

RFI response for:

New York City Comptroller's Office

Investment and Fiduciary Analysis of
Prudent Strategies for Divestment of
Securities Issued by Fossil Fuel Reserve
Owners

15 JUNE 2018

All investors should consider the risks that may impact their capital, before investing. The value of your investment may become worth more or less than at the time of the original investment.

A. General Information (all responders must provide the following information)

Question 1

Name and business address of responding party (if responding on behalf of a firm or organization, provide for that entity)

Wellington Management Company LLP
280 Congress Street
Boston, Massachusetts 02210

Question 2

Website address, if available

www.wellington.com

Question 3

Name, address, email address and phone number for single point of contact for all communications.

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Question 4

Please briefly describe your occupational and professional status and background, expertise related to the issues in this RFI and any other relevant background information.

With US\$1,078 billion in assets under management, Wellington Management serves as an investment adviser to 2,247 clients located in more than 61 countries, as of 31 March 2018. Our singular focus is investments — from global equities and fixed income to currencies and commodities. We like to describe ourselves as a community of investment boutiques that create solutions designed to respond to specific client needs. Our most distinctive strength is our proprietary, independent research, which is shared across all areas of the organization and used only for managing our clients' portfolios.

We trace our roots to the founding of the Wellington Fund in 1928. Headquartered in Boston, Massachusetts, we also have offices in Chicago, Illinois; Radnor, Pennsylvania; San Francisco, California; Beijing; Frankfurt; Hong Kong; London; Luxembourg; Singapore; Sydney; Tokyo; Toronto; and Zurich.

At Wellington Management, we consider environmental, social, and corporate governance (ESG) criteria as one set of factors among many that should be weighed appropriately to inform investment decision making.

We view ESG analysis and integration as both return enhancing and risk mitigating. To help our portfolio managers and investment teams better assess risks and opportunities in client portfolios, we have integrated the analysis of ESG factors into our investment and risk-management processes firmwide.

Our approach

We approach ESG integration as a tailored process that can be applied to all asset classes. We do this by analyzing ESG risks and opportunities in our clients' portfolios, engaging with companies in which we invest to discuss material ESG issues and proxy voting on our clients' behalf to support decisions that we believe will maximize the long-term value for shareholders. Wellington Management's culture is built to support collaboration and our open-architecture "community of investors" naturally lends itself to the integration of ESG considerations.

Our ESG Research team is part of the central Investment Research function and helps our portfolio managers and analysts gather deeper intelligence on ESG topics and integrate these considerations into the investment process. We believe that a holistic understanding of how companies deploy capital — financial, physical, and human — is helpful in framing an investment thesis, and examining ESG issues gives us a more complete picture. Our ESG analysts are responsible for conducting in-depth analysis of the ESG factors considered material to the companies within their sector coverage. Materiality is the foundation of our integration process, as the ESG considerations likely to impact long-term value are not identical for every sector or industry.

As a firm with a long history of independent fundamental research, direct engagement with company managements has always been a core part of our process. Examples of engagement topics include business strategy, capital structure, and material ESG issues relevant to the company's long-term success, such as environmental regulation, employee training and development, and senior-level succession planning. We believe this engagement plays a critical role in helping to identify, understand, and appropriately consider ESG risks. Wellington hosts thousands of company management meetings each year. This degree of interaction helps our investors assess changes in a company's ESG performance with more depth and conviction than if they had to rely purely on quantitative data sources.

Proxy voting is another powerful tool for our investors, providing leverage in company management discussions and also affords the opportunity to directly influence corporate policy. Our Global ESG Research Update report, published quarterly and is available on our website, includes a list of company engagements conducted by our ESG team and statistics summarizing proxy voting activity from the previous quarter. As a PRI signatory since 2012, we report annually on our ESG integration approach through the PRI Reporting Framework.

Question 5

Please state whether the responder is able to provide the Investment Analysis Services, or a portion of such work, including legal fiduciary analysis services, and is likely to respond to an RFP that includes Investment Analysis Services. If yes, please respond to the questions in Attachment 1.

Wellington Management is responding to this RFI with the intent to help inform the New York City Comptroller's Office of the broad ESG capabilities and research resources that a large global investment manager possesses which may be available to the Comptroller's Office as you assess the concept of fossil fuel divestment from the NYC Retirement systems. While we believe we have both the capabilities for investment analysis through our Investment Strategy and Risk team and investment solutions that may qualify as potential "alternative investments with equivalent economic features" for a divested fossil fuel/zero-carbon solution as defined in Section III.A item #7, we will do not plan to respond to a potential investment analysis services RFP at this time. As an organization, Wellington Management's only business is managing investment assets for our clients. We currently do not have any other consulting or analytics fee based businesses.

B. Information Requested Regarding RFP and Investment Analysis Services

(Responders must address one or more of the following questions). Responders are encouraged to respond with other considerations and approaches not covered herein that would achieve the Comptroller's and Systems' purpose and objectives regarding potential prudent divestment strategies.

RFP Structure for Investment Analysis Services

Question 1

What specific areas, factors, risks and impacts should an RFP consider in order enable selection of a provider or providers that can best conduct comprehensive and in-depth Investment Analysis Services?

Question 2

What other important questions should be included in an RFP that includes Investment Analysis Services?

Question 3

What information and format do you believe would be useful for soliciting and evaluating Investment Analysis Services?

Question 4

What criteria, experience and qualifications for services providers should be considered for Investment Analysis Services?

Approaches to Investment Analysis Services

Question 5

What do you believe are best approaches to:

5.a

Determining the scope of companies, including further defining fossil fuel reserve owners, appropriate for divestment.

5.b

Determining the timetable and specific milestones within a five year period appropriate for divestment.

5.c

Assessing appropriate divestment approaches based on asset classes, strategies and styles.

5.d

Analyzing the investment risks posed by climate change and fossil fuel reserve owners to the Systems' portfolios (including scenario analysis).

Our general view is that asset owners are long climate risk as those companies that are among the largest fossil fuel reserve owners and other high-carbon intensity businesses are representative of larger capital exposures in the market. As the risks in the market evolve, the market will reprice those assets accordingly. Wellington Management does not currently have a systematic way of measuring this risk, but is keenly aware of these risks. As a firm we are improving our climate change risk research capabilities and will be able to leverage proprietary tools to understand transition, physical, and regulatory risk associated with climate change among our client's portfolios.

We aim to understand the risk and investment implications of carbon exposure and climate change risk primarily through company-level fundamental research in conjunction with the research from our ESG team. Portfolio managers are focused on where risks and returns will come from going forward, particularly as the market moves away from fossil fuels and we believe similar focus by the NYC Comptroller's Office would be prudent. Our view is that much of the alpha opportunity is about understanding where the market capitalization will go as we transition to a lower carbon economy and what sectors and which companies will be long-term winners from a stock price perspective. It would be relevant for any analysis to gain perspective on what the future opportunity costs are of divestment, while at the same time, building a deep understanding of where the long-term winners will be as the overall economy shifts to a variety of energy sources.

5.e

Analyzing potential investment impacts on the Systems' portfolios of divesting from the securities of fossil fuel reserve owners, including impacts on return, risk, diversification and cost (including tracking error).

As indicated above, we do not currently have a systematic way of measuring the risk/return impact from divestment in our own portfolio management. However, we believe analyzing impact from an alpha generation perspective is a prudent lens to use for evaluation. Our general view is that asset owners are long climate risk and therefore analysis should focus on how climate risks in the market evolve and are repriced relative to a non-repricing event.

5.f

Assessing potential alternative investments available to the Systems that have risk and return characteristics equivalent to the securities that may be divested.

From an investment perspective, climate change presents structural tailwinds (policy, regulation, cost, and consumer preferences) that are driving a transition towards lower carbon assets. The increased demand for lower carbon creates significant growth opportunities through the adoption of renewable power sources, electrified transportation, resource efficiency, and pollution control. Many of these companies provide substitutes for high-fossil fuel reserve or high-carbon intensity business and as such, offer comparable market exposure to those companies.

Climate change adaptation, which accepts that some damage may be irreversible, entails mitigating risk to, upgrading, or replacing at-risk physical capital with sustainable infrastructure. Massive investments to finance the engineering and construction of climate-resilient roads, bridges, ports, railways, and buildings are needed to ensure both the long-term integrity of a country's infrastructure and the continuity of basic goods and services such as water, electricity, and communications to affected areas.

When assessing potential alternative investments, evaluation using standard risk return metric is prudent and proven methodology. These criteria would include risk metrics (i.e. standard deviation, tracking error, downside risk, beta) and risk-adjusted performance metrics (i.e. Sharpe ratio, and information ratio). However, investing to solve for climate and environmental risks offers the opportunity to achieve attractive financial returns while supporting positive environmental improvement, a double bottom line, which should also be evaluated in the context of any potential investment. The double bottom line would include understanding how the potential investment achieves this positive impact within its investment process; evaluating its environmental stewardship (sustainability return) and its capital stewardship (investment return).

Question 6

Are there any precedents that can help guide the approach to analyzing the impacts of and determining a prudent strategy for divesting from fossil fuel reserve owners?

Question 7

What are ways to address the costs of externalities in investment portfolios that can help mitigate risk?

Question 8

How do you view the extent to which the market currently prices in climate change risk and, specifically, the economic and investment risks related to the carbon intensive businesses such as fossil fuel reserve owners?

Ultimately, the increased climate variability, as well as the frequency, intensity and duration of extreme weather events have the potential to disrupt vulnerable geographies, industries and sectors. We believe the focus of climate mitigation and adaptation will largely focus around three areas of risk:

- **Physical Risk:** The potential for asset impairments and supply chain disruptions through increased costs and decreased values.
- **Litigation Risk:** The potential for liabilities related to climate risk (e.g. climate denial funding/misleading risk disclosure, resource extraction, infrastructure planning and coastal development). Those who have suffered loss from the effects of climate change are likely to seek compensation from those they believe to be responsible. While these claims might not be made for decades, they have the potential to hit carbon extractors and emitters (and possibly their insurers) the hardest.
- **Transition Risk:** The potential for policy action and/or technological disruption associated with transitioning towards a lower-carbon economy. Some assets could become stranded as the depreciation or depletion period extends beyond their productive life (e.g. fossil fuel reserves that are never developed or extracted as a result of maintaining a specific level of carbon emissions).

Importantly, we believe assets are not pricing these three risks related to climate change appropriately because...

- Global climate models predict variables that contribute to disastrous outcomes, but not the outcomes themselves (e.g. air temperature, cloud cover).
- The timing and magnitude of extreme events are difficult to predict with accuracy. The costs of these events also vary significantly depending on the impacted assets and we anticipate these costs will only increase over time.

- Consensus around the drivers and contributors of climate change is relatively new, therefore legal cases require time to establish willful wrongdoing on the part of extractors or emitters.
- Climate change is a global challenge, not a localized one, making it hard to identify truly responsible or culpable parties. This might ultimately lead judges to use token companies to set an example or establish precedent.

Furthermore, we believe the inefficiency here – and the opportunity – is tremendous, and relates to three behavioral anomalies.

- **Time horizon:** The climate illustrates a classic case of investor myopia, as climate change is a risk that is easy to dismiss given the perceived effects occur far out in the future. Unfortunately, many investors also believe climate risk relates only to adverse changes in weather and rising temperatures, which further defers the focus and worry for many years, until the dates when climate-driven weather adversity is predicted to become onerous (2030+).

The problem with this view is that it ignores:

- a) Growing evidence that climate-driven weather adversity is impacting assets and markets today.
- b) Climate risk as growing regulatory, policy, and political pressure separate from actual weather events.

Because most investment professionals are measured and compensated on 1-, 3-, and 5- year performance, it is easy to dismiss even thinking about climate change if it is understood only as a long term risk.

The insurance industry, specifically the property & casualty (“P&C”) sub-sector, is a great example of how a short time horizon can impact an investor’s ability to effectively capture the impact of climate risk. Arguably no other industry more wholly embraces the possibility of climate risk than P&C insurance, due in part to these companies’ expansive use of risk modeling and vested interest in protecting (or adequately underwriting) physical assets. Yet, many P&C policies apply to a mere one-to two-year period, virtually insuring that climate risk is inadequately priced.

- **Mean reversion:** Many investment principles today are based on some notion of mean reversion: value investing, “normalized” earnings, “normalized” margins, and risk premiums/spreads all convey the idea of mispricing relative to a central tendency. If climate risk is real, however, and if both the physical world deteriorate as science predicts and if the regulatory / policy /financial disclosure environment gets more stringent as seems to be the case, then climate is a trend with no mean reversion. Therefore, we believe that investors banking on climate risk eventually fading are making the wrong bet.
- **Familiarity bias:** Climate risk has never been regarded as a systematic financial problem. Climate forecasts have actually proven remarkably prescient over time, arguably much more so than conventional financial forecasts! Climate scientists have been more effective in aggregate predicting temperature trends dating back several decades than economic and market forecasters have in estimating outcomes in their area of expertise, yet virtually 100% of investors base all their decisions on the economic and market forecasts, and arguably none base portfolio decisions on the climate science predictions. This may be due to lack of explicit empirics on climate risk; there is no measurable climate beta or risk premium, no historical correlations of climate risk to portfolio or security level returns, no “climate factor” that’s yet been identified. This lack of climate data in familiar financial metrics makes climate risk seem esoteric, unfamiliar, and ultimately irrelevant or unusable for most professional investors.

Question 9

How could divestment be effective in influencing fossil fuel reserve owners to take steps toward addressing carbon risk?