MONTGOMERY COUNTY EMPLOYEE RETIREMENT PLANS

CONSOLIDATED RETIREE HEALTH BENEFITS TRUST

November 20, 2020

FOURTH REPORT TO THE COUNTY COUNCIL AND THE COUNTY EXECUTIVE PURSUANT TO COUNCIL RESOLUTION NO. 18-804

On May 16, 2017, the Montgomery County Council adopted Resolution No. 18-804, *Environmental, Social, and Governance Investment Policy Guidelines and Fossil Fuel Company Investments of the Employees' Retirement System and the Consolidated Retiree Health Benefits Trust*.[1] The resolution is Attachment 1. It requested the Boards for the ERS and the CRHBT to:

1. consistent with their fiduciary duties, explore all means possible to:

    a. minimize the Boards' investments in companies with the largest fossil fuel reserves as rapidly as possible; and

    b. apply environmentally and economically sound decision-making, both generally and specific to climate change, using ESG policy guidelines; and

2. report within 6 months after adoption of this resolution and annually thereafter to the Council and the Executive on implementation of these actions, detailing the research conducted on top fossil fuel holding companies and detailing the extent of divestment or the rationale for not pursuing divestment from individual holdings.

This is the Board's fourth report to Council. It is organized as follows: Part A reviews the Boards' fiduciary duty and the Environmental, Social, and Governance (ESG) policy guidelines employed by the Boards and their investment managers and consultants. Part B reviews the Boards' current holdings in fossil fuel companies. Part C reviews the research and actions undertaken by the Boards and Staff since the adoption of the resolution.

[1] The Employees' Retirement System (ERS), the defined benefit pension plan that includes employees of Montgomery County Government, participating agencies, and their beneficiaries, is overseen by the Board of Investment Trustees. The Consolidated Retiree Health Benefits Trust (CRHBT), the trust that includes employees of Montgomery County Government, Montgomery County Public Schools, Montgomery College, participating agencies, and their dependents, is overseen by the Board of Trustees. As of September 30, 2020, the ERS had assets of $4.5 billion. The CRHBT had assets of $1.3 billion. The ERS, which started in 1965, currently has a funded level of 99 percent. Its 10-year investment return is in the top decile of its peer group (better than 90% of peers) of public pension funds. The CRHBT, which started in 2008, currently has a funded level of 39 percent and a 10-year investment return in the top quartile of its peer group (better than 75% of peers).

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A. The Boards' fiduciary duty and the ESG policy guidelines employed by the Boards and their investment managers and consultants, both generally and specific to climate change.

Both Boards are required by law to act in accordance with their fiduciary duty. The Standard of Care for the ERS in Section 33-61C of the County Code requires a fiduciary to act "only in the best interest of the participants and their beneficiaries." The Duty of Care for the CRHBT in Section 33-163 requires a fiduciary to act "only in the interest of the participants in retiree benefit plans and eligible dependents."

The County Code also requires the Boards to use investment managers to select individual securities; we are not authorized to do so ourselves. We apply rigorous screens to determine the best investment managers for different asset classes.

The Boards have developed ESG policy guidelines that are embedded in our investment and governance processes. Our Governance Manuals state that our policy is:

> that the Executive Director and Investment Staff incorporate ESG considerations into all investments…and examine opportunities for ESG integration in existing investments. This policy also applies to investment consultants and investment managers hired…to provide guidance on investment due diligence matters. The Boards annually review engagement outcomes and update this policy as appropriate.

As our investment managers work to achieve the best risk-adjusted return in accordance with their fiduciary duty, they apply ESG factors to help determine which companies to include or exclude from consideration. Shown below are actions taken by our investment managers since our last report:

- **Private Equity Manager** – This fund that was recently added to the portfolio and has developed an ESG Policy that attempts to measure potential risks and opportunities at both the general partner and portfolio company level. Some of the metrics that the manager uses are shown below:

  Environmental
  - Total annual energy spend across all facilities
  - Adoption of renewable energy
  - E-Waste – This is particularly important for technology businesses. The manager asks that each portfolio company uses certified disposal companies to dispose of electronic equipment that is no longer needed.

  Social
  - Employee turnover rates
  - Analysis of non-discrimination and anti-harassment policies
  - Analysis of employee/HR handbooks
  - Quality of family leave policies and procedures
  - Existence of employee wellness programs

  Governance
  - Cybersecurity and privacy concerns – the manager will analyze whether there have been breaches over the last 5 years in either area.
  - Analysis of policies and procedures surrounding business continuity.
  - Analysis of litigation that a portfolio company may be involved in.

- **Private Real Assets Manager** –Recently hired a manager focused on making control equity investments in middle market renewable power assets, primarily wind and solar. The manager is helping to support a more sustainable future of clean energy. Each investment into a renewable energy source serves to reduce society's carbon footprint and the amount of air pollution caused from the reliance on traditional fossil fuels. As an example, the manager estimates that once fully deployed, their portfolio will generate 2,800,000 MWs of renewable energy annually which will offset approximately 683,000 metric tons of CO_2 from polluting the air. This is roughly equivalent to the removal of 148,000 cars from the roads. In addition, while solar and wind projects are inherently good for the environment, prior to the construction of any new asset, the manager will evaluate any potential environmental impact and ensure that any necessary prevention and mitigation efforts are implemented.

- **Private Real Assets Manager** – A private real assets manager focused on the midstream energy infrastructure space invests in a company that transports water out of hydrocarbon producing areas via pipeline. This strategy has been well received by both customers and regulators. The company's pipelines also directly reduce the amount of 18-wheeler trucks on the road that were previously used to transport produced water. According to the Environmental Defense Fund, the average 18-wheeler in the U.S. emits 161.8 grams of CO_2 per ton-mile. At 5 million miles and an estimated loaded weight of 40 tons for a water truck, the company has eliminated over 30,000 metric tons of CO_2 emissions in the Bakken alone, which is equivalent to removing over 6,500 passenger vehicles from the road. The company also has stringent standards and systems in place to monitor real time data of its pipelines to detect any mechanical integrity that could lead to issues.

- **Private Debt Manager** – This manager focuses on making debt investments into renewable power developers and recently issued their annual impact report for the last year. They estimate that over the past year, 2.1 million metric tons of CO_2 were offset by their investments, which is equivalent to planting 43 million trees, replacing 293 million gallons of gasoline, or removing 552,000 vehicle miles driven for one year.

- **Private Real Estate Manager** –This real estate manager makes significant investments in grocery-anchored retail centers across the U.S. The manager works toward creating community-oriented retail centers. Each tenant is chosen based on the needs of the community and not just as a profit center. For instance, in one of their retail properties, the manager had the opportunity to rent a space to a restaurant at a higher rent, but they declined the offer after assessing that a more suitable tenant could contribute stronger to the property/community (e.g. instead of a shrimp restaurant they are looking for a business that is family friendly). From an environmental standpoint, each potential investment will undergo, at a minimum, a Phase 1 environmental inspection conducted by a third-party environmental consultant. Some of the managers environmental initiatives include:

    - Reducing energy usage through retrofitting lighting to lower energy using LED lights within the warehouse space as well as the exterior parking fields at retail and industrial assets.
    - Reducing water usage at each of its assets. The GP redesigns and implements new landscaping schemes at its retail and industrial assets with lower water-using plantings and incorporates the use of hardscape alternatives.
    - Improving the local ecosystem surrounding its assets by engaging with architects and local consultants

- **Long Duration Fixed Income Manager –** In late 2019, the manager began to reduce their exposure to a food company after the SEC began an investigation into the company's accounts which led to management turnover. The manager spoke to the treasurer, and strongly encouraged their team to adopt a more conservative financial profile as the company addresses some of its governance and operating challenges. The manager did not get the corporate governance response they were looking for, so they continued to reduce their position. This manager also developed reporting for their investment teams that include third party ESG data from Sustainalytics, a leading global provider of ESG and corporate governance research and ratings to investors, to enable the firm's investment professionals to be aware of ESG trends within their portfolio.

- **Long Duration Fixed Income Manager –** The manager reduced its allocation to a U.S. bank following concerns raised during bond offerings for the Malaysian development bank in 2013. Several years later, criminal charges were filed seeking fines for allegedly misappropriating bond proceeds as well as $600 million in related fees. While the manager has benefitted from an underweight to the bank, they have recently been engaging with the company to better understand the scope of the misconduct and understand the willingness and ability of the company to address the governance shortfalls that led to these issues.

- **High Yield Fixed Income Manager –** Invested in a global automaker that has made combatting climate change a strategic priority and has demonstrated significant ESG commitments including meeting CO_2 reduction targets in the US and Europe, while providing industry leading disclosures in addition to a long history of investor engagement. The company plans to invest $11 billion through 2022 for new hybrid and fully electric (EV) models. Since 2017, the company has also achieved a 30% reduction in CO_2 per vehicle with a goal of a further 18% reduction by 2023. The manager has engaged with this manager for several years, having met at least annually to discuss ESG priorities, including the company's electrification strategies, board composition and governance, as well as warranty and recall costs.

- **High Yield Fixed Income Manager –** Invested in a midstream energy company that has shown leadership in implementing clean environment technologies in the oil and gas industry, such as advanced completion techniques (balanced drill outs) to minimize the amount of methane gas that reaches the surface and requires combustion by flaring, closed loop mud systems to eliminate the need for disposing of drilling muds in a separately excavated pit, and green completion units for completion flowback, which are essentially eliminating methane emissions. They also invest in a packaging company that manufactures metal and glass containers for food and beverages that are more sustainable than single use plastics. The manager believes that there will be a shift both in consumer preference and government regulation in the coming years that will lead to increased demand for this type of packaging.

- **Domestic Equity Manager** – The manager recently purchased a healthcare company that they previously refused to own due to corporate governance concerns. The manager engaged with the company on this issue and were pleased when the company announced several governance improvements, particularly regarding board structure. The manager believes this move unlocks value in the stock and makes the company a more attractive investment as well as acquisition candidate. The manager also engaged an electronics company to encourage the firm to address a lack of diversity on its board of directors.

- **Domestic Equity Manager** –This manager expanded their ESG research team in 2020, hiring a new ESG analyst. The firm's Sustainability Team also added a dedicated policy manager focused

on regulatory, third-party, and client concerns. The firm's Climate Research Team added a dedicated transition risk analyst to focus on the transition to a lower carbon economy and the investment implications of such a shift. The Client Research Team continues to help portfolio managers assess potential impacts of climate change on companies, economies, and society. This manager also recently hired a Head of Responsible Investing.

- **International Equity Manager –** Purchased a French-based energy management and industrial automation company with a business model now fully positioned to support the energy transition process, with 75% of revenues from energy management and 25% from industrial automation. Their products decrease energy use by 13%, and they have saved 110 million tons of CO2 on their customers end since 2018. Their superior positioning on sustainability gives them an edge on fundamentals with higher growth and free cash flow generation. The company also recently defined their impact goals, which align with the UN's Sustainable Development Goals, which are quantified and reported semi-annually.

- **International Equity Manager –** As part of this manager's ESG due diligence process for a European industrial gas company, they interviewed several former employees involved in the firm's green energy program. Their research found that the firm had made material commitments to sustainability issues that went beyond lip service. This included hefty investments in the hydrogen energy value chain, such as technology to reduce the carbon footprint of hydrogen production. The company appeared to be genuinely positioning themselves for an increasingly decarbonized world and were active in promoting the commercialization of hydrogen fuel-cell technology. These findings strengthened the manager's conviction in the investment and gave reassurance that the company would ultimately be rewarded by environmental regulations instead of being targeted by them.

- **International Equity Manager –** During a discussion with a Mexican retail store's management, the manager asked about the company's pricing policies versus their peer group. From a social standpoint, it was very interesting that their peers were aggressively passing on pricing from any sort of commodity inflation/currency depreciation onto customers, while this particular retail store was choosing to absorb it. Essentially, despite the fact that the retail store knew that they had the pricing power and the ability to charge more during a period when certain goods were scarce, they decided to opt for the more socially beneficial option which would draw less criticism from their customers or the government, engendering more goodwill long term, despite leaving some of the economics on the table today. The manager expressed their approval of the strategy.

- **International Equity Manager –** The manager purchased a leading wind turbine business. Over the years, much of the manager's analysis has focused on capital allocation and competition within the industry. This has largely been driven by government subsidies to renewable energy, making prices competitive versus fossil fuel power generation, as nations try to meet their climate commitments to reduce the growth in greenhouse gas emissions. Over time, this company made significant investments, improving the efficiencies of their turbines and reducing costs, so that in many countries they can now compete with other fuel sources on an unsubsidized basis. In the meantime, many less efficient competitors have had to exit the industry.

- **International Equity Manager –** The manager recently decided not to participate in a Canadian IPO due to the murky background of a major acquisition they had made a year ago in the U.K. The founder of the company they had acquired has spent time in prison for fraud and has a history of inter-company transaction that the manager's local contacts believe have severely short-

changed minority investors. While the operating numbers looked appealing, the manager felt that the local network in combination with their knowledge of the founder influenced their decision to stay away even though they had no negative view of the company itself.

- **International Equity Manager** – The manager voted against the remuneration of the CEO of a British shipping company due to a very low degree of transparency. They subsequently met with the chairman of the remuneration committee to discuss, which led to the committee agreeing to improve transparency. While the company provided a slight improvement in CEO compensation, the manager did not see it as being enough, so they voted against it again. Soon after, the manager decided to exit the position due to a combination of not delivering earnings to the manager's expectations (which further proved the point about compensation transparency) as well as an increased uncertainty for the outlook of the shipping industry.

- **International Equity Manager** – The manager purchased a Korean chemicals company. This company traditionally was focused on petrochemical production, primarily commodity plastics. However, the company also operates a business focused on the design and manufacturing of Lithium-ion batteries. This business segment was historically focused on small scale applications such as smartphones, over the last ten years the company as emerged as a leading producer of batteries for large scale applications, most importantly for electric vehicles. This company is a clear beneficiary of the global drive to meet emissions targets through increased electric vehicle adoption.

- **International Equity Manager** – Purchased an industrial gas company following meeting with management over the years that solidified the belief in the company's strong culture of corporate governance. In addition, the company had a very well-articulated and outlined ESG strategy specifically targeting goals of carbon neutrality and environmental impacts along with a strong outlook for long term earnings growth. This company also has a strong footprint and exciting opportunity for growth in the market for hydrogen, which is being touted by the European Union and others as a more environmentally friendly choice for the future of many industrial processes.

- **International Equity Manager** – This manager sold two Hong Kong-based companies due to corporate governance issues that were not apparent at the time of investment. The first involves a company that purchased the Chairman's yacht and the second was a water utility company that was involved in a related party transaction where the manager was concerned a premium price was being paid by the company to the related party.

- **Listed Infrastructure Manager** – This manager continues to maintain a heavy underweight to the energy infrastructure sector due to general investor aversion to the sector combined against the rise of ESG investing, overhang from financial distress in the exploration and production (E&P) sector, commodity price uncertainty due to COVID-19 and OPEC concerns, and 2020 election risks to the sector in the event of a Biden/democratic victory. Taken together, despite the large sell-off in energy infrastructure, they have maintained a sizable underweight position. The manager has also further adjusted their allocation within the utilities sector due to the ongoing energy transition. The manager continues to focus on dedicated renewable companies and increased their exposure to more diversified utilities that are "greening" their fleets.

- **Public Real Estate Manager** – The manager recently purchased a Japanese office REIT focused on improving its ESG focus. The company was recently given 4 stars by GRESB, a sustainability benchmark for real assets, in the most recent survey. Additionally, 93% of their buildings have green building certifications, which is the highest among Japanese REITS. The manager also

increased their position in a Singapore-based retail REIT, which is the highest scoring in the country from an overall MSCI ESG rating standpoint. This manager continues to marry their own internal ESG ratings with third-party ratings from MSCI. In the coming year, they plan to develop a proprietary ESG score to provide a more structured assessment.

- **Global Equity Manager** – In a trade session in 2020, the manager's portfolio construction process generated a proposed buy of shares of a U.S. industrial stock. The proposed trade was driven by a variety of considerations, the manager's quantitative process proposed this purchase in part because of the stock's ESG characteristics, which reduced the perceived risk associated with the position. This industrial company scores above average on each component of ESG, and particularly on the environmental component.

- **Global Equity Manager** – This manager became a signatory to the United Nations' Principles for Responsible Investment (UNPRI) in 2020. In addition, the manager also formalized a firmwide ESG policy during the year. The manager also invests with a global spirits manufacturer that about how they are promoting broader diversity amongst their management team and board. After the onset of the COVID-19 pandemic, this company also donated pure alcohol and producing hand sanitizer at large scale in France, Sweden, Ireland, Sweden, and the U.S.

Each Board's Governance Manual requires a comprehensive annual report detailing the implementation and outcomes of its ESG policy guidelines. The November 20, 2020 annual report for the Board of Investment Trustees for the ERS is Attachment 2. The report includes industry developments, current manager ESG updates and corporate engagement, consultant initiatives, recent board actions, and Staff research. There is a similar report for the Board of Trustees for the CRHBT.

B. The Boards' current holdings in fossil fuel companies.

Two tables, on Attachments 3 and 4, show the fossil fuel holdings of the ERS and the CRHBT as of September 30, 2020. As noted above, the Council resolution referred to "top fossil fuel holding companies." We have used the Carbon 200 list proposed by 350.org.

As we indicated in part A, the County Code requires the Boards to use investment managers to select individual securities; we are not authorized to do so ourselves. The Boards apply rigorous screens to determine the best investment managers for different asset classes.

The Boards have developed ESG policy guidelines that are embedded in our investment and governance processes. As our investment managers work to achieve the best risk-adjusted return in accordance with their fiduciary duty, they consider ESG factors to help determine which companies to include or exclude from consideration.

Earlier last month, in preparation for this report and future annual reports, we asked our investment managers to confirm that their fossil fuel holdings, if any, reflect their best judgment as to their risk-return mix, their ESG policy, and their fiduciary duty. Six of our actively managed separate account managers have such holdings. All have replied in the affirmative.

The table for the ERS on Attachment 3 lists fossil fuel holdings of $49.3 million. This represents 1.10 percent of our total fund's market value of $4.5 billion as of September 30, 2020. This compares to a $46.9 million or 1.08 percent exposure as of October 31, 2019.

The table for the CRHBT on Attachment 4 lists fossil fuel holdings of $9.8 million This represents 0.76 percent of the total fund's market value of $1.3 billion. This compares to a $10.4 million or 0.94 percent exposure as of October 31, 2019.

To place the current percentage of our funds' direct fossil fuel holdings in perspective, the majority of our holdings are actively managed. Three-fourths of the fossil fuel holdings in the Trust funds are in bonds, not stocks.

The Boards will continue to assess and refine our ESG policy guidelines and those of our investment managers and consultants. This analysis will be included in the future annual reports required by the Council resolution.

C. Research and actions undertaken by the Boards and Staff since the second report to the Council

Since the third report to the Council on November 20, 2019 we have continued to expand our knowledge of ESG issues. Shown below is a summary of the activities taken:

- **Ivy League Endowment Divestment Activities –** Staff analyzed the fossil fuel divestment activities of the eight Ivy League endowments, considered by many to be the most sophisticated institutional investors across the globe. To date, none of the eight institutions have divested of fossil fuels and several of them re-affirmed their aversion to such a strategy over the last year. Quotes from many of these endowments over the last year are shown below:

  > "Yale's managers make critical decisions about what investments are selected for Yale's portfolio and what issue are raised with company management teams. Given the nature of Yale's investment strategy, direct dialogue with its managers is the most effective means of addressing climate change risk in the portfolio." -David Swensen, Chief Investment Officer at Yale
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  > "Right or wrong, divestment is just not effective. I don't see how it does any good. In some ways, if people think that that's all they need to do, and that it lets them off the hook that's a really easy way out of doing the hard work of actually making real change." -Christina Paxson, President of Brown University
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  > "The answer is right now; we do not have any such divestment plan. We make a difference in the world through our teaching and research and the quality of that teaching and research, rather than by taking a symbolic stance with our endowment." Christopher Eisengruber, President of Princeton University

- **Divergence of ESG Ratings Across Firms** – MIT recently published a paper titled "Aggregate Confusion: The Divergence of ESG Ratings" which shows how noisy and sometimes unreliable ESG ratings can be when different ESG ratings agencies classify things in different ways. The paper investigates the divergence of ESG ratings across six prominent ratings agencies, namely, MSCI, Sustainalytics, Moody's, SP Global, and IVA. The study compared ESG ratings to credit ratings and noted that the correlation between a company's rating with one credit rating agency and another was 0.91, indicating very high correlation. Conversely, this figure was only 0.61 for ESG ratings. The study decomposed the divergence into three sources: different scope of categories, different measures of categories, and different weights of categories. The paper discussed the Sustainability Initiative, a collaboration between MIT and MassPRIM, that seeks to improve ESG measurement in the financial sector.

- **Relationship Between Gold and Climate Change** – The World Gold Council, the leading global advocacy organization for the gold industry, recently issued a report on the current and future impacts of climate change on gold. The study focused on both the gold industry's greenhouse gas intensity and carbon footprint in addition to the portfolio diversification benefits of holding gold during climate change driven periods of market volatility. A high-level summary is shown below:

    - Gold's downstream uses such as jewelry, electronic products, and gold bullion, have very limited impact on gold's overall carbon footprint.
    - The biggest driver of gold's carbon footprint is the gold supply chain, namely the energy and fuel use in gold production. The World Gold Council believes that the industry can achieve a net zero emissions goal by 2050 and believes the industry will have an easier path to zero relative to other industries such as agriculture, cement, steel, chemicals, and shipping.
    - Heightened market volatility and uncertainty from climate-related risks should be supportive of future gold demand, given the metal's role as a portfolio hedge.
    - Gold's risk-return profile is likely to be relatively robust in the context of climate-related transition risks, particularly relative to other mainstream assets.

- **Moody's View on Impact of Fossil Fuel Divestment** – Moody's Corporation, one of the leading credit rating agencies, does not believe divestment campaigns to be a threat to the oil and gas sector. They noted that university endowments and governmental pension funds have never represented a significant source of capital for the energy sector. Additionally, they don't believe that divestment would impact the financing market for the sector given the abundance of capital from other sources.

- **Climate Change Risk for Commercial Real Estate Sector** - Morgan Stanley Capital Investment, has created a model that seeks to assess the risk of climate change on the commercial real estate sector. Given the physical nature of real estate relative to other instruments such as stocks or bonds, it is crucial for investors to understand that potential physical and transition risks of the properties they own. This model is called the MSCI Real Estate Climate Value-at-Risk (Climate VaR) and it seeks to demonstrate how the nature and magnitude of physical risks may differ across assets and portfolios. With a sample of 671 assets from the MSCI US Annual Property Index, the firm assessed two critical physical risks: coastal flooding and tropical storms. The geographic with the highest risk from these two occurrences are the New York/New Jersey and Miami-Fort Lauderdale metropolitan areas.

- **Letter to the DOL on ESG Proposal –** In July 2020, the Boards sent a letter to the Department of Labor in opposition of their proposed rule "Financial Factors in Selecting Plan Investments." Staff, and the Boards, believe that this rule would make it more difficult for fiduciaries to consider financially material ESG factors as part of their investment decision making process. Some highlights from the letter include:

    > "The Plans have incorporated environmental, social, and governance (ESG) considerations into their investment policies related to all investments considered or made by the Plans. The policies also apply to investment consultants and investment managers hired by the Plans and provides guidance to them on investment due diligence matters."

"ESG integration is essential to fulfill our fiduciary obligations to engage in the appropriate analysis of the risks and returns of any investment as we believe ESG related issues can impact the risk and return characteristics of an investment. We believe that the Proposal misconstrues ESG integration and would lead to confusion and costs for our Plans. Given the challenges that the Proposal would create for Plans like ours, we urge you to allow the existing guidance to remain in effect and not move forward with the final rule. If the Proposal goes into effect, it will undermine our ability to act in the long-term best interest of our beneficiaries."

- **ESG Monitoring and Evaluation** – Sustainalytics, a leading global provider of ESG and corporate governance research and ratings to investors, ran a Climate Portfolio Risk Report for our public equity, fixed income, and real assets portfolio. They analyzed our portfolio across five metrics – carbon risk rating, carbon intensity, fossil fuel revenue exposure, stranded asset risk, and carbon solutions. Our portfolio was more favorable relative to the benchmark on four of the five metrics.

    - *Carbon Risk Rating* – This rating quantifies the company's exposure and management of material carbon issues in its own operations as well as its products in services – Overall, our portfolio has a 3% lower carbon risk than the benchmark.

    - *Carbon Intensity* – This is a relative metric used to compare company emissions across industries and is scaled by total revenue. Overall, our portfolio is 19% less carbon intensive than the benchmark.

    - *Fossil Fuel Revenue Exposure* – This measures the percentage of revenue that companies derive from thermal coal extraction, coal-based power generation, oil and gas production, oil and gas-based power generation, and oil and gas-related products and services. Overall, our portfolio has 24% less exposure to fossil fuels than the benchmark.

    - *Stranded Asset Risk* – This score assesses the financial risk associated with fossil fuel production and reserves, and any specific involvement in high cost fossil fuel projects. Overall, our portfolio has 14% more exposure to stranded asset risk than the benchmark. The high yield bond manager that held a company with a high stranded asset risk has recently sold this position, which brings our portfolio closer to the index in this category. Additionally, our holdings with the highest stranded asset risk are in fixed income securities with near-term maturities, meaning that long-term stranded asset risk is less relevant.

    - *Carbon Solutions* – Measures the percentage of revenue that companies derive from green transportation and renewable energy. Overall, our portfolio has 10% more exposure to carbon solutions than the benchmark.

- **CERES** – The Boards joined the CERES Investor Network in 2018 to gain a better understanding of climate risk within the portfolios, explore opportunities embedded in the clean energy economy, and develop a dialogue with other institutional investors on ESG related matters. Since joining, Staff has been an active participant in the Disclosure Working Group, which seeks to push companies to disclose all relevant sustainability information using the Global Reporting Initiative (GRI) guidelines as well as additional sector-relevant indicators. The goal of this working group is for more companies to disclose material sustainability risks and opportunities within their financial filings.

- **CFA Institute ESG Expert Network –** Investment Staff will be actively participating in the CFA ESG Expert Network, a diverse working group to share knowledge and resources focused on integrating ESG best practices. The CFA Institute is a leading global association for investment professionals.

Attachment - 1

Resolution No.: 18-804
Introduced: May 2, 2017
Adopted: May 16, 2017

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

Lead Sponsor: Council President Berliner
Co-Sponsors: Council Vice President Hans Riemer, Councilmember Tom Hucker

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SUBJECT: Environmental, Social, and Governance Investment Policy Guidelines and Fossil Fuel Company Investments of the Employees' Retirement System and the Consolidated Retiree Health Benefits Trust

Background

1. In 2016, President Obama noted that "Climate Change is a potential existential threat to the entire world if we don't do something about it." The substantial global risks of climate change are without question and are an immediate and increasing threat to our own generation and those that follow.

2. Climate change is a global issue, but with profoundly local aspects as well. Known environmental impacts of climate change include the loss of ice at the poles, rising seas and increased coastal flooding, longer and more damaging wildfires, more destructive hurricanes, more frequent and intense heat waves, and increased droughts. Health impacts of climate change include increased air pollution, a longer and more intense allergy season, the spread of insect-borne diseases, the disruption of our food supply, and more frequent and dangerous medical issues due to heat waves. These will have a profound impact upon the quality of life for current and future Montgomery County residents. Other impacts include the continued acidification of the oceans, destruction of coral reefs, the loss of marine life and shrinking habitats.

3. The extraction, transport and burning of fossil fuels results in the release of greenhouse gases, such as carbon dioxide and methane, which directly contribute to climate change. The 2015 Paris Agreement on goals for reducing emissions is a major step forward, and market forces are moving strongly in the direction of clean energy. However, the challenge remains grave, especially given the gross disregard for the threat of climate change displayed by President Trump and members of his administration. It is more important than ever that local governments confront climate change and the companies that contribute to it. Montgomery County is a national leader among local governments in addressing climate change by taking direct action locally to support clean energy, energy efficiency, and sustainability.

4. Retirement funds and other institutional investors have focused increasing attention on environmental, social, and governance (ESG) factors in the selection of professional investment managers and in the process followed by those managers when selecting companies for investment. Investments in the securities of fossil fuel companies must draw particular scrutiny. The burning of fossil fuels results in the release of greenhouse gases, such as carbon dioxide and methane, which directly contribute to climate change. Many fossil fuel companies have refused to acknowledge climate science, have rejected business plans that accurately account for the carbon emissions created by their identified reserves, and have lobbied against urgently needed climate policies. For these reasons, a growing global movement believes that it is morally reprehensible to invest in and seek to profit from the catastrophe-inducing actions of these companies. Since 2012, investments worldwide with a total value of over $5 trillion have been fully or partially divested of fossil fuel holdings. Minimizing the amount of County public employee pension funds invested in these companies will tell the world that we can no longer support policies and business practices that endanger our climate and our health.

5. The Employees' Retirement System (ERS), the defined benefit pension plan that includes employees of Montgomery County Government, participating agencies, and their beneficiaries, is overseen by the Board of Investment Trustees. The Consolidated Retiree Health Benefits Trust (CRHBT), the trust that includes employees of Montgomery County Government, Montgomery County Public Schools, Montgomery College, participating agencies, and their dependents, is overseen by the CRHBT Board of Trustees. The ERS currently has assets of about $3.8 billion. The CRHBT currently has assets of about $700 million.

6. Both Boards have adopted ESG guidelines for a socially responsible investment policy that applies ESG factors to the selection of investment managers and the managers' selection of securities. As the managers work to achieve the best risk-adjusted return in accordance with their fiduciary duty, they apply ESG screens to help determine which investment options to include or exclude from consideration.

7. There are several examples of public pension funds that have reduced or eliminated fossil fuel holdings using ESG factors. Notably, The District of Columbia Retirement Board has sold all of its directly held Carbon Underground 200 stocks via ESG screening as of June 9, 2016, in response to a DC Council resolution passed in 2014. The states of Maine and Vermont have also made considerable progress in reducing the fossil fuel holdings of their public employee pension funds using ESG policies.

8. Gino Renne, President of UFCW Local 1994, in an April 16 letter to Council President Berliner, expressed support for using ESG factors to reduce fossil fuel holdings in the ERS, noting that "Employee unions across the country have played a critical role in taking action to fight climate change by leveraging employee funds to make investment decisions that take the impact on our climate into consideration." And the Board of Investment Trustees noted in its April 10 statement on the issue that it will "focus particular attention on decisions by our managers to retain or invest in securities of fossil fuel companies."

Action

The County Council for Montgomery County, Maryland approves the following resolution:

The Council requests the Board of Investment Trustees of the Employees' Retirement System and the Board of Trustees of the Consolidated Retiree Health Benefits Trust to:

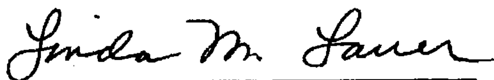
1. consistent with their fiduciary duties, explore all means possible to:

    a. minimize the Board's investments in companies with the largest fossil fuel reserves as rapidly as possible; and

    b. apply environmentally and economically-sound decision-making, both generally and specific to climate change, using ESG policy guidelines; and

2. report within 6 months after adoption of this Resolution and annually thereafter to the Council and the Executive on implementation of these actions, detailing the research conducted on top fossil fuel holding companies and detailing the extent of divestment or the rationale for not pursuing divestment from individual holdings.

This is a correct copy of Council action.



Linda M. Lauer, Clerk of the Council

Attachment – 2
11/20/2020

BOARD OF INVESTMENT TRUSTEES

BOARD OF TRUSTEES

MEMORANDUM

November 20, 2020

TO: Board of Investment Trustees and Board of Trustees

FROM: Linda Herman, Executive Director

SUBJECT: Environmental, Social, Governance – Required Annual Update – 2020

As detailed in the Board's Governance Manual, the Boards are required to annually provide a comprehensive report describing the implementation and outcomes of the Board's ESG policy, including recommendations for updates or revisions to this policy, as part of the year-end reporting process.

This report includes the following:

I. Industry Developments
II. Current Manager ESG Updates and Corporate Engagement
III. Consultant Initiatives
IV. Recent Board Actions
V. Staff Research

I. Industry Developments

- **Department of Labor Proposes Rule Cracking Down on ESG –** On June 23, 2020, the Department of Labor (DOL) issued a proposed regulation defining plan fiduciaries' duties under the ERISA act when considering making investments that incorporate ESG considerations. The proposed rule adds new recordkeeping requirements setting forth how plan fiduciaries can meet their fiduciary obligations when making ESG investments. This ruling demonstrates continued scrutiny from the DOL regarding ESG investing practices. As shown on a subsequent page, the Board sent a letter to the DOL in opposition of the proposed guidance given the Board's belief that ESG considerations can have a meaningful impact on the risk and return profile of an investment.

- **Iowa Public Employees' Retirement System Rejects Fossil Fuel Divestment –** In June of 2020, the Iowa Public Employees' Retirement System (IPERS), a $35 billion public pension plan, rejected calls to divest their portfolio from fossil fuels. Their rejection noted that "The system or the Board would not support investment policies or strategies which seek to promote specific social issues or agendas through investment or divestment of IPERS' assets. To act otherwise would be construed as a violation of fiduciary duty and could endanger the System's tax-exempt status."

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- **Minnesota State Board of Investments Rejects Fossil Fuel Divestment –** In November 2019, the Minnesota State Board of Investments, a $102 billion public pension plan, rejected calls to divest their portfolio from fossil fuels. This decision was supported by their general investment consultant, Meketa Investment Group, who noted that "divestment of fossil fuels does not impact the demand for non-renewable energy and, therefore, does not directly impact carbon emissions; gives up the SBI's shareowner voting rights and transfers those rights to parties that may not share the SBI's investment beliefs and proxy voting policies; and risks divestment from firms that may be actively transitioning to renewable energy as they continue to own non-renewable assets."

- **New Mexico Educational Retirement Board Divests from Private Prisons –** In October of 2020, the New Mexico Educational Retirement Board (NMERB), a $13 billion pension, recently voted to divest from their two private prison holdings, CoreCivic and GEO Group. Given that these are relatively small companies, it was deemed that such a divestment would have a "de minimis" impact on the entire portfolio.

- **Rhode Island State Pension Divests from Private Prisons and Gun Manufacturers –** In January of 2020, the Rhode Island State Investment Commission (SIC), a $9 billion pension, recently voted to divest from their holdings of private prisons and assault weapon manufacturers. Given that these investments represented less than $250,000 of the portfolio, or 0.003% of assets, it was deemed that such a divestment would have a "de minimis" impact on the entire portfolio.

- **Georgetown and GW University Divest of Their Fossil Fuel Holdings –** Georgetown and George Washington University, who have endowments of $1.8 billion and $2.3 billion, respectively, announced they will be divesting of their fossil fuel holdings. These endowments will halt any new investments in fossil fuel companies immediately and will phase out their current holdings in these companies over the next five years.

- **PRI Signatory Growth –** The number of signatories to the Principles for Responsible Investment reached 3,372 by the end of September 2020. Over the last year, this group has grown by 25%, which includes an addition of 70 institutional investors, 449 investment managers, and 58 service providers. Montgomery County became a signatory in October 2019.

II. Current Manager ESG Updates and Corporate Engagement

- **Private Equity Manager –** This fund that was recently added to the portfolio and has developed an ESG Policy that attempts to measure potential risks and opportunities at both the general partner and portfolio company level. Some of the metrics that the manager uses are shown below:

    Environmental

    - Total annual energy spend across all facilities
    - Adoption of renewable energy
    - E-Waste – This is particularly important for technology businesses. The manager asks that each portfolio company uses certified disposal companies to dispose of electronic equipment that is no longer needed.

    Social

    - Employee turnover rates
    - Analysis of non-discrimination and anti-harassment policies
    - Analysis of employee/HR handbooks

- Quality of family leave policies and procedures
- Existence of employee wellness programs

Governance

- Cybersecurity and privacy concerns – the manager will analyze whether there have been breaches over the last 5 years in either area.
- Analysis of policies and procedures surrounding business continuity.
- Analysis of litigation that a portfolio company may be involved in.

- **Private Real Assets Manager** –Recently hired a manager focused on making control equity investments in middle market renewable power assets, primarily wind and solar. The manager is helping to support a more sustainable future of clean energy. Each investment into a renewable energy source serves to reduce society's carbon footprint and the amount of air pollution caused from the reliance on traditional fossil fuels. As an example, the manager estimates that once fully deployed, their portfolio will generate 2,800,000 MWs of renewable energy annually which will offset approximately 683,000 metric tons of CO_2 from polluting the air. This is roughly equivalent to the removal of 148,000 cars from the roads. In addition, while solar and wind projects are inherently good for the environment, prior to the construction of any new asset, the manager will evaluate any potential environmental impact and ensure that any necessary prevention and mitigation efforts are implemented.

- **Private Real Assets Manager** – A private real assets manager focused on the midstream energy infrastructure space invests in a company that transports water out of hydrocarbon producing areas via pipeline. This strategy has been well received by both customers and regulators. The company's pipelines also directly reduce the amount of 18-wheeler trucks on the road that were previously used to transport produced water. According to the Environmental Defense Fund, the average 18-wheeler in the U.S. emits 161.8 grams of CO_2 per ton-mile. At 5 million miles and an estimated loaded weight of 40 tons for a water truck, the company has eliminated over 30,000 metric tons of CO_2 emissions in the Bakken alone, which is equivalent to removing over 6,500 passenger vehicles from the road. The company also has stringent standards and systems in place to monitor real time data of its pipelines to detect any mechanical integrity that could lead to issues.

- **Private Debt Manager** – This manager focuses on making debt investments into renewable power developers and recently issued their annual impact report for the last year. They estimate that over the past year, 2.1 million metric tons of CO_2 were offset by their investments, which is equivalent to planting 43 million trees, replacing 293 million gallons of gasoline, or removing 552,000 vehicle miles driven for one year.

- **Private Real Estate Manager** –This real estate manager makes significant investments in grocery-anchored retail centers across the U.S. The manager works toward creating community-oriented retail centers. Each tenant is chosen based on the needs of the community and not just as a profit center. For instance, in one of their retail properties, the manager had the opportunity to rent a space to a restaurant at a higher rent, but they declined the offer after assessing that a more suitable tenant could contribute stronger to the property/community (e.g. instead of a shrimp restaurant they are looking for a business that is family friendly). From an environmental standpoint, each potential investment will undergo, at a minimum, a Phase 1 environmental inspection conducted by a third-party environmental consultant. Some of the managers environmental initiatives include:

  - Reducing energy usage through retrofitting lighting to lower energy using LED lights within the warehouse space as well as the exterior parking fields at retail and industrial assets.
  - Reducing water usage at each of its assets. The GP redesigns and implements new landscaping schemes at its retail and industrial assets with lower water-using plantings and incorporates the use of hardscape alternatives.
  - Improving the local ecosystem surrounding its assets by engaging with architects and local consultants

- **Long Duration Fixed Income Manager –** In late 2019, the manager began to reduce their exposure to a food company after the SEC began an investigation into the company's accounts which led to management turnover. The manager spoke to the treasurer, and strongly encouraged their team to adopt a more conservative financial profile as the company addresses some of its governance and operating challenges. The manager did not get the corporate governance response they were looking for, so they continued to reduce their position. This manager also developed reporting for their investment teams that include third party ESG data from Sustainalytics, a leading global provider of ESG and corporate governance research and ratings to investors, to enable the firm's investment professionals to be aware of ESG trends within their portfolio.

- **Long Duration Fixed Income Manager –** The manager reduced its allocation to a U.S. bank following concerns raised during bond offerings for the Malaysian development bank in 2013. Several years later, criminal charges were filed seeking fines for allegedly misappropriating bond proceeds as well as $600 million in related fees. While the manager has benefitted from an underweight to the bank, they have recently been engaging with the company to better understand the scope of the misconduct and understand the willingness and ability of the company to address the governance shortfalls that led to these issues.

- **High Yield Fixed Income Manager –** Invested in a global automaker that has made combatting climate change a strategic priority and has demonstrated significant ESG commitments including meeting CO2 reduction targets in the US and Europe, while providing industry leading disclosures in addition to a long history of investor engagement. The company plans to invest $11 billion through 2022 for new hybrid and fully electric (EV) models. Since 2017, the company has also achieved a 30% reduction in CO2 per vehicle with a goal of a further 18% reduction by 2023. The manager has engaged with this manager for several years, having met at least annually to discuss ESG priorities, including the company's electrification strategies, board composition and governance, as well as warranty and recall costs.

- **High Yield Fixed Income Manager –** Invested in a midstream energy company that has shown leadership in implementing clean environment technologies in the oil and gas industry, such as advanced completion techniques (balanced drill outs) to minimize the amount of methane gas that reaches the surface and requires combustion by flaring, closed loop mud systems to eliminate the need for disposing of drilling muds in a separately excavated pit, and green completion units for completion flowback, which are essentially eliminating methane emissions. They also invest in a packaging company that manufactures metal and glass containers for food and beverages that are more sustainable than single use plastics. The manager believes that there will be a shift both in consumer preference and government regulation in the coming years that will lead to increased demand for this type of packaging.

- **Domestic Equity Manager –** The manager recently purchased a healthcare company that they previously refused to own due to corporate governance concerns. The manager engaged with the

company on this issue and were pleased when the company announced several governance improvements, particularly regarding board structure. The manager believes this move unlocks value in the stock and makes the company a more attractive investment as well as acquisition candidate. The manager also engaged an electronics company to encourage the firm to address a lack of diversity on its board of directors.

- **Domestic Equity Manager** –This manager expanded their ESG research team in 2020, hiring a new ESG analyst. The firm's Sustainability Team also added a dedicated policy manager focused on regulatory, third-party, and client concerns. The firm's Climate Research Team added a dedicated transition risk analyst to focus on the transition to a lower carbon economy and the investment implications of such a shift. The Client Research Team continues to help portfolio managers assess potential impacts of climate change on companies, economies, and society. This manager also recently hired a Head of Responsible Investing.

- **International Equity Manager** – Purchased a French-based energy management and industrial automation company with a business model now fully positioned to support the energy transition process, with 75% of revenues from energy management and 25% from industrial automation. Their products decrease energy use by 13%, and they have saved 110 million tons of CO2 on their customers end since 2018. Their superior positioning on sustainability gives them an edge on fundamentals with higher growth and free cash flow generation. The company also recently defined their impact goals, which align with the UN's Sustainable Development Goals, which are quantified and reported semi-annually.

- **International Equity Manager** – As part of this manager's ESG due diligence process for a European industrial gas company, they interviewed several former employees involved in the firm's green energy program. Their research found that the firm had made material commitments to sustainability issues that went beyond lip service. This included hefty investments in the hydrogen energy value chain, such as technology to reduce the carbon footprint of hydrogen production. The company appeared to be genuinely positioning themselves for an increasingly decarbonized world and were active in promoting the commercialization of hydrogen fuel-cell technology. These findings strengthened the manager's conviction in the investment and gave reassurance that the company would ultimately be rewarded by environmental regulations instead of being targeted by them.

- **International Equity Manager** – During a discussion with a Mexican retail store's management, the manager asked about the company's pricing policies versus their peer group. From a social standpoint, it was very interesting that their peers were aggressively passing on pricing from any sort of commodity inflation/currency depreciation onto customers, while this particular retail store was choosing to absorb it. Essentially, despite the fact that the retail store knew that they had the pricing power and the ability to charge more during a period when certain goods were scarce, they decided to opt for the more socially beneficial option which would draw less criticism from their customers or the government, engendering more goodwill long term, despite leaving some of the economics on the table today. The manager expressed their approval of the strategy.

- **International Equity Manager** – The manager purchased a leading wind turbine business. Over the years, much of the manager's analysis has focused on capital allocation and competition within the industry. This has largely been driven by government subsidies to renewable energy, making prices competitive versus fossil fuel power generation, as nations try to meet their climate commitments to reduce the growth in greenhouse gas emissions. Over time, this company made significant investments, improving the efficiencies of their turbines and reducing costs, so that in

many countries they can now compete with other fuel sources on an unsubsidized basis. In the meantime, many less efficient competitors have had to exit the industry.

- **International Equity Manager** – The manager recently decided not to participate in a Canadian IPO due to the murky background of a major acquisition they had made a year ago in the U.K. The founder of the company they had acquired has spent time in prison for fraud and has a history of inter-company transaction that the manager's local contacts believe have severely short-changed minority investors. While the operating numbers looked appealing, the manager felt that the local network in combination with their knowledge of the founder influenced their decision to stay away even though they had no negative view of the company itself.

- **International Equity Manager** – The manager voted against the remuneration of the CEO of a British shipping company due to a very low degree of transparency. They subsequently met with the chairman of the remuneration committee to discuss, which led to the committee agreeing to improve transparency. While the company provided a slight improvement in CEO compensation, the manager did not see it as being enough, so they voted against it again. Soon after, the manager decided to exit the position due to a combination of not delivering earnings to the manager's expectations (which further proved the point about compensation transparency) as well as an increased uncertainty for the outlook of the shipping industry.

- **International Equity Manager** – The manager purchased a Korean chemicals company. This company traditionally was focused on petrochemical production, primarily commodity plastics. However, the company also operates a business focused on the design and manufacturing of Lithium-ion batteries. This business segment was historically focused on small scale applications such as smartphones, over the last ten years the company as emerged as a leading producer of batteries for large scale applications, most importantly for electric vehicles. This company is a clear beneficiary of the global drive to meet emissions targets through increased electric vehicle adoption.

- **International Equity Manager** – Purchased an industrial gas company following meeting with management over the years that solidified the belief in the company's strong culture of corporate governance. In addition, the company had a very well-articulated and outlined ESG strategy specifically targeting goals of carbon neutrality and environmental impacts along with a strong outlook for long term earnings growth. This company also has a strong footprint and exciting opportunity for growth in the market for hydrogen, which is being touted by the European Union and others as a more environmentally friendly choice for the future of many industrial processes.

- **International Equity Manager** – This manager sold two Hong Kong-based companies due to corporate governance issues that were not apparent at the time of investment. The first involves a company that purchased the Chairman's yacht and the second was a water utility company that was involved in a related party transaction where the manager was concerned a premium price was being paid by the company to the related party.

- **Listed Infrastructure Manager** – This manager continues to maintain a heavy underweight to the energy infrastructure sector due to general investor aversion to the sector combined against the rise of ESG investing, overhang from financial distress in the exploration and production (E&P) sector, commodity price uncertainty due to COVID-19 and OPEC concerns, and 2020 election risks to the sector in the event of a Biden/democratic victory. Taken together, despite the large sell-off in energy infrastructure, they have maintained a sizable underweight position. The manager has also

further adjusted their allocation within the utilities sector due to the ongoing energy transition. The manager continues to focus on dedicated renewable companies and increased their exposure to more diversified utilities that are "greening" their fleets.

- **Public Real Estate Manager** – The manager recently purchased a Japanese office REIT focused on improving its ESG focus. The company was recently given 4 stars by GRESB, a sustainability benchmark for real assets, in the most recent survey. Additionally, 93% of their buildings have green building certifications, which is the highest among Japanese REITS. The manager also increased their position in a Singapore-based retail REIT, which is the highest scoring in the country from an overall MSCI ESG rating standpoint. This manager continues to marry their own internal ESG ratings with third-party ratings from MSCI. In the coming year, they plan to develop a proprietary ESG score to provide a more structured assessment.

- **Global Equity Manager** – In a trade session in 2020, the manager's portfolio construction process generated a proposed buy of shares of a U.S. industrial stock. The proposed trade was driven by a variety of considerations, the manager's quantitative process proposed this purchase in part because of the stock's ESG characteristics, which reduced the perceived risk associated with the position. This industrial company scores above average on each component of ESG, and particularly on the environmental component.

- **Global Equity Manager –** This manager became a signatory to the United Nations' Principles for Responsible Investment (UNPRI) in 2020. In addition, the manager also formalized a firmwide ESG policy during the year. The manager also invests with a global spirits manufacturer that about how they are promoting broader diversity amongst their management team and board. After the onset of the COVID-19 pandemic, this company also donated pure alcohol and producing hand sanitizer at large scale in France, Sweden, Ireland, Sweden, and the U.S.

III. Consultant Initiatives and Approach to ESG

- **NEPC (General Consultant) –** Over the last 12 months, NEPC created a climate change asset allocation framework that seeks to incorporate climate risk into forward looking return and risk expectations. They also expanded the breadth of their ESG ratings. Nearly 70% of their manager coverage universe has now been given an ESG rating by NEPC. Additionally, NEPC wrote a letter in opposition to the recent DOL ruling on ESG, citing their belief that ESG considerations are financially material to investment decision making. Their letter noted that "this proposal is likely to have the perverse effect of dissuading fiduciaries, even against their better judgement, from offering options for their plans that consider ESG factors as part of the evaluation of material financial criteria". NEPC also published several white papers on ESG, which covered the areas of climate change, impact investing, COVID-19, diversity and inclusion, and sustainability.

- **Franklin Park Associates (Private Equity Consultant) –** During the last year, Franklin Park developed tools to better integrate ESG due diligence into their investment process. This further integration includes an updated due diligence questionnaire and assessment matrix that Franklin Park uses to evaluate candidate fund managers. They also continued to enhance their coverage of the clean energy and sustainable investment market, including publishing market research papers, developing ESG manager market maps, and evaluating over 50 fund managers that focus on ESG.

- **Aberdeen (Private Real Assets Consultant) –** In the last year, the Aberdeen Private Real Assets team has added a requirement to include a comprehensive ESG review within their final investment

committee presentations for all investment managers. This document includes a review of environmental, social, governance considerations as well as an overall analysis on the investment manager's overall dedication to ESG at the firm level, which includes items such as diversity and inclusion, adoption of leading industry standards such as the Principles for Responsible Investing (PRI), and a review of the firm's ESG Policy. During the year, Aberdeen also completed a comprehensive ESG review of the private real estate sector, which detailed various considerations across environmental, social, and governance factors, provided an overview of the various ESG reporting frameworks within the real estate sector, and provided highlights of ESG actions taken by various real estate managers within our private real estate portfolio.

IV. Recent Board Actions

- **Letter to the DOL on ESG Proposal –** In July 2020, the Boards sent a letter to the Department of Labor in opposition of their proposed rule "Financial Factors in Selecting Plan Investments." Staff, and the Boards, believe that this rule would make it more difficult for fiduciaries to consider financially material ESG factors as part of their investment decision making process. Some highlights from the letter include:

  > "The Plans have incorporated environmental, social, and governance (ESG) considerations into their investment policies related to all investments considered or made by the Plans. The policies also apply to investment consultants and investment managers hired by the Plans and provides guidance to them on investment due diligence matters."
  >
  > "ESG integration is essential to fulfill our fiduciary obligations to engage in the appropriate analysis of the risks and returns of any investment as we believe ESG related issues can impact the risk and return characteristics of an investment. We believe that the Proposal misconstrues ESG integration and would lead to confusion and costs for our Plans. Given the challenges that the Proposal would create for Plans like ours, we urge you to allow the existing guidance to remain in effect and not move forward with the final rule. If the Proposal goes into effect, it will undermine our ability to act in the long-term best interest of our beneficiaries."

- **ESG Monitoring and Evaluation** – Sustainalytics, a leading global provider of ESG and corporate governance research and ratings to investors, ran a Climate Portfolio Risk Report for our public equity, fixed income, and real assets portfolio. They analyzed our portfolio across five metrics – carbon risk rating, carbon intensity, fossil fuel revenue exposure, stranded asset risk, and carbon solutions. Our portfolio was more favorable relative to the benchmark on four of the five metrics.

  - *Carbon Risk Rating* – This rating quantifies the company's exposure and management of material carbon issues in its own operations as well as its products in services – Overall, our portfolio has a 3% lower carbon risk than the benchmark.

  - *Carbon Intensity* – This is a relative metric used to compare company emissions across industries and is scaled by total revenue. Overall, our portfolio is 19% less carbon intensive than the benchmark.

  - *Fossil Fuel Revenue Exposure* – This measures the percentage of revenue that companies derive from thermal coal extraction, coal-based power generation, oil and gas production,

oil and gas-based power generation, and oil and gas-related products and services. Overall, our portfolio has 24% less exposure to fossil fuels than the benchmark.

  - *Stranded Asset Risk* – This score assesses the financial risk associated with fossil fuel production and reserves, and any specific involvement in high cost fossil fuel projects. Overall, our portfolio has 14% more exposure to stranded asset risk than the benchmark. The high yield bond manager that held a company with a high stranded asset risk has recently sold this position, which brings our portfolio closer to the index in this category. Additionally, our holdings with the highest stranded asset risk are in fixed income securities with near-term maturities, meaning that long-term stranded asset risk is less relevant.

  - *Carbon Solutions* – Measures the percentage of revenue that companies derive from green transportation and renewable energy. Overall, our portfolio has 10% more exposure to carbon solutions than the benchmark.

- **CERES** – The Boards joined the CERES Investor Network in 2018 to gain a better understanding of climate risk within the portfolios, explore opportunities embedded in the clean energy economy, and develop a dialogue with other institutional investors on ESG related matters. Since joining, Staff has been an active participant in the Disclosure Working Group, which seeks to push companies to disclose all relevant sustainability information using the Global Reporting Initiative (GRI) guidelines as well as additional sector-relevant indicators. The goal of this working group is for more companies to disclose material sustainability risks and opportunities within their financial filings.

- **CFA Institute ESG Expert Network** – Investment Staff will be actively participating in the CFA ESG Expert Network, a diverse working group to share knowledge and resources focused on integrating ESG best practices. The CFA Institute is a leading global association for investment professionals.

V. Staff Research

- **Ivy League Endowment Divestment Activities –** Staff analyzed the fossil fuel divestment activities of the eight Ivy League endowments, considered by many to be the most sophisticated institutional investors across the globe. To date, none of the eight institutions have divested of fossil fuels and several of them re-affirmed their aversion to such a strategy over the last year. Quotes from many of these endowments over the last year are shown below:

> "Yale's managers make critical decisions about what investments are selected for Yale's portfolio and what issue are raised with company management teams. Given the nature of Yale's investment strategy, direct dialogue with its managers is the most effective means of addressing climate change risk in the portfolio." -David Swensen, Chief Investment Officer at Yale

> "Right or wrong, divestment is just not effective. I don't see how it does any good. In some ways, if people think that that's all they need to do, and that it lets them off the hook that's a really easy way out of doing the hard work of actually making real change." -Christina Paxson, President of Brown University

> "The answer is right now; we do not have any such divestment plan. We make a difference in the world through our teaching and research and the quality of that teaching and research,

rather than by taking a symbolic stance with our endowment." Christopher Eisengruber, President of Princeton University

- **Divergence of ESG Ratings Across Firms** – MIT recently published a paper titled "Aggregate Confusion: The Divergence of ESG Ratings" which shows how noisy and sometimes unreliable ESG ratings can be when different ESG ratings agencies classify things in different ways. The paper investigates the divergence of ESG ratings across six prominent ratings agencies, namely, MSCI, Sustainalytics, Moody's, SP Global, and IVA. The study compared ESG ratings to credit ratings and noted that the correlation between a company's rating with one credit rating agency and another was 0.91, indicating very high correlation. Conversely, this figure was only 0.61 for ESG ratings. The study decomposed the divergence into three sources: different scope of categories, different measures of categories, and different weights of categories. The paper discussed the Sustainability Initiative, a collaboration between MIT and MassPRIM, that seeks to improve ESG measurement in the financial sector.

- **Relationship Between Gold and Climate Change** – The World Gold Council, the leading global advocacy organization for the gold industry, recently issued a report on the current and future impacts of climate change on gold. The study focused on both the gold industry's greenhouse gas intensity and carbon footprint in addition to the portfolio diversification benefits of holding gold during climate change driven periods of market volatility. A high-level summary is shown below:

  - Gold's downstream uses such as jewelry, electronic products, and gold bullion, have very limited impact on gold's overall carbon footprint.
  - The biggest driver of gold's carbon footprint is the gold supply chain, namely the energy and fuel use in gold production. The World Gold Council believes that the industry can achieve a net zero emissions goal by 2050 and believes the industry will have an easier path to zero relative to other industries such as agriculture, cement, steel, chemicals, and shipping.
  - Heightened market volatility and uncertainty from climate-related risks should be supportive of future gold demand, given the metal's role as a portfolio hedge.
  - Gold's risk-return profile is likely to be relatively robust in the context of climate-related transition risks, particularly relative to other mainstream assets.

- **Moody's View on Impact of Fossil Fuel Divestment** – Moody's Corporation, one of the leading credit rating agencies, does not believe divestment campaigns to be a threat to the oil and gas sector. They noted that university endowments and governmental pension funds have never represented a significant source of capital for the energy sector. Additionally, they don't believe that divestment would impact the financing market for the sector given the abundance of capital from other sources.

- **Climate Change Risk for Commercial Real Estate Sector** - Morgan Stanley Capital Investment, has created a model that seeks to assess the risk of climate change on the commercial real estate sector. Given the physical nature of real estate relative to other instruments such as stocks or bonds, it is crucial for investors to understand that potential physical and transition risks of the properties they own. This model is called the MSCI Real Estate Climate Value-at-Risk (Climate VaR) and it seeks to demonstrate how the nature and magnitude of physical risks may differ across assets and portfolios. With a sample of 671 assets from the MSCI US Annual Property Index, the firm assessed two critical physical risks: coastal flooding and tropical storms. The geographic with the highest risk from these two occurrences are the New York/New Jersey and Miami-Fort Lauderdale metropolitan areas.

ERS Carbon 200 Exposure - September 2020

Coal or Oil	Company	Market Value
O	Aker BP	$616,967
O	Antero Resources	$83,879
O	Apache	$1,553,004
C	ArcelorMittal	$1,239,900
C/O	BHP Billiton	$94,403
O	BP	$1,731,759
O	Cabot Oil & Gas	$114,326
O	California Resources	$188,675
O	Cenovus Energy	$1,179,897
O	Centennial Resource Developn	$354,850
O	Chesapeake Energy	$44,782
O	Chevron	$3,367,640
O	Cimarex Energy	$36,799
O	CNX Resources	$387,173
O	Comstock Resources	$486,769
O	Concho Resources	$136,713
O	ConocoPhillips	$1,597,426
O	Continental Resources	$1,650,025
O	Denbury Resources	$226,046
O	Devon Energy	$289,842
O	Diamondback Energy	$110,431
O	Encana	$424,604
O	ENI	$421,238
O	EOG Resources	$340,816
O	EP Energy	$2
O	EQT	$1,387,859
O	Equinor ASA (Statoil ASA)	$2,065,860
O	ExxonMobil	$5,043,751
C	FirstEnergy	$252,303
C	Glencore	$510,033
O	Gulfport Energy	$261,026
O	Hess	$338,431
O	Inpex	$72,756
O	Marathon Oil	$52,786
O	MEG Energy	$542,140
O	Murphy Oil	$1,054,186
O	National Fuel Gas	$57,970
O	Noble Energy	$126,644
O	Occidental	$8,146,716
O	Oil Search	$48,035
O	Paramount Resources	$122,526
O	Parsley Energy	$1,150,979
O	PDC Energy	$98,028
C	PGE	$1,170,594
O	Pioneer Natural Resources	$230,532
O	Range Resources	$686,168
O	Royal Dutch Shell	$2,883,695
O	Seven Generations Energy	$719,321
O	SM Energy	$467,546
O	Southwestern Energy	$877,102
C	Sumitomo	$83,273
O	Suncor Energy	$279,828
O	Total	$3,155,567
O	Whiting Petroleum	$132,468
O	WPX Energy	$584,177
	Total ERS Carbon 200	**$49,280,264**

Total Oil	$45,929,758	93.20%
Total Coal	$3,256,103	6.61%
Total Coal/Oil	$94,403	0.19%
Total	**$49,280,264**	**100.00%**

Increase from 10/31/2019	**$2,425,916**

ERS Portfolio Size	**$4,464,452,460**
Carbon 200 % of Portfolio	**1.10%**

Total Fixed Income	$39,229,841	79.61%
Total Equity	$10,050,423	20.39%
Total	**$49,280,264**	**100.00%**

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CRHBT Carbon 200 Exposure - September 2020

Coal or Oil	Company	Market Value
O	Apache	$243,459
C	ArcelorMittal	$58,856
O	BP	$310,454
O	Cabot Oil & Gas	$35,424
O	California Resources	$35,938
O	Cenovus Energy	$141,950
O	Centennial Resource Development Inc	$20,250
O	Chevron	$1,088,257
O	Cimarex Energy	$11,669
O	CNX Resources	$103,246
O	Comstock Resources	$52,203
O	Concho Resources	$41,825
O	ConocoPhillips	$415,399
O	Continental Resources	$128,386
O	Denbury Resources	$57,312
O	Devon Energy	$99,883
O	Diamondback Energy	$22,486
O	ENI	$118,659
O	EOG Resources	$105,615
O	EP Energy	$1
O	EQT	$179,547
O	Equinor ASA (Statoil ASA)	$521,107
O	ExxonMobil	$1,612,685
C	FirstEnergy	$77,897
O	Gulfport Energy	$76,755
O	Hess	$103,534
O	Marathon Oil	$16,247
O	MEG Energy	$81,974
O	Murphy Oil	$230,539
O	National Fuel Gas	$17,907
O	Noble Energy	$31,276
O	Occidental	$898,412
O	Paramount Resources	$73,516
O	Parsley Energy	$39,056
O	PDC Energy	$24,633
C	PGE	$185,895
O	Pioneer Natural Resources	$70,440
O	Range Resources	$89,022
O	Royal Dutch Shell	$854,822
O	SM Energy	$44,448
O	Southwestern Energy	$123,311
O	Suncor Energy	$167,172
O	Total	$1,101,423
O	Whiting Petroleum	$35,095
O	WPX Energy	$36,789
	Total CRHBT Carbon 200	**$9,784,773**

Total Oil	$9,462,125	96.70%
Total Coal	$322,648	3.30%
Total Coal/Oil	$0	0.00%
Total	**$9,784,773**	**100.00%**

Decrease from 10/31/2019	**$597,152**

CRHBT Portfolio Size	**$1,280,761,299**
Carbon 200 % of Portfolio	**0.76%**

Total Fixed Income	$7,456,542	76.21%
Total Equity	$2,328,231	23.79%
Total	**$9,784,773**	**100.00%**