WASHINGTON, DC 20510

February 4, 2019

Larry Fink, Chairman and CEO BlackRock Park Avenue Plaza, 55 East 52nd Street New York, NY 10055

Dear Mr. Fink,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, BlackRock is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. ² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

¹ Vijay V, Pimm SL, Jenkins CN, Smith SJ (2016) The Impacts of Oil Palm on Recent Deforestation and Biodiversity Loss. PLoS ONE 11(7): e0159668. https://doi.org/10.1371/journal.pone.0159668

² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group. 10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf N S.pdf.

³ http://unfccc.int/resource/docs/2015/sbi/eng/21.pdf

⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/cn/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which BlackRock invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for BlackRock.
- Assuming that BlackRock may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ

United States Senator

TOM UDALL

United States Senator

EDWARD J. MARKEY

United States Senator

RICHARD BLUMENTHAL

United States Senator

United States Senator

BETH WARREN

United States Senator

JEFFREY A. MERKLEY

United States Senator

BERNARD SANDERS

^{9 &}quot;Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_

WASHINGTON, DC 20510

February 4, 2019

Marcie Frost, CEO CalPERS 400 Q Street Sacramento, CA 95811

Dear Ms. Frost,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, CalPERS is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. ² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

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⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which CalPERS invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for CalPERS.
- Assuming that CalPERS may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ United States Senator

TOM UDALL

United States Senator

United States Senator

RICHARD BLUMENTHAL

United States Senator

United States Senator

ELIZABETH WARREN

United States Senator

JEFFREY A. MERKLEY United States Senator

BERNARD SANDERS United States Senator

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WASHINGTON, DC 20510

February 4, 2019

Abigail P. Johnson, Chairman and CEO Fidelity Investments Corporate Office 82 Devonshire St Boston, MA 02109

Dear Ms. Johnson,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Fidelity Investments is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.

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 Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018.

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⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

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We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Fidelity Investments invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to
 environmental, social, or governance risks? If so, please explain the factors that led to
 this decision, and if not, please elaborate on what ESG activities would pose an
 unacceptable risk for Fidelity Investments.
- Assuming that Fidelity Investments may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely, IAN SCHATZ United States Senator United States Senator TOM UDALL ELIZABETH WARREN United States Senator United States Senator EDWARD J. MARKEY JEFFREY A. MERKLEY United States Senator United States Senator RICHARD BLUMENTHAL BERNARD SANDERS United States Senator United States Senator

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_

WASHINGTON, DC 20510

February 4, 2019

Gerard K. O'Reilly, Co-CEO and Chief Investment Officer Dimensional Fund Advisors Palisades West 6300 Bee Cave Road, Building One Austin, TX 78746

Dear Mr. O'Reilly,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Dimensional Fund Advisors is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.

Across the tropics, in regions as varied as West Africa, Central America and Southeast Asia, the palm oil sector is also widely linked to human rights violations⁴ and social conflict, both of which are associated with significant material costs.⁵ And, as noted by INTERPOL, UNEP⁶ and others,⁷ the palm oil sector is associated with forest crimes such as illegal logging. These social and governance issues and the related sustainability concerns have made some financial sector

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⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

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⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

entities increasingly recognize the palm oil sector as a high-risk sector⁸ that bears enhanced due diligence in order to manage and mitigate risks.

Increasingly, direct environmental factors and human rights considerations – both magnified by climate change – drive business risks and opportunities. Consequently, financiers and investors are increasingly recognizing the materiality of risks associated with exposure to climate change, environmental destruction, and human rights violations. It is our view that addressing risks from deforestation is in line with your fiduciary responsibility. As such, we are interested in learning what due diligence and risk management procedures your firm has put in place to address and mitigate these risks for both active investments and passively managed funds.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Dimensional Fund Advisors invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for Dimensional Fund Advisors.
- Assuming that Dimensional Fund Advisors may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ

United States Senator

TOM UDALL

United States Senator

SHELDON WHITEHOUSE

United States Senator

ELIZABETH WARREN

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.
9 "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016.
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Edward J. Markey
EDWARD J. MARKEY
United States Senator

JEFFREY A. MERKLEY United States Senator

pichart Vlames / Lef

RICHARD BLUMENTHAL United States Senator

BERNARD SANDERS United States Senator

WASHINGTON, DC 20510

February 4, 2019

Jamie Dimon, CEO JPMorgan Chase & Co. 270 Park Avenue New York, NY 10017

Dear Mr. Dimon,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, JPMorgan Chase & Co is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

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⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which JPMorgan Chase & Co invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to
 environmental, social, or governance risks? If so, please explain the factors that led to
 this decision, and if not, please elaborate on what ESG activities would pose an
 unacceptable risk for JPMorgan Chase & Co.
- Assuming that JPMorgan Chase & Co may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ

United States Senator

TOM UDALL

United States Senator

EDWARD J. MARKEY

United States Senator

RICHARD BLUMENTHAL

United States Senator

SHELDON WHITEHOUSE

United States Senator

ELIZABETH WARREN

United States Senator

IFFEREY A MERKLEY

United States Senator

United States Senator

BERNARD SANDERS

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_

WASHINGTON, DC 20510

February 4, 2019

David Iben, Chief Investment Officer Kopernik Global Investors, LLC Harbour Place 302 Knights Run Ave, Suite 1225 Tampa, FL 33602

Dear Mr. Iben,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Kopernik Global Investors is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture.² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year roughly equivalent to the annual emissions of Spain.³

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⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018.

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May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Kopernik Global Investors invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for Kopernik Global Investors.
- Assuming that Kopernik Global Investors may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

RICHARD BLUMENTHAL

United States Senator

BRIAN SCHATZ
United States Senator

SHELDON WHITEHOUSE
United States Senator

United States Senator

EDWARD J. MAGKEY
United States Senator

JEFFREY A. MERKLEY
United States Senator

BERNARD SANDERS

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WASHINGTON, DC 20510

February 4, 2019

Howard Appleby, Founding Partner/Principal Northern Cross 125 Summer Street Boston, MA 02110

Dear Mr. Appleby,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Northern Cross is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. ² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group. 10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

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⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

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We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Northern Cross invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to
 environmental, social, or governance risks? If so, please explain the factors that led to
 this decision, and if not, please elaborate on what ESG activities would pose an
 unacceptable risk for Northern Cross.
- Assuming that Northern Cross may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ

United States Senator

TOM UDALL United States Senator

EDWARD J. MARKEY

United States Senator

RICHARD BLUMENTHAL

United States Senator

SHELDON WHITEHOUSE

United States Senator

ELIZABETH WARREN

United States Senator

JEFFREY A. MERKLEY

United States Senator

BERNARD SANDERS

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact." Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_



February 4, 2019

Michael G. O'Grady, President and CEO Northern Trust Corporation 50 South LaSalle Chicago, IL 60603

Dear Mr. O'Grady,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Northern Trust is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. ² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

¹ Vijay V, Pimm SL, Jenkins CN, Smith SJ (2016) The Impacts of Oil Palm on Recent Deforestation and Biodiversity Loss. PLoS ONE 11(7): e0159668. https://doi.org/10.1371/journal.pone.0159668

² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

³ http://unfccc.int/resource/docs/2015/sbi/eng/21.pdf

⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018.

https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/2016/11

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-eyents/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Northern Trust invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for Northern Trust.
- Assuming that Northern Trust may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

BRIAN SCHATZ
United States Senator

SHELDON WHITEHOU
United States Senator

Sincerely,

TOM UDALL
United States Senator

ELIZABETH WARREN
United States Senator

EDWARD J. MARKEY
United States Senator

Little A. Merkley
United States Senator

Sichard Olmen Ref Buf Sander

RICHARD BLUMENTHAL
United States Senator

BERNARD SANDERS
United States Senator

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_

WASHINGTON, DC 20510

February 4, 2019

Charles F. Lowrey, CEO Prudential Financial 751 Broad Street Newark, New Jersey 07102

Dear Mr. Lowrey,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Prudential is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture.² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

³ http://unfccc.int/resource/docs/2015/sbi/eng/21.pdf

⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Prudential invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for Prudential.
- Assuming that Prudential may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

Sincerely,

BRIAN SCHATZ

United States Senator

TOM UDALL

United States Senator

EDWARD J. MARKEY

United States Senator

RICHARD BLUMENTHAL

United States Senator

SHELDON WHITEHOUSE

United States Senator

ELIZABETH WARREN

United States Senator

JEFFREY A. MERKLEY

United States Senator

BERNARD SANDERS

^{9 &}quot;Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_

WASHINGTON, DC 20510

February 4, 2019

Roger Ferguson, President and CEO **TIAA-CREF** 730 Third Ave New York, NY 10017

Dear Mr. Ferguson,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, TIAA-CREF is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture.² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf N S.pdf.

³ http://unfccc.int/resource/docs/2015/sbi/eng/21.pdf

⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018.

https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

8 Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on

May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which TIAA-CREF invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for TIAA-CREF.
- Assuming that TIAA-CREF may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

BRIAN SCHATZ
United States Senator

TOM UDALL
United States Senator

EDWARD J. MARKEY
United States Senator

JEFFREY A. MERKLEY
United States Senator

JEFFREY A. MERKLEY
United States Senator

BLUMBALL
BERNARD SANDERS

United States Senator

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact." Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment

WASHINGTON, DC 20510

February 4, 2019

Mortimer J. Buckley, President and CEO Vanguard 100 Vanguard Boulevard, V26 Malvern, PA 19355

Dear Mr. Buckley,

We write to inquire about your firm's approach to managing environmental, social, and governance (ESG) risks related to investments exposed to tropical deforestation and associated human rights issues. In particular, we are concerned that some companies in your portfolio may not be living up to their commitments to address deforestation in their supply chain—if they have made such commitments at all.

According to publicly available data, Vanguard is among the top U.S. asset managers exposed to companies active in the palm oil sector – an industry sector widely known to be a leading cause of tropical deforestation and biodiversity loss, ¹ as well as associated climate impacts. Roughly 12 percent of total greenhouse gas emissions globally are caused by deforestation, and some 80 percent of global deforestation is driven by agriculture. ² The majority of this deforestation, including the conversion of Southeast Asia's carbon-rich peat lands, is caused by industrial-scale commodity crops, with palm oil being the primary driver. In Indonesia alone, the palm oil sector generates an estimated 250 million tons of carbon dioxide per year – roughly equivalent to the annual emissions of Spain.³

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² Kissinger, Gabrielle, Martin Herold, and Veronique De Sy. "Drivers of Deforestation and Forest Degradation." Wageningen University. World Bank Group.10. https://www.forestcarbonpartnership.org/sites/fcp/files/DriversOfDeforestation.pdf_N_S.pdf.

³ http://unfccc.int/resource/docs/2015/sbi/eng/21.pdf

⁴ Amnesty International. "Case studies: Palm oil and human rights abuses." Accessed May 16, 2018. https://www.amnesty.org/en/latest/news/2016/11/case-studies-palm-oil-and-human-rights-abuses/

⁵ Hans Nicholas Jong. Study puts a figure to hidden cost of community-company conflict in palm oil industry. April 25, 2018. https://news.mongabay.com/2018/04/studies-reveal-gargantuan-costs-of-palm-oil-related-land-conflicts-in-indonesia/

⁶ Nellemann, C., INTERPOL Environmental Crime Programme (eds). 2012. Green Carbon, Black Trade: Illegal Logging, Tax Fraud and Laundering in the Worlds Tropical Forests. A Rapid Response Assessment. United Nations Environment Programme, GRIDArendal. www.grida.no

⁷ Forest Trends, Consumer Goods and Deforestation: An Analysis of the Extent and Nature of Illegality in Forest Conversion for Agriculture and Timber Plantations.2014; EIA, "Permitting Crime: How palm oil expansion drives illegal logging in Indonesia." December 2014.

⁸ Financial Institutions Face Increased Risk from Unsustainable Palm Oil Production," RSPO, last modified on December 15, 2017, accessed on May 14, 2018. https://rspo.org/news-and-events/news/financial-institutions-face-increased-risk-from-unsustainable-palm-oil-production.

We respectfully request that you respond to the following questions by March 1, 2019:

- What is your policy for conducting due diligence on the environmental, social, and governance activities for the firms in which Vanguard invests?
- Do you have a policy specifically related to companies' deforestation-related activities? If so, please provide details, and if not, what are your plans for instituting such a policy in the future?
- Have you ever excluded a company from your portfolio due exclusively to environmental, social, or governance risks? If so, please explain the factors that led to this decision, and if not, please elaborate on what ESG activities would pose an unacceptable risk for Vanguard.
- Assuming that Vanguard may hold many of these companies through passive index funds, do you make provisions to apply ESG due diligence to holdings through such funds?

BRIAN SCHATZ
United States Senator

TOM UDALL
United States Senator

Lunited States Senator

United States Senator

⁹ "Report: Over 70% of Investors See Risk, Investment Opportunities in Climate Change Impact" Sustainable Brands. 16 November 2016. http://www.sustainablebrands.com/news_and_views/stakeholder_trends_insights/talia_rudee/report_over_70_investors_see_risk_investment_