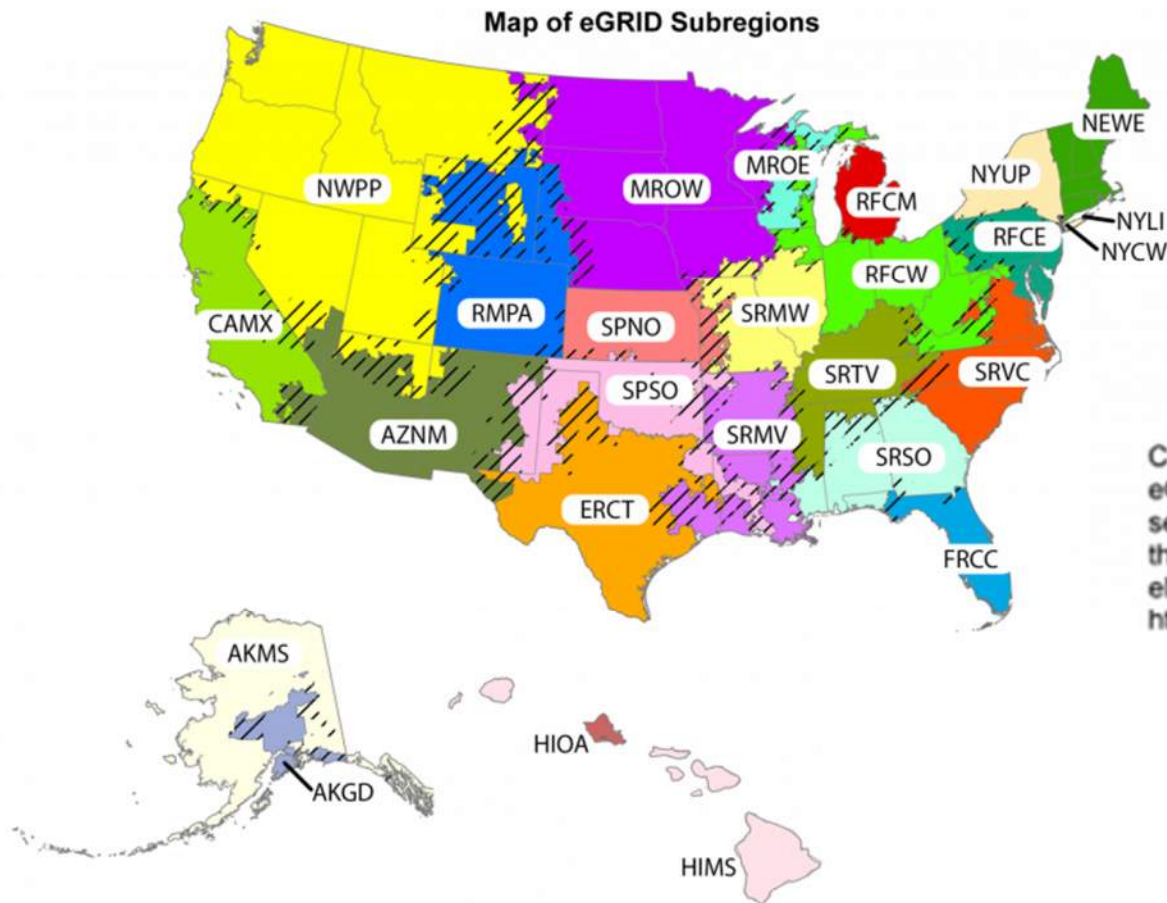
<u>Type</u>	<u>CO₂e (lb/unit)</u>	<u>Unit</u>
<u>Electricity</u>	<u>0.70</u>	<u>kWh</u>
<u>Natural Gas</u>	<u>11.7</u>	<u>Therm</u>
<u>Oil</u>	<u>19.2</u>	<u>Gallon</u>
<u>Propane</u>	<u>10.5</u>	<u>Gallon</u>
<u>Other^a</u>	<u>195.00</u>	<u>mmBtu</u>
<u>On-site renewable energy</u>	<u>0.00</u>	

^a District energy systems may use alternative emissions factors supported by calculations approved by the *code official*.

IgCC

Carbon multiplier	Co2e
Electricity	716 lb/mWh
Natural gas	509 lb/mWh
Coal	820 lb/mWh
Gasoline	681 lb/mWh
District steam	855 lb/mWh
District chilled water	323 lb/mWh
District hot water	807 lb/mWh

Power Grids



USEPA, eGRID, March 2020

Crosshatching indicates that an area falls within overlapping eGRID subregions due to the presence of multiple electric service providers. Visit Power Profiler to definitively determine the eGRID subregion associated with your location and electric service provider.

<http://www.epa.gov/energy/power-profiler>

Power Profiler

Power Profiler

How clean is the electricity you use?

Electricity is produced by many different sources of energy, including, but not limited to, wind, solar, nuclear, and fossil fuels. The type and amount of emissions produced depend on how electricity is generated in your region. Type in your zip code (or select a region) to view your power profile. [More Info](#)

Power Profiler

Enter zip code:

eGRID Subregions [More Info](#)

RFCE (RFC East) ▼

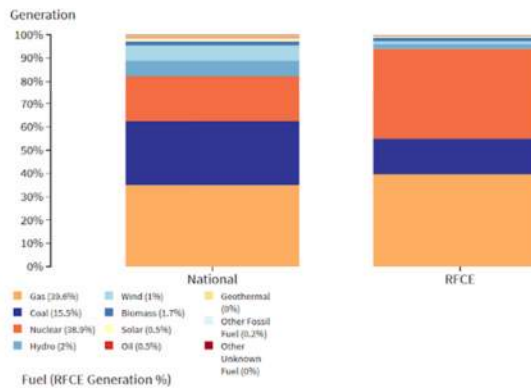
RFCE Emission Rates



[Back to All Subregions](#)

Fuel Mix

This chart compares fuel mix (%) of sources used to generate electricity in the selected [eGRID subregion](#) to the national fuel mix (%).



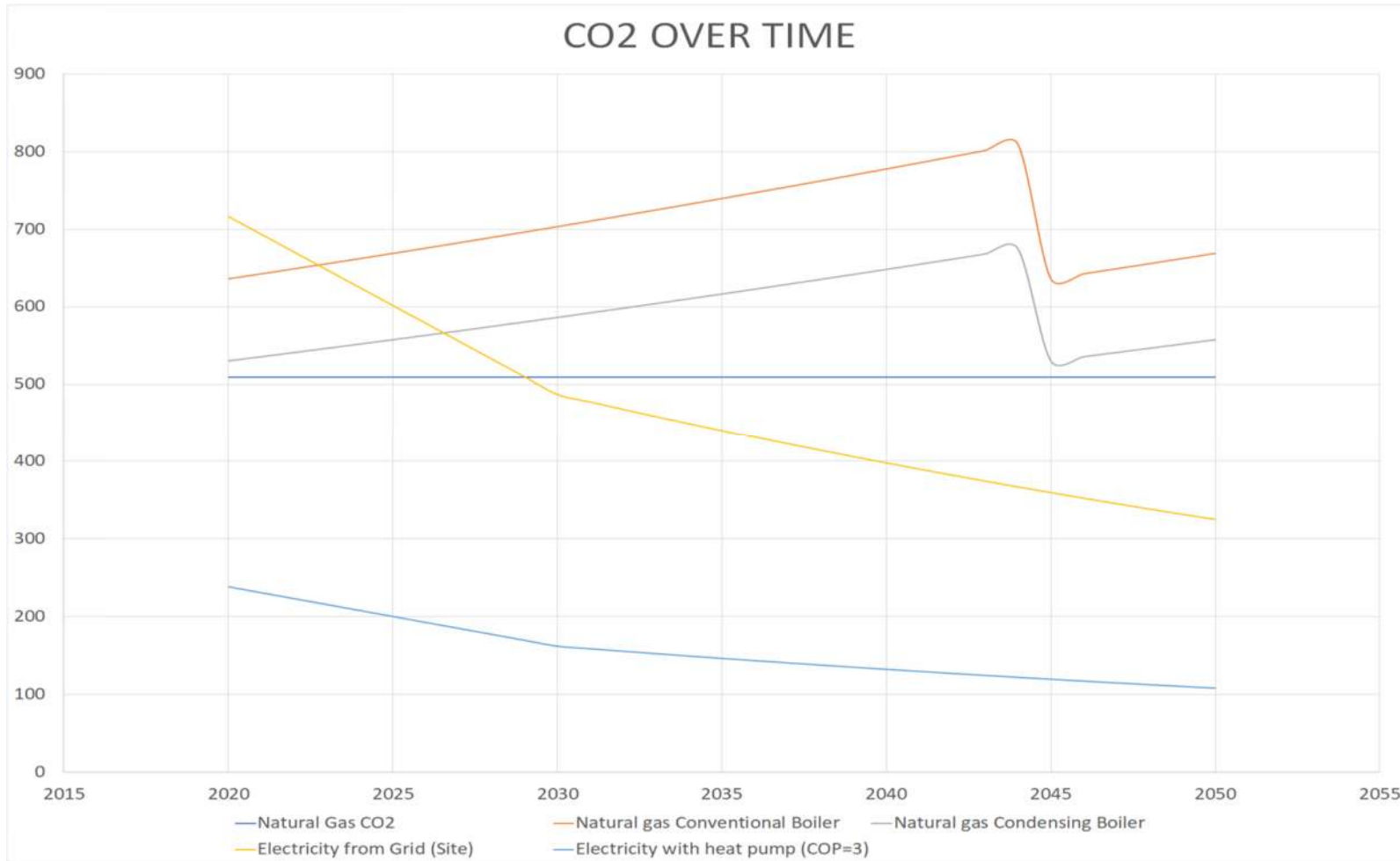
Emission Rates

This chart compares the average emission rates (lbs/MWh) in the selected [eGRID subregion](#) to the national average emission rates (lbs/MWh) for [carbon dioxide \(CO₂\)](#), [sulfur dioxide \(SO₂\)](#), and [nitrogen oxide \(NO_x\)](#).



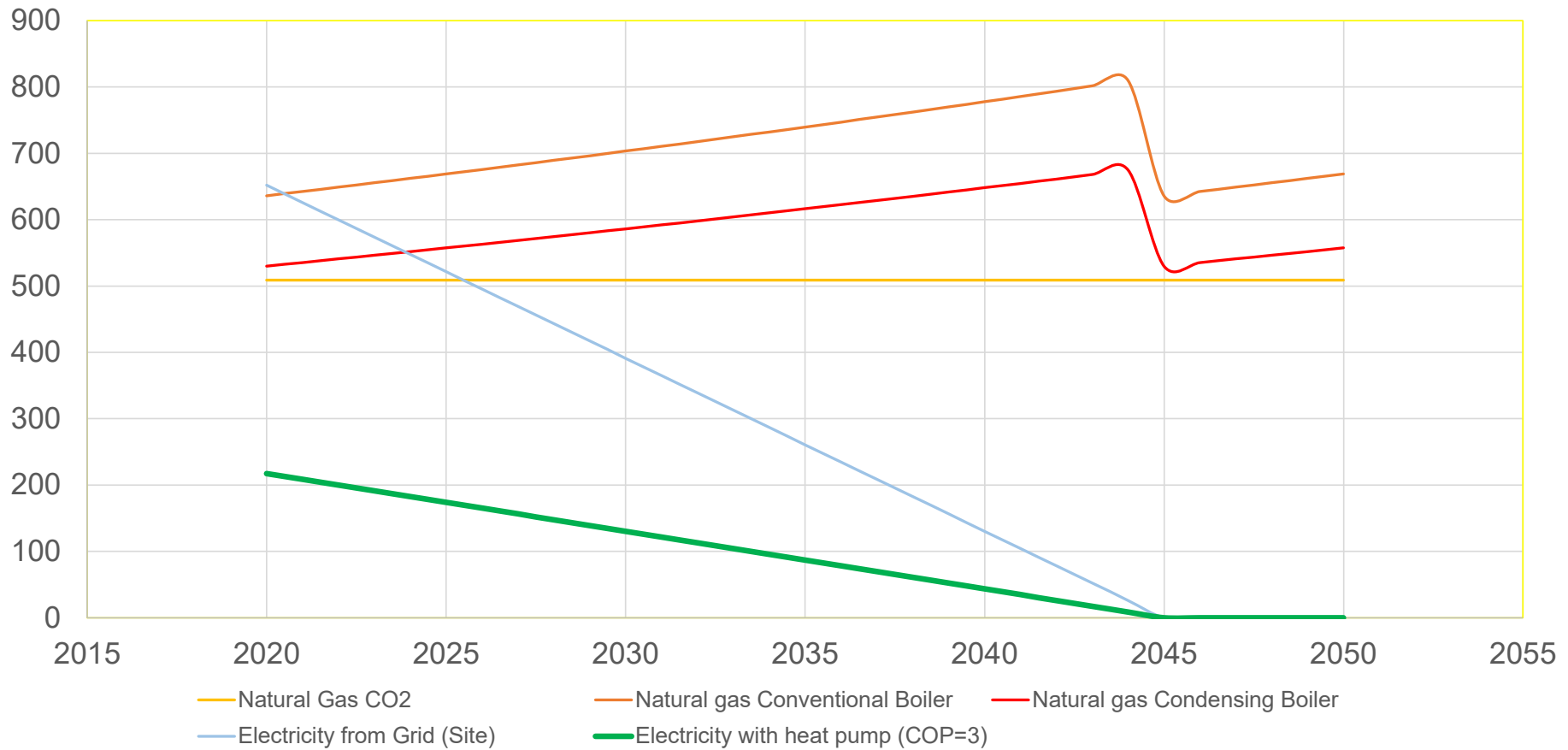
eGRID

Carbon Over Time, MD



Carbon Over Time, MD

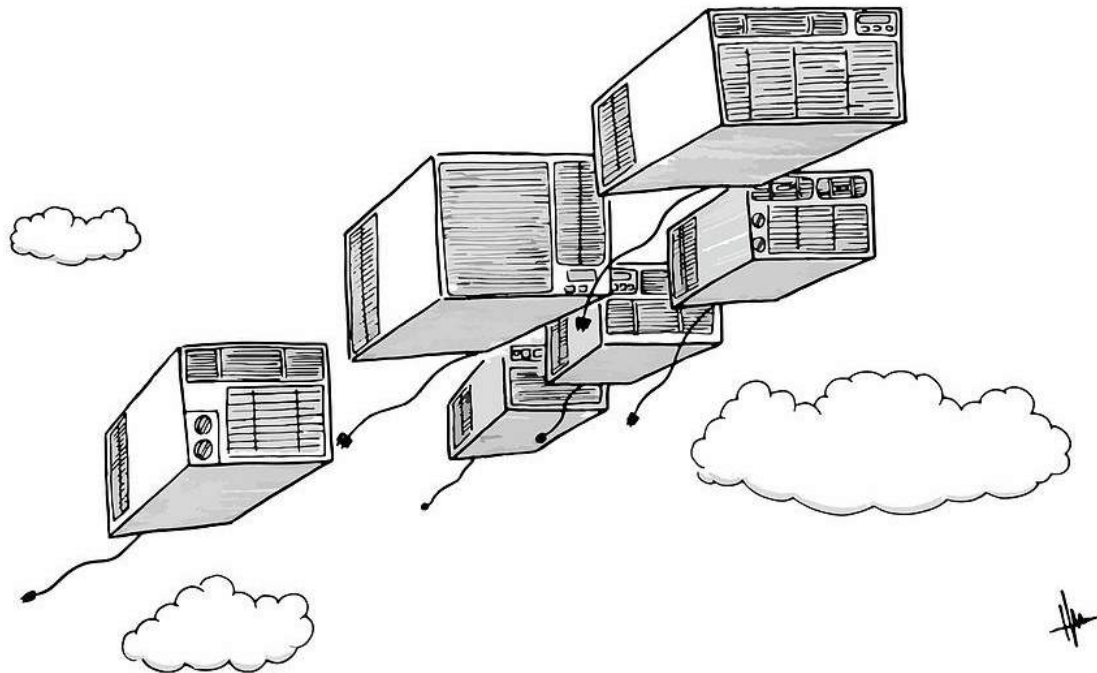
CO2 OVER TIME



The Big Picture

Heat pumps are coming....for your children!

AIR-CONDITIONERS LEAVING NEW YORK
FOR THE WINTER



MCCC, E3 Report

Maryland Building Decarbonization Study

Updated Results

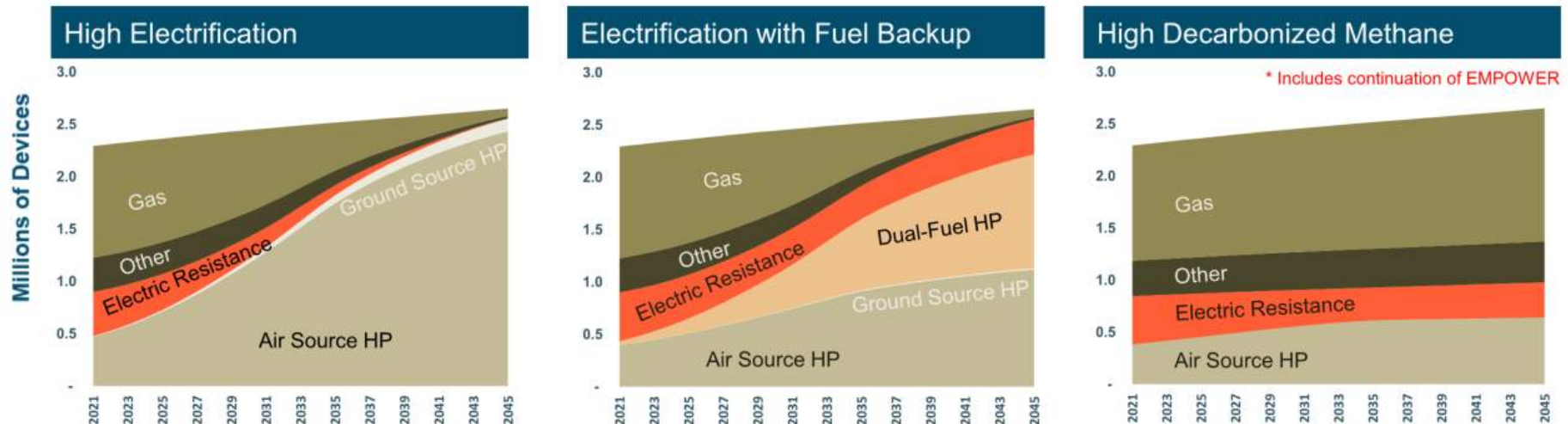
September 3, 2021



Tory Clark, Director
Dan Aas, Director
Charles Li, Managing Consultant
John de Villier, Consultant
Michaela Levine, Associate
Jared Landsman, Senior Consultant

MCCC, E3 Report

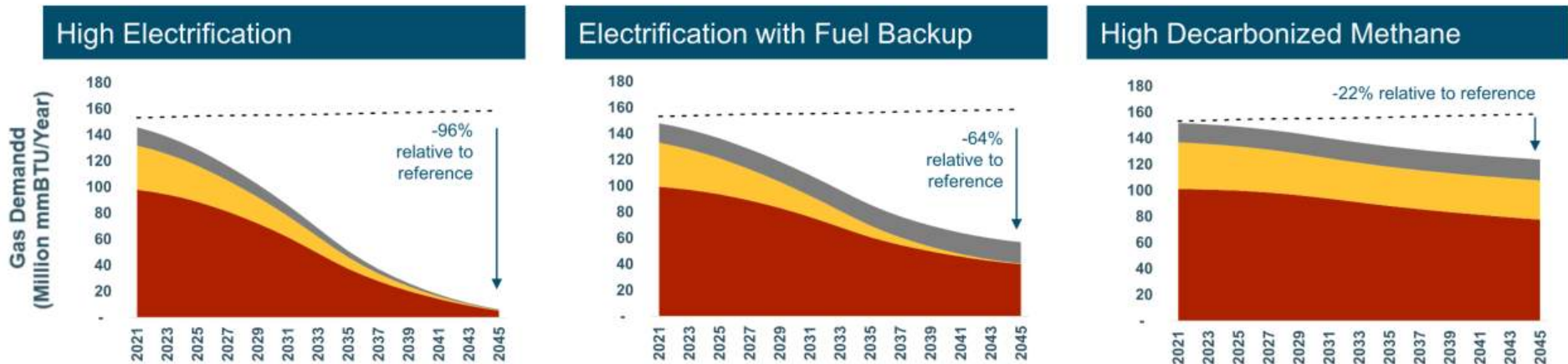
- + Heat pumps become the major space heating equipment in the High Electrification scenario
- + Dual-fuel heat pumps are added to most retrofit buildings in the Electrification with Fuel Backup scenario, pairing with existing fuel-based systems
- + Electric resistance currently accounts for about 20% of space heating devices



* "Other" space heating devices mainly include fuel oil and LPG-based furnaces and boilers
 * Consistent with the 2030 GGRA Plan, the Electrification with Fuel Backup and High Decarbonized Methane scenarios assume continuation of EMPOWER program after 2023
 * E3 is working with MDE to evaluate the impact of geothermal heating and cooling carve-out requirement in the RPS on GSHP adoption assumptions across the scenarios

MCCC, E3 Report

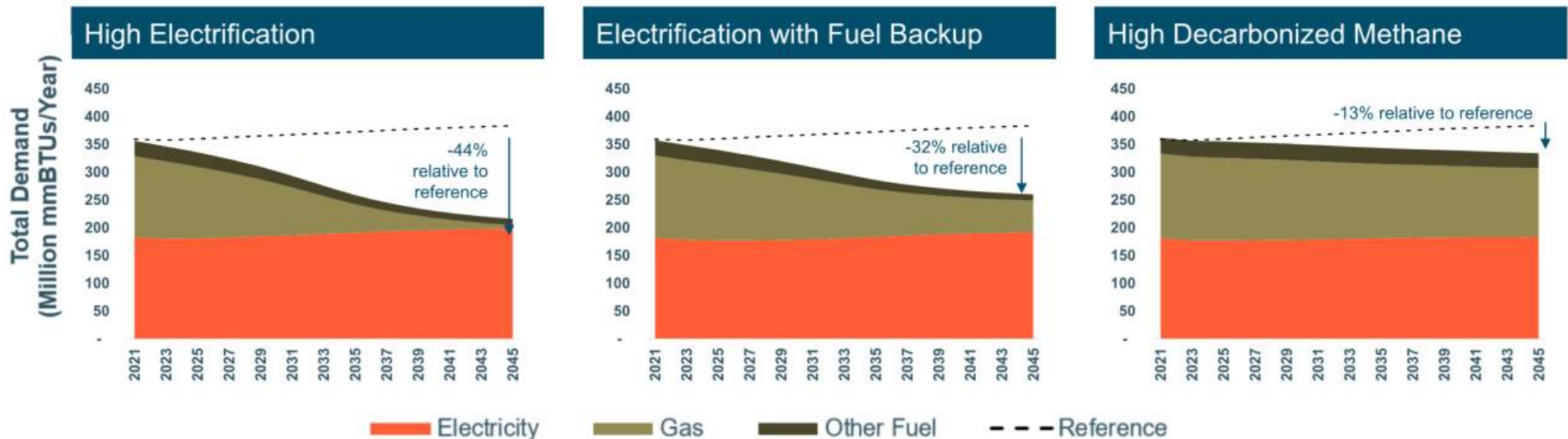
- + **Natural gas use in buildings is expected to decline in all scenarios due to energy efficiency gains offsetting growth in households, and this decline is accelerated in scenarios with significant building electrification**
 - **High Electrification** reduces gas demand by 96% by 2045 due to aggressive electrification of all building end-uses
 - **Electrification with Fuel Backup scenario** has lower reduction in gas demand by 2045 at 62%, as most customers adopt dual-fuel heat pumps that use gas with gas as a backup heating source during coldest hours of the year
 - **High Decarbonized Methane** scenario results in a 19% reduction in gas demand by 2045 due to efficient gas appliance adoption and building shell improvements



MCCC, E3 Report

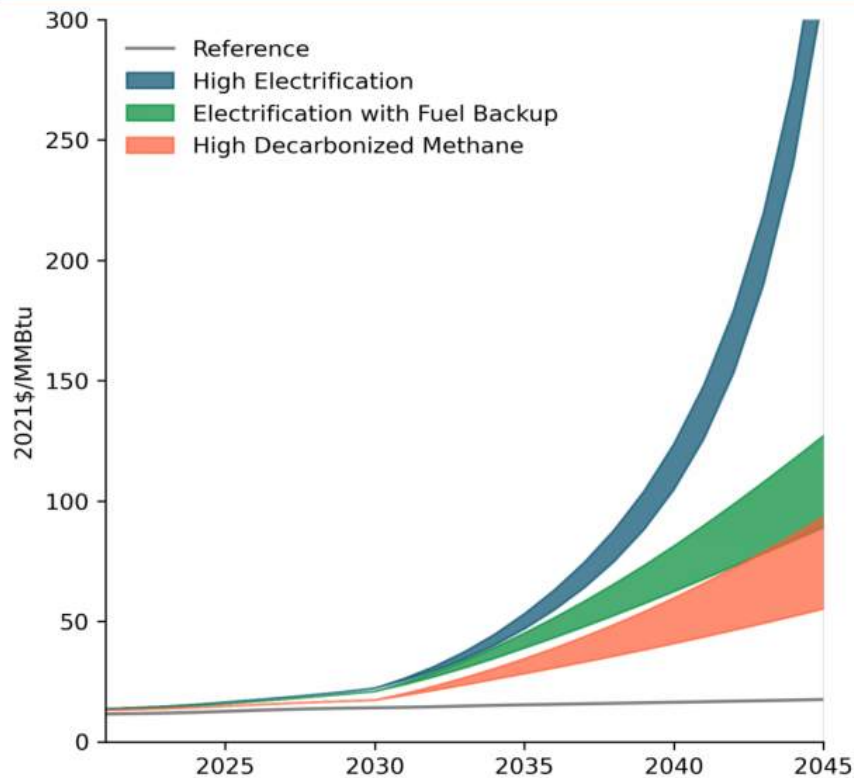
+ Overall energy demand decreases through 2045 in all scenarios

- Deep electrification almost eliminates gas demand by 2045 under the High Electrification Scenario
- Gas demand decreases ~62% in the fuel backup scenario due to adoption of dual-fuel heat pumps, while overall energy demand falls 32%
- Efficiency gains from building shell improvements and efficient appliance adoption reduce overall demand by 13% in the High Decarbonized Methane Scenario



MCCC, E3 Report

Residential gas rates (2021\$/MMBtu)

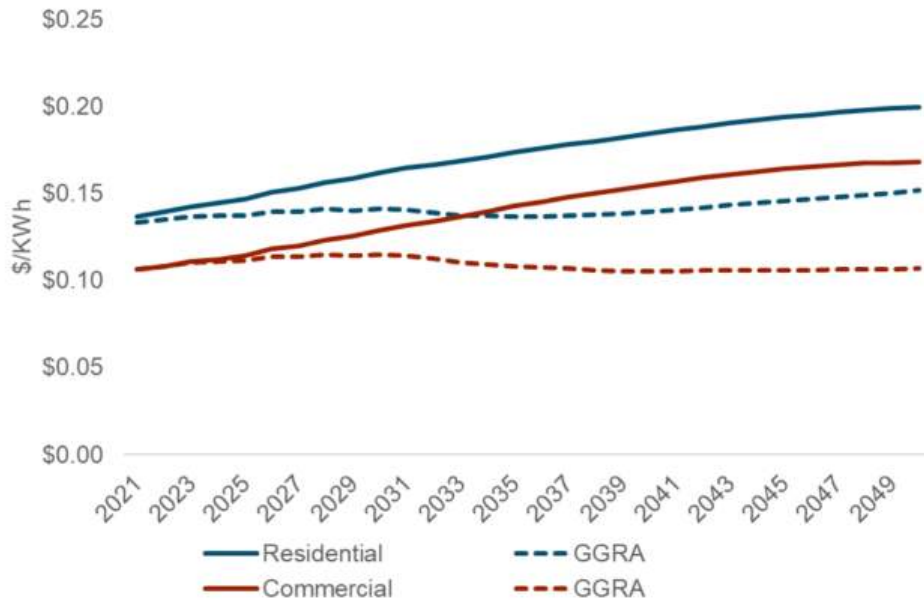


- + **High Electrification scenario** experiences a rapid rate increase driven by declining throughput despite lower total delivery and commodity costs
- + Rate increases in the **High Decarbonized Methane scenario** are driven primarily by the commodity cost for zero carbon fuel
- + **Electrification with Fuel Backup scenario** has higher gas rates than the High Decarbonized Methane scenario, due to its lower throughput and the resulting higher per MMBtu delivery cost

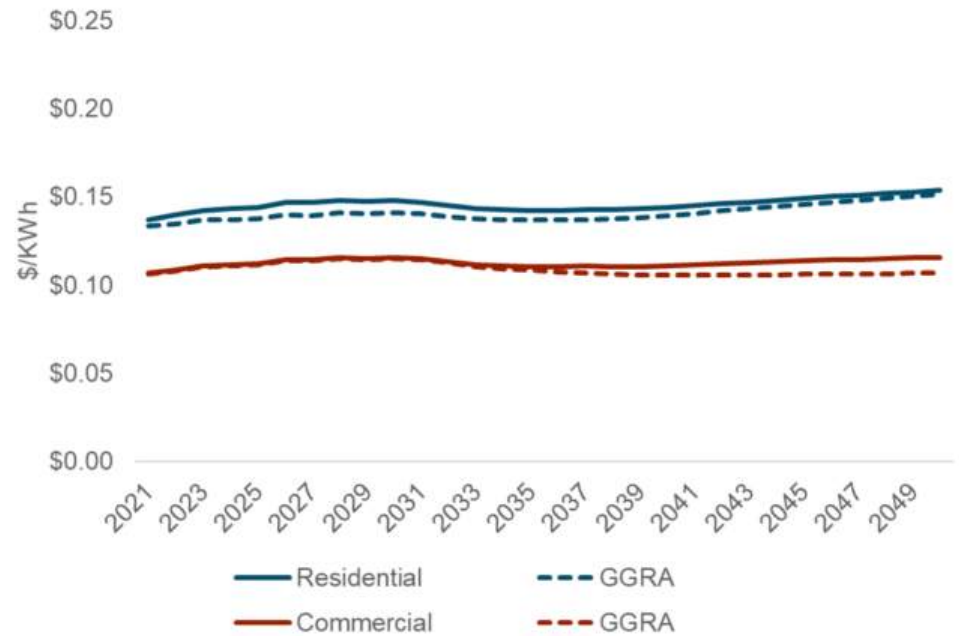
*Range shown in figure reflects the commodity cost forecast uncertainty

MCCC, E3 Report

Electric rates in the High Electrification Scenario (2021\$/kWh)



Electric rates in the Electrification + Gas Back-up Scenario (2021\$/kWh)



Building Energy Performance Standards, MD

Rules of engagement for BEPS:

- Commercial and multifamily residential 35,000 SF and larger
- 2025 is baseline for benchmarking
- Reduce from average in building use/construction type by 20% by 2030
- Reduce to net zero emissions from fossil fuel by 2040
- Rulemaking by committee

Building Energy Performance Standards, MD

Exceptions for:

- “Is a food service facility as defined by COMAR 10.15.03.02”
- Engages in commercial cooking and water heating
- Excludes parking garage
- Historic properties
- Elementary or secondary school buildings
- Manufacturing
- Agricultural buildings

Engineering Terms

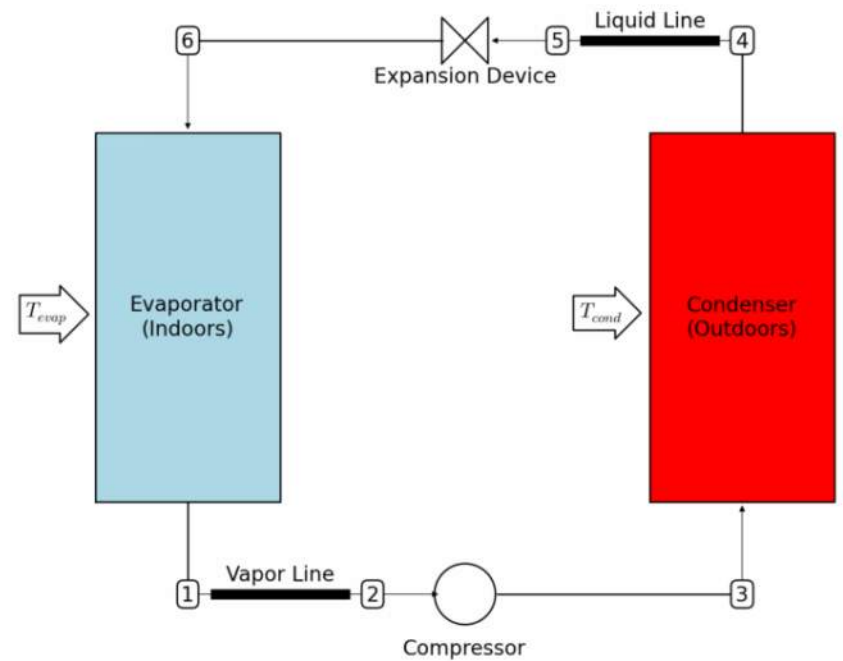
Heat Pump

Performance

Coefficient of
Performance (COP)



Resistance:
1kW in=1kW Work Out

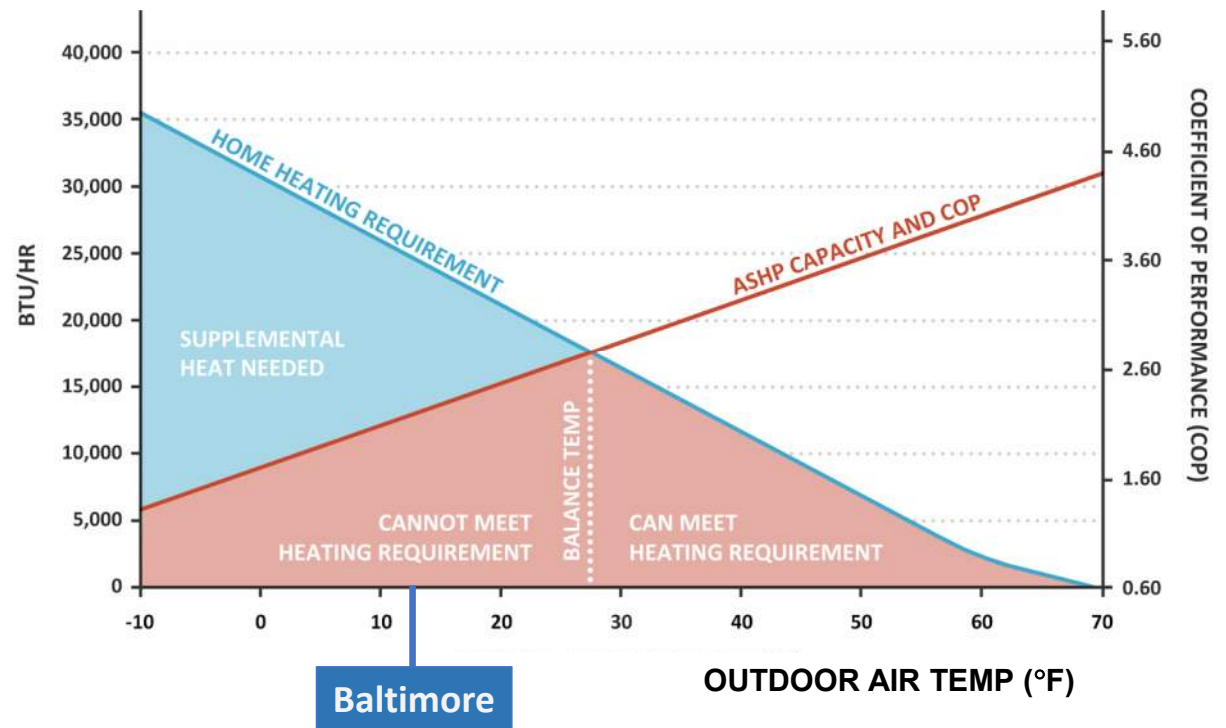


Refrigeration cycle:
1kW in=3kW Work Out

Engineering View, Limitations

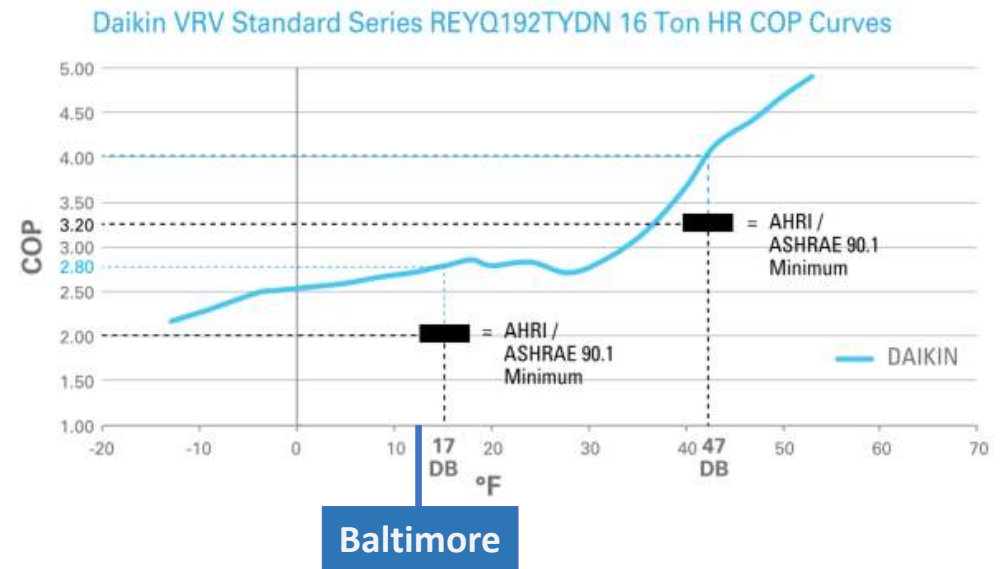
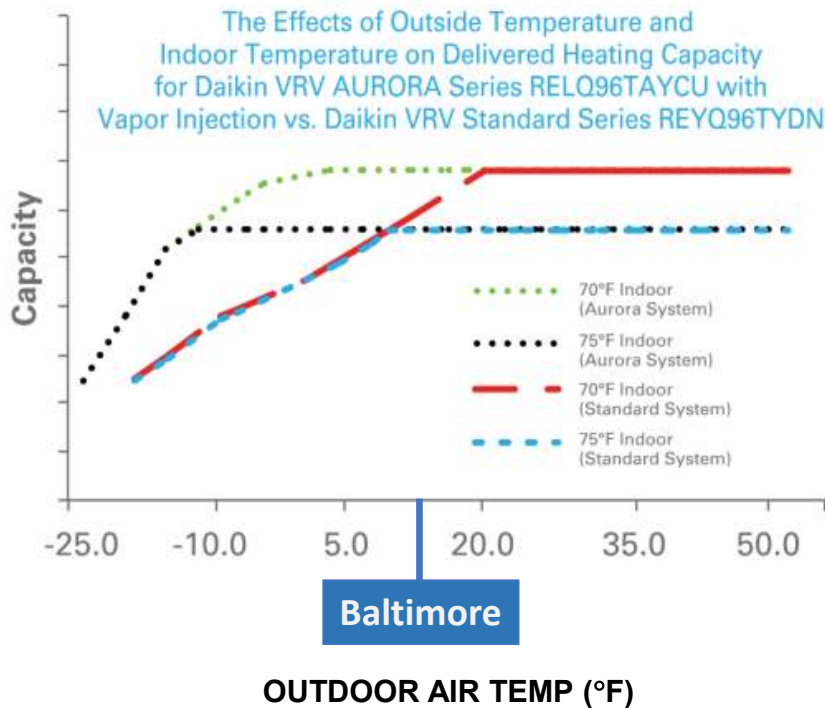
Heat Pump
Performance,
Cold Temp Impacts
(cheap version)

Performance of typical 2-ton air-source heat pump



Engineering View, Fewer Limitations

Variable Speed Version



Engineering View, Future

Department of Energy

DOE Announces Breakthrough in Residential Cold Climate Heat Pump Technology

JUNE 17, 2022

Engineering View, Future

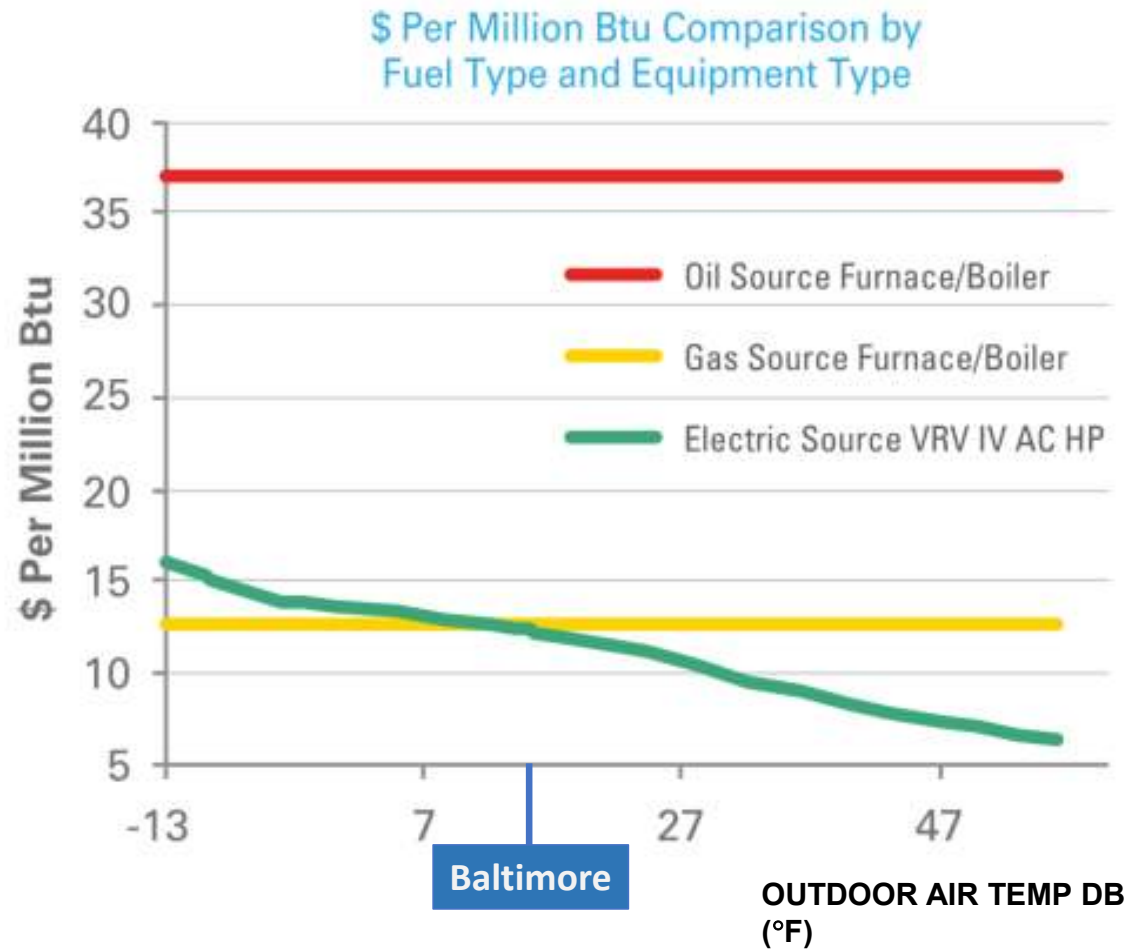
Table II-2: Performance Requirements at 5°F (-15°C)²

HP nominal capacity¹ (Btu/h)	COP at 5°F (-15°C)	Capacity Ratio	Low-temperature compressor cut-out	Low-temperature compressor cut-in
≥24,000 and ≤ 36,000	2.4	100%	≤ -10°F (-23°C)	≤ -5°F (-21°C)
>36,000 and ≤ 48,000	2.4	100%		
>48,000	2.1	100%		

¹ Capacity for the A2 test of Appendix M1 for a heating/cooling heat pump. Capacity of the H1_N test of Appendix M1 for a heating-only heat pump.

² All of the requirements in the second through fifth columns are mandatory as indicated for the specified ranges of HP nominal capacity.

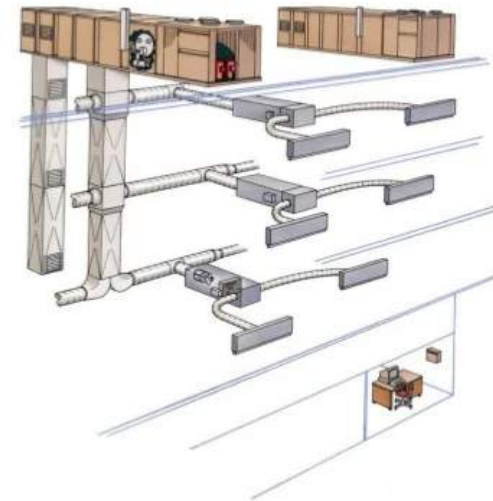
Engineering View, Cost



Engineering View, Impacts



VAV RTU
w/Gas Heat
Electric Reheat



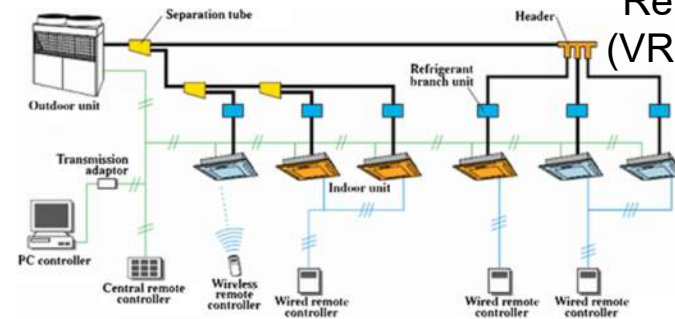
Systems and equipment will be different than what we've been used to designing and building for the last 30-40 years



VRF Systems



DOAS AHU
w/Energy
Recovery



Variable
Refrigerant Flow
(VRF) heating and
cooling

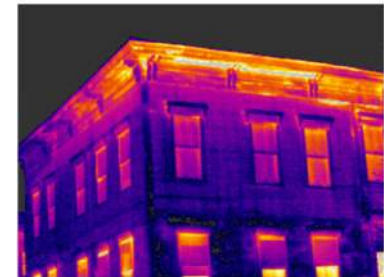
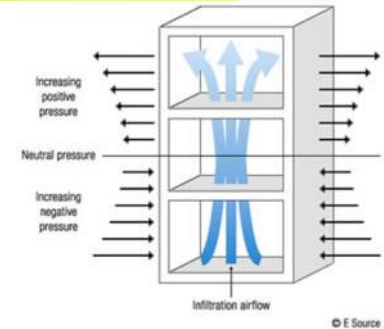
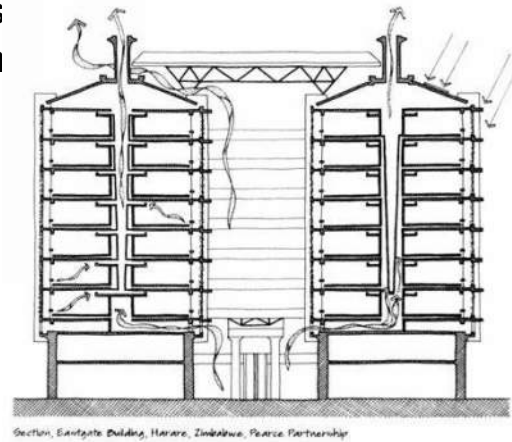
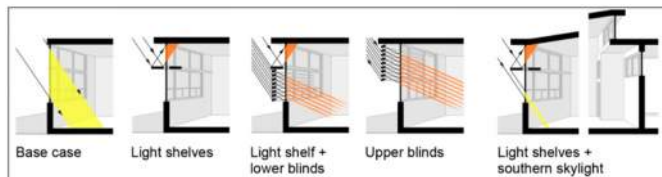
Engineering View, Impacts



Engineering View, Impacts

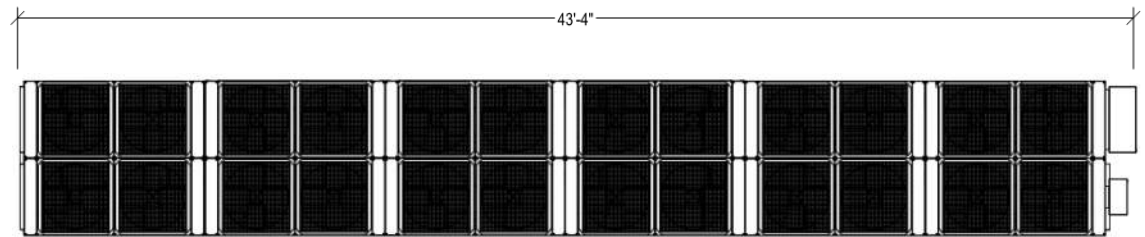
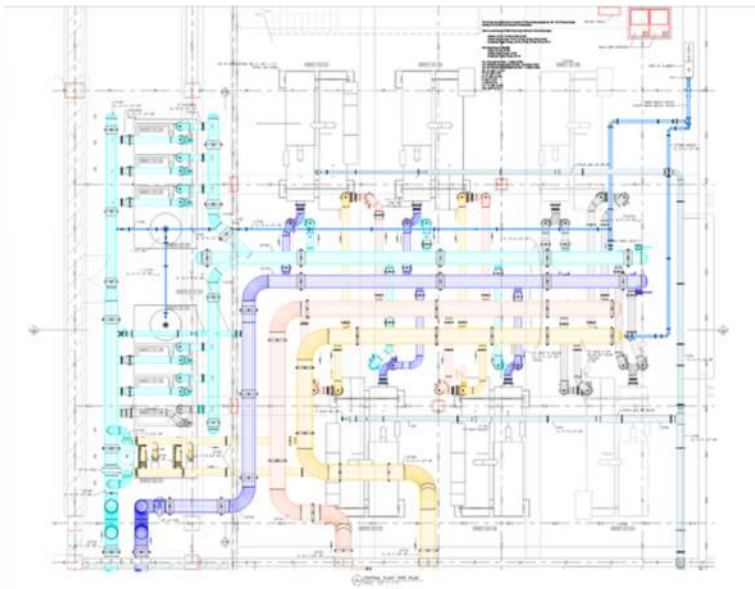
Architectural – Reduce the Load

- Limits to glazing area (30%-40%)
- High performance glazing systems - Low U-values and Solar Heat Gain Factors (SHGF)
- Architectural daylighting strategies (light shelves, 50% area within daylight zones)
- Improved building thermal performance (Insulation)
- Reduce infiltration – building air barrier pres
- Reducing (natural ventilation)



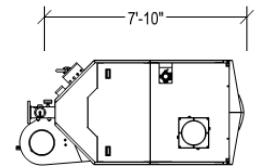
Engineering View, Impacts

Architectural – Yes, HVAC really does need all that space



17,500 lbs

3200 MBH Gas Boiler
-vs-
Same capacity AWHP



4,000
lbs

Engineering View, Impacts

Electrical - Strategies

- Reduced Lighting Power Density (LPD)
 - LED Lights
 - Human centric lighting
- Advanced Lighting Controls:
 - Daylighting controls
 - Addressable zones/fixtures
- Controlled Receptacles (50% of installed receptacles to be controlled by timers)
- Energy Metering:
 - Source Energy Metering
 - End Use Metering
 - Requires additional circuit
- Solar (PV)

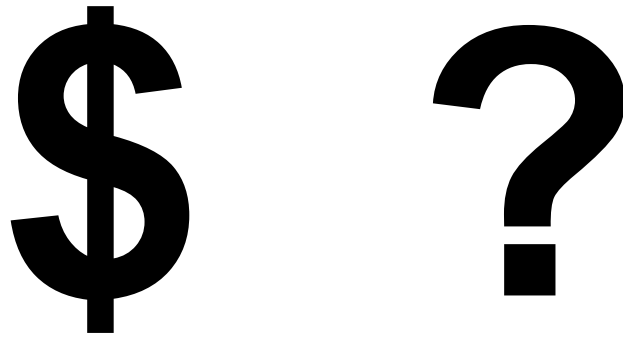


Engineering View, Impacts

Electrical - Impacts

- Decarbonization:
 - Use of fossil fuels prohibited or significantly limited use (e.g., backup source only)
 - Increase in electrical service size (depending on occupancy and use)
 - 25% increase for current Life Science project
 - Up to 200% for commercial cooking facility (restaurants)
 - Smaller projects may require transformer vault – depends on local provider limits

Engineering View, Cost and Schedule



Engineering View, Training and Operations



WHAT'S NEXT

Climate Solutions Now - Next Steps

MDE Draft plan to achieve 60% GHG Reduction by 2031 issue +/- June 2023

- Building Code draft report Dec 1, 2023
- PSC report-broader electrification Sep 2023
- BEPS draft regulations spring 2023
- Bldg Energy Trans Task Force recommend incentive targets for electrification

Legislative Initiatives 2023

Energy
Transportation
Planning
Preservation
Products





move MD toward clean energy

Offshore Wind Energy Resources Act (HB908/SB781)

- Approved 8500 MW goal – 4x current capacity

TF to Study **Solar Incentives** (SB 469)

- Boost Renewable Energy Sourcing - Commercial and Residential. Report Due 12.15.2023

Community Solar Energy Generating (HB908/SB781)

- Made program permanent – provides LMI benefit

Maryland **Energy Storage** Program (HB910/SB697)

- PSC establish program & set targets to deploy



Clean Trucks Act (HB230/SB224)

- Regs model Calif Clean Trucks Act, effective 2027
- Expand infrastructure, purchase offsets of cost difference

MEA Clean Transportation & Energy Act(HB550)

- Boosts grants/incentives for ZEV/Charging – LMI flexibility

Residential Construction EV Charging(HB830/SB477)

- Requires EV ready new homes, MF resid report due Dec 1

EV Charging Reliability Act(HB803/SB834)

- Expands EV Pilot to install in MF dwellings in underserved communities. Requires specified uptime for stations.



S - CONSERVATION & PERFORMANCE

Maryland Sustainable Buildings Act (HB006/SB092)

- DGS standard to conserve energy & diminish bird impact

Public Utilities Performance Targets (HB169/SB 144)

- EMPOWER energy savings goals 24-26 from .53% to 1%
- Task force establish reporting/planning for LMI retrofits.

Energy Effic & Conservation Plans (HB1035/SB905)

- Use of EMPOWER funds for-beneficial electrification

MD Building Performance Standards (HB1134)

- Required Dept of Labor to adopt standards that require all energy demands met w/o fossil fuels – some exceptions

PLANNING - SMART GROWTH LEGISLATION

Equitable & Inclusive TOD Act (HB012/SB151)

- Shifts scoring from Sec of Transport to Smart Growth Subcabinet to enhance service to underserved areas
- \$5M annual fund to support jurisdictions with TOD

Accessory Dwelling Unit Policy TF(HB239/SB382)

- Task Force - survey laws re: ADU development/operation.

Nat Res Greenspace Equity Program(HB503/SB923)

- Establish program to enhance underserved communities
- Start \$5M in 2025 and grow to \$10M annually



PRESERVATION

MHT Historic **Preservation Loan Fund**(HB674/SB425)

- Transfer MHT loan fund to a nonprofit to enable greater flexibility of fund allocation to restore historic properties

Credit for **Catalytic Revitalization Projects**(SB 783)

- Extends Catalytic Tax Credit to 2035.
- Requires MD Smart Growth Subcabinet to study/make recommendations on MD historic complexes
- Allows greater flexibility of use and transfer of these tax credits

PRODUCTS – CHOICES AND RESPONSIBILITY

Buy Clean Maryland Act (HB261/SB424)

- Requires Cement producers to submit EPD by 12.01.2024
- DGS to establish min Global Warming Potential 1.1.2026
- Develop EPD fund - develop, standardize, make transparent

Maryland Paint Stewardship Program (HB255/SB260)

- Requires paint producers to submit a plan to collect, transport and process postconsumer paint by 7.01.2024

Synthetic Turf Chain of Custody (HB299)

- Requires DOE to establish a system to track chain of custody on synthetic turf fields 5,000sf or larger

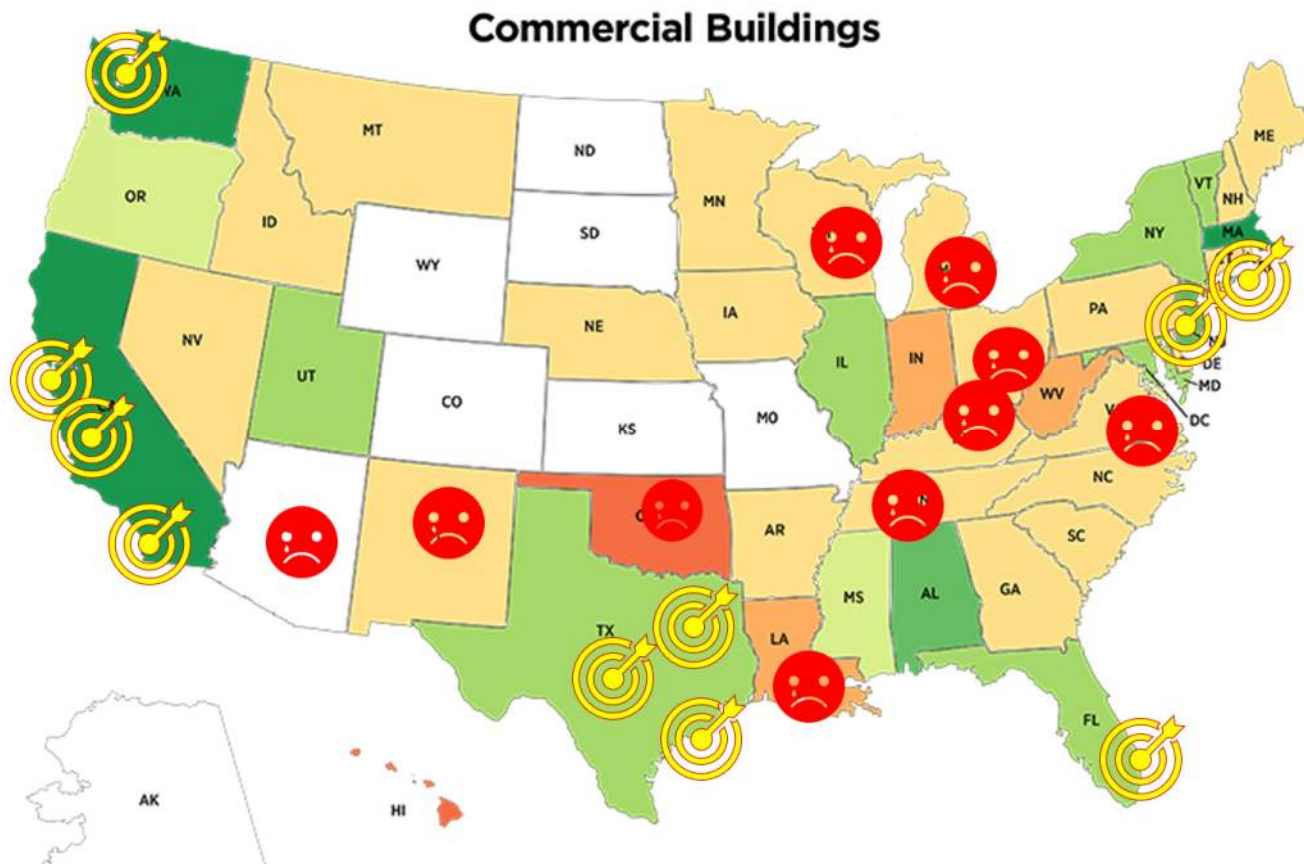
Educator, Environmentalist, Union Leader, Senator, Paul Pinsky Now Gets to Turn His Climate Ideals Into Action

The long-time liberal state senator from Prince George's County, an outspoken environmental critic of former Republican Gov. Larry Hogan, takes over the Maryland Energy Administration in the Moore administration.

 By Aman Azhar 
April 24, 2023



Are strong energy codes bad for business?



Courtesy of Seattle DC&I

Questions?



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