### HB6\_IndivisibleHoCoMD\_FAV\_AlecWeinberg.pdf Uploaded by: Alec Weinberg



### HB6 – Department of General Services – Energy–Conserving Standards (Maryland Sustainable Buildings Act of 2023)

### **Testimony before**

### House Health & Government Operations Committee

### February 8, 2023

### **Position: Favorable**

Madame Chair, Madame Vice Chair and members of the committee, my name is Alec Weinberg, and I represent the 750+ members of Indivisible Howard County. We are providing written testimony today *in support of HB6*, which would save bird deaths while making our buildings more energy efficient. Indivisible Howard County is an active member of the Maryland Legislative Coalition (with 30,000+ members). We appreciate the leadership of Del. Hill for sponsoring this important legislation.

We support this legislation for two reasons: saving birds, and saving energy.

Birds are essential to the health of our ecosystems. They are predators, prey, seed dispersers, scavengers, and pollinators. The natural resources we depend on depend significantly on birds. Yet since 1970 we've lost 29% of all North American birds - one billion a year due to collisions with windows. This bill would prevent 90% of bird deaths at each bird-safe building.

The climate crisis is also destroying ecosystems. According to the World Health Organization, climate change is the number one health threat facing humanity, already causing thousands of extra deaths each year due to malnutrition, malaria, diarrhea and heat stress. Energy efficient windows would decrease our energy consumption, and reduce greenhouse gas emissions.

Thank you for your consideration of this important legislation.

### We respectfully urge a favorable committee report.

Alec Weinberg 5688 Stevens Forest Road, apt 24 Columbia, MD 21045

## Alexi Boado Testimony in Support HB4006 Maryland S Uploaded by: Alexi Boado

### Maryland General Assembly – Senate EHEA Committee – February 6, 2023

### HB0006, Energy-Conserving Standards, Maryland Sustainable Buildings Act of 2023

### As a Hispanic-American and Hispanic resident of Maryland I support this effort wholeheartedly.

One billion birds die in the U.S. every year colliding with transparent or reflective building glass (and the number of glass-dominated buildings is growing exponentially)

- People walk into glass when they don't see the frame; birds never recognize a frame
- Nearly all species are affected; even the best and brightest birds collide and die
- Declining populations of migratory songbirds are significantly attributable to this nonsustainable loss
- Birds are both an ecological mainstay and an economic driver through factors such as pest control
- Maryland receives \$333 million in revenue from bird watching each year)

Building design and treated glass are an existing solution

- Flight tunnel tests have demonstrated the degree of safety provided by different kinds of glass
- Green Business Council LEED program has codified a bird-friendly building pilot credit 55
- Building façade, screens, and shades work
- Glass with UV or visible patterns of narrow lines or dots in 2x4" arrangement work
- Bird-friendly design is generally cost neutral at the design phase
- Bird-friendly designs and glass are energy efficient and saves dollars over time

Bird Safe Building designs and retrofits are already being implemented

- Many beautiful glass buildings are bird friendly such as Anchorage Museum and the Inuit Headquarters in Mountainview CA
- Expansive Jacob Javits Conference Center in NYC was retrofitted to be bird friendly and has reduced bird deaths by 90% and energy consumption by 25%
- Locally the Maryland DNR Tawes Building, National Aquarium, universities, nature centers and others are retrofitting their glass to be bird friendly

Bird Safe Building laws are already being implemented

• States of Illinois (2021) and Minnesota (2013) have mandatory bird safe building laws and Howard County MD passed a comprehensive law in July 2020

- Mandatory laws are also in place in New York City, San Francisco, Oakland, Toronto, Ontario Province, and many other cities in US and Canada, with voluntary laws in other places
- Federal General Services Administration has instituted bird-safe standards, following passage in US House of a bi-partisan bill Bird-Safe Buildings Act earlier

Sincerely,

Alexi Sanchez de Boado Hyattsville, MD 20782

**HB6 Written Testimony.pdf** Uploaded by: Benjamin Gantz Position: FAV



### **Committee: Health and Government Operations**

### Testimony on: HB6 Maryland Sustainable Buildings Act of 2023

### **Position: Support**

### Hearing Date: February 8, 2023

My name is Benjamin Gantz, I am representing the Audubon Society of Central Maryland and testifying on behalf of Audubon of Central Maryland and as a volunteer with the Phoenix Wildlife Center and speaking in favor of passing bill HB6 – Department of General Services – Energy – Conserving Standards (Maryland Sustainable Buildings Act of 2023). This bill would require new Leadership in Energy and Environmental Design (LEED) buildings in the state to implement specified bird friendly design features to prevent window collisions. I am a board member of Audubon Society of Central Maryland, which is a 501 (c)3 non-profit organization with members throughout Howard, Frederick, and Carroll counties in Maryland. Window collisions are a leading factor in the decline of North American bird populations. Birds have numerous benefits to both the environment and economy. A few of their important services include pest control, seed dispersal, and providing opportunities for outdoor recreation. Birds are also an important part of tourism in the state. The diversity of unique species found across Maryland's geography draws in birders and photographers.

I have been very fortunate in being able to volunteer with the Phoenix Wildlife Center, which is also a 501 (c)3 non-profit based in Baltimore County dedicated to the rehabilitation and release of Maryland's wildlife. We receive a wide variety of wildlife species throughout the year that need help from different situations. One issue in particular, window collisions, is responsible for a large majority of the birds brought in. This problem is at its highest during Spring and Fall migration, when birds are making their way between wintering grounds and summer breeding sites. Many of the birds we receive during these times are found in Baltimore City. Volunteers with an organization called Lights out Baltimore (LOB) walk around the city regularly, picking up any birds that fall victim to window collisions. Unfortunately, many are killed. Those that remain alive are brought in to the wildlife center where they are treated appropriately.

During Spring and Fall, downed birds are put into brown paper bags for transport and to help them recover. It is not uncommon to see these bags filling incubators in the clinic. Although these birds are alive, not all of them can be saved. Their injuries from the collision are too severe. Many of them can be released but are injured and require treatment. One of the most common injuries is brain trauma, and the birds must be medicated properly to heal them. Many of the birds suffer from shock and after being allowed to stabilize and rest in the bag for several

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 70,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

hours, they can be released. Some of the migratory bird species that we receive include American Redstarts, Common Yellowthroats, Ovenbirds, and American Woodcocks. Some species suffer from higher mortality from window collisions than others. Woodcocks are an example. This species, once common in Maryland but now declining, is often brought to us, and at times many have come in within just a few days. I remember at one point, in less than a weeks' time, around 10 individuals were brought to us.

Although the majority of window-struck birds brought to us are from Baltimore City during migration, we also receive calls from people who have had birds hit their windows from many other places throughout the year. Window collisions occur throughout the state and are more likely to occur in urban areas with large buildings. However, they can also occur in less populated areas. Passing bill HB6 would save the lives of many birds by preventing them from colliding with windows of new state LEED buildings in Maryland. This would be especially important for migratory birds making their way through Maryland, and it would also make a difference for our resident bird species. Not only would the window design standards in HB6 benefit birds, they would also increase the cooling efficiency of the buildings during summer. Since window collisions are a major contributor to bird declines, passing this bill would make a big difference. Different places in Maryland, such as Howard County have already retrofitted certain buildings to make them bird friendly, and there are new buildings planned that will also eliminate the risk of window collisions. Passing HB6 would further protect our birds. I ask that you support bill HB6 – Department of General Services – Energy – Conserving Standards (Maryland Sustainable Buildings Act of 2023).

Thank you,

Benjamin Gantz

1231 Allview Drive

### **Dr Chris Swan Testimony in Support of HB6.pdf** Uploaded by: Christopher Swan

#### Maryland General Assembly - House HGO Committee - February 6, 2023

#### Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) - HB 6

#### TESTIMONY OF DR. CHRISTOPHER SWAN -- SUPPORT

#### I am a waterfowl hunter who strongly support this bill as an important step for maintaining waterfowl populations important for my recreation, the economic vitality of local communities, and the quality of life on the Eastern Shore of Maryland.

This bill would require all newly built, acquired, or renovated buildings receiving 51% Maryland State funding to follow standards for bird-friendly windows and shielded nighttime lighting, which will both conserve energy and save birds. This is of urgent need right now as we face climate change impacts and continue to lose one billion birds each year to collisions with window glass in the United States.

These birds are part of our healthy breeding populations and their losses are unsustainable, as witnessed by the 29% reduction in bird numbers since 1970. Every year that bird populations decline, we lose valuable services of hunting, pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland's hunting and tourism industry. In 2011, waterfowl hunters spent \$14 million in Maryland as one of the nation's premier waterfowl hunting destinations.

This is a common-sense bill, where scientists and builders have come together to find proven solutions, which will save the state money over time. The methods to protect birds are codified as a Leadership in Energy and Environmental Design (LEED) Innovation Credit by the U.S. Green Building Council. Currently, builders and architects may use this credit to meet LEED certifications, but the credit is optional and we need this bill to make it mandatory.

Maryland has a chance to act locally to save money, fight climate change, and reduce the unsustainable deaths of economically important birds. Waiting even one year will see more glass buildings built and more money lost, more greenhouse gas emissions, and more birds dying.

Respectfully Submitted,

Christopher M. Swan, Ph.D Professor Environmental Science University of Maryland, Baltimore County & Waterfowl Hunter Columbia MD 21045

## HB6 Sustainable Buidlings 2023 sign on testimony v Uploaded by: Cynthia Williams



<u>Bill Title:</u> HB6—Department of General Services—Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) <u>Bill Sponsor</u>: Delegate Terri Hill <u>Committee</u>: Health & Government Operations <u>Position</u>: Support Date: February **8**, **2023** 

### Community in SUPPORT of Maryland Sustainable Buildings Act of 2023

We, the undersigned organizations, support enacting the Maryland Sustainable Buildings Act of 2023 to ensure Maryland continues to be a national leader in energy efficiency and biodiversity conservation—helping achieve the goals set out in the transformational 2022 Climate Solutions Now Act.

This bill would require all newly built, acquired, or renovated buildings receiving 51% Maryland State funding to follow standards for bird-friendly windows and shielded nighttime lighting, which will both conserve energy and save birds. This is of urgent need right now as we face climate change impacts and continue to lose one billion birds each year to collisions with window glass in the United States. These birds are part of our healthy breeding populations and their losses are unsustainable, as witnessed by the 29% reduction in bird numbers since 1970. Every year that bird populations decline, we lose valuable services in pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland's tourism industry. Wildlife watching in Maryland generates over \$450 million in economic activity annually in the state.

Many jurisdictions have already passed similar legislation around the world and in the United States, including New York City, Illinois, and recently The DC Council just passed a bird-friendly bill and the Mayor has signed it. In 2020, Howard County became the first county in Maryland to pass bird-friendly building legislation.

This is a common-sense bill, where scientists and builders have come together to find proven solutions, which will save the state money over time. The methods to protect birds are codified as a Leadership in Energy and Environmental Design (LEED) Innovation Credit by the U.S. Green Building Council. Currently, builders and architects may use this credit to meet LEED certifications, but the credit is optional and we need this bill to make it mandatory.



This bill is a win-win both saving birds and saving energy. Passage is urgently needed to address the increased use of large glass windows in buildings that threatens to undo energy conservation efforts, cost the state money, and contribute to climate change.

### We urge a **FAVORABLE** report for this bill.

Signed,

Safe Skies Maryland Maryland Ornithological Society Maryland Native Plant Society Audubon Mid Atlantic NAACP Maryland **Baltimore Jewish Council** Blue Water Baltimore **Forever Maryland** National Aquarium **Climate Justice Wing** Chesapeake Bay Foundation City Wildlife **Clean Water Action** Annapolis Green Nancy Lawson, The Humane Gardener Maryland League of Conservation Voters Maryland Campaign for Environmental Human Rights Indivisible HoCo Maryland Maryland Legislative Coalition Maryland Conservation Council The Nature Conservancy Audubon Society of Central Maryland Unitarian Universalist Legislative Ministry of Maryland American Bird Conservancy DC Voters for Animals SAFE Saving Animals from Extinction—North American Songbirds Capital Nature Friends of Quincy Run Maryland Pesticide Education Network Howard County Beekeepers Association Anacostia Parks and Community Collaborative

### HB6\_djung\_FAV.pdf Uploaded by: Deb Jung



### **Howard County Council**

**Deb Jung** Councilmember

District 4

George Howard Building 3430 Court House Drive Ellicott City, Maryland 21043-4392

February 6, 2023 HB6 Deb Jung Howard County Council FAVORABLE

Dear Chair Delegate Pena-Melnyk, Vice Chair Delegate Kelly, and Members of the House Health and Government Operations Committee:

Thank you to Delegate Terri Hill for sponsoring this bill.

In 2020, I sponsored Howard County Council Bill 11 that required all commercial and County buildings to incorporate LEED Pilot Credit #55 which includes bird-safe building design standards. My interest in the bill came about thanks to the advocacy efforts of Mark Southerland of Safe Skies Maryland and an elementary school Lego Robotics team that promoted bird-safe buildings as their research project. The bill was crafted with the involvement of the County's Office of Community Resources & Sustainability, the Natural Resources Division, and the Department of Inspections, Licenses, & Permits.

My bill was unanimously supported by all four of my Council colleagues, including our Republican Councilmember, and demonstrates that adoption of the bird-safe LEED credit can garner bipartisan support.

The Natural Resources Division had conducted bird strike counts on County buildings that supported the need for a reduction of transparent and reflective glass in building construction. The Robinson Nature Center, which is a County-owned building promoting environmental education and access, recently received retrofitting funding to address problematic areas of the building to reduce bird collisions. No current County buildings have been built since the passage of the law.

6300 Merriweather in Downtown Columbia will be the first commercial building in the County to boast bird-safe features. This building is currently in the planning phase and is the latest in the Howard Hughes portfolio envisioned as a 16-story, 250-foot tall office building scheduled for completion in 2025. The building theme is a modern "treehouse" with stacked glass levels

encased in recycled materials. The building features bird-safe elements so that the built environment can both mimic and protect nature.

Residential buildings also present significant hazards to birds but I didn't address this problem in my bill as I felt that systematic change required cautious implementation to ensure that commercial products are available to meet the LEED credit requirements.

Bird-safe building design is a vital component of supporting the General Assembly's Climate Solutions Now Act of 2022 and is a feasible construction option for public buildings. HB6 is a reasonable and responsible step towards fulfilling our environmental pledge to the residents of this State.

Thank you for your time and consideration.

Sincerely,

Deb Jung Councilmember, District 4

### Nature Forward - HB06 - FAV .pdf Uploaded by: Denisse Guitarra

### February 6, 2023

Written testimony for HB06 - Department of General Services -Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)<sup>1</sup>

### **Position: Favorable**

Submitted by: Denisse Guitarra, MD Conservation Advocate, Nature Forward

Dear House Health and Government Operations & Appropriations Committees,

Nature Forward (formerly Audubon Naturalist Society) is the oldest independent environmental organization in the DC metropolitan region. For 126 years, we have inspired residents of the greater Washington, DC, area to appreciate, understand, and protect their natural environment through outdoor experiences and environmental education and advocacy. Nature Forward's conservation priorities include promoting human health and access to nature, protecting biodiversity and habitat, fighting the climate crisis, and supporting sustainable land use. We strongly support passage of HB06 - Department of General Services - Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023), and we appreciate the opportunity to testify on this bill.

HB06 would require implementation of building standards to conserve energy, make State buildings more sustainable, and also minimize adverse impacts on birds. The bill would require the Maryland Green Building Council to include building standards as a condition of participation in a higher performance building program. The bill applies to "State buildings" as defined in the legislation and includes exclusions for certain public work contracts (Sec. 4-



natureforward.org

<sup>&</sup>lt;sup>1</sup> HB06 available at: <u>https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/hb0006</u>



410.1(B).) If enacted, HR06 would further the energy-saving goals of last year's Climate Solutions Now bill.<sup>2</sup>

The sponsors of HR06 recognize that the increased use of glass in State buildings undermines energy conservation efforts, contributes to climate change and biodiversity loss (through fatal bird collisions with glass windows), and costs the State money. (HR06, Preamble.) Enactment of HR06 would better protect birds against building collision mortality by requiring certain window treatments in State buildings and by requiring adjustments to building lighting during certain times of year. Existing building lighting would be shielded and minimized from midnight to dawn from March 1-May 31, and from August 1-October 31 (spring and fall bird migration season) except where full building lighting is found to be necessary, e.g., for public safety. This can be readily accomplished by use of automatic control technologies such as timers, photosensors, infrared detectors, and motion detectors. (Sec. 4-410.1(E)(2).)

Experts tell us that birds see building glass differently than humans and do not perceive the glass as a barrier.<sup>3</sup> The American Bird Conservancy estimates that one billion birds die every year in the US in collisions with building and house windows. In the District of Columbia alone (for which we have statistics), volunteers with the organization "Lights Out DC" have counted more than 4500 bird strikes since 2010, most in the small downtown area that they monitor; 85% of these strikes are fatal. Bird fatalities are growing, as more glass buildings are being built.<sup>4</sup>

Migratory species may be lost prior to reproduction by hitting buildings during nighttime spring migration. Fledglings may also be lost while attempting their first migration in the fall. Populations of neotropical migrating birds cannot sustain these losses indefinitely. This bill and

<sup>&</sup>lt;sup>2</sup> Climate Solutions Now Act of 2022. Available at:

https://mgaleg.maryland.gov/mgawebsite/Legislation/Details/sb0528?ys=2022RS

<sup>&</sup>lt;sup>3</sup> American Bird Conservancy website (abcbirds.org/glass-collisions/).

<sup>&</sup>lt;sup>4</sup> See Oct. 21, 2022, testimony of Nature Forward to the DC Council on the Migratory Wildlife Protection Act of 2022. In 2011, 212 birds were found by Lights Out volunteers in downtown Washington DC. In 2021, 738 dead birds were found. Available at: <u>https://natureforward.org/nature-forward-supports-bird-safe-buildings/</u>



others like it can help enormously. Please see Safe Skies Maryland's fact sheet for additional information about the need for this legislation.<sup>5</sup>

We believe that birds are valuable not only in and of themselves, but also because they enrich our environment, maintaining the biodiversity upon which we all depend. If bird populations decline, the entire wildlife chain is disrupted and weakened, and humans lose the ecological services birds provide as key pollinators of our crops, fields, and forests. Additionally, bird collisions will not go away over time. Birds do not "learn" to avoid glass. If yet another rationale is needed for this legislation, we understand that nationwide, birdwatching, bird feeding, and bird equipment purchases account for \$41 billion dollars in annual revenue. There are many avid birders in Maryland and elsewhere in the mid-Atlantic states. Finally, we believe that passing HR06 is simply the right thing to do.

On behalf of Nature Forward and our 28,000 members and supporters, we recommend that the House Health and Government Operations & Appropriations Committees, passes and approves HR06. Thank you for your time and consideration.

Sincerely,

Denisse Guitarra, MD Conservation Advocate, Nature Forward

Anne Cottingham, Conservation Volunteer, Nature Forward

<sup>&</sup>lt;sup>5</sup> Safe Skies Maryland HB06 fact sheet. Available at: <u>https://mdbirds.org/wp-content/uploads/Sustainable-</u> Buidlings-2023-fact-sheet-HB6-SB92.pdf

### HB6\_CleanWaterAction\_Support\_EmilyRanson.pdf Uploaded by: Emily Ranson

### SB92/HB6: Department of General Services - Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)

House Health and Government Affairs & Appropriations Committees Senate Education, Energy, and the Environment Committee

### **Positon: Favorable**

Dear Members of the Committees,

Clean Water Action supports the Maryland Sustainable Buildings Act of 2023 as a method of reducing energy consumption and better protecting our birds.

This legislation impacts GSA state-funded projects, and requires that the projects include wherever practical energy-conserving features that are also bird-safe features. These practices reduce solar heat gain, lower the cost of heating and cooling, and also protect resident and migratory birds from building-strikes.

The practices, like requiring motion-sensor and/or down-shielded lights also limit unnecessary nighttime light pollution and reduce energy consumption as well.

We appreciate the hard work that both the House and Senate put into this legislation in previous years, and ask for a favorable report to both reduce energy consumption and reduce the number of birds that hit buildings.

Thank you,

Emily Ranson Clean Water Action eranson@cleanwater.org

# **Copy of ISEWOP House Version.pdf** Uploaded by: Felix Baum Position: FAV

#### Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) - SB 92

#### TESTIMONY OF FELIX BAUM – **SUPPORT**

My name is Felix Baum, I'm a sophomore at Mt. Hebron High School. I was a part of the Anglerfish Overlords, a Lego robotics team of 4th graders focused on bird safe building practices. The theme for that year's project was "Animal Allies", tasking us with finding a unique problem relating to animals, and an innovative solution. We talked to a concerned activist who counted, one by one, the dead bodies of birds who had struck the reflective glass of the Baltimore Convention Center. We realized that reflective glass, seen so often in modern architecture across the world, was leading one billion birds to their deaths- PER year. We realized the problem with bird strikes was much bigger than the birds themselves, but what such drastically decreased populations did to natural food and supply chains. These strikes were harming the ecosystem, and at an alarming volume. It wasn't just a problem for that specific Convention Center, at that specific time, but rather a problem across the country, and one that was going to continue into the future, unless changes were made. So we talked to state and local representatives, consulted experts (like Dr. Southerland), and thought of ways to prevent fatal bird strikes. We presented our findings and project summary at the Lego League State Championship that year, and we won third place for the project! That was 6 years ago. Since then, Howard County, my home county, passed CB11 2020, requiring new commercial and government construction in Howard County to be LEED certified for bird-safe designs. I testified at the Public Hearing. I told my story, I spoke for my classmates and my peers, and the law took effect not long after it was passed. That was 3 years ago. The problem isn't over. One billion birds per year now could easily be one billion dollars per year later. It's far beyond an unacceptable number- it's one that threatens our natural world's future- the world in which myself and other young people will continue to grow up in. We care about the world we are going to inherit, and this is a problem that has no place there. It isn't just about birds, and it isn't just about the climate. This is a fight for change- a fight for a world that you would want the future generations to live in. Be that change.

## AudubonMidAtlantic\_HB6\_HGO\_Sustainable Buildings A Uploaded by: Jim Brown



February 8, 2023

To: Maryland House of Delegates, Health and Government Operations Committee

From: Jim Brown, Policy Director, Audubon Mid-Atlantic

Subject: Favorable Testimony for Maryland HB 6 Maryland Sustainable Buildings Act of 2023

Good Afternoon. My name is Jim Brown. I am the policy director for Audubon Mid-Atlantic, here in Maryland. Audubon Mid-Atlantic is the regional office of National Audubon Society, representing over 35,000 Marylanders who advocate for the protection of birds, bird habitat, and policies aiming to protect both birds and human communities in the face of increasing environmental challenges, habitat loss, pollution, and climate change.

Audubon Mid-Atlantic enthusiastically supports HB 6 – Maryland Sustainable Buildings Act of 2023. The provisions in this bill will save birds lives. What is good for birds is good for the people, ecosystems, and economies of Maryland. Specifically, HB 6 requires energy efficient and bird friendly design practices. These methods to protect birds are already codified as an optional LEED Innovation Credit by the U.S. Green Building Council. HB 6 will make it mandatory on state funded buildings, setting a precedent for sustainable and eco-friendly building design in Maryland.

Over 450 species of birds have been identified in Maryland. Every spring, millions of birds fly through the state on their way from tropical Central and South America. Some of them such as the Wood Thrush, Baltimore Oriole, and Yellow Warbler stay here all spring and summer to breed, while countless others pass through to their preferred breeding grounds further north. Millions more live in Maryland year-round, such as our iconic Cardinals and Robins which we see outside this building today. All of them however face very real threats from ever increasing deadly collisions with buildings in Maryland. More than half of US Birds are declining. 70 species of birds in the U.S. have lost more than 50% of their population in the last 50 years. These numbers include birds that are culturally important to Maryland such as our waterfowl and shorebirds, and iconic forest species that fill our air with melodic song.

The rapid declines in birds signal the intensifying stresses that birds face around world and here in Maryland on the Atlantic Flyway due to bird collisions with buildings. Collisions are a leading factor in the decline of North American bird populations—in the United States we lose one billion birds each year to collisions with window glass. In Maryland these collisions occur in urban, suburban, and rural areas. HB 6 will increase protections for both for migratory and resident birds. Birds have numerous benefits to both the environment and economy. Every year that bird populations decline, we lose valuable services in pollination, seed dispersal, and pest insect consumption. Birds are also critical to Maryland's tourism industry. Wildlife watching in Maryland generates over \$450 million in economic activity annually in the state.

The Science tells us:

- Collisions with glass buildings kill birds
- Buildings with less glass are more energy efficient
- Reducing the amount of glass in new buildings will increase energy efficiency and save millions of birds lives each year

The Maryland Sustainable Buildings Act of 2023 will also ensure our state continues to be a national leader in climate policy and energy efficiency—helping achieve the goals set out in the transformational 2022 Climate Solutions Now Act. Howard County has become the first jurisdiction to pass bird-friendly building legislation in Maryland. New York City and the State of Illinois have also recently passed similar laws to save birds and increase energy efficiency. Last year, the D.C. Council passed a bird-friendly bill that the mayor signed into law last week, and under the Biden administration, the General Services Administration now includes bird-friendly standards in its guidelines for federal buildings.

Audubon Mid-Atlantic urges a favorable review of HB 6 – for the benefit of Maryland's residents, birds, and ecosystems and to keep Maryland national leader in climate resiliency.

Thank You,

Jim Brown

**Policy Director** 

Audubon Mid-Atlantic

Jim.brown@audubon.org

410-207-2445

HB0006\_khoffman\_fav.pdf Uploaded by: Kirsten Hoffman Position: FAV



February 2, 2023

### HB6 Department of General Services - Energy-Conserving Standards (Maryland Sustainable Building Act of 2023) FAVORABLE

Dear Chair Pena-Melnyk, Vice-Chair Kelly and Honorable Members of the Health and Government Operations Committee,

The Green Towson Alliance writes in support of HB6, the Maryland Sustainable Buildings Act of 2023. We support the bill's goals to increase the energy efficiency of glazing in state buildings and to reduce deadly bird collisions.

Large areas of architectural glazing can be deadly to birds killing close to one billion birds in the United States annually according to the Audubon Society. Glass that is highly reflective or highly transparent creates visual voids that can reflect vegetation in the glass. Birds can't perceive the difference between a tree and its reflection and may fly into the glass. During periods of high migration, nighttime lighting of buildings can confuse birds further contributing to deadly collisions making building collisions the second greatest source of human-caused avian mortality in the United States. Large areas of glass in our building facades also lead to heat loss in the winter and heat gain in the summer causing increased energy usage.

The good news is that energy efficient glazing and bird-safe designs are readily available in the market and are becoming standard practice in many locations around the country. By using patterned glass, translucent glass, UV coatings, or sun shades, the incidence of bird collisions can be reduced to almost zero. These strategies are all compatible with using coatings to increase energy efficiency. Shielding and minimizing lighting during periods of nighttime migration with automatic control technologies can also save birds.

The 2022 annual report from North American Bird Conservation Initiative (NABCI) shows more than half the bird species in the United States and Canada are in decline. Birds are an indicator of biodiversity and the health of our ecosystems. They are crucial for our survival and the survival of the planet. Birds are essential pollinators and seed dispersers. They balance the population of pests and control pathogens by eating carrion, and they provide the intangible delight of birdsong and beauty.

The members of the Green Towson Alliance work to increase biodiversity and promote a sustainable environment. One billion bird deaths a year due to building glazing and nighttime lighting is not sustainable. We ask for a favorable report on HB6 to stop these preventable bird collisions, increase the energy efficiency of our state buildings and save taxpayers money.

Respectfully, **Kirsten Hoffman for the Green Towson Alliance** 701 West Joppa Road Towson, Maryland 21204

# MOS HB0006 Sustainable Bldg House Health and Govt Uploaded by: Kurt Schwarz



February 8, 2023

### <u>Committee:</u> Health and Government Operations

### <u>Testimony On:</u> HB0006: Department of General Services - Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023)

### Position: Support: HB0006

The Maryland Ornithological Society (MOS) asks that the House Health and Government Operations Committee give a favorable report of HB0006 and move it to the full House of Delegates.

MOS is a Maryland-based volunteer organization of some 1800 members, with 15 chapters in Maryland. We are devoted to the study, preservation and enjoyment of birds and their habitat.

As you are aware, it is estimated that up to a billion birds a year die in collisions with glass on buildings and other structures.<sup>1</sup> While birds face many threats to their survival, the dramatic increase in the use of glass as a building material need not pose the unsustainable threat to birdlife that it currently does. We can use glass and still help our migrating and resident birds be able to navigate safely in and through our state.

Maryland sits in a vital position along one of the four major migration flyways, Maryland, the Atlantic Flyway, and billions of migrating birds pass through our state each migration season. Our State bird, the Baltimore Oriole, is one such migrant that returns yearly to breed and departs in Fall for wintering grounds in the Caribbean, Central and South America. It is also a frequent victim of collisions with the glass that has become increasingly and more widely used in our state. Many otherwise successful fledgling young of the year will also perish in what would have been their first migration when they become confused by glass. Indeed, according to the Maryland Bird Conservation Partnership (MBCP), "Maryland (has) features that support an impressive diversity of ecosystems, habitats, and species...(and) due to a variety of threats, some 143 species of birds have been recognized as 'Species of Greatest Conservation Need'". The MBCP further notes that, "Over 200 species of birds breed in Maryland, more than half of which are considered to be Species of Greatest Conservation Need. Many species that breed in the state migrate to other areas outside of breeding season, and given the mobility of birds, planning at the

<sup>&</sup>lt;sup>1</sup> Loss, Scott et al, Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability, The Condor, Volume 116, Issue 1, February 2014, <u>https://academic.oup.com/condor/article/116/1/8/5153098</u>

landscape level and considering species needs during their full life cycle is important. Further, working with a variety of partners will be critical to minimize mortality due to collisions."

While many man-made factors challenge birds, perhaps none is as immediately fatal and artificial as a collision with glass. Birds have evolved to make decisions at flight speed and given the chance to avoid an object they can see, make quick decisions to do so. The air is their habitat, and the lightweight frames of birds enable them to fly that also makes them horrifyingly vulnerable to collision with glass. It is noteworthy that people cannot see glass and frequently walk into glass doors and other objects unless an added feature alerts them to its presence. We can also alert birds to the presence of glass and for many reasons, it is incumbent upon us to do so.

The diversity of bird species and their habitats is under increasing threat. Unless concerted efforts are taken in the near future Maryland will lose some of its greatest assets – healthy natural systems and the wide range of birds, plants, and other wildlife that they support. Maryland risks economic impact as well as a decrease in quality of life. An estimated 900,000 residents and non-residents enjoy birding in the state. While Marylanders generated \$483 million from wildlife-watching activities in 2011, the Total Industrial Output (TIO), which includes, direct, indirect, and induced effects, totaled over \$909 million, produced 10,807 full- and part-time jobs, and generated \$88.4 million in state and local tax revenue. Nationally, Americans who watch and feed birds contribute \$41 billion to the nation's economy every year.<sup>2</sup>

Birds provide invaluable ecological services in areas of pest control, seed dispersal, and pollination. The immediate threats to their survival and a disruption to our symbiotic relationship with them are matters of great importance for a variety of reasons. It wasn't that long ago that people were shooting birds out of the sky at a faster rate than they could reproduce. The same affect will result from continuing to erect glass buildings without incorporating reasonable measures to help the bird see the glass and avoid collisions with it. Both scenarios are directly responsible for removing birds at a faster rate than be sustained by reproduction.

HB0006 is an important step in dealing with the issue of glass collisions. Bird-safe features are cost-neutral in the design phase of new buildings. They will also save energy, resulting in lower operating costs, and lower carbon emissions, which drive climate change. Two-thirds of North America's birds face an increasing risk of

<sup>&</sup>lt;sup>2</sup> US Fish and Wildlife Service, Economic Impact: Birds, Birdwatching and the U.S. Economy, November 16, 2017, <u>https://www.fws.gov/birds/bird-enthusiasts/bird-watching/valuing-birds.php</u>

extinction from global warming, 389 species are at risk.<sup>3</sup> For these reasons, many jurisdictions across the nation have passed bird-safe legislation, most notably New York City. Here in Maryland, Howard County was the first jurisdiction to pass such legislation in July 2020. Washington, D.C. City Council recently passed a bird-friendly bill and Mayor Bowser signed it.

Sustainable growth in Maryland is very important. incorporating bird-safe features in buildings will allow this growth to continue without unsustainable bird mortality from collisions and carbon emissions., while being cost-neutral. We therefore ask you issue a favorable report on the Maryland Sustainable Building Act of 2023 (HB0006).

Sincerely,

Kurt R. Schwarz Conservation Chair Emeritus Maryland Ornithological Society <u>www.mdbirds.org</u> 7329 Wildwood Ct. Columbia, MD 21046 410-461-1643 <u>krschwa1@verizon.net</u>

<sup>&</sup>lt;sup>3</sup> Survival by Degrees, 389 Bird Species on the Brink, National Audubon Society, 2019, <u>https://nas-national-prod.s3.amazonaws.com/climatereport-2019-english-lowres.pdf</u>

# HB006 Bird bill testimony FAV.pdf Uploaded by: Lance Davis Position: FAV

Testimony for HB6 Favorable Feb 8, 2023 Health and Government Operations

Good afternoon,

I am Lance Davis, Sustainability Architect for a federal agency with over 186 million sf of owned inventory in the US. I write the book, P100, used to set the design standards and performance requirements for this inventory. I am also a LEED Fellow, immediate past chair of the LEED Steering Committee, an AIA member and proud resident of the state of Maryland.

In 2012 I was introduced to the idea of bird safe design by the American Bird Conservancy. Shortly after that, members of Congress were reaching out to me to educate them and help with proposed legislation. For the last 10 years, I have met with some of the world's experts and associations to develop a high level of knowledge on this topic. In 2018, I introduced the concept of bird safe design to the federal inventory and in 2021, I wrote, in close collaboration with the American Bird Conservancy and the National Glass Association, the nation's leading and most reasonable requirements for bird safe design.

Bird safe design recognizes that birds cannot see glass or perceive visual cues like window frames and mullions. The most dangerous areas on buildings are generally on the lower floors which produce reflections of food, shelter, or escape routes. Some solutions are simple, others could add significant cost if done poorly. An uninspired design team that slaps on a product will undoubtedly add cost to any project. But, I have seen many solutions that are integrated, beautiful, and no to little first cost. The best solutions are coordinated with other building components and help to bring many systems together.

This is a key reason why I like the language in HB6. It combines and recognizes the need to integrate energy efficiency, bird safe design and lighting. This language's intent allows design teams the freedom to find the best solutions with no to little first cost to the project, and more importantly, find the best way to lower operational costs thus saving significant money over the long term. I encourage you to move this bill forward so that DGS can work with industry experts to set standards that lower operational energy through bird safe design.

Thank you,

Lance Davis, AIA, LEED Fellow, MSU Fellow 501 Bay View Point Dr Edgewater, MD 21037

HB006 Bird bill testimony.pdf Uploaded by: Lance Davis Position: FAV

Testimony for HB6 Feb 8, 2023 Health and Government Operations

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Thank you,

Lance Davis, AIA, LEED Fellow, MSU Fellow

## hb6- DGS, energy standards- HGO 2-8-'23.pdf Uploaded by: Lee Hudson



### Testimony Prepared for the Health and Government Operations Committee

on

### House Bill 6

February 8, 2023

Position: Favorable

Madam Chair and members of the Committee, thank you for the opportunity to support energy conservation in Maryland's building inventory. I am Lee Hudson, assistant to the bishop for public policy in the Delaware-Maryland Synod, <u>Evangelical Lutheran Church</u> in <u>America</u>. We are a faith community with three judicatories in every part of our State.

**House Bill 6** will require the Maryland Department of General Services to apply established green building standards to State facilities, increasing the portfolio of present and future structures that reduce greenhouse gas emissions.

It will also make a good citizen of the State by complying with the intentions of its legislative record. We have supported Maryland policies and goals for GGR because of our commitment to caring for created goodness ("Caring for Creation," ELCA, 1993). We therefore appreciate the bill's consideration of wildlife conservation in its goals. Updating the standards every five years will keep the policy intent current and relevant.

We ask a favorable report for **House Bill 6**.

Lee Hudson

### HB6\_MDSierraClub\_fav 8Feb2023.pdf Uploaded by: Lily Fountain



P.O. Box 278 Riverdale, MD 20738

### Committee: Health and Government Operations and Appropriations Testimony on: HB6 "Energy-Conserving Standards (Maryland Sustainable Buildings Act of

### 2023)" Position: Support Hearing Date: February 8, 2023

The Maryland Chapter of the Sierra Club urges support for HB6, which will require the Department of General Services to promulgate standards for state buildings to better protect Maryland's bird population while saving energy. In 2020, Howard County became the first county in Maryland to pass legislation addressing this issue. Minnesota (2013) and Illinois (2021) have passed statewide legislation. The latter is most similar to HB6, which requires bird safe building design in new and renovated state owned buildings.<sup>1</sup> Many other localities have also passed legislation, including New York City, Madison, WI, Minneapolis, MN, Portland, OR, Washington, DC, as well as many cities in California and Canada.<sup>2</sup> The Washington, DC council has recently passed stronger legislation that is awaiting the Mayor's signature.

Maryland has a rich diversity of birds with over 450 documented species, which is over half of the birds documented in the United States; 72 of these species are rare, threatened, or endangered.<sup>3</sup> Maryland is located along the Atlantic flyway, through which billions of birds migrate seasonally.

One billion birds die each year by collision with glass in America, and research and practice show us that these deaths are preventable. The buildings we construct (or significantly renovate) can and should use bird-friendly design.

Importantly, with this bill, buildings become more energy efficient. While well-placed windows are critical to building design and allow for natural lighting, making windows increasingly larger is detrimental to overall energy efficiency. Windows are the weakest link in the building envelope<sup>4</sup>, therefore the greater the surface area of windows in a building, the more energy is needed to keep it cool in the summer and warm in the winter. In state-owned buildings, taxpayers are paying for extra heating and cooling costs. This extra energy use comes at a cost to the environment by contributing to climate change when it relies on fossil fuels.

In sum, incorporating bird-friendly design will save energy and protect birds. Maryland should take this first step by adopting HB6.

Carolyn Parsa Chair, Natural Places Legislative Workgroup Carolyn.Parsa@MDSierra.org

Josh Tulkin Chapter Director Josh.Tulkin@MDSierra.org

Founded in 1892, the Sierra Club is America's oldest and largest grassroots environmental organization. The Maryland Chapter has over 75,000 members and supporters, and the Sierra Club nationwide has over 800,000 members and nearly four million supporters.

<sup>&</sup>lt;sup>1</sup> https://gl.audubon.org/news/new-law-will-protect-illinois-birds-deadly-building-collisions <sup>2</sup> https://abcbirds.org/glass-collisions/existing-ordinances/

<sup>&</sup>lt;sup>3</sup>https://dnr.maryland.gov/wildlife/Pages/plants\_wildlife/mdbirds.aspx#:~:text=Over%20450%20bird%20species%20ha ve,or%20a%20handful%20of%20times.

<sup>&</sup>lt;sup>4</sup> <u>https://www.energy-manager.ca/windows-the-weakest-link/</u>

### Dr Mark Southerland Testimony in Support of HB6 Ma Uploaded by: Mark Southerland



### Maryland General Assembly - House HGO Committee - February 8, 2023

### Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2023) – HB 6

### TESTIMONY OF DR. MARK SOUTHERLAND – SUPPORT

I am a professional ecologist who has served on the boards of Maryland Science Council, Maryland Water Monitoring Council, Howard County Environmental Sustainability Board, Howard County Conservancy, and Patapsco Heritage Greenway. I represent **Safe Skies Maryland**, a statewide organization dedicated to saving birds, wildlife, and people.

Two events brought me to advocating for this bill:

1. <u>Glass Buildings as Energy Sinks</u>. As a scientist working in the fields of energy conservation and green buildings, I was struck by the exponential growth of buildings with extensive glass facades. I realized that these majority glass buildings would be an energy sink and erode the energy conservation gains from decades of green building policies. While the extensive use of glass was originally considered green, because it reduced the need for artificial lighting, technological advances in LED lighting meant that the heat gain from windows and the need for additional air conditioning far outweighed the benefits. If future building continues to be dominated by extensive glass facades, then we are setting up society for increasing energy costs and greenhouse gas emissions for decades to come.

2. <u>Glass Buildings as Killers of Birds</u>. As a consultant to Maryland DNR on the licensing of windpower turbines, I learned that, while we could avoid major bird mortality at windpower turbines (with proper lighting and siting), building glass was a thousand times much larger killer of birds. Then I witnessed the construction of the first of several new, large glass buildings being built in Downtown Columbia and realized that we were creating a deathtrap for birds migrating through our community. I realized that, as the number of glass buildings statewide and nationwide was growing rapidly, bird deaths from building collisions was about to become much worse. Then, in September 2019, scientists reported that we have lost 29% of all birds in North America since 1970, confirming the dire state of this treasured resource.

<u>Win-Win Solution</u>. Most importantly, I learned that both problems were easily solvable. The building standards embodied in this bill would both conserve energy and reduce bird mortality by more than 90%. So, I was compelled to act and, working with Delegate Hill, Senators Guzzone and Lam, and others, began efforts to solve this problem at the local and state level.

Here is a summary of the problem and the solution:

#### This is an important problem with existing solutions and a diverse concerned citizenry

- 1. The number of majority glass buildings is increasing exponentially, setting up society for long-term energy costs as building envelopes will be in place or at least 50 years.
- There are no daylighting or energy benefits with window-to-wall ratios over 60 percent, and in most cases an area of 25-40 percent is optimum, i.e., lowest energy consumption
- When glass treated to be bird friendly is used, energy loss is much reduced

- 2. 1 billion birds die in the U.S. every year colliding with transparent or reflective building glass (and the number of glass-dominated buildings is growing exponentially)
  - People walk into glass when they don't see the frame; birds never recognize a frame
  - Nearly all species are affected; even the best and brightest birds collide and die
  - Declining populations of migratory songbirds are significantly attributable to this nonsustainable loss
  - Birds are both an ecological mainstay and an economic driver through factors such as pest control and tourism (Maryland receives nearly \$1 billion in economic benefit from bird watching each year)
- 3. Building design and treated glass are an existing solution
  - Flight tunnel tests conducted by academics and the American Bird Conservancy have demonstrated the degree of safety provided by different kinds of glass
  - Green Business Council LEED program has codified the bird-friendly innovation credit standard in this bill
  - Building façade, screens, and shades work
  - Glass with UV or visible patterns of narrow lines or dots in 2"x4" arrangement work
  - Bird-friendly design is cost neutral at the design phase
  - Bird-friendly designs and glass are energy efficient and saves dollars over time
- 4. Bird Safe Building designs and retrofits are being implemented
  - Many beautiful glass buildings are bird friendly such as Anchorage Museum and the Inuit Headquarters in Mountainview CA
  - Jacob Javits Conference Center in NYC was expanded, but used bird friendly glass and has reduced bird deaths by 90% and energy consumption by 25%
  - Locally the Maryland DNR Tawes Building, National Aquarium, universities, nature centers and others are retrofitting their glass to be bird friendly
- 5. Bird Safe Building laws are being implemented
  - States of Illinois (2021) and Minnesota (2013) have mandatory bird safe building laws and Howard County MD passed a comprehensive law in July 2020
  - Mandatory laws are also in place in New York City, San Francisco, Oakland, Toronto, Ontario Province, and many other cities in US and Canada, with voluntary laws in other places (DC Council unanimously passed a bill and Mayor signed it on January 26, 2023)
  - Federal General Services Administration has instituted bird-safe standards, following passage in US House of a bi-partisan bill Bird-Safe Buildings Act earlier

Maryland has a chance to act locally to save money, fight climate change, and reduce the unsustainable deaths of economically important birds. Waiting even one year will see more glass buildings built and more money lost, more greenhouse gas emissions, and more birds dying.

### HB6- National Aquarium - MD Sustainable Buildings Uploaded by: Ryan Fredriksson



Date: February 8, 2023

Bill: HB 6 – Department of General Services – Energy- Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Position: Support

Dear Chair Peña-Melnyk and Members of the Committee:

The National Aquarium respectfully requests a favorable report for House Bill 6, Maryland Sustainable Buildings Act of 2023, which will help reduce bird fatalities across Maryland and improve energy efficiency in public buildings throughout the state.

Experts estimate that glass collisions are a leading cause of bird mortality second only to habitat loss worldwide<sup>1</sup>, and annually result in the deaths of at least 600 million birds in the U.S.<sup>2</sup> Maryland is part of the Atlantic Flyway, one of four major northsouth migratory routes birds travel over North America and the one through which land is the most densely populated. Fortunately, solutions exist to dramatically limit fatal bird strikes and protect bird populations through building design, installation of bird-safe glass and films, and limits to interior lighting at night.

In recent years, the National Aquarium has worked with our animal care experts to cover over 3,000 sq. ft of existing glass with bird-safe dot patterns. These patterns create new, highly visible signage and have significantly reduced bird strikes on our building.

Thanks to support of the state, the National Aquarium recently replaced the iconic glass pyramid above the *Upland Tropical Rain* 



*Forest.* Each of the new 684 glass pyramid panels is made of entirely bird safe glass. The bird safe glass has an added benefit of increasing energy efficiency because the etched pattern, which makes it visible to birds, also diffuses sunlight and reduces hotspots within the exhibit. Incorporating bird safe glass into the design and build process is far more cost-effective than retrofitting existing glass, with the added benefit of increased energy efficiency overall.

HB 6 would help mitigate bird collisions across the state by requiring similar strategies be utilized on state buildings or that bird-safe building and design standards be considered from the start of new projects. Our experience shows that many of the methods used to prevent bird collisions not only reduce bird fatalities but also make economic sense and increase sustainability within the built environment. We urge the Committee to issue a favorable report.

<u>Contact</u>: **Ryan Fredriksson** Vice President, Government Affairs 410-385-8276 rfredriksson@aqua.org

<sup>&</sup>lt;sup>1</sup> Klem, D. 2008. Avian mortality at windows: the second largest human source of bird mortality on Earth. In: <u>Proceedings of the Fourth</u> <u>International Partners in Flight Conference, Tundra to Tropics</u>, pp 244-251.

<sup>&</sup>lt;sup>2</sup> Loss, S.R. et al. 2014. Bird-building collisions in the United States: Estimates of annual mortality and species vulnerability. *The Condor* 116:1. https://doi.org/10.1650/CONDOR-13-090.1

### HB 0006 AIAMD Ltr of Support.pdf Uploaded by: Sandi Worthman



6 February, 2023

Delegate Joseline A. Pena-Melnyk Chair, Health and Government Operations Committee Room 241 House Office Building Annapolis, Maryland 21401

Re: Letter of Support for HB 0006 Department of General Services – Energy – Conserving Standards (Maryland Sustainable Buildings Act of 2023).

Dear Chairwoman Pena-Melnyk and members of the Health and Government Operations Committee:

I am writing to voice AIA Maryland's support of House Bill 0006. AIA Maryland represents nearly 2,000 architects in the state of Maryland and advocates for the profession and the quality of the built environment. As we work to be good stewards of the built environment, we are equally cognizant of the natural environment that we interact with and we aim to minimize our impact on the natural world. This bill's primary purpose is clearly to reduce the estimated 1 billion bird deaths each year in the United States as a result of striking buildings. We believe this bill takes practical measures that can help reduce the likelihood of these collisions from happening and in turn, it may help reduce building energy use. The energy conserving standards are an aspect of the bird-safe design, largely tied to automatic lighting controls that turn off portions of interior and exterior lighting that may attract or confuse birds when buildings or site areas are not actively occupied. Additionally, energy conservation may be gained in the design process of assessing the building windows, screening and configuration. Bird-friendly design is particularly important in Maryland where we are on the Atlantic flyway, a heavily traveled path for migratory birds.

Member firms from our state chapter have tested the tool this bill implements, LEED Sustainable Sites pilot credit 55 on a couple of new 2-story sample projects. Research has shown that the first 40' of building height above the ground has the highest probability of bird strikes, so our sampling is relevant, and the pilot credit calculations account for building height zones carrying different risk factors. The process required for both projects required a modest amount of design time to comply with the pilot credit. The process enables sufficient flexibility to be able to meet the design criteria without any undue hardship and we do not expect it would have significant project cost impact. We also acknowledge and believe that there may be energy reduction through window criteria, screening and opacity of materials that may reduce heat gain on buildings in addition to limiting night-time illumination of interior glass-enclosed spaces and exterior lighting. Based on the testing of projects that were completed, we believe such accommodations can be made on new designs, or when existing buildings are being substantially renovated. In either case, the building skins and systems can be designed to respond to the proposed criteria.

Maryland is not acting alone in adopting guidelines like these. Given our geophysical presence along the coast and the Chesapeake Bay, it is particularly important to provide an accommodating migratory path for birds. Other states and jurisdictions have already enacted regulations similar to this bill, those include the state of Minnesota, New York City, San Francisco, Oakland, Chicago, Toronto and others. Howard County passed a law through county council, requiring mandatory bird safe design as a part of the County Green Building standards. Building codes continue to move toward developing buildings with a more efficient building envelope and the bird friendly criteria can be incorporated into the design parameters. Studies have shown that by implementing bird friendly design parameters, bird collision deaths can be reduced by up to 90 percent.

AIA Maryland 86 Maryland Avenue Annapolis, Maryland 21401 **T** (410) 263-0916

www.aiamd.org

We recommend that the regulations be incorporated in the Maryland Green Building Council's program requirements documents so they are in a location where design professionals will reference criteria they need to meet. Starting with these measures early in the design process enables the design team to incorporate elements in the building design from the beginning where they may have limited to no effect on building cost.

AIA Maryland cares deeply about the quality of Maryland's natural and built environment. Sensible measures that diminish the impact of our built environment on the natural world are valuable to all of us. We therefore respectfully ask your committee to vote in favor of HB 0006 that provides thoughtful, responsible paths to bird-friendly design and may provide some added benefits of diminishing energy use.

Sincerely,

Chris Parts, AIA Director, Past President, AIA Maryland

**T** (410) 263-0916

www.aiamd.org

## **2023 H6 Sponsor Testimony final.pdf** Uploaded by: Terri Hill Position: FAV

**TERRI L. HILL, M.D.** Legislative District 12A Howard County

Health and Government Operations Committee

Subcommittees Government Operations and Health Facilities

Public Health and Minority Health Disparities

February 8, 2023



Annapolis Office The Maryland House of Delegates 6 Bladen Street, Room 404 Annapolis, Maryland 21401

410-841-3378 . 301-858-3378 800-492-7122 *Ext.* 3378 *Fax* 410-841-3197 · 301-858-3197

Terri.Hill@house.state.md

### THE MARYLAND HOUSE OF DELEGATES ANNAPOLIS, MARYLAND 21401

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#### House Bill 6

Department of General Services – Energy–Conserving Standards (Maryland Sustainable Buildings Act of 2023)

Dear Chair Peña-Melnyk, Chair Barnes, Vice-chair Kelly, Vice-chair Chang, and Members of the Committees,

House Bill 6 is our opportunity, as legislators, to address an urgent and significant ecologic, economic, and environmental problem while simultaneously saving money. By modifying our building construction and operation standards, we can reduce energy costs to the state and decrease the up to a billion U.S. annual bird building-strike deaths. A complement to the 2030 Greenhouse Gas Emissions Reduction Act Plan, HB6 would modify the State's High Performance Green Building Program, thereby complementing the State's Climate Solutions Now Act of 2022, which left this important issue unaddressed. It also substantially improves on former Governor Larry Hogan's 2019 "Maryland Leads by Example" initiative to achieve a 10% reduction in the energy consumption of state-owned buildings by 2029.

#### HB6 requires the

- Department of General Services to establish LEED 55 standards, periodically updated, for newly constructed, acquired, or substantially altered state buildings. The LEED 55 standards incorporate "bird-safe" designs for cladding, thus conserving energy **and** minimizing adverse impacts on birds;
- Maryland Green Building Council to include the standards in any requirements that the Council establishes for participation in a higher-performance building program;
- shielding from dusk to dawn, and minimization by use of automated technologies of building lighting, to the extent practicable and within budgetary constraints; and
- that the bill's directives apply "to the extent practicable and within budgetary constraints.

Buildings account for more than 40 percent of energy use and almost a third of greenhouse gas emissions worldwide. This includes consumption and conservation efficiencies related to construction design, materials, and operations. The trend of the past decades has been to incorporate greater amounts of glass/plexiglass into building facades. While architecturally and artistically appealing, the increased use of transparent glass, particularly in the lower four stories, has threatened to undo energy conservation efforts, cost the State money, and contribute to climate unsustainability. Untreated transparent glass/plexiglass is energy inefficient and acts as death traps. Birds, unable to detect the glass, fly into the structure walls at high velocities and die. Next to predation by domesticated and feral cats, this is the second-highest cause of bird deaths in the United States. <u>https://abcbirds.org/glass-collisions/</u>.

Conversely, use of U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) credit 55 bird-safe windows and/or architectural elements - including ultraviolet patterned, matte, opaque, etched, stained, or frosted glass Plexiglas<sup>®</sup>- measurably increases a building's energy efficiency and reduce bird strikes by up to 90%. When incorporated in the design and planning stage, their use is cost neutral.

Birds enhance our quality of life, control insect and other vermin populations, are key players in seed

dispersal and pollination, serve as nourishment, and provide comfort, companionship, entertainment, protection, and employment. The economic contribution of birding and other avian-related industries and activities to Maryland's Total Industrial Output is calculated by the Maryland Ornithological Society as over \$909 million annually, generating 10, 807 full and part-time jobs, and producing \$88.4 million in state and local revenue. As a signatory to the Migratory Bird Treaty Act of 1918, Maryland has committed to protecting, and our agencies are obligated to minimize, to the extent practicable, adverse effects on migratory birds.

Incorporation of bird-safe designs in construction reduces energy maintenance costs, resulting in net savings to the buildings and facilities budget. This is consistent with the State's mandate under the High-Performance Building Act of 2008 that newly constructed state buildings meet or exceed U.S. Green Building Council's LEED silver rating criteria or the equivalent.

**HB6 has** passed the House twice, and a Senate bill passed both chambers only to be die in the final minutes Sine Die. I hope for better success with both this year. Passing **HB6**, The Maryland Sustainable Buildings Act of 2023, is a win-win. By requiring the incorporation of LEED credit 55 bird-safe standards in the planning, design, and construction of new State buildings and significant renovations, mandating utilization of light shielding and automatic controls, we can decrease the number of deadly bird strikes, maintain- even enhance - architectural aesthetics, and save taxpayer dollars on building operational energy cost.

I respectfully request a favorable report with the sponsor's technical amendment putting the cross-filed bills in the same posture.

HB 147 Climate Crisis.pdf Uploaded by: Dana Schulze Position: UNF

### HB 147

I am a USAF combat veteran, hold a BS in Public Affairs, MA in counseling.

Balanced Energy policies must provide Marylanders multiple, reliable, and affordable energy choices.

I oppose HB 147 it does not provide a balanced energy policy. Intermittent forms of energy such as wind and solar are a greater threat to people due to the difficulty producing and transporting energy during extreme heat and cold causing more death than any recorded difficulties from fossil fuels. Other countries are producing more pollutants than the United States. We are one of the cleanest energy producers in the world.

The verbiage in HB 147 sounds like the sustainable development goals of Agenda 2030 when the government decides what fuel to produce and whom it will be distributed to in the community based upon a false climate crisis. The World Economic Forum created the climate crisis to control the populace and rule the world under a few select nations. The tactics of the WEF is to create a crisis and then provide a solution which controls the masses. Agenda 2030 and the Bali Declaration of G20, are examples of these strategies. Another example of the over reaching climate agenda is that bugs will be the choice of food for the masses since bugs positively impact the climate crisis. You will own nothing, eat bugs and be happy. See the links below.

Maryland is a breadbasket of food and fuel which can provide bountifully for all Marylanders. Marylanders want equal opportunities to produce and consume energy without the government deciding for us. This plan ultimately removes choices from individuals and hands over control to the government to provide highly regulated expensive fuel to citizens.

Zero emissions is a term which is highly acclaimed for the populace while the "select few" freely fly the globe in their personal jets, fund the military industrial complex, incite global conflict, and promise that all lowly people will own nothing and be happy. Transportation and fuels decided by the government such as fossil fuels become regulated and extremely costly and will only be available for the extremely wealthy.

https://www.weforum.org/agenda/2022/02/how-insects-positively-impact-climate-change/

You'll own Nothing. And You'll be Happy (bitchute.com)

G20 Bali Leaders' Declaration | The White House

https://www.un.org/en/global-issues/food

You'll own Nothing. And You'll be Happy (bitchute.com)

# **'23 HB 6 DGS Energy-Conserving Standards LOI HGO 2** Uploaded by: Devin Neil Position: INFO

Wes Moore Governor

Aruna Miller Lt Governor



Atif Chaudhry Secretary

Nelson E. Reichart Deputy Secretary

BILL:	House Bill 6 Department of General Services – Energy-Conserving Standards (Maryland Sustainable Buildings Act of 2022)
COMMITTEE:	Senate Education, Energy & Environment
DATE:	February 8, 2023
<b>POSITION:</b>	Letter of Information

Upon review of House Bill 6 – Department of General Services – Energy-Conserving Standards, the Department of General Services (DGS) provides these comments for informational purposes.

The bill would require DGS to establish guidelines and adopt regulations to minimize adverse impacts to birds on State buildings constructed, substantially altered, or acquired by DGS, to the extent practicable.

House Bill 6 requires lighting to be reduced in existing buildings to the extent practicable. A few State buildings would have to implement this, by using automatic control technologies. The requirement to reduce lighting on existing buildings may cause a significant cost, however this is left to DGS to determine the appropriateness and could be included when lighting projects are considered at existing facilities.

For additional information, contact Ellen Robertson at 410-260-2908.

## HB 6 - State Projects - Bird Safe Buildings - NAIO Uploaded by: Tom Ballentine

Position: INFO



February 6, 2023

The Honorable Joseline A. Pena-Melnyk, Chair House and Government Operations Committee House Office Building, Room 241 Annapolis, MD 21401

#### Informational – HB 6 – Department of General Services – Energy – Conserving Standards

Dear, Chair Pena-Melnyk Committee Members:

The NAIOP Maryland Chapters represent more than 700 companies involved in all aspects of commercial, industrial, and mixeduse real estate. NAIOP generally does not provide testimony on bills that affect construction standards for state buildings. But our membership has concerns about the confusing scope and several questionable provisions in HB 6 and would like the committee to consider the following points:

- The definition of state building and the required inclusion of the HB 6 standards in the Maryland High Performance Green Building Program cause confusion about whether the requirements will apply to private buildings leased to the state and whether private buildings that adhere to the Maryland Green Building Council's design guidelines will be required to meet the standards referenced in HB 6.
- The bill requires DGS use design features "consistent" with U.S Green Building Council LEED 55 Pilot Credit. LEED Pilots are experimental provisions that are being evaluated to determine if they should be awarded credits in future versions of the certification system. LEED 55 has been in pilot status for years and despite numerous opportunities has not been elevated to a full LEED credit. Many LEED certified professionals consider it to be contrary to other LEED priorities and outdated because it does not include audible deterrents and other more recent, effective, and less costly approaches to avoiding bird strikes.
- The LEED 55 Pilot runs contrary to LEED priorities because it calls for limiting the amount of glass on building facades and increasing the wall area. This approach reduces the amount of natural daylight that can reach work areas inside the building. Daylighting is important for the comfort of occupants and a priority element of LEED design.
- Replacing transparent glass with frosted or etched glass can add substantially to the cost of a building. Alternative glass treatments such as adhesive film must be replaced every 5-7 years increasing maintenance requirements. Both approaches have negative implications for ground floor retail uses and are generally viewed as creating less desirable work environments.
- Despite what has been implied, the use of glass on the exterior of buildings does not necessarily threaten energy conservation efforts. Double-paned windows available in this market are more efficient than the latest energy code requirements for Maryland's climate zone. Because building components are interrelated, design teams improve the efficiency of other parts of the building in order to achieve overall energy performance requirements while still using exterior glass. The recently adopted 2021 International Energy Conservation Code requires lighting of outdoor parking areas to automatically dim to 50% of its wattage when activity is not detected. This applies during all dark hours of the year, not the six months listed in the bill.

#### NAIOP respectfully requests your consideration of our point of view on HB 6.

Sincerely,

T.M. Balt

Tom Ballentine, Vice President for Policy NAIOP Maryland Chapters - *The Association for Commercial Real Estate* 

cc: Health and Government Operations Committee Members Nick Manis – Manis, Canning Assoc.