

MARYLAND STATE RETIREMENT AND PENSION SYSTEM CLIMATE ADVISORY PANEL MINUTES OF OPEN SESSION

Convened on Thursday, August 21, 2025, at 11:00 a.m., virtually via a videoconference

Panel Members present:

Angelo Calvello, Chair Maria-Elena Drew Douglas Lawrence, Vice Chair Stacy Swann

Mary Cerulli

Staff members present:

Martin Noven, Executive Director Courtney Key Cheryl Davis-Shaw Thomas Kim Michael Fang John Lane

David Ferguson Michael McCord
Dimitri Grechenko Stephen Reilly
Joe Gutberlet Beau Smith
Michael Howard Rick Sullivan
Lisa Jordan Chex Yu

Edward Kamonjoh Greg Kasten Kate Kemmerer

Assistant Attorneys General present:

Tea Carnell Alex Harisiadis
Rachel Cohen Michael Watts

Other attendees:

Frank Benham Mary Mustard

Stephen MacLellan Devaughn Blackburn

1. Call the Meeting to Order

Mr. Calvello called the meeting to order at 11:02 a.m. and proceeded to conduct a roll call of Panel members to confirm a quorum.

2. Approve Open Session Meeting Minutes

Mr. Calvello called a vote to approve the open session minutes from the July 17, 2025 meeting. All Panel members voted to approve the minutes.

3. Education Workstream Update

Asset Allocation Process

Mr. Kim introduced the Meketa team and outlined what the will team cover, in addition to highlighting the topics Mr. Smith would address. Mr. Benham (Meketa) covered the System's asset allocation process and explained that asset allocation is reviewed annually, though changes are typically made every five years or when conditions or objectives change. Mr. Benham provided historical context for the System's asset allocation journey - touching on risk tolerance priorities and the risk analysis range and approach employed by Meketa, including use of a peer average portfolio as reference, and the deployment of liquidity stress tests to verify the System can meet its obligations under severe market conditions. Questions from Panelists covered the nature of the peer group, capital assumption sources and their historical accuracy.

Incorporation of Climate Risk in Asset Allocation

Mr. MacLellan (Meketa) explained that Meketa uses a factor based, top-down model rather than bottom-up company modelling, evaluating climate impacts through their influence on macroeconomic growth. Mr. MacLellan articulated that Climate risk is integrated as one of several factors across 35–40 macro factors, discussed the sources of climate risk data, and highlighted the distribution of return spreads under different climate paths. Questions from Panelists ranged from the existence of heat maps showing regional climate risk impacts, the inclusion of 'tipping points' in modeling, whether there is a climate science team at Meketa, and the potential climate risk liability impacts on plan funding levels. Ms. Cerulli referenced a report from the Institute of Actuaries regarding use of tipping points in climate risk modeling.

Climate Risk Report

Mr. Smith indicated that the System's Climate Risk Reports have been an incremental work in progress over the past seven years, in partnership with Meketa. Mr. Smith shared that Staff has worked with a global manager to complement Meketa's climate risk modelling and suggested that the Panel is well positioned to contribute its intellectual capacity and leadership to the Climate Risk Report construct thought process as well as with respect to making contributions around the range and nature of analytical tools the System should consider for a deeper analysis of climate risks and opportunities in its investment processes. Questions from Panelists included whether climate transition planning is viewed at the company-level in scenario analyses conducted by the System's partners.

4. Investment Process

Public Equity

Mr. Kim stated that while the System consults with various stakeholders to inform its investment decisions, the ultimate implementational decision-making authority rests with the Investment Division. Mr. Kim indicated that the System's public equity portfolio represents \$23 billion with a target return of 50 basis points over the benchmark. Mr. Kim pointed out that the System's overall strategy is to use external managers to drive alpha, that internal management is focused on beta, and that approximately 30 percent of the equity portfolio is managed internally via index or enhanced index strategies. He stated that climate

considerations are addressed in external manager due diligence questions and that manager responses are factored into the System's decision-making processes.

Fixed Income and Private Credit

Mr. Grechenko indicated that his team is responsible for fixed income, currencies & commodities, pointing out that rate-sensitive and credit portfolios represent about \$19 billion. across rate sensitive and credit portfolios. Mr. Grechenko shared that all investment strategies are active and that the team aims to add at least 30 basis points in rate sensitive portfolios, and 65 basis points within the credit portfolio. Mr. Grechenko explained that the team has generated approximately \$200 million in value over a five year period, and mentioned his team's investments in California carbon allowance certificates - which he indicated was an internally sourced investment, when the Panel inquired about how the certificates' investment opportunity was sourced.

Private Equity

Mr. Ferguson stated that private equity investments represent about \$15 billion or approximately 20 percent of plan assets. He shared that the System has about 60 managers, predominantly U.S.-focused with some exposure to Europe and Asia. Mr. Ferguson explained that the private equity portfolio concentrates on technology and healthcare, with minimal exposure to traditional energy, and that co-investment relationships represent about 15 percent of commitments. Mr. Ferguson mentioned that managers provide extensive data, and that Staff closely monitors underwriting and due diligence. Panelists inquired about lessons learned from managers on climate-related financial risks.

Real Estate

Mr. Reilly expressed that the real estate asset class is entirely externally managed by 27 managers, and that the portfolio skews to core and core plus strategies and includes thousands of properties. Managers assess climate transition risk (e.g., building performance standards) and physical risk via third party tools (Moody's, MSCI, Munich RE). Mr. Reilly indicated that the team is gathering more comprehensive data on energy use, water and insurance. In response to Panelist inquiries, Mr. Reilly and pointed out that while rising insurance costs in the Sunbelt remain a concern, costs but have partly receded (10–30 percent declines noted).

Real Assets

Mr. Kasten indicated the natural resources and infrastructure portfolio comprises approximately 5 percent of the asset allocation weight, but that is expected to increase to 6 percent under the new allocation. Mr. Kasten explained that half of the portfolio is in public securities but there are plans to increase private infrastructure exposure, and that commitments range from \$100 million to \$300 million and focus on core and core plus strategies. Mr. Kasten expressed that his team has noted increasing data center investments and, in response to Panelist questions on the climate impact of such investments, indicated that the System intends to assess data center climate impacts.

5. External Manager Engagement and Due Diligence on Climate Risk Management

Panel members reviewed various due diligence questionnaire (DDQ) templates used to assess external managers and suggested that the DDQs be streamlined, become more targeted, and distinguish between more forward-looking transition planning and backward-looking emissions data. Other suggestions included clarifying definitions of physical risk, transition risk, and climate related opportunities, as well as considering separate approaches for different asset classes while maintaining a core set of common metrics for portfolio-wide analysis. The discussion included references to legislative language calling for climate metrics germane to particular asset classes – and the System's ability to demonstrate momentum, on such metrics, over time. The discussants also recognized the time burden on both managers and staff with respect to filling and reviewing DDQs.

6. Motion Meet in Closed Session

At 12:57 p.m., on a motion made by Mr. Lawrence and seconded by Ms. Drew, the Panel moved to meet in closed session to review the closed session Climate Advisory Panel meeting minutes from July 17, 2025, pursuant to General Provisions Art., § 3-103(a)(1)(i), the exercise of an administrative function, and General Provisions Art., § 3-305(b)(13), to comply with a specific statutory requirement that prevents public disclosure, namely, General Provisions Art., § 3-306(c)(3)(ii), requiring that the minutes of a closed session be sealed and not be open to public inspection.

CLOSED SESSION

Panel Members present:

Angelo Calvello, Chair Douglas Lawrence, Vice Chair

Mary Cerulli

Staff members present:

Martin Noven, Executive Director Cheryl Davis-Shaw Michael Fang David Ferguson Dimitri Grechenko Lisa Jordan Edward Kamonjoh

Greg Kasten Kate Kemmerer Courtney Key Thomas Kim John Lane Stephen Reilly Beau Smith Chex Yu

Maria-Elena Drew

Stacy Swann

Assistant Attorneys General present:

Rachel Cohen Alex Harisiadis

Other attendees:

Devaughn Blackburn

7. Approve Closed Session Meeting Minutes

On a motion made and duly seconded, the Panel approved the closed session minutes from the July 17, 2025 meeting.

8. Motion to Adjourn Closed Session and Return to Open Session

At 12:58 p.m., on a motion made by Mr. Lawrence and seconded by Ms. Drew, the Panel moved to adjourn the closed session and return to open session.

OPEN SESSION

Staff members present:

Martin Noven, Executive Director Cheryl Davis-Shaw Michael Fang David Ferguson Dimitri Grechenko Lisa Jordan Edward Kamonjoh Greg Kasten Kate Kemmerer Courtney Key Thomas Kim John Lane Stephen Reilly Beau Smith Chex Yu

Assistant Attorneys General present:

Rachel Cohen Alex Harisiadis

Other attendees:

Devaughn Blackburn

9/10. Panel-led Discussion/Next Panel Meeting

Panel members exchanged suggestions about next steps for the Panel's activities and discussed whether it was possible to schedule a meeting before the next Panel meeting scheduled on September 18, 2025. Mr. Calvello agreed to confer with staff on the topics discussed.

11. Motion to Adjourn the Meeting

At 1:08 p.m., on a motion made by Mr. Lawrence and seconded by Ms. Drew, the Panel moved to adjourn the meeting.

Respectfully submitted,

Edward Kamonjoh Sr. Governance Manager