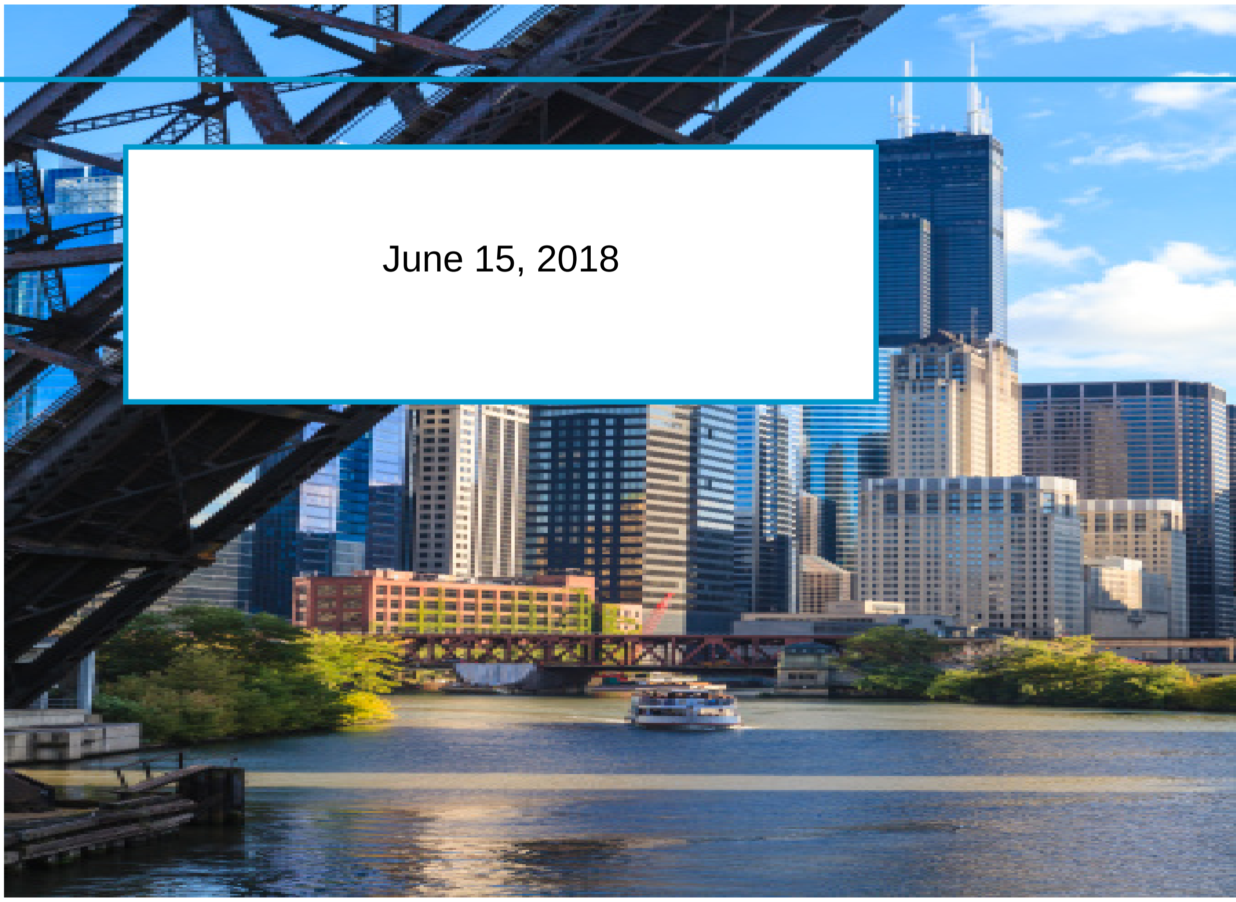
Legal & General Investment Management America

# Request for Information

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



June 15, 2018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## I. Information Requested

The Systems request information that will assist them in achieving the purpose and objectives described above and that is responsive to the following questions:

"Legal & General" also seen as "we" throughout this presentation relates to Legal & General Investment Management America ("LGIMA"), an SEC registered investment advisor, Legal & General Investment Management ("LGIM"), an FCA registered advisor, LGIM Asia an adviser registered with the Hong Kong Securities and Futures Commission and LGIM International ("LGIMI"), an FCA registered advisor and SEC registered investment advisor. The foregoing is for the services of only LGIMA.

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

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

Legal & General Investment Management America, Inc.
71 S Wacker Drive, Suite 800
Chicago, IL 60606

**2. Website address, if available**

**www.lgima.com**
**www.lgim.com**

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

Meghan Bourke
Investment Director
**meghan.bourke@lgima.com**
312.585.0332

**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.**

LGIMA was founded in 2006 to manage assets for institutional investors. A subsidiary of LGIM(H), LGIMA was launched with a focus on delivering outcomes in actively managed credit and liability-driven investment strategies. As we have grown in scale over the years, we added capabilities including passively managed, "smart beta" and multi-asset strategies. As a part of that progression, LGIMA is focused on delivering a broad solution set for ESG focused investors. Our U.K. affiliate, LGIM, also a subsidiary of LGIM(H), has built a robust offering in ESG, with a strong reputation for corporate engagement and environmentally focused solutions. In fact, LGIM was recognized for its work in launching the Future World Fund, a multi-factor fund that focuses on investing with companies who comply with global environmental standards and disinvesting from those that fail to meet minimum standards of governance and sustainability.

As LGIMA establishes its approach to ESG we plan on leveraging the expertise and capabilities of our affiliate LGIM to ensure we bring a consistent and robust approach to ESG investing across the globe. LGIMA has hired a Head of US Stewardship and

Sustainable Investments (staring June 14, 2018) who will lead the efforts in the US. Legal & General has made a commitment to address climate change by engaging directly with the largest companies in the world which hold the key to meeting the international 2 degree climate change target of the Paris Agreement. The purpose and the ultimate goal of the Pledge is to protect and enhance the long-term investment returns of the millions of pension and investment savers who are our end clients.

The Pledge focuses on sectors that are vital to the achievement of global climate change goals, identifying whether companies recognize and assume their responsibility in transitioning to a low carbon economy, namely:

- Oil and gas – companies that extract and distribute oil and gas
- Metals and mining – companies that extract ores, especially coal
- Electric utilities – companies that generate electricity, mainly by burning fossil fuel
- Automobiles – companies that manufacture cars and vehicles
- Banks and insurance – companies that finance/own projects and companies linked to climate change
- Food retail and distribution – companies that provide a wide variety of food and consumer goods

Within these sectors, the largest companies by market capitalization, consisting of approximately 50% of each sector within a global index were chosen due to their magnified impact on the market and the influence they have on other companies in their respective sectors.

Under the Pledge, LGIM's Corporate Governance team scores and ranks these companies on their preparedness for the challenges of climate change and energy transition. Active engagements with the companies are then carried out over a period of 12 months, to support meaningful improvement in specific areas of climate governance.

If companies excel in addressing the challenges and opportunities arising from the transition to a low carbon economy, LGIM will 'name and fame' them publicly. For those companies that fail to demonstrate progress and do not meet our minimum expectations over the engagement period LGIM will vote against the election of the Chair of the Board, across our entire equity holdings (starting from March 2018). For those clients invested in our Future Fund range those same companies that fail to meet our minimum expectations will be divested.

*LGIM ranked no. 2 globally for the management of climate risks in investments*
https://aodproject.net/managers/

**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.**

Yes, LGIMA is able to provide Analysis Services.

**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*

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?**

   Providers in the finance sector should be assessed on two major categories – first, their capabilities in the area of sustainability and low-carbon investments. Second, the extent to which these capabilities are aligned with the providers' overall strategies – e.g. in voting, company engagement, and collaboration with other stakeholders.

- What are the provider's capabilities in the area of sustainability and low-carbon investments?
- What is the providers' record of supporting sustainability and the low-carbon investment through its broader activities, as they relate to:
  - Voting
  - Company engagement
  - Collaboration with other stakeholders

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

   If there is any case in which investment decision-making, engagement and the exercise of voting rights are integrated, please explain about it.

   What are the major ESG risks you have identified among your portfolio holdings, and what measures do you take to reduce such risks? Please cite five examples.

   Please explain the voting process. Do you make a diverse exercise of voting rights?

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

4. **What criteria, experience and qualifications for services providers**

   We believe it is important to have a provider with an experienced corporate governance staff and proven ability to bring change. It is important to understand the tools used to make proxy decisions and their engagement strategy. Where managers use outside vendors or functions are outsourced, it is important to understand this relationship.

*Approaches to Investment Analysis Services*

5. **What do you believe are best approaches to:**
   a. **Determining the scope of companies, including further defining fossil fuel reserve owners, appropriate for divestment.**

      There is significant variation between companies involved in the extraction, distribution and consumption of fossil fuels. Some electric utilities, for example, remain heavily reliant on burning coal, while others are rapidly growing their renewable energy capacity. As such, a nuanced approach would aim to capture the differences in the extent to which companies are preparing for the low-carbon transition.

This is the focus of our Climate Impact Pledge, which focuses on 6 sectors that are vital to the achievement of global climate change goals. Oil and gas, mining and utilities – are the most relevant in terms of fossil fuel usage, though this debate has important implications for auto manufacturers, as well.

LGIM has developed over 50 metrics, in order to understand:

- whether companies have a corporate statement that formally recognizes the impact of climate change;
- whether companies are fully transparent on their carbon contribution (scope 1, 2 and 3 emissions)
- whether the board composition is diverse and robust enough to drive innovation and change.
- whether company lobbying is supportive of the low-carbon transition

We will also consider companies' investments into clean technologies, as well as the integration of climate change scenarios compatible with the Paris Agreement into company planning.

We will also look at the comprehensiveness of climate-related disclosures, particularly around the use of scenario analysis (see subsection d below)

One potentially useful approach will look at fossil fuel companies' planned capital expenditure, identifying the highest-cost, highest-carbon projects[1], although there will be limitations in the availability (and licensing) of the relevant data.

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

When planning engagements we consider ESG issues that could affect the value of our clients' assets, both directly and indirectly in the short to long term. In addition, we have also a longer-term strategic planning process for engagements linked to our firm-wide macro- economic thematic themes: demography, technology and energy.

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

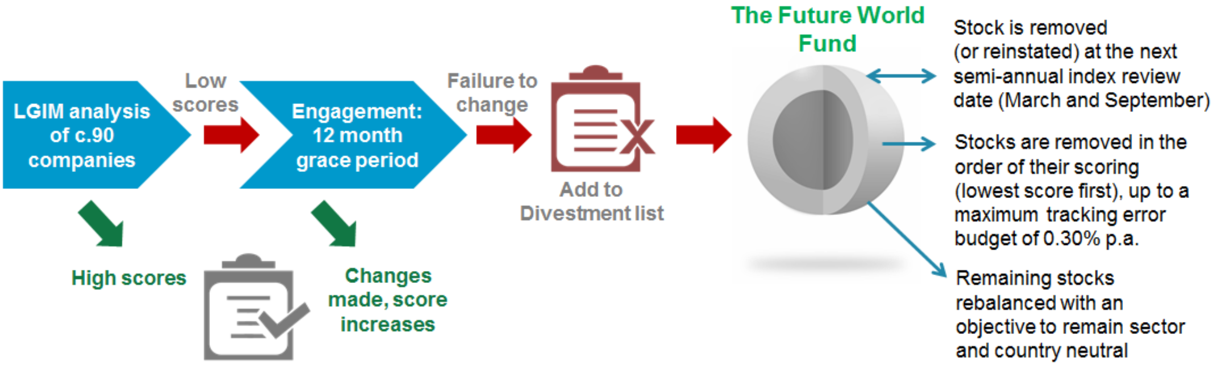
Strategies will vary across different asset classes and time horizons. Below, we illustrate one divestment strategy as it applies to an equity index fund.

LGIMA is in the process of launching the Future World Fund, a multi-factor equities index fund that incorporates a climate 'tilt' to address the investment risks associated with climate change. The Future World Fund incorporates LGIM's Climate Impact Pledge in which LGIM commits to engage with the

[1] http://2degreeseparation.com/

world's largest companies that will need to adapt their business models and drive innovation in order to meet global climate change goals.

After one year of engagement, if companies still fail to meet the minimum threshold we consider necessary, they will be **divested** from the Fund.




While the divestment is intended to send a strong message to companies, the impact of the fund's return is intended to be kept to a minimum, by rebalancing the holdings and keeping the sector and country exposures neutral.

Divestment is a powerful way to communicate to companies that there is a red line for investors in relation to the approaching climate change.

The Pledge is a commitment LGIM has made as a firm. Therefore, for all other funds LGIM manages where we are unable to contractually divest, we exercise their shareholder rights by voting against the chair of the board of the same companies. This way, companies hear one voice from LGIM and its clients.

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

There is growing recognition, even within the oil and gas industry, that the long-term unabated use of fossil fuels at current levels of consumption is incompatible with avoiding dangerous levels of climate change[2]. When deciding to buy or hold the securities of a fossil fuel issuer, investment fiduciaries must be satisfied that such an investment is compatible with the legal duty of prudence[3]. An important question is:

- ***What are the minimum standards of climate change disclosure required from a fossil fuel issuer in order for such an investment to qualify as prudent?***

In its interpretative release on climate change disclosure[4], the Securities and Exchange Commission (SEC) notes four channels through which climate change can materially affect the value of a company: the impact of regulation or legislation, international accords, indirect consequences of regulation or business trends, and the physical impacts of climate change.

With the possible exception of physical risks, which are the most difficult to model, there is

[2] **https://www.theguardian.com/environment/2015/oct/13/oil-unlikely-to-ever-be-fully-exploited-because-of-climate-concerns-bp**
[3] Provisions of which are set in the Uniform Prudent Investor Act (for public pension funds), Employee Retirement Income Security Act (for private pension funds), as well as the Uniform Prudent Management of Institutional Funds Act
[4] Nos. 33-9106; 34-61469, 2010

growing investor consensus that the other three trends are already affecting the fossil fuel industry[5]. Relevant pieces of regulation and legislation include air pollution controls (such as NAAQS in the US[6]) and fuel emissions standards (e.g. proposed EU standards for heavy-duty vehicles[7]; announcement of diesel bans in several cities and countries around the world[8]).

Signed by 195 countries in 2015, the Paris Agreement on climate change is the most salient – but not the only[9] – international accord. Its stated ambition is to limit global average temperature increase to 'well below 2 degrees C above pre-industrial levels'. This international agreement has spurred further legislative action from governments, with 106 new clean energy laws implemented around the world since 2015[10].

Finally, the continued progress of renewable energy and electric vehicles, coupled with wider business trends in automation, electrification and digitalisation, has the potential to affect demand for fossil fuels[11].

However, fossil fuel companies have faced criticism for not providing investors with sufficient 'decision-useful' information in their disclosures. A review of selected US coal company disclosures between 2010-2015 finds that companies rely on central planning scenarios which project 'current business-as-usual trends over a 20-30 year period, assuming no new policies, regulatory interventions, or disruptive technological developments'[12]. Such assumptions seem questionable in light of the trends discussed above, and at least one large coal company has already faced successful legal action to improve their climate disclosures[13].

- ***Are there examples where an investment did not take place because of inadequate climate-related disclosures?***

Under the Climate Impact Pledge, LGIM expects to see a clear articulation of the risks and opportunities from investee companies. This covers the entire spectrum – from management discussion and analysis (MD&A) in annual reports and financial filings, through to comprehensive disclosure of environmental data through standardized channels such as CDP (Carbon Disclosure Project). If companies fail to meet our minimum standards, they risk being removed from select funds in the Future World range. We have already announced the first divestment targets:
**http://www.lgim.com/uk/en/press/2018/legal---general-investment-management-takes-action-on-climate-change-risks.html**

- ***Are there examples of engagement with regulators and companies to improve climate-related disclosures?***

LGIM has been working with investee companies, outlining specific, measurable objectives to improve their climate-related disclosures. More details can be found here:
**http://www.lgim.com/uk/en/press/2018/legal---general-investment-management-**

[5] Consider long-term coal outlooks from LGIM: **http://www.lgim.com/uk/en/insights/our-thinking/long-term-thinking/peak-coal-in-terminal-decline.html** , Goldman Sachs: **https://oilprice.com/Energy/Coal/Goldman-Sachs-Peak-Coal-Is-Here.html** and Blackrock**:** **http://www.afr.com/business/mining/coal/blackrock-says-coal-is-dead-as-it-eyes-renewable-power-splurge-20170524-gwbuu6**

[6] ***https://www.epa.gov/criteria-air-pollutants/naaqs-table***

[7] **https://ec.europa.eu/clima/policies/transport/vehicles/heavy_en**

[8] **http://www.autoexpress.co.uk/car-news/consumer-news/98747/diesel-ban-the-future-of-diesel-cars-in-the-uk-and-beyond**

[9] Other relevant agreements include the International Civil Aviation Organization agreement to curb greenhouse gas pollution from aviation, agreed in 2016, and the the International Maritime Organisation's cap on the sulphur content of heavy fuel oil, coming into force in 2020.

[10] **http://www.climatechangenews.com/2018/05/14/11-ways-paris-climate-deal-working-real-world/**

[11] **http://www.nature.com/articles/s41558-018-0182-1**

[12] **https://www.carbontracker.org/reports/no-rhyme-or-reason-eia-energy-outlook-coal-companies-risk-disclosure/**

[13] **https://www.reuters.com/article/us-peabody-energy-climatechange/peabody-reaches-deal-with-new-york-ag-on-climate-disclosures-idUSKCN0SY1U420151110**

**takes-action-on-climate-change-risks.html**

LGIM has also been a supporter of the Taskforce on Climate-related Financial Disclosures (TCFD), providing detailed responses to the two rounds of industry consultations organized by the TCFD. This culminated in June 2017 with the release of the final recommendations of the TCFD. At the time of their release, LGIM was the largest asset manager in the world to have publicly supported the recommendations[14]. We encourage investee companies to report in line with TCFD guidelines, and our parent company (Legal & General) will also release its first TCFD report in 2018.

- ***Does the firm conduct scenario analysis, as recommended by the TCFD?***

One key recommendation of the TCFD concerns the use of scenario analysis. Companies are asked to outline the resilience of their business in the face of shifts in technology, policy and consumer preferences. This approach can help illuminate investor exposure to the risks and opportunities of climate change.

Scenario analysis is one of the scoring categories of the Climate Impact Pledge methodology. To encourage its use more broadly, LGIM has been supporting shareholder proposals calling on companies to conduct scenario analysis. Noting that many of the large asset managers have a pattern of inconsistent voting in this area, our work as a 'consistent supporter' of shareholder action has been highlighted by the Asset Owner Disclosure Project (**https://shareaction.org/press-release/investors-inconsistent-climate-votes/** ) and Preventable Surprises (**https://preventablesurprises.com/wp-content/uploads/2017/11/Missing-55-V7-1.pdf** )

LGIM has been engaging with companies – particularly in the energy and utility sectors – discussing the assumptions that underpin their scenario analysis. LGIM is also part of the Institutional Investor Group on Climate Change, which is developing guidelines around the use of scenario analysis and climate disclosure for institutional investors. As the state of climate-related disclosures improves, investors will have more information to distinguish which companies – even companies currently operating in carbon-intensive sectors - are leading their peers in preparing for a low-carbon world.

- ***What other approaches are helpful in analyzing carbon investment risks?***

Recognizing that the world will continue to use fossil fuels for the next decades, LGIM does not believe in taking a blanket approach to divestment from all fossil fuels. An alternative to outright exclusion is gradual decarbonization. One option which we have employed in some of our index funds is 'tilting', i.e. increasing/decreasing the weight of companies in the index according to specific criteria. By tilting in favor of companies with lower-than-average carbon emission intensity or fossil fuel reserve intensity, this approach allows a fund to achieve environmental objectives, without compromising financial performance.

The first fund launched in the Future World range, for example, has lowered to the carbon emissions of its underlying companies equivalent to that produced by 40,000 cars in a year (compared to traditional index investing). The same fund the fund has reduced exposure to the fossil fuel reserves of the fund's underlying companies by more than 76% (compared to traditional index investing). In practice, this amounts to the equivalent of 55 million barrels of oil[15]. Tilting has the added advantage of encouraging positive action from investee companies.

For example, if a company reduces its carbon emissions, more capital will be allocated

[14] **https://www.google.com/search?q=tcfd+supporters+july&sourceid=ie7&rls=com.microsoft:en-GB:IE-Address&ie=&oe=&safe=active&gws_rd=ssl**

[15] Compared to a market-cap based index. Carbon reserves measured in tons /m$ of equity. Data as at 31/03/2018

towards it. When doubled by shareholder engagement, this approach can help put pressure for companies to align their businesses with the ongoing energy transition.

### 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).

- ***What is the impact of fossil fuel divestment on risk-adjusted returns?***

We believe blanket divestment from companies and entire sectors has downsides, since it can result in a more concentrated portfolio. Yet limited exclusion – and the threat of it – can still be a potent tool: research has shown that the targeted exclusion of certain stocks (e.g. the companies with the worst ESG record) need not have significant impact on the tracking error of index funds, or the difference between their returns and those of the index they follow[16].

The case of 'pure-play' coal companies, which derive all their revenue from coal mining, might deserve special consideration. Such companies face headwinds from cleaner sources of energy as well as increased regulation, having lost over 75% of their value in last 8 years[17]. In this case, divestment might contribute to the reduction in the long-term risks associated with a fund, which is why LGIM's funds in the Future World range do not invest in pure-play coal companies.

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

- ***What are the alternative investments available?***

Going one step beyond penalizing high carbon and rewarding low carbon producers, LGIMA's investment philosophy is to also implement allocations tilted toward companies whose bottom line is directly linked to a greener and low carbon economy.

Green revenues are defined as the revenues derived from cleaner processes, renewable sources, energy efficiency, environmental solutions, or related to cleaner finished products. We believe these companies may be positioned more favorably to improve the environment and benefit from the future low carbon economy. The allocation overweight within the Future World Low Carbon Fund is directly equal to the green revenue percentage. This allocation mechanism strongly discriminates between companies to achieve maximum exposure to the green revenue parameter.

LGIMA is currently working on creating a custom dashboard to help in customization of client portfolios.

- ***What are the available asset classes?***

Some asset owners have noted that investment opportunities related to climate change can be found outside (listed) equity markets – in private equity, fixed income, as well as other more illiquid asset classes such as infrastructure and other real assets.[18]

LGIM is developing the Future World fund range across the asset classes, designed to

[16] 2Tim Verheyden, Robert G. Eccles, Andreas Feiner (2015) - ESG for All? The Impact of ESG Screening on Return, Risk, and Diversification

[17] Measured by the performance of the Stowe Global Coal Index

[18] Local Authority Pension Fund Forum, *Climate Change Investment Policy Framework* (2017), via http://www.lapfforum.org/wp-content/uploads/2017/11/Climate_Change_Investment_Policy_Framework.pdf

capture some of these opportunities. Funds include fixed income funds, a real assets fund focused on clean energy, as well as a multi-asset fund focused on sustainable opportunities. All of the funds will incorporate a carbon reduction objective.

### 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?

Several asset owners have set precedents by adopting different strategies to reduce their carbon exposure. These include:

- US pension funds CalPRS, CalSTRS divesting from non-US thermal coal companies
- the Norwegian Government Pension Fund Global divesting from coal companies,
- the UK Environment Agency (UK) aligning its investments with a 2°C transition,
- Sweden's AP3 pension fund doubling its green bond investments
- Danish pension fund PKA divesting from select oil & gas companies whose business plans were not aligned with the Paris Agreement[19]

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

When planning engagements we consider ESG issues that could affect the value of our clients' assets, both directly and indirectly in the short to long term. In addition, we have also a longer-term strategic planning process for engagements linked to our firm-wide macro-economic thematic themes: demography, technology and energy.

At LGIM, we believe that well governed companies that manage all stakeholders, including the environment, are more likely to deliver sustainable long-term returns. We view the consideration of environmental, social and governance ('ESG') issues as part of risk management, and therefore part of fiduciary duty. We recognize that companies are intrinsically linked to the economies and societies in which they operate. Positive and negative externalities generated by individual entities can have consequence for the economy and society at large. We therefore believe that investors have a responsibility to the market as a whole. Our ultimate goal is to protect and enhance the investment returns for the benefit of our clients' assets. LGIM's commitment to addressing ESG issues is set at the top of the organisation, therefore it permeates throughout.

Public ESG targets and goals in relation to LGIM were disclosed in our parent company's (Legal & General Group plc) reporting on corporate responsibility. This can be found here: **http://reports.legalandgeneralgroup.com/2016/responsibility/introduction/our-targets-2017-2023.html**

### 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?

We recognize that markets might be underestimating the systemic risks surrounding climate change – one of the reasons why support the work of the TCFD.

However, ESG factors are increasingly recognized as playing a role in determining asset prices. We therefore integrate our work with LGIM's investment teams in order to

[19] **http://www.pionline.com/article/20180412/ONLINE/180419948/denmarks-pka-divests-from-35-oil-and-gas-companies**

supplement their fundamental analysis. We identify sector-specific risks and opportunities, and focus our attention on the material impact of ESG on a company's bottom line and creditworthiness.

Voting and engagement form a key part of the corporate governance team's monitoring process and help us identify key risks and opportunities at investment level.

LGIM's proprietary ESG scores of the investment universe, which incorporates voting decisions, are available to share amongst all investment professionals within LGIM by having direct access them on Bloomberg (LGIM wide sharing tool).

The exchange of information between the corporate governance and investment teams is on-going at both formal and informal level. And, while voting and engagement decisions are directed by the corporate governance team, the extent to which ESG considerations influence investment decision-making is directed by the investment management team, through integration of ESG with fundamental analysis.

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

There are several avenues through which divestment can be effective in influencing change. One theoretical option is for divestment to gather sufficient momentum in order to alter the cost of capital, making low-carbon investments more attractive on a relative basis. This ultimately depends on the liquidity and capital flow of the different fossil fuel markets. A study by Oxford University sees divestment as most impactful on coal markets: "a diminishing pool of debt finance and a higher hurdle rate will thus have the greatest effect on companies and marginal projects related to coal and the least effect on those related to crude oil."[20]

A different avenue explores reputational pressures. In the case of the Future World funds, LGIM has committed to make public the names of the best and worst performers in our climate ranking. The threat of divestment – alongside negative publicity – is therefore used as a tool to drive change at investee companies. On the flipside, companies are given the opportunity to be praised in the public domain.

## Response Elements and Format

### Executive Summary

**Responses should include an Executive Summary which provides the name of the responding entity, contact information for the point of contact for communications and a brief description of the responding entity and the major features of its response.**

Please see attached.

[20] Smith School of Enterprise and the Environment, Oxford University: Stranded assets and the fossil fuel divestment campaign: what does divestment mean for the valuation of fossil fuel assets?

## Attachment 1

**Please answer these questions only if you are able to provide the Investment Analysis Services, or a portion of such work that would be sought in the above- referenced RFP and would likely respond to that RFP.**

a. **What services can you provide that could satisfy the Investment Analysis Services sought in the above-referenced RFP? Describe briefly what other services relating to mitigating climate change or carbon risk you can you provide.**

We evaluate exposure and the impact of ESG investment risks, including climate change, by using our ESG proprietary scoring tool. This tool incorporates external data and analysis from six different sources and aims to objectively assess ESG performance relative to peers in the same sector. Our investment teams have access to these scores via Bloomberg, and continuous investment dialogues are held between the Investment and Corporate Governance teams on ESG issues.

We have also carried out an audit of external carbon data providers and produced a sample carbon footprinting exercise on a representative portfolio ('How much carbon do I own?') This footprinting exercise was performed on the FTSE All-World index as a proxy to demonstrate how carbon emissions and reserves are concentrated in regions and sectors within an average portfolio.

In addition, our thematic working group focused on energy assesses the sector implications of climate risks related to policy and regulation, transition and physical risks. The findings are integrated into top-down sector considerations and will also influence company-specific research and analysis.

b. **Describe your business including your primary business activity and all the professional services that you or your company or organization provide.**

LGIMA provides investment management advisory services.

c. **What skills, experience, expertise or tools do you have that enable you to provide Investment Analysis Services? Please include a list of similar prior projects and/or services; a description of experience with providing similar services to public pension funds or other institutional investors; and the length of time that you and your company or organization have provided such services.**

- Energy and climate change is one of LGIM's key long-term investment themes. This op-ed by LGIM's CIO has more detail: **https://www.ft.com/content/ff65b760-f07b-11e7-b220-857e26d1aca4** LGIM ranked no. 2 globally for the management of climate risks in investments **https://aodproject.net/managers/**

- LGIM's preoccupation with long-term risks of climate change integrated into the range of new funds in the Future World range
    - Appointed advisory board including LGIM senior management and independent experts to provide informed and expert advice to the fund, ensuring the fund remains representative of clients' needs and acknowledging changing markets and best practices in corporate governance.
    - The funds are designed for mainstream investors who want to achieve ESG objectives and positive financial outcomes
    - We have provided low-carbon investment services for several major pension schemes.
        - LGIM's capabilities in the area of sustainability and corporate governance are a differentiating factor in client mandates: "LGIM's approach to enhancing performance and their commitment to corporate governance and stewardship, along with their client-focused ethos, has contributed to making them our preferred choice" (**https://www.brunelpensionpartnership.org/news/2018/04/brunel-pension-partnership-announces-appointment-of-lgim** )
- We are using our scale to put pressure on investee companies to address climate change
    - Voting against chairs of the boards who are showing inaction on climate change. *This is market-leading practice:* it is unusual for asset managers to vote against the chair on a single issue such as climate change. This sends a powerful message to companies that they should be raising their standards in this area.
    - The chair of a major bank's DC pension scheme invested in the Future World Fund commented: "Mr Picot says: "Not only have we got a financial solution to manage our position on ESG issues, but we also benefit from LGIM engaging with companies seeking to drive positive behavior." (**https://www.dcif.co.uk/wp-content/uploads/2018/04/navigating-esg-final-lo-res.pdf** )
    - An overview of LGIM's voting record in support of climate change resolutions: **http://www.lgim.com/files/_document-library/capabilities/lgim-acts-on-climate-change.pdf**
    - LGIM voted 'Best in Engagement' by company secretaries for 3 years in a row (ICSA Awards) → **our engagements are pragmatic, driven by the desire to achieve change,** not noise in the public arena. Voting and divestment are only tools of last resort.

- LGIM's 2017 Active Ownership report, showing the actions undertaken on behalf of clients with regards to climate change **http://www2.landginvestments.com/annual_report?cid=cgint3#climate-change**

**d. Would you be willing to serve as a fiduciary to the Systems if you performed the Investment Analysis Services?**

Yes we will serve as a fiduciary if our investment management services are used.

**e. What are your sources of income other than from clients? If you are a not-for-profit organization, please identify your donors.**

All income is for investment management services.

**f. What is the estimated pricing structure and cost for provision of Investment Analysis Services?**

Pricing is dependent on the scope of the mandate.

**Confidentiality Statement**

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