

SB861.ESLC Support letter.pdf

Uploaded by: Carol Bean

Position: FAV



March 6, 2024

Maryland General Assembly
Education, Energy, and the Environment Committee
2 West Street
Miller Senate Office Building
Annapolis, Maryland 21401

Dear Mr. Chairman and Members of the Committee,

The Eastern Shore Land Conservancy (ESLC) is Maryland's leading regional land trust operating in Cecil, Kent, Queen Anne's, Caroline, Talbot, and Dorchester counties. ESLC advocates for more research, better planning, greater oversight, and appropriate incentives and mitigation measures for new high-energy industries such as data centers which have potentially significant land-use implications for rural areas.

ESLC **supports** the passage of **Senate Bill 861: Public Utilities – High-Energy-Use Facilities – Greenhouse Gas Emissions Reductions** advanced by Senator Karen Lewis-Young and Senator Ron Watson. The bill establishes a timeline for greenhouse gas reduction targets and reporting requirements for certain high-energy use facilities, such as data centers.

By some accounts, the "Cloud" now has a greater carbon footprint than the airline industry with explosive growth forecast in the near future. A single data center can consume the equivalent electricity of 50,000 homes and require uninterrupted power sources which usually means, at this point in time, massive banks of diesel-powered generators.

While Maryland seeks ways to take advantage of the potential economic benefits from these new industries, it must be cognizant of the environmental impacts of these high-energy users and find ways these projects do not undermine the state's climate goals.

SB 861 begins to do just that and we recommend passage of this legislation. Thank you for your consideration.

Sincerely,

A handwritten signature in dark ink, appearing to read "S.K. Kline".

Steven K. Kline
President



SB0861 - High-Energy-Use Facilities - Greenhouse G

Uploaded by: Dave Arndt

Position: FAV

TESTIMONY IN SUPPORT OF SB0861
“High-Energy-Use Facilities - Greenhouse Gas Emissions
Reductions”

Education, Energy, and the Environment

March 7, 2024

Dear Mr. Chair and Committee Members:

Hello, my name is Dave Arndt, a resident of Baltimore MD, a Climate, Environmental and Social Justice advocate, a chemical engineer, a former Director for BP Solar in Frederick MD and retiree of The National Institutes of Health. Thank you for allowing our testimony today in support of SB0861. I urge you to vote favorably on SB0861.

Data centers are the foundation of the internet and our modern IT infrastructure. In light of future growth in data centers, including “hyperscale” data centers to support new technologies like AI and bit coin operations, Maryland faces significant challenges in managing this new industry while pursuing its goals towards protecting public health, resource sustainability and reducing climate emissions. In the same manner, cultivating cannabis is also a very high energy intensive use operation that presents issues that complicate and perhaps prevent us from achieving our Green House Gas (GHG) emission goals.

Maryland simply cannot meet its goals when we are looking at facilities that can use as much power as the City of Baltimore. It only makes sense that these facilities become partners with the state of Maryland to achieve our goals together. The way to structure this partnership is to establish limits of GHG emission for these facilities. This way the high emitters of GHG are paying their fair share and we, Maryland residents, are not subsidizing these industries while we make our own investments in clean energy.

SB0861 represents a common-sense approach to managing data centers by imposing yearly goals that can readily be achieved with current technologies which put the onus of climate pollution on the organization responsible for GHG emissions.

For all of these reasons, I strongly support SB0861 and urge a **FAVORABLE** report in Committee.

SB 861 testimony High Energy Use Facilities.pdf

Uploaded by: Debbie Cohn

Position: FAV

Committees: Education, Energy and the Environment
Testimony on: SB861- Public Utilities – High-Energy-Use Facilities –
Greenhouse Gas Emissions Reductions
Submitting: Deborah A. Cohn
Position: Favorable
Hearing Date: March 7, 2024

Dear Chair Feldman and Members of the Committee:

Thank you for considering this testimony in support of SB861.

Problem: Maryland has committed to reducing greenhouse gas emissions (GHGs) to 60% of 2006 levels by 2031 and transitioning to a net-zero economy by 2045. Yet as Maryland’s Climate Pollution Reduction Plan showed, these are challenging goals.

High energy use facilities, whether providing electronic data processing or hosting services ([data centers](#)), or [cryptocurrency mining](#) and related operations, or [cultivating cannabis](#), make achieving Maryland’s GHG reduction goals and maintaining grid reliability much more difficult. According to [The Economist](#), the International Energy Agency has estimated that “data centers account for between 1.5% and 2% of global electricity consumption, roughly the same as the entire British economy [and that electricity consumption] is expected to rise to 4% by 2030.” RMI, a consultancy, estimates U.S. [cryptocurrency activity](#) is responsible for emitting “from 25 to 50 million tons of CO₂ each year, on par with the annual emissions from diesel fuel used by U.S. railroads.” The [National Conference of State Legislatures](#) (NCSL) characterizes electricity consumption of cannabis grow houses as “staggering when compared to business and residential use.” It indicated that in 2015, “the average electricity consumption of a 5,000-square-foot indoor facility in Boulder County was 41,808 kilowatt-hours per month, while an average household in the county used about 630 kilowatthours.”

Still, Maryland needs to build its economy. The Maryland Comptroller’s [State of the Economy report](#) showed that despite many positive economic indicators, “Maryland’s economic growth effectively stalled in 2017 and...has been stagnant ever since. “From between the fourth quarter of 2016 to the first quarter of 2023, Maryland’s Gross Domestic Product (GDP)...has grown 1.6%, compared with 13.9% for the entire U.S. during the same period.” Maryland must do better. Indeed, high energy use facilities, particularly technology hubs that support safe and reliable storage of data, may support significant economic growth in Maryland. And Governor Moore has already prioritized growth of this industry in Maryland.

As Maryland welcomes new energy intensive industries, however, we must be mindful to ensure that their development in Maryland is consistent with our meeting our goals to protect environmental resources and reduce GHG emissions. SB861 addresses how Maryland can welcome these industries without undermining our GHG reduction goals.

Solution: SB861 would require a person that owns, operates, or controls (“person in charge”) a high energy use facility (facility) to ensure that greenhouse gas (GHG) emissions associated with

the electricity used by the facility are reduced from their baseline emissions levels by specified percentages. The reduction targets would start in 2027 (60% reduction), and require zero GHG emissions by 2040. The bill would cover data center, cryptocurrency and cannabis cultivating facilities with a base load of at least 10MW. The high use energy facilities would need to achieve these targets without relying on carbon offsets or renewable energy credits. In other words, they would need to reduce their fossil-fuel based energy consumption and enter into power purchase agreements or other contracts for supplying emission-free electricity to the facility.

SB861 would require the Public Service Commission to verify reports submitted by the person in charge to ensure that the facility is making adequate progress toward achieving the GHG reduction goals. And SB861 imposes certain penalties for non-compliance.

This bill does not address the impact of increased demand on electricity prices or that high energy use facilities may complicate and perhaps increase the cost of the State's ability to compete for offshore wind and meet its solar carve-out goals under the Renewable Portfolio Standards. Those and other ramifications of welcoming high use energy facilities will need to be addressed elsewhere.

But SB861 is certainly a good beginning and for that reason, I urge the Committee to issue a **FAVORABLE** report for SB861.

Thank you.

Deborah A. Cohn

SB861-IndivisibleHoCoMd_FAV-EFixsen.pdf

Uploaded by: Elizabeth Fixsen

Position: FAV



SB861

Public Utilities - High-Energy-Use Facilities – Greenhouse Gas Emissions Reductions

Testimony before Energy, Education, and the Environment Committee

Hearing March 7, 2024, 1:00 p.m.

Position: FAVORABLE

Dear Chair Sen. Feldman and Vice-Chair Sen. Kagan, my name is Elizabeth Fixsen, and I represent the 700+ members of Indivisible Howard County, an active member of the Maryland Legislative Coalition (with 30,000+ members). We are providing written testimony today in support of SB861, requiring facilities using high levels of energy to reduce greenhouse gas emissions according to certain targets. We thank Senators Young and Watson for sponsoring this bill.

A high-energy-use facility is one that (1) uses a base load of 10 or more megawatt hours, and (2) primarily provides electronic data processing or hosting services or producing or processing cryptocurrencies or cultivating cannabis.

The bill establishes a baseline emissions level of 0.428 metric tons of carbon dioxide equivalent per megawatt-hour of electricity used by a high-energy-use facility. Then it establishes a timeline of reduction of emissions: 60% by 2027; 80% by 2030; 90% by 2035; and 100% by 2040. It prohibits owners from achieving reductions by using carbon offsets or renewable energy credits.

According to C&C Technology Group, data centers consume about 1,000 kWh per square meter--about ten times the power consumption of a typical American home. According to S&P global, bitcoin mining companies use powerful computers housed in sprawling datacenters to verify, process and record cryptocurrency transactions. A single bitcoin transaction using the "proof-of-work" process today requires 705 kWh of electricity. According to Pullman & Comey, growing four pounds of marijuana at an indoor facility can consume as much electricity as the average American home uses in a year. Cannabis growth now accounts for 1% of all U.S. electricity consumption per year, and this consumption is expected to increase to 3% by 2035.

The state of Maryland is not immune from the effects of climate change; for example, we have seen increases in flooding along the Chesapeake Bay. It is imperative that every possible measure is taken to reduce carbon dioxide emissions in order to combat climate change and protect the whole planet.

Thank you for your consideration of this important legislation.

We respectfully urge a favorable report.

Elizabeth Fixsen
Savage, MD

Testimony-SB0861-High Energy Use- Favorable.pdf

Uploaded by: Elizabeth Law

Position: FAV

Testimony Outline for Senate Bill 861

Public Utilities – High Energy – Use Facilities – Greenhouse Gas Emissions Reductions

March 7, 2024

Education, Environment and Energy Committee

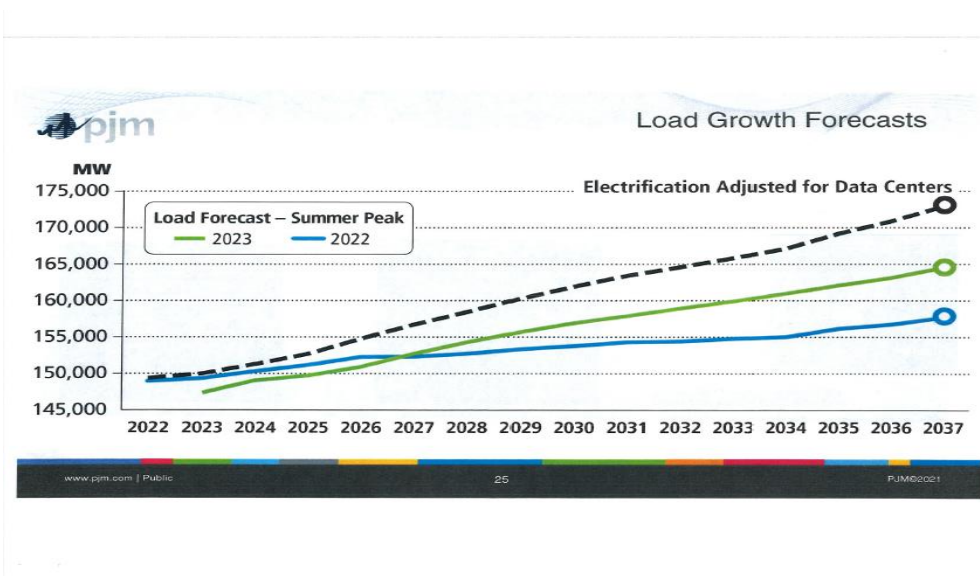
Opinion: Favorable

Dear Chair Brian J. Feldman and Committee Members,

The Fellowship of Scientists and Engineers supports SB 861.

I am the Chair of the Fellowship of Scientists and Engineers and an electric power engineer with a Masters in Electric Power Engineering from Rensselaer Polytechnic Institute. I analyzed the NYC grid for Con Edison and investigated blackouts for the Federal Energy Regulatory Commission. As an electric power engineer, it is my opinion that SB 861 is necessary legislation to help transform high energy industries from polluting to sustainable.

We scientists and engineers are constituents of Senator Karen Lewis Young. We are not against datacenters. However, we encourage our elected representatives to promote the use of renewable energy by the industry that will be the biggest consumer of energy in the state. PJM, our regional transmission system operator, projects that the “electrification adjusted for data centers” will drastically accelerate the region’s power requirements as seen in this PJM load growth forecast presented to the Maryland Education, Energy and Environment Committee on September 12, 2023. (See page 13 of the presentation.)



Indeed, Governor Moore’s administration in June 2023, unveiled a wide-ranging plan to achieve a 60% cut in the state’s greenhouse gas emissions by 2031. How will this be

achieved if the enormous increase in power demanded by hyperscale datacenters and other new high use industries is provided by fossil fueled power plants?

SB 861 is a response to dealing with this enormous increase in power demand while complementing current Maryland laws such as the *Climate Solutions Now Act*. Furthermore, SB 861 reflects actions by the Federal Energy Regulatory Commission (FERC) and PJM to encourage a continuous significant increase in the percentage of sources of renewable energy.

FERC Order 2023, issued November 6, 2023, details improved processes and requires transmission providers to proceed quickly to connect generating facilities that do not emit greenhouse gases to the transmission system.¹

PJM is incorporating methods to bring more renewable energy into the system. Jeff Shields, PJM spokesman recently noted, “More than 90% of the projects are renewable energy or energy storage”.²

Electric Power by the numbers:³

Maryland is a net importer of power. Its existing installed capacity is about 11,000 megawatts while PJM’s installed capacity is over 184,000 megawatts (making Maryland’s contribution about 6%). At present the energy mix of both Maryland and the PJM region is dominated by power generated by fossil fuel and nuclear power plants, but this is about to change.

When a generator wishes to connect to the transmission system in any region, the request for interconnection is entered in a “queue”. Per FERC Order 2023, applicants that will produce renewable power will be given priority in the queue, including PJM’s.

PJM’s queued capacity as of April 1, 2023, is over 252,000 megawatts, of which only 5,500 megawatts is expected to be natural gas generation. Therefore, renewable power will dominate new interconnections in keeping with the objectives of SB 861. It is this renewable power that will be accessible to high energy users such as hyperscale datacenters. At present, Quantum Loophole in Frederick County is the only hyperscale datacenter campus being planned for Maryland. The PJM Regional Transmission Planning

¹ “FERC issues rule to speed grid connections for storage, renewables, other generators amid 2-TW backlog” (<https://www.utilitydive.com/news/ferc-interconnection-rule-queue-renewable-energy/689289/>)

² <https://www.utilitydive.com/news/pjm-outlook-2024-capacity-market-reform-rmr-transmission-planning/708811/>

³ In September 2023, a delegation of the Maryland Senate Education, Environment and Energy Committee were given a presentation by PJM at its headquarters. The data cited below is from that presentation.

report projects providing an initial 1500 megawatts by 2027/2028, (See Data Center Component Load for FirstEnergy (APS) below.)

Table 1. 2027/28 Case Summer Zonal Load for Dominion and FirstEnergy

Study Case	Summer Zonal Load (MW)	
	Dominion/NOVEC	FirstEnergy (APS)
2022 Peak	20,424 (forecast)/21,156 (actual)	8,675 (forecast)/8,412 (actual)
2027 RTEP	23,681	8,780
2027 Baseline	26,393	9,607
2027 High Load Growth	28,893	10,559
2028 RTEP (2023 Load Forecast)	28,705	9,568
Data Center Component Load (modeled in cases)	~5,700	~1,500

PJM RTEP – 2022 Window 3, page 5, [20231205-2022-rtep-window-3-reliability-analysis-report.ashx](https://www.pjm.com/2023/12/05/2022-rtep-window-3-reliability-analysis-report.ashx) ([pjm.com](https://www.pjm.com))

Projections for Quantum Loophole Datacenter Campus:

Quantum Loophole CEO Josh Snowhorn has estimated that the campus could require 2400 to 3000 or more megawatts at full buildout in 15 years. Consider the greenhouse gas emissions that could be avoided if this mega scale amount of power were emission free.

It will take an unknown number of years to build the projected renewable generation and interconnect it to high energy use industries via bulk power transmission lines. As an engineer, it has been my experience that projects often go past the original completion date. During that construction and interconnection time, data centers and other high energy use industries can arrange for power purchase agreements (PPAs) of renewable energy.

To reduce the amount of power required from the PJM system, high energy use industries can invest in solar arrays onsite or on an adjacent site. As technology advances fuel cells, flow batteries or heat recovery to steam systems will become available. Further power demand reduction can be achieved through sustainable building and lighting practices.

We scientists and engineers ask that you protect our environment, honor our laws, and encourage the development of renewable power by approving SB 861.

Elizabeth Law, Chair,
 William Steigleemann, Vice Chair
 Fellowship of Scientists and Engineers

Public Utilities - High-Energy-Use Facilities - Gr

Uploaded by: Ernesto Villasenor

Position: FAV

Committee: Education, Energy, and the Environment
Testimony: Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions (SB 861)
Position: Favorable
Hearing Date: March 7, 2024

Ernesto Villaseñor, Jr., J.D
Chesapeake Climate Action Network Action Fund

On behalf of the Chesapeake Climate Action Network Action Fund, we offer our favorable support for Senate Bill 861, which addresses the urgent need to mitigate greenhouse gas emissions associated with high-energy-use facilities, and urge the committee for a favorable finding. As an organization dedicated to promoting environmental sustainability and combating climate change, we believe that this legislation represents a crucial step towards achieving our shared goals.

Subtitle 10 of Article – Public Utilities offers a comprehensive approach to address emissions from high-energy-use facilities. By defining terms like "Baseline Emissions Level" and "High-Energy-Use Facility," the bill establishes a clear regulatory framework. Its inclusive definition ensures accountability for facilities with substantial energy demand, engaging in activities such as electronic data processing, cryptocurrency production, and cannabis cultivation. This precision ensures all stakeholders are accountable for their environmental impact.

Senate Bill 861's ambitious reduction targets for greenhouse gas emissions, including a 60% reduction by 2027 and ultimately 100% by 2040, demonstrate a strong commitment to long-term sustainability. Additionally, the prohibition on the use of carbon offsets or renewable energy credits to meet the reduction targets underscores the importance of genuine emissions reductions. This provision ensures that high-energy-use facilities are incentivized to adopt truly sustainable practices rather than relying on temporary or superficial measures to fulfill their obligations.

Furthermore, the requirement for annual reporting to the commission ensures transparency and accountability in tracking progress towards emission reduction goals. By mandating the submission of comprehensive reports detailing emissions estimates, reduction goals, and electricity supply contracts, the legislation enables rigorous oversight and ensures that progress towards emission reduction targets is accurately monitored and evaluated.



In conclusion, Senate Bill 861 represents a significant opportunity for Maryland to demonstrate leadership in the fight against climate change. By implementing robust measures to reduce emissions from high-energy-use facilities, the state can make meaningful progress towards a more sustainable and resilient future. We urge the committee to support this vital legislation for the benefit of current and future generations.

Thank you for your attention to this important issue.

CONTACT
Ernesto Villaseñor, Jr., JD | Policy Manager
Chesapeake Climate Action Network Action Fund
ernesto@chesapeakeclimate.org | 310-465-6943



Mobilize Frederick Testimony SB 861.pdf

Uploaded by: Kathy Kinsey

Position: FAV



March 6, 2024

Committee: Energy, Education, and Environment

Testimony on: SB 861, High-Energy-Use Facilities, Greenhouse Gas Emissions Reductions

Organization: Mobilize Frederick

Submitting: Barb Trader, President, Board of Directors

Position: Favorable

Hearing Date: March 7, 2024

Dear Chair and Committee Members:

Thank you for the opportunity to comment on Senate Bill 861, Public Utilities – High-Energy-Use Facilities – Greenhouse Gas Emission Reductions. Mobilize Frederick urges the Committee to issue a **favorable** report on SB 681.

Mobilize Frederick is a non-profit organization of Frederick City and County residents formed to assist with implementation of 40 climate action recommendations contained in a 2021 *Climate Response and Resilience Report* prepared for the City and County.

Demand for data centers is on the rise and Maryland policymakers are actively encouraging growth of this sector through tax incentives and proposed relaxation of permitting requirements.

Data centers use hundreds of megawatts of energy. An approved data center site in Frederick County is projected to use between 230 – 250 megawatts of power when it is fully built out. Furthermore, data centers require a large number of backup diesel generators to power the facility in the event the power supply from the grid is interrupted. If the energy used to power the data center is generated from carbon-intensive energy sources, or the backup diesel generators are called into operation, greenhouse gas emissions could increase.

To the maximum extent feasible, these energy intensive data centers should be powered by clean renewable energy sources to ensure that Maryland achieves its greenhouse gas emission reduction goals. By mandating greenhouse gas emission reductions from data centers and other high energy use facilities to achieve a 100 percent reduction from baseline emissions by 2040 and establishing reporting requirements to track compliance, SB 861 will incentivize the use of clean renewable energy sources and keep Maryland on the path to net zero greenhouse gas emissions by 2045.

For these reasons, Mobilize Frederick urges the Committee to issue a **favorable** report on SB 861.

Barb Trader
President, Board of Directors
Mobilize Frederick

SB861 (3).pdf

Uploaded by: Kevin Sellner

Position: FAV

SB 861

I am writing this comment in support of SB 861, “Public Utilities – High–Energy–Use Facilities – Greenhouse Gas Emissions 3 Reductions.” The state previously committed to rigorously reducing greenhouse gases in the Climate Solutions Now Act and hence, requiring major energy users to meet specific standards in emissions for the coming 26 years is a reasonable and needed mandate that should be enacted and enforced. As an invited co-author of a 243 page climate report for Frederick County and City listing 40 recommendations, technical details on the impacts of the practices put forward, and public and private funding sources, emission reductions are critical to protect air and water quality, public health, local economy, and maintenance of a viable and productive natural community. SB 861 emission reduction requirements is one critical step in that endeavor. If we do not meet the state’s identified goals, multiple natural hazards will increase as 1) floods destroy public and private infrastructure; 2) water-damage creates indoor medical catastrophes derived from black mold or pathogen-rich sewage backing up in basements; 3) high temperature extremes jeopardize health of outside workers; 4) select for toxin-producing ‘algae’ in our waterways, lakes, and drinking water reservoirs that will require huge expensive upgrades to drinking water facilities (\$137M in Toledo, OH, \$10,000/d in operational costs); and 5) intense storms and extended droughts become the norm for our food-producing communities, constraining maintenance of productive, profitable, yet affordable crops and animals. All of these will have devastating impacts on the lower income residents of Maryland as these individuals and families have few discretionary funds nor adequate insurance to cover these high emission-generated climate impacts.

Limiting emissions now falls to you, our leaders. Please be forward-looking and initiate this first essential step for oversight of the largest energy consumers in our state. We can do this but we must start now with the passage of SB 861 to reduce emissions as we move to a green economy that benefits everyone and our natural resources.

Kevin Sellner, Ph.D.
102 E. 5th Street
Frederick, MD 21701

SB861 - SUPPORT - MDLCV - .pdf

Uploaded by: Kristen Harbeson

Position: FAV



MARYLAND
LEAGUE OF
CONSERVATION
VOTERS

March 7, 2024

Kim Coble
Executive Director

2024 Board of
Directors

Lynn Heller, Chair
The Hon. Nancy Kopp,
Treasurer
Kimberly Armstrong
Candace Dodson-Reed
Verna Harrison
Melanie Hartwig-Davis
Charles Hernick
The Hon. Steve Lafferty
Patrick Miller
Bonnie L. Norman
Katherine (Kitty)
Thomas

SUPPORT: SB861 - Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

Dear Chair Feldman and Members of the Committee:

Maryland LCV supports SB861 - Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions, and thanks Senators Lewis Young and Watson for their leadership on this issue.

The exponential expansion of ‘cloud’ storage for both personal and business use has led to a similar growth in the development of remote storage facilities that offers opportunities for new jobs and economic development in abandoned or underutilized industrial areas, shopping malls, and warehouses. Currently, the majority of these facilities are smaller, but the trend towards large “hyperscale” warehouses present significant challenges for Maryland as it seeks to attract this new industry while pursuing its goals towards resource sustainability and reducing climate emissions. As the state attracts new technologies, it must also simultaneously consider the state’s commitment to a 60% reduction in carbon emissions from baseline 2006 levels by the year 2031. In order to reach these goals all sectors of the economy must contribute.

While the General Assembly is simultaneously considering proposed legislation that would create an exemption for back-up generators, for critical infrastructure, includes data centers, SB861 seeks to ensure that new high-energy-use industries - including but not exclusive to data centers - contribute to the state’s climate goals by requiring that they aggressively reduce their greenhouse gas emissions, ultimately to a net-zero level by 2040.

Maryland LCV urges a favorable report on this important legislation.

NPCA Comments on SB0861_FAV.pdf

Uploaded by: Kyle Hart

Position: FAV



March 6, 2024

Senate Education, Energy, and Environment Committee
Maryland General Assembly
Room 2 West
Miller Senate Office Building
Annapolis, Maryland 21401

Re: SB0861: Public Utilities – High–Energy–Use Facilities – Greenhouse Gas Emissions Reductions

Chair Feldman and Members of the Senate Education, Energy, and Environment Committee:

Thank you for this opportunity to comment on SB0861 regarding greenhouse gas emissions reductions for high energy use facilities such as data centers. I write to you today to share our support on behalf of the National Parks Conservation Association (NPCA). NPCA is a nationwide nonprofit, nonpartisan organization dedicated to protecting and enhancing America’s national parks for present and future generations. We are proud to have more than 1.6 million members and supporters nationwide, with more than 32,000 of those members in Maryland.

As proposed, SB0861 is an important and necessary step as Maryland seeks to attract the data center industry while also working to uphold its commitments under the Climate Solutions Now Act. Data centers require a tremendous amount of energy to operate, and proper regulation and oversight of this industry is vital to ensuring Maryland continues to meet its carbon reduction goals.

In Virginia, data centers are currently consuming more than 3.5 gigawatts of electricity, more than 2.5 times the generation capacity of the Brandon Shores coal-fired power plant. There, the state’s leading electric utility, Dominion Energy, is predicting demand to rise to approximately 13 gigawatts in 15 years¹, more than double the amount of energy consumed by New York City on an average day². This explosive energy demand is threatening state and regional climate goals, as more natural gas is planned to be brought online and coal-fired power plants delay retirement to meet this surging energy demand.

In Maryland, data center complexes have currently been proposed near Monocacy National Battlefield Park and the Chesapeake and Ohio Canal National Historical Park. At the Quantum Loophole site, the company’s leadership is estimating their data center complex alone will require

¹ Virginia State Corporation Commission eFiling, Rebuttal Testimony of Virginia Electric and Power Company, Figure 2, Filed 9/5/23, <https://www.scc.virginia.gov/docketsearch/DOCS/7%25h501!.PDF>.

² New York City, Mayors Office of Climate and Environmental Justice, [https://climate.cityofnewyork.us/subtopics/systems/#:~:text=NYC%20uses%20about%20the%20same,of%20power%20\(NYISO%202022\)](https://climate.cityofnewyork.us/subtopics/systems/#:~:text=NYC%20uses%20about%20the%20same,of%20power%20(NYISO%202022)).

upwards of 3,000 to 5,000 MW of energy at peak demand³. This estimate alone should cause members of the General Assembly concerned about meeting our climate goals to understand the urgency of putting safeguards in place for this industry. The significant air and climate pollution from these data center developments could harm the visitor experience for both tourism and outdoor recreation at Maryland's national parks, as well as damage sensitive habitat for wildlife. It is vitally important that Maryland gets this issue right the first time around.

SB0861 would take an important step towards reducing carbon pollution, supporting grid stability, and Maryland's renewable energy goals. Simultaneously, the General Assembly is considering legislation that would result in exempting data center diesel backup generator complexes and other potential impacts from being reviewed by the Maryland Public Service Commission for a Certificate of Public Convenience and Necessity (CPCN), which we are opposed to. SB0861 would put the state of Maryland on a path towards leading the nation in sustainable data center development, and we applaud Senator Karen Lewis Young for her leadership on this important issue.

The visitors to Maryland's national parks and the millions who live in surrounding communities deserve that every effort is made to address and mitigate the impacts that would result from scaling data center development in Maryland. We look forward to working with you to enhance Maryland's economy while protecting its national parks for current and future generations.

Thank you,

Kyle Hart
Program Manager, Mid-Atlantic
202-400-1193 | khart@npca.org
National Parks Conservation Association

³ Data Center Revolution Podcast; Episode 81 - "I'm going Nuclear" with Josh Snowhorn; February 8, 2024; https://www.youtube.com/watch?v=y_aF4RpIHAA

SB0861 - High-Energy-Use Facilities - Greenhouse G

Uploaded by: Laurie McGilvray

Position: FAV



Committee: Education, Energy, and the Environment
Testimony on: SB0861 - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions
Organization: Maryland Legislative Coalition Climate Justice Wing
Submitting: Dave Arndt, Co-Chair
Position: Favorable
Hearing Date: March 7, 2024

Dear Mr. Chair and Committee Members:

Thank you for allowing our testimony today in support of SB0861. The Maryland Legislative Coalition Climate Justice Wing, a statewide coalition of nearly 30 grassroots and professional organizations, urges you to vote favorably on SB0861.

Data centers are the foundation of the internet and our modern IT infrastructure. In light of future growth in data centers, including “hyperscale” data centers to support new technologies like AI and cryptocurrency operations, Maryland faces significant challenges in managing this new industry while pursuing its goals towards reducing climate emissions, greening the electric grid, and protecting public health. In the same manner, cultivating cannabis is also a very energy-intensive use operation that presents issues that complicate and perhaps prevent us from achieving our Green House Gas (GHG) emission goals.

Maryland simply cannot meet its GHG reduction goals when facing the growth of facilities that can use as much power as the City of Baltimore. It only makes sense that these facilities become partners with the State of Maryland to achieve our goals together. The way to structure this partnership is to establish limits on GHG emissions for these facilities. This way, these high GHG emitting facilities are paying their fair share. Maryland residents should not subsidize these energy-intensive industries while making our own offsetting investments in clean energy. In addition, these industries cannot undermine or set back Maryland’s efforts to transition from dirty to clean sources of electricity and electrify the transportation and building sectors.

SB0861 represents a common-sense approach to managing data centers, cryptocurrency processing operations, and cannabis cultivation facilities by imposing yearly GHG emission goals that can readily be achieved with current technologies. which put the onus of climate pollution on the organization responsible for GHG emissions.

For all of these reasons, we strongly support HB0905 and urge a **FAVORABLE** report in Committee.

350MoCo
Adat Shalom Climate Action
Cedar Lane Unitarian Universalist Church Environmental Justice Ministry
Chesapeake Earth Holders
Chesapeake Physicians for Social Responsibility
Climate Parents of Prince George's
Climate Reality Project
ClimateXChange – Rebuild Maryland Coalition
Coming Clean Network, Union of Concerned Scientists
DoTheMostGood Montgomery County
Echotopia
Elders Climate Action
Fix Maryland Rail
Glen Echo Heights Mobilization
Greenbelt Climate Action Network
HoCoClimateAction
IndivisibleHoCoMD
Maryland Legislative Coalition
Mobilize Frederick
Montgomery County Faith Alliance for Climate Solutions
Montgomery Countryside Alliance
Mountain Maryland Movement
Nuclear Information & Resource Service
Progressive Maryland
Safe & Healthy Playing Fields
Takoma Park Mobilization Environment Committee
The Climate Mobilization MoCo Chapter
Unitarian Universalist Legislative Ministry of Maryland
WISE

SB 861 Public Utilities - High-Energy-Use Facilit

Uploaded by: Mariana Rosales

Position: FAV

Thursday, March 7, 2024

TO: Brian Feldman, Chair of the Senate Education, Energy, and the Environment Committee, and Committee Members

FROM: Mariana Rosales, The Nature Conservancy, Director of Climate; Cait Kerr, The Nature Conservancy, State Policy Manager

POSITION: Support SB 861 Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

The Nature Conservancy (TNC) supports SB 861 offered by Senators Lewis Young and Watson. This bill aims to ensure that new high-energy-use industries in Maryland take part in the state's climate goals. It requires that these industries' facilities aggressively reduce their greenhouse gas emissions, ultimately to a net-zero level by 2040. This aligns with Maryland's Climate Solutions Now Act goals of reducing GHG emissions by 60% from 2006 levels by 2031 and achieving net-zero statewide GHG emissions by 2045.

Maryland is experiencing more frequent extreme weather events with increasing intensity, including heavy rainfall, high tides, and record heat, causing significant damage to infrastructure, homes, and natural habitats. We cannot rely on business as usual. This bill promotes a more sustainable and resilient future for our state, requiring efficient energy usage and striving to reduce greenhouse gas emissions. The expected result is a more rapid, effective, and equitable transition to a net-zero economy.

TNC commends Senators Lewis Young and Watson for their leadership on this issue and their strong support for achieving our state's climate mitigation goals.

Therefore, we request a favorable report on SB 861.

Testimony in support of SB0861.pdf

Uploaded by: Richard KAP Kaplowitz

Position: FAV

3/07/2024

Richard Keith Kaplowitz
Frederick, MD 21703

TESTIMONY ON SB#0861 - FAVORABLE

Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

TO: Chair Feldman, Vice Chair Kagan, and members of the Education, Energy, and the Environment Committee

FROM: Richard Keith Kaplowitz

My name is Richard Keith Kaplowitz. I am a resident of District 3. I am submitting this testimony in support of SB#0861, Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

My Jewish faith teaches me a "...halakhah (Jewish law) prohibits wasteful consumption. When we waste resources we are violating the mitzvah (commandment) of *Bal Tashhit* ("Do not destroy"). It is based on Deuteronomy 20:19-20:

"When in your war against a city you have to besiege it a long time in order to capture it, you must not destroy its trees, wielding the ax against them. You may eat of them, but you must not cut them down. Are trees of the field human to withdraw before you into the besieged city? Only trees that you know do no yield food may be destroyed; you may cut them down for constructing siegeworks against the city that is waging war on you, until it has been reduced."

This law was expanded in later Jewish legal sources to include the prohibition of the wanton destruction of household goods, clothes, buildings, springs, food, or the wasteful consumption of anything ... The underlying idea of this law is the recognition that everything we own belongs to God. When we consume in a wasteful manner, we damage Creation and violate our mandate to use Creation only for our legitimate benefit.”

I am proud to support this bill sponsored by my Senator Karen Lewis Young. As Maryland moves to include Data Centers in our industrial mix, it must be acknowledged that mitigation of the harm Data Centers bring to the environment must be controlled and managed.

“Data centers are responsible for 2% of overall U.S. greenhouse gas emissions.² Three factors influence the carbon footprint of data centers”¹ MIT, in it’s study of the problems from Data Centers, notes :

¹ <https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/carbon-footprint-of-data-centers/>

“...the Cloud now has [a greater carbon footprint](#) than the airline industry. A single data center can consume the equivalent electricity of 50,000 homes. At 200 terawatt hours (TWh) annually, data centers collectively devour more energy than some nation-states. Today, the electricity utilized by data centers [accounts for](#) 0.3 percent of overall carbon emissions, and if we extend our accounting to include networked devices like laptops, smartphones, and tablets, the total shifts to 2 percent of global carbon emissions.”²

This bill will state that emissions reduction targets must occur when electricity is generated. It will mandate the Public Service Commission review and verify the reports submitted by persons that own, operate, or control a high energy use facility show this greenhouse gas emissions control will be present for their facility. It will protect the health and safety of residents near or adjacent to the site of these facilities. Environmental justice demands that we undertake strict controls so that the burden of these emissions do not fall onto minority and lower-income populations.

SB0861 makes a moral statement that Maryland stands for climate justice and environmental justice and is forward looking in its approach to energy generation.

I respectfully urge this committee to return a favorable report on SB#0861.

² <https://thereader.mitpress.mit.edu/the-staggering-ecological-impacts-of-computation-and-the-cloud/>

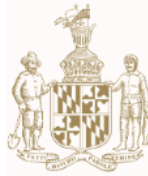
SB0861 High Energy-Use Facilities Cover Letter (wr

Uploaded by: Senator Karen Lewis Young

Position: FAV

KAREN LEWIS YOUNG
Legislative District 3
Frederick County

Committee on Education, Energy,
and the Environment



James Senate Office Building
11 Bladen Street, Room 302
Annapolis, Maryland 21401
410-841-3575 · 301-858-3575
800-492-7122 Ext. 3575
Karen.Young@senate.state.md.us

THE SENATE OF MARYLAND
ANNAPOLIS, MARYLAND 21401

The Honorable Senator Feldman, Chair
The Honorable Senator Kagan, Vice Chair
Education, Energy, and Environment Committee
Maryland Senate
Annapolis, MD

March 7th, 2024

Testimony in Support of SB0861: High Energy-Use Facilities

Chair Feldman, Vice Chair Kagan, and esteemed members of this committee,

SB861 establishes a proactive timetable for emissions reductions among high energy-using facilities. A high energy-use facility for the purposes of this bill is a facility that uses 10 or more megawatt-hours of electricity and has the primary purpose of data processing, producing cryptocurrency, or cultivating cannabis. These are fast-growing industries that require massive amounts of energy, water, and land to function¹. **High energy use facilities can require as much as 100 megawatts of energy capacity; enough to power 80,000 households².**

SB861 requires only that these facilities mitigate their environmental impact with a phased-in approach limiting the amount of greenhouse gas emissions released by the facility to a Baseline Emissions Level (0.428 metric tons of carbon dioxide equivalent per megawatt hour) and empowers the Public Service Commission with oversight authority.

As noted in Department of Legislative Services' 2024 Issues Paper, high energy-use facilities "could add more stress to the electric grid, increase

¹ 1 Bolthouse, Julie. "Mitigating Data Center Development's Impacts". Piedmont Environmental Council. <https://www.pecva.org/region/regional-state-national-region/general-assembly/mitigating-data-center-developments-impacts/>. August 18th, 2023.

² "How Much Energy Do Data Centers Really Use?" Energy Innovation. <https://energyinnovation.org/2020/03/17/how-much-energy-do-data-centers-really-use/>. March 17, 2020.

³ Department of Legislative Services. "Managing the Environmental and Energy Impacts of Data Centers". Issue Papers 2024 Legislative Session, Pg. 172.

greenhouse gas emissions if the energy used to power a data center is from carbon-intensive resources, and potentially increase electricity rates due to increased demand³.” Additionally, these facilities require power backups in case of shortages, often in the form of diesel generators. While each diesel generator is tested once a month, **there are numerous diesel generators per high energy-use facility — resulting in daily pollutant release.**

Climate-caused power shortages and additional high energy use facilities will put more stress on the grid, leading to the use of even more diesel back-up power emissions. Emissions would be a major setback for Maryland’s clean energy and air quality goals.

Right now, more and more taxpayer dollars are going to combat the impacts climate change is having on our infrastructure. We should at least be expending the same effort to prevent exacerbating the problems. Maryland’s Climate Solutions Now act requires us to achieve a 60% reduction in overall emissions by 2031 and 100% emissions reduction by 2045. SB861 will ensure that these facilities are built and operated with Maryland’s emissions goals in mind and do not undermine Maryland’s Climate Solutions Now Act. I urge a favorable report.

Sincerely,



Senator Karen Lewis Young

SB0861_High-Energy_Use_ClimateCC.pdf

Uploaded by: Sonia Demiray

Position: FAV



Testimony Supporting SB0861

Public Utilities – High-Energy-Use Facilities- Greenhouse Gas Emissions Reductions

Senate Education, Energy, and the Environment Committee

Thursday, March 7, 2024

Position: FAVORABLE

Dear Chair Feldman and Members of the Committee,

My name is Sonia Demiray, I am the co-founder of the Climate Communications Coalition, a member of the Mid-Atlantic Justice Coalition and the climate Forest Campaign -among others-, and a resident of Frederick County.

Our group fully endorses SB0861, introduced by Senators Lewis Young and Watson, to ensure that all high energy use facilities –no exceptions- reduce their emissions to match the goals of the State. During this climate emergency, it is key that everyone pull their weight, in order to meet much needed emission reductions and avert the worst of the climate crisis. As we work together to dramatically reduce our carbon footprint, nobody should be able to continue polluting and simply purchase carbon credits to offset their emissions. We don't have time to waste with carbon trade schemes that have opened loopholes for polluting and profitable industry to simply purchase credits (or plant trees) and not clean up their emissions. These loopholes must be closed and SB0861 is a step in the right direction.

The Climate Communications Coalition wholeheartedly endorses the proposal that any high-energy-use operation or facility, no matter what they produce or manufacture, must reduce their emissions as stated:

- By 60% by 2027 over emissions from 2022
- By 80% by 2030
- By 90% by 2035
- 100% by 2040

Nobody should get a free ride or offset emissions in the process of climate alerting emissions, especially not the very profitable high-energy use facilities.

Thank you.

###

Sugarloaf Itr SB 861.pdf

Uploaded by: Stephen Black

Position: FAV



SB 861: High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

Position: SUPPORT

Date: March 7, 2024

Contact: Steve Black, Sugarloaf Alliance

Sugarloaf Alliance requests a **FAVORABLE** report on SB 861: High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions, from the Education, Energy, and Environment Committee.

The GHG emission reduction requirement in SB 861 will ensure that this new and important industry is in synch with Maryland's statewide climate policy goals. The disclosures required by the bill will ensure public accountability and further the State's environmental justice aspirations.

We are not against data center development. Just like the printing press, the telephone, and indoor plumbing, the modern data center provides a valuable service. And just like those earlier major industrial developments, data centers come with a host of impacts that must be mitigated.

Data centers consume enormous amounts of power. Even a modest size facility uses the same power as thousands of homes. In Virginia, the data center industry accounted for more than 20% of Dominion Energy's 2022 sales.¹ According to PJM, the regional grid operator, data center power requirements could cause Virginia's electrical demand to double by 2040.²

New data centers in Maryland could, without appropriate regulation, eclipse all our climate goals. In Frederick County alone the Quantum Loophole project at full buildout is expected to draw 3 to 5 gigawatts of power. This is the equivalent of adding 2 to 4 more Baltimores to Maryland's power consumption. Under current policy only a fraction of this new energy will be provided by renewable sources.

¹ https://s2.q4cdn.com/510812146/files/doc_financials/2022/q4/2023-02-08-DE-IR-4Q-2022-earnings-call-slides-vTC-Final.pdf

² Fanger, Ella. "The Dirty Energy Fueling Amazon's Data Gold Rush" *The Nation*. 2/22/2024.



SUGARLOAF ALLIANCE

A study prepared by the Frederick County Division of Energy & Environment shows that emissions from even the first half of the Quantum project will eclipse all of the county's GHG emission reduction efforts of the last 19 years.³ Just 2 gigawatts of new power demand will add 2.8 million metric tons of CO2 equivalent to the atmosphere...the impact of 500,000 to 600,000 new homes.

The amount of electrical power needed by data centers will dwarf that used by most other industries and existing households. Without urgently needed, common sense legislation like SB 861, every data center development in Maryland will move the state backwards in its critical climate and environmental goals and efforts.

We respectfully request a **FAVORABLE** report from this Committee on SB 861.

Respectfully submitted,

Steve Black
President
Sugarloaf Alliance

³ <https://frederickcountymd.gov/DocumentCenter/View/348061/August-2-DEE-Deck>

Earthjustice Support Letter SB 861.pdf

Uploaded by: Susan Miller

Position: FAV



March 6, 2024

Chair Brian J. Feldman
Members of the Senate Education, Energy, and the Environment Committee

Re: Earthjustice support for SB 861:
Public Utilities – High-Energy-Use Facilities –
Greenhouse Gas Emissions Reductions

Earthjustice¹ supports the passage of SB 861. This legislation would require high-energy-use facilities (as defined in the bill) to gradually reduce the greenhouse gas emissions associated with the electricity use of the facility over a period of years.

Under the 2022 Climate Solutions Now Act, Maryland is required to reduce greenhouse gas emissions by 60 percent from 2006 levels by 2031 and achieve net-zero emissions by 2045. The explosive growth of high-energy-use facilities represents a major challenge to achieving the clean energy future mandated by Maryland law. These facilities consume quantities of electricity so vast that they have begun to tax entire energy grids and could exacerbate the climate crisis. Increasingly, Maryland residents will be asked to compromise on Maryland’s clean energy goals in order to meet the massive electricity demand caused by a few private industries. SB 861 simply holds high-energy-use facilities responsible for their contribution to the increase in greenhouse gas emissions in Maryland.

These problems are illustrated by the current situation in Virginia. Data center development in Northern Virginia has been accelerating for years. As of late 2022, data centers accounted for 21% of Dominion Energy’s electricity sales in Virginia. Disturbingly, Dominion’s Integrated Resource Plan filed in 2023 uses this anticipated load growth from data centers as the rationale for leaving in place existing fossil-fuel generation (which would have been retired) and as a justification for the construction of a new 1000 MW gas-fired generating station.

A very serious concern is the impact of the use of polluting diesel back-up generators by the high-energy-use facilities. Data center campuses are expected to use thousands of diesel backup generators if the construction of all the planned facilities is completed. For example, Aligned Data Center recently requested an exemption from the Maryland Public Service Commission for 168 diesel emergency engine-generators—rated at 3 megawatts (“MW”) each—for the *first phase* of its five-phase construction plan. Thus, it is reasonable to assume that this one facility will contain approximately 840 diesel generators.

¹ Earthjustice is a non-profit public interest environmental law organization that represents other non-profits free of charge.

Importantly, while these generators are labelled “emergency,” the generators are not limited to operating only during emergencies. Each generator must be operated for an hour once a month for testing and maintenance. Thus, for the proposed Aligned Data Center alone, twenty-eight diesel generators will be operated for an hour every day. Of course, this high-energy-use facility is just one of several expected to be constructed in Maryland in the coming decade. This incredible and potentially disastrous increase in greenhouse gas emissions needs to be addressed if Maryland is going to achieve the mandates set forth in the Climate Solutions Now Act.

Assuming 1000 3 MW generators, each operating 1 hour a month, these diesel generators would be operating 12,000 hours a year and producing 36,000 MW. The national average carbon dioxide output rate for electricity generated in 2021 was 852.3 lbs CO₂ per megawatt-hour (EPA 2023a), which translates to about 919.1 lbs CO₂ per megawatt-hour for delivered electricity, assuming transmission and distribution losses of 7.3% (EIA 2022b; EPA 2023b). So over 33 million pounds of CO₂ would be emitted by 1000 3 MW generators each year. This increased level of CO₂ emissions must be viewed as significant.

Currently, there is no incentive for high-energy-use facilities to lessen their greenhouse gas emissions. Given the impact of diesel generator use on air quality, the increased reliance on these polluting backup generators and high-energy-use facilities massive use of electricity in general, the General Assembly must put in place a mechanism to counteract the substantial increase in greenhouse gas emissions that will occur.

Maryland will potentially undergo a massive economic, technological, and environmental upheaval, all centered around the activities of a few high energy using facilities. The explosive growth of these facilities represents a major challenge to achieving the climate mandates set forth in Maryland law. SB 861 represents an important tool to address the consequences of the growth in high-energy-use facilities while not impeding that growth.

Finally, Earthjustice thanks Senators Lewis Young and Watson for their leadership on this important issue.

Earthjustice strongly urges a favorable report for SB 861.

Thank you in advance for your support. Should you have any questions, please contact me at smiller@earthjustice.org.

Respectfully submitted,



Susan Stevens Miller
Senior Attorney, Clean Energy Program
Earthjustice

SB861-Pavlak-FAVWA-High-Energy-Use Facilities.pdf

Uploaded by: Alex Pavlak

Position: FWA

March 7, 2024

SB0861 - High–Energy–Use Facilities – GHG Emissions Reductions FAVORABLE WITH AMENDMENT

Allow the facility to use non-fossil hydrocarbon fuel

§7-1003

(C) A person may use a non-fossil hydrocarbon fuel such as renewable natural gas or fuel derived from biomass.



SB0861_UNF_MTC_Pub. Utilities - High-Energy-Use Fa

Uploaded by: Drew Vetter

Position: UNF



MARYLAND TECH COUNCIL

TO: The Honorable Brian J. Feldman, Chair
Members, Senate Education, Energy, and the Environment Committee
The Honorable Senator Karen Lewis Young
The Honorable Senator Ron Watson

FROM: Andrew G. Vetter
Pamela Metz Kasemeyer
J. Steven Wise
Danna L. Kauffman
Christine K. Krone
410-244-7000

DATE: March 7, 2024

RE: **OPPOSE** – Senate Bill 861 – *Public Utilities – High-Energy-Use Facilities – Greenhouse Gas Emissions Reductions*

The Maryland Tech Council (MTC) writes in **opposition** of *Senate Bill 861: Public Utilities – High-Energy-Use Facilities – Greenhouse Gas Emissions Reductions*. We are a community of 800 Maryland member companies that span the full range of the technology sector. Our vision is to propel Maryland to become the number one innovation economy for life sciences and technology in the nation. We bring our members together and build Maryland’s innovation economy through advocacy, networking, and education.

This bill requires that a person who owns, operates, or controls a high-energy-use facility to reduce greenhouse gas emissions associated with electricity use by specified amounts, starting with 60% below the baseline emissions level in 2027 and gradually increasing to 100% by 2040. The bill defines “high-energy-use facilities” as those with a primary purpose of providing electronic data processing or hosting services, producing or processing cryptocurrency, or cultivating cannabis.

The MTC has been supportive of the growth of the data center industry in Maryland, specifically. That is why the MTC applauded the efforts of the General Assembly to establish the Sale and Use Tax and Property Tax Exemptions for data centers in 2020. The economic potential of the data center industry in Maryland is real. The MTC commissioned a third-party study of the planned data center campus sited at the old Eastalco smelting plant site in Buckeystown, Frederick County. The study found that the construction of this facility would support approximately 48,000 jobs directly and secondary in the county from 2023 through 2038, or about 3,000 jobs per year, \$3.1 billion in local labor income, and \$25.8 million in county tax revenues. Once fully operational, this facility will support an estimated 6,300 direct and indirect jobs in Frederick County annually, including 1,700 directly on the campus with \$65,000 average annual per-worker wages on the campus. Frederick County would receive \$41 million in tax revenues annually. There are similar

opportunities for economic revitalization around the State, with similar impacts on jobs and tax revenues.

We are concerned that this bill would prevent this industry from taking hold in Maryland before it begins. It is unclear what efforts have been taken to determine whether the 60% reduction goal by 2027 is feasible, or what methodology was used to determine the reduction levels in the bill. Adding to the difficulty of compliance is that a person may not use carbon offsets or renewable energy credits to meet the emissions reduction targets. It is not clear whether there has been consideration of what the financial impact would be on entities subject to this bill, and whether that impact would undermine the policy intent of the General Assembly to incentivize the growth of the data center industry. The MTC and its membership recognize the importance of Maryland's climate goals as laid out in the Climate Solutions Now Act of 2022 (CSNA). Any new data center development would be subject to all existing state and local permitting, zoning, and environmental regulations, as well as future requirements consistent with CSNA. The restrictions imposed by this legislation represent significant additional uncertainty and risk for the data center industry in Maryland and may result in driving potential new developments to other states.

For these reasons, we respectfully request an unfavorable report.

SB0861 OPPOSE.pdf

Uploaded by: George Gallagher

Position: UNF

SB0861 OPPOSE/WITHDRAW

Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

Dear Committee Members:

This bill is a direct assault on scientific reality.

I am voicing strong opposition to this ideological attack on the "People" of Maryland with these expensive and unnecessary anti CO2 goals. These UN Agenda 2030/World Economic Forum (WEF) objectives being forced down our throats is unacceptable.

This tyrannical agenda attacks inexpensive sources of energy. It is nothing more than a **regressive tax** on the poor, middle class and small businesses in support of the collectivists/socialist fraud of man-made climate change.

CO2 is NOT a pollutant.

CO2 is a trace gas (~0.04%) in our atmosphere that is **essential to life** on Earth.

No CO2, NO plants, No animals, No Humans!

All human activity on Earth produces 3% of the 0.04 % CO2 in our atmosphere. That is **ONLY** 12/1,000,000 = 12 ppm.

👉 Plants require a minimum of 150 ppm of CO2 to survive (not die).

What is the minimum level of CO2 for plant growth?

Average outdoor CO2 levels are normally around 400 ppm, which achieves normal outdoor plant growth. Greenhouse and indoor plants grow better with CO2 concentration of at least two to three times that of outdoor levels (800 to 1200 ppm).

What is the best CO2 level for flowering plants?

Flowering stage: During the flowering stage, when the plants are producing buds, the recommended CO2 level is between 1200 and 1500 ppm. Higher CO2 levels at this stage can help increase yields and improve the quality of the buds.

Making plans to reduce CO2 in the atmosphere is an **anti-life non-science fraud** that will facilitate the **increase in poverty and starvation!**

Man-made CO2 does not change climate.

A quote from Professor John Raymond Christy

“Suppose the United States closed everything and ceased to exist. No people, no cars, no industry, and no utilities. Current climate models tell us that as the result of this scenario in 50 years’ time might be a few hundredths of one degree! An amount well within the amount that the global temperature bounces around from one month to the next. The effect would be so small as to be unattributable to regulation.”

Professor Christy is a climate scientist involved in satellite remote sensing of global climate and global climate change. He is best known, jointly with meteorologist and Senior Scientist for Climate Studies at NASA’s Marshall Space Flight Center Dr. Roy Spencer, for the first successful development of a satellite temperature record.

Dr. John R. Christy is the Distinguished Professor of Atmospheric Science and Director of the Earth System Science Center at the University of Alabama in Huntsville where he began studying global climate issues in 1987.


The bottom line is solar activity and planetary motion changes climate. That is why the Earth experiences cyclical ice ages and warming periods. CO2 levels are a lagging indicator of solar activity.

This tyrannical approach to governance is straight out of Klaus Schwab’s World Economic Forum.

Legislative attempts to penalize the use of energy for Marylanders are nothing more than an attempt to create a Neo-Feudal state by limiting our access to life giving energy. The people of Maryland DO NOT want to be turned into serfs by bureaucratic tyrants.

Withdraw this bill!

Best regards,

A handwritten signature in blue ink that reads "George Gallagher" followed by a large, stylized flourish. To the right of the signature, the date "3/6/2024" is written in blue ink.

George Gallagher
1212 Barbud Lane
Annapolis MD 21403
410-868-0005

SB 861_MDCC_Public Utilities - High-Energy-Use Fa

Uploaded by: Hannah Allen

Position: UNF



LEGISLATIVE POSITION:

Unfavorable

Senate Bill 861

Public Utilities - High-Energy-Use Facilities - Greenhouse Gas Emissions Reductions

Seante Education, Energy, and the Environment Committee

Thursday, March 7, 2024

Dear Chairman Feldman and Members of the Committee:

Founded in 1968, the Maryland Chamber of Commerce is the leading voice for business in Maryland. We are a statewide coalition of more than 6,800 members and federated partners working to develop and promote strong public policy that ensures sustained economic recovery and growth for Maryland businesses, employees, and families.

Senate Bill 861 requires someone who owns, operates, or controls a data center, processes cryptocurrency or cultivates cannabis to reduce greenhouse gas emissions of the facility by 100% by 2040. It also requires annual reporting of compliance with this law by the owner of these facilities.

SB 861 makes it more difficult for important industries like data centers and cannabis cultivation to locate in Maryland by placing stringent requirements on owners and operators of these facilities. It also singles out data centers, cryptocurrency processing and cannabis production facilities. Specific industries should not bear the burden of reducing emissions. Instead, it should be an equitable, cross-industry approach.

In the 2020 legislative session, the Maryland General Assembly wisely chose to pass SB 397, Sales and Use Tax and Personal Property Tax – Exemptions – Data Centers, a bill exempting the sales tax for certain data center equipment after investment thresholds had been met. The goal of that legislation was to draw data center investment into Maryland to take advantage of a booming industry running out of room in neighboring Virginia. Serving as the lead of the Maryland Data Center Coalition at the time, the Maryland Chamber of Commerce commissioned Mangum Economics to produce an economic impact study on the potential impacts of large data center development in Maryland. Some of the key findings include:

1. Large data centers provide a high benefit to cost ratio for counties in terms of tax revenue generated versus government services provided.
2. Large data centers provide significant one-time economic and fiscal impacts on counties during the construction phase.

3. Large data centers provide significant annual economic and fiscal impacts on counties during their on-going operational phase.

Unfortunately, as the industry begins to invest in Maryland because of SB 397 of 2020, SB 861 threatens to move the goal posts by layering on new and significant requirements on data centers. Going above and beyond what is required in other states, SB 861 threatens to stop economic investment in Maryland before shovels are in the ground. This legislation counters the goals of the Moore-Miller Administration, which is to attract data centers to Maryland and create a more competitive state while growing our economy. This legislation will result in large implications down the road.

For these reasons, the Maryland Chamber of Commerce respectfully requests an **unfavorable report** on **SB 861**.



SB 861 Letter of Concern.pdf

Uploaded by: Martin Romo

Position: UNF

Maryland Senate Education, Energy & Environment Committee
Miller Senate Office Building
11 Bladen St.
Annapolis, MD 21401

March 4th, 2024

RE: Concerns with SB 861

Dear Chair Feldman, Vice Chair Kagan, and members of the committee,

On behalf of Rowan Digital Infrastructure (Rowan), thank you for the opportunity provide our perspective regarding SB 861 and its potential impacts to our recently approved project in Frederick County. As a data center developer with a conditionally approved project in the state, we feel we have unique insights to offer on the well-intended regulations this bill proposes.

Rowan was established in November 2020 to support hyperscale data center users in meeting their development needs sustainably. We are actively developing multiple, strategically located sites across the U.S. to host next-generation, mission critical, hyperscale data centers.

On January 10, 2024, Rowan received unanimous Planning Commission approval for our 777,000 SF data center project in Frederick County, which will bolster statewide economic activity by \$125 million each year. This will directly generate \$7 million in annual tax revenues for Frederick County and an additional \$14 million for the State of Maryland.¹

SB 861 proposes mandates for specific energy usage requirements on certain industries, particularly the digital infrastructure sector. We believe this bill could have significant, unintended consequences on our state's economy and the critical infrastructure that supports it – and therefore, offer the following concerns that we encourage you to take into consideration when evaluating the bill.

First and foremost, the digital infrastructure industry is leading the way in clean energy adoption globally. Despite the substantial energy requirements of these facilities, there is a clear trend towards utilizing renewable energy sources – indeed, our project in Frederick County will be supported by 100% renewable energy. Hyperscale data center operators, such as Meta, Amazon Web Services, Google, and Microsoft, have made significant public commitments to renewable energy and voluntarily enter into Power Purchase Agreements to procure renewable energy demonstrating their commitment to sustainability without the need for statutory mandates. This is a testament to the collaborative efforts between industry stakeholders, local utilities, and local governments.

It's crucial to recognize that the Legislature in 2020 approved the Sales & Use Tax Incentive Program for data center development, acknowledging the capital-intensive nature of critical infrastructure equipment and the necessity of such an economic development program to attract data center investment to the state. Implementing unnecessary energy mandates only a few years after adopting

¹ Maryland Tech Council (Jan 2024), <https://mdtechcouncil.com/wp-content/uploads/2024/01/Rowan-Frederick-Economic-Impact-Study.pdf>

this program sends a counterproductive signal to the market and undermines the trust and stability necessary for long-term investment in our state.

Moreover, as critical infrastructure, hyperscale data centers play a vital role in national security, education, healthcare, and various essential services. Mandating specific energy requirements risks jeopardizing the reliability and security of these facilities, which are relied upon by Marylanders every day. While clean energy is a priority, mandating its usage without considering the complex operational needs of these facilities could have unintended consequences.

Finally, singling out specific industries for energy mandates sets a concerning precedent and raises questions of equity and fairness. Other high-energy-use sectors are not included in this legislation, creating an imbalance in regulatory burden. It is essential to avoid targeting individual industries and instead focus on collaborative efforts to promote sustainable practices across all sectors. Rowan is certainly hoping to do so in the digital infrastructure industry.

For these reasons, we would encourage this committee to reconsider SB 861 and instead prioritize collaborative approaches to promote renewable energy adoption while supporting the growth and security of our digital infrastructure industry here in Maryland. Thank you for considering our perspective on this important issue.

Sincerely,

Martin Romo

Martin Romo
Senior Director of Economic Development & Policy
mromo@rowan.digital
ROWAN DIGITAL INFRASTRUCTURE

SB0861 Climate.pdf

Uploaded by: Suzanne Price

Position: UNF

SB0861 Is the auto emissions hoax on steroids but 'electricity' is the newest culprit.

- Government overreach in the name of reaching 'climate' goals
- A violation of property rights
- Based on a scam aka hoax

This bad bill is more unsustainable and unaffordable climate \$\$\$ hustling that no one but the WEF is asking for. SAY no to draining Maryland and her citizens of this unsustainable and dishonest money wasting scam. Who do these MD Representatives work for, us or Davos? It surely is not their constituents. Remember that every time one of us speaks out we represent a 1,000 who haven't yet.

Say no to this sham of a bill that will only harm, not help Maryland businesses.

Suzanne Price
AACo, MD