ARTICLE
For professional investors
March 2017

ROBECO
The Investment Engineers

Six key ESG issues in energy credits

Frances Pang
Credit Analyst

Francis Condon
Sustainability Investing Analyst

- The energy sector is faced with significant ESG challenges
- We have identified six material ESG factors for energy credits
- We incorporate them into our valuation of company credit profiles

ESG information provides credit investors with valuable information on companies' ability to manage their assets, repay debt holders and avoid situations in which their operations can be impaired. In this article, we will address the six main ESG issues in the energy sector and what they tell us as credit investors.

The energy sector is the totality of all companies involved in the production and sale of energy, including fuel extraction, production, transportation, processing, refining, marketing and distribution. The sector contains a diverse number of activities along the value chain, but for credits we primarily invest in the following types of issuers:

- International oil companies (IOCs), which integrate upstream (searching for and extracting oil and gas), midstream (transportation) and downstream operations (refining, marketing and distribution) and which are interesting for their generally high credit quality; most IOCs combine conventional operations with a varying degree of exposure to unconventional onshore operations, mainly in North America and Australia
- Independent exploration & production (E&P) companies with a focus on upstream unconventional North American onshore operations
- National oil companies (NOCs), which have integrated business models and which run both commodity and sovereign risk

'We need to know how companies address the challenges the energy sector faces'

The six key ESG issues in the energy sector

Looking through the lens of a credit investor, we identify six key sustainability issues in the energy sector that can have a material financial impact on a company's long-term business position. Incorporating this type of information in addition to purely financial data allows us to make better investment decisions. Using the RobecoSAM ESG materiality framework as an important source, we define the following six issues:

1. Energy use and greenhouse gas emissions
2. Water management
3. Health & safety
4. Community relations
5. Bribery and corruption
6. Corporate governance

We will review each of them, their impact on the valuation of the companies we cover, their magnitude, and how we expect company management to mitigate or diversify these risks.

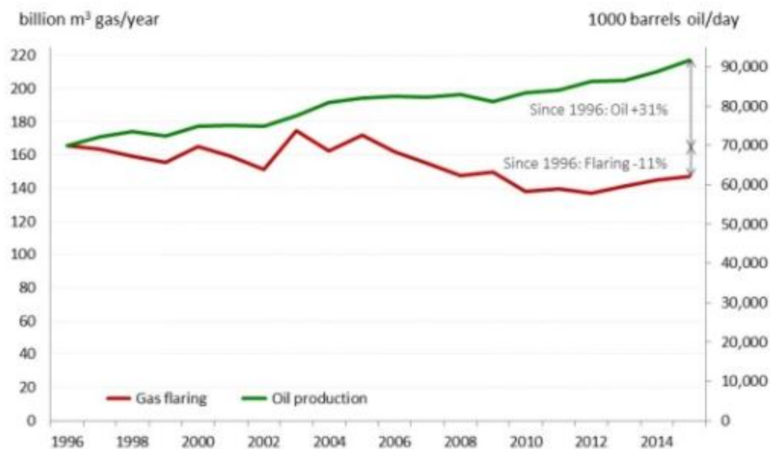
1. Energy use and greenhouse gas emissions

Upstream carbon emissions are driven by the nature of the reserves, which affects energy use and the volume of gas flared (burnt) or vented. In this part of the value chain, direct emissions mainly consist of flared natural gas (carbon dioxide) and natural gas (methane) that is vented or lost through leakage. Additionally, indirect emissions are caused by the energy required to lift or extract hydrocarbons. Oil sands operations and aging conventional fields generally demonstrate higher carbon emissions per unit of production.

In recent years, the upstream oil & gas industry has invested in the reduction of methane emissions and flaring through greater capture of natural gas. The development of Liquefied Natural Gas has improved the route to market for what was previously stranded natural gas, which would typically be flared at the well site. As a result, flaring has declined, while production has increased, as shown in Figure 1. A number of oil & gas companies are seeking to further reduce flaring as part of the Global Gas Flaring Reduction Partnership, a public-private initiative comprising international and national oil companies, national and regional governments, and international institutions.[1]

[1] http://www.worldbank.org/en/programs/gasflaringreduction

Figure 1 | Global flaring and oil production 1996-2015



Source: http://www.worldbank.org/en/programs/gasflaringreduction#7. Note: Flaring data based on new satellite image system and calibration from 2013 (VIIRS satellite – Visible Infrared Imaging Radiometer Suite)

In the downstream segment, oil refineries are also significant contributors to direct greenhouse gas (GHG) emissions. Some IOCs report around half of their total GHG emissions as coming from their downstream operations. Direct GHG emissions in oil refineries come from the flaring of methane released during processing as well as produced carbon dioxide.

Indirect GHG emissions are also significant, as downstream refining operations are typically large energy users with many refineries using hydrogen or steam from nearby third-party plants and electricity from the public grid. Energy costs may account for 30% of total refinery operating costs. Downstream carbon emissions are driven by energy use, which varies according to the type of feedstock (raw material) used and refinery complexity. Heavy crudes, refineries with a high Nelson complexity index, and the production of petrochemicals generally have a higher energy intensity.

In the midstream segment, GHG emissions are typically associated with methane leakage. In general this is the aggregate of small leakage events from a large number of highly dispersed sources.

The relevance for credit investors

Energy use and greenhouse gas emissions are relevant to credit investors because:

- A company's position relative to the industry-average carbon intensity is an indicator of its overall operational and energy efficiency, and its operating margin.
- Energy producers are subject to regulations, which may include natural gas emissions. In the US, for example, local or state level Specific Gas Emitters Regulations require companies to pay attention to energy use and GHG emissions.

ROBECO
The Investment Engineers

Credit investors are interested in the extent to which companies are able to avoid, reduce or mitigate the overall risks arising from energy intensity and GHG emissions. For us key factors are the company's overall environmental management and its specific focus on GHG emissions. We obtain information from company reports and responses to the Carbon Disclosure Project questionnaires.

2. Water management

Water management is important for hydrocarbon producers. Some forms of hydrocarbon extraction and processing require significant amounts of water. Potential conflicts with other users over access to water increase in areas where water resources are less plentiful. Waste water disposal is another issue because of the need to dispose of 'produced water', which contains hydrocarbons.

In the upstream segment, the problem of water management is becoming more significant in North America, particularly for unconventional methods such as hydraulic fracturing production ('fracking') of shale oil and gas reserves. The overall environmental impact of water demand and waste water disposal is still subject to some uncertainty. The possible impacts of hydraulic fracturing on drinking water have been discussed by the US Environmental Protection Agency (EPA) in a draft paper[2].

A risk associated with waste water disposal is the issue of induced seismicity. When hydrocarbon producers extract oil and gas from wells in these regions, thousands of liters of salty water laced with heavy metals surface along with the fuel. The water is often injected back into special underground disposal wells under high pressure. The US government and academic researchers have found that this practice may help trigger movement along geologic fault lines, but more research is needed to link specific wells to specific incidents. Currently there is no industry-wide solution to this problem and energy producers may face a potential financial impact because of new regulations, such as restrictions on the energy production, or additional costs associated with this risk.

The downstream segment typically consumes substantial amounts of water primarily for processing and cooling. BP has disclosed that over 90% of its fresh water withdrawal is for downstream operations[3]. The US EPA has estimated that refineries use 1 - 2.5 gallons of water (3.8 - 9.5 liters) for every gallon of product. Not all of this water is consumed, however, and part of it has to be disposed as waste water. Costs of waste water treatment are also increasing. Companies are seeking to improve water efficiency and increase the proportion of recycled water.

[2] Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources, June 2015
[3] BP, HSE Charting Tool 2014

ROBECO
The Investment Engineers

The relevance for credit investors

Water management is relevant to credit investors because:

- A company's water intensity is an indicator of its overall operational and energy efficiency and, consequently, its operating cost base.
- Companies are subject to regulations and agreements on access to water. Changing regulations and alternative demands for access to water resources may increase costs.
- In waste water disposal, North American unconventional onshore producers in particular are facing increased risks of new regulations being introduced and an increase in costs associated with disposal wells due to concerns about environmental impact and induced seismicity.

As credit investors, we look for company-specific information on water consumption and operations in water stressed areas, as well as water disposal methods. We are also interested in the extent to which companies are able to avoid, reduce or mitigate the overall risks arising from water. For us the key factors are the overall focus of a company's operations, its general environmental management and its specific focus on water management. An adequate water management program that focuses on efficiency gains to reduce water use or on water-efficient operations, including recycling, lowers costs, scarcity risk and waste water issues. We also look for a good track record in compliance with permits and regulations.

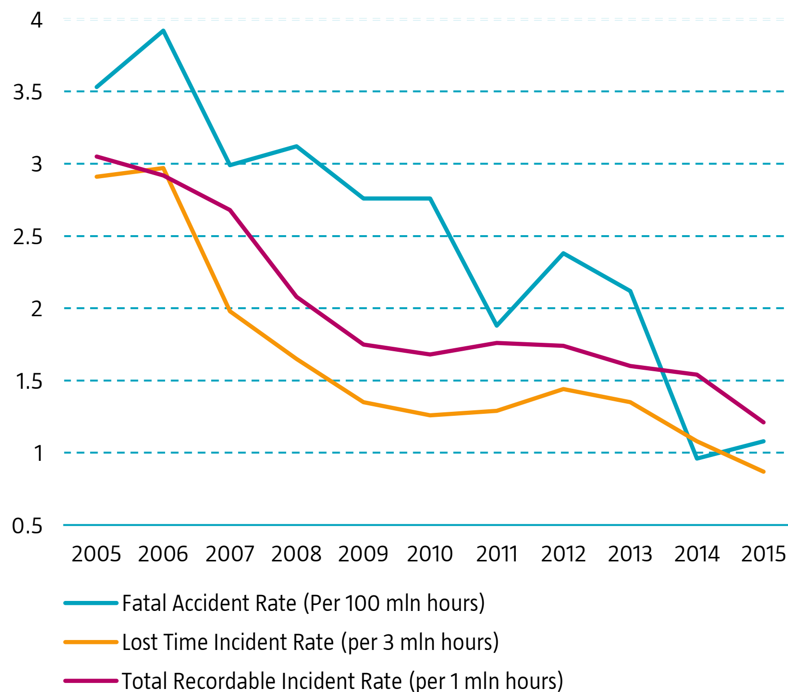
3. Health and safety

On top of the human costs, safety incidents can lead to disruptions, delays, oil spills and natural gas leakages, which impair the profitability of projects by lowering production and revenues, increasing operating costs, and giving rise to cleaning costs and other liabilities. This is particularly important for energy companies that operate in challenging conditions, such as deep-water offshore exploration and operations in the Arctic.

The most significant incident was BP's Gulf of Mexico spill in 2010, which led the company to put aside USD 61.6 billion to cover financial and environmental costs. Other significant costs include the Exxon Valdez tanker spill in 1991, which cost the company USD 3.8 billion, and Occidental Petroleum's Piper Alpha accident in 1988, which cost USD 1.6 billion.

Over the last ten years, the oil and gas industry has generally been successful in reducing occupational health & safety incidents. This has been the result of management focus on the safety of employees and contractors, establishment of a 'safety culture', and continuous improvement of operating practices. This is illustrated in the figure below.

Figure 2 | Occupational Health & Safety track record



Source: International Oil & Gas Producers

The relevance for credit investors

As credit investors, we use occupational health & safety and environmental data as a proxy for operational excellence. We therefore look for:

- The track record and disclosure of occupational health & safety indicators, including fatalities, injury rates and, increasingly, process safety events
- The disclosure on environmental impacts such as loss of containment incidents
- The proportion of assets located in challenging operating environments and the extent to which the company is able to manage the risks

We are concerned about how companies manage the health & safety of their employees and contractors. We want management to address situations in which their company is adversely positioned against peers, to look closely at individual cases of fatalities and injuries, and to address sequences of events that may suggest a failing safety culture.

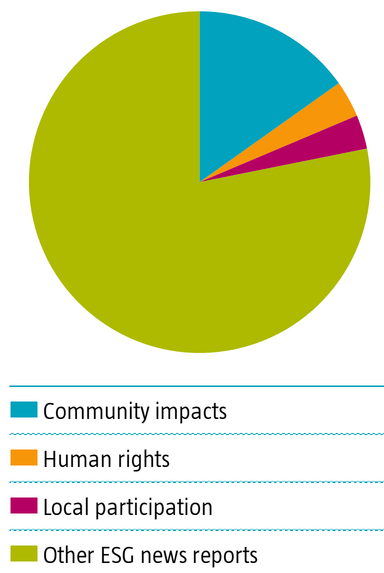
4. Community relations

Management of community relation risk is important to both the development and the operation of energy assets. IPIECA, the upstream industry association for environmental and social considerations, notes that "understanding and addressing the interests of societies, different social groups and communities that may affect, or be affected by, oil and gas

operations, is often an important component of designing and executing successful and sustainable oil and gas projects".[4] In practice, the community interaction footprint is generally larger for onshore activities such as conventional and hydraulic fracturing production, midstream pipelines and associated infrastructure, and downstream processing plants.

Noise, light, traffic, spills and perceived differences in benefit and burden sharing may all create tensions between operators and communities. The importance of community relations can be seen from the data of RepRisk[5], the leading business intelligence provider specializing in ESG risk analytics and metrics. RepRisk also identifies impacts on communities as one of the top 5 ESG issues for the sector. From inception in 2007 to the end of 2016, a quarter of the press articles on oil & gas companies relate to impacts on communities, as well as corporate complicity in human rights abuses, and local participation issues.

Figure 3 | Press articles on oil & gas companies per ESG topic



Source: RepRisk

The community relation issue has mainly been associated with emerging markets. For instance, in Nigeria, a complex social situation caused elevated spill rates for Shell, Total and Eni, driven by sabotage on pipelines. However, community risk is now also becoming more evident in developed countries such as the US and Canada, where community protests have caused delays to the proposed large-scale pipelines.

[4] Source: Oil and gas industry guidance on voluntary sustainability reporting, 2015
[5] RepRisk ESG Business intelligence (www.reprisk.com) is a global research and business intelligence provider specialized in dynamic ESG risk analytics and metrics. To assess the risk, RepRisk's research focuses on capturing and analyzing data from media, stakeholders, and other third-party sources external to the company.

ROBECO
The Investment Engineers

The relevance for credit investors

As credit investors, we look for reassurance that companies are able to manage their community interactions and prevent reputational risks. Examples include incorporation of community relations into operating management systems, and country level stakeholder engagement programs. We also require companies to provide good disclosure on the community relations issues they are exposed to, as well as on how these are managed across the company and in individual examples.

5. Bribery and corruption

Large energy companies work together with national oil companies and national state officials in emerging markets. These companies are involved in large projects requiring negotiation with public officials on production and return sharing agreements. The investment returns can be significant. In the energy sector corruption may be associated particularly with access to resources as well as the procurement of services contracts.

There have been a number of large corruption cases in the energy industry. While the absolute scale of such incidents is eye-catching, it is extremely rare for the penalties to be big enough to impair the credit quality of the companies involved. Nevertheless, such incidents point to risk exposure and weaknesses in management and internal governance.

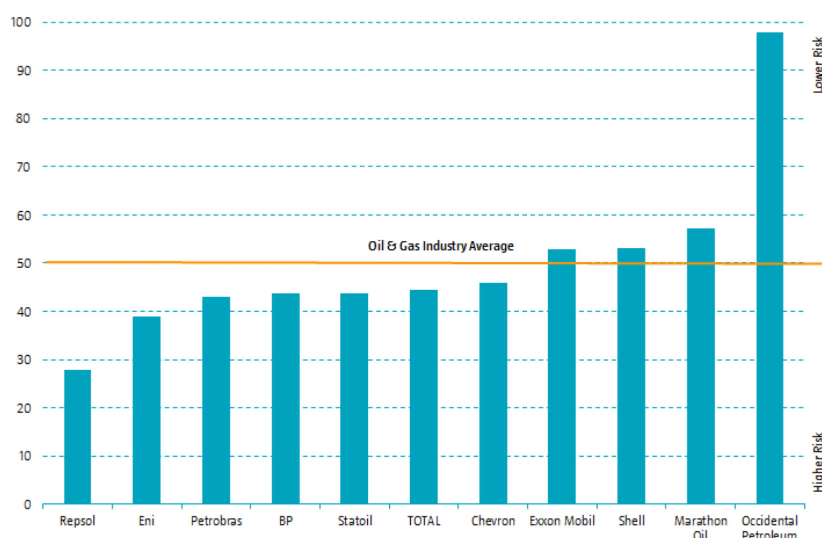
National oil companies have not proven to be immune. The largest corruption case in the sector in recent years has revolved around Petrobras in Brazil and the overpricing of procurement contracts, with excess payments subsequently circulating into the political arena.

The relevance for credit investors

In order to get more insight into corruption risks in the energy sector, we look at the exposure of energy companies to countries associated with higher levels of corruption. We use, among other sources, RobecoSAM's Country Sustainability Ranking for this. For an even closer look we also combine reported production data and the Transparency International Corruption Perception Index (TICPI) to develop a 'production weighted TICPI score' for individual oil & gas companies. An illustration of the outcomes of this calculation is given in the chart below. We use this to understand how well companies diversify their general corruption risks and to identify specific risk exposures.

ROBECO
The Investment Engineers

Figure 4 | Upstream Production Weighted Transparency International Corruption Perception Index, 2014



Sources: Company Data, Transparency International Corruption Perception Index, BP World Energy Statistics, RobecoSAM estimates. Country-based corruption: High numbers mean lower risk: most have more risk exposure than the industry average.

We are concerned with how companies mitigate their corruption risk exposure through their country choices, the standards they set in their codes of business ethics and the ways in which they implement them.

6. Corporate governance

As with all companies, good corporate governance is a means to ensuring optimum decision-making and alignment of interests on strategy, investments, allocation of capital investments and cash flows, and financial stability. National oil companies bring their own set of corporate governance challenges. In these instances company strategy and investment decisions risk being run as instruments of national policy and to the detriment of credit investors. A recent example is the way in which Petrobras has priced its products in the domestic market such that the company has become an instrument of fuel subsidy in Brazil. We have been encouraged by the efforts of the current management team to put an end to this practice.

The relevance for credit investors

In understanding corporate governance in the energy sector we look at:

- Company ownership and the presence of government or other shareholders with the potential to influence management
- Board quality, including independence, directors with appropriate skills and diversity

ROBECO
The Investment Engineers

- Close alignment of the remuneration of executives with the interests of investors, including credit investors

As credit investors, we expect companies to meet good practice standards of corporate governance based on the International Corporate Governance Network (ICGN) principles.

Conclusion

At Robeco we incorporate financially material ESG factors into the final valuation of the credit profile of the companies we cover, as these issues can have a material impact on an issuer's ability to repay its debt. They provide us with a more thorough understanding of the ESG risks and how management addresses them. ESG information is often a proxy for how well companies are being managed.

Understanding these risks also helps us with our active ownership engagement programs which, in recent years, have covered industry specific topics such as deepwater drilling, controversial regimes, unconventional operations, and climate change strategies.

The energy sector is moving fast towards the adoption of new technologies for developing and finding new hydrocarbon resources and improving operating efficiency. At the same time the sector is also facing large challenges from various regulatory changes, including those relating to climate change. We use our ESG perspective to monitor the impact of such new developments on the companies we cover with the aim to making better informed investment decisions.

Important Information

Robeco Institutional Asset Management B.V., hereafter Robeco, has a license as manager of UCITS and AIFs from the Netherlands Authority for the Financial Markets in Amsterdam. This statement is intended for professional investors. Therefore, the information set forth herein is not addressed and must not be made available, in whole or in part, to other parties, such as retail clients. Robeco disclaims all liability arising from users other than those specified herein. Without further explanation this presentation cannot be considered complete. It is intended to provide the professional investor with general information on Robeco's specific capabilities, but does not constitute a recommendation or an advice to buy or sell certain securities or investment products. All rights relating to the information in this presentation are and will remain the property of Robeco. No part of this presentation may be reproduced, saved in an automated data file or published in any form or by any means, either electronically, mechanically, by photocopy, recording or in any other way, without Robeco's prior written permission. The information contained in this publication is not intended for users from other countries, such as US citizens and residents, where the offering of foreign financial services is not permitted, or where Robeco's services are not available. The prospectus and the Key Investor Information Document for the Robeco Funds can all be obtained free of charge at www.robeco.com. Investment involves risks. Before investing, please note the initial capital is not guaranteed. The value of the investments may fluctuate. Past performance is no guarantee of future results. Historical returns are provided for illustrative purposes only. The price of units may go down as well as up and the past performance is not indicative of future performance. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency.

Additional Information for investors with residence or seat in France

Robeco is having the freedom to provide services in France. Robeco France has been approved under registry number 10683 by the French prudential control and resolution authority (formerly ACP, now the ACPR) as an investment firm since 28 September 2012. Robeco France is only authorized to offer investment advice service to professional investors.

Additional Information for investors with residence or seat in Germany

This information is solely intended for professional investors or eligible counterparties in the meaning of the German Securities Trading Act.

Additional Information for investors with residence or seat in Italy

This document is considered for use solely by qualified investors and private professional clients (as defined in Article 26 (1) (d) of Consob Regulation No. 16190). If made available to Distributors and individuals authorized by Distributors to conduct promotion and marketing activity, it may only be used for the purpose for which it was conceived. Therefore, the information set forth herein is not addressed and must not be made available, in whole or in part, to other parties, such as retail clients. Robeco disclaims all liability arising from uses other than those specified herein.

Additional Information for investors with residence or seat in Spain

The Spanish branch Robeco Institutional Asset Management BV, Sucursal en España, having its registered office at Paseo de la Castellana 42, 28046 Madrid, is registered with the Spanish Authority for the Financial Markets (CNMV) in Spain under registry number 24.

Additional Information for investors with residence or seat in Switzerland

This document is exclusively distributed in Switzerland to qualified investors as such terms are defined under the Swiss Collective Investment Schemes Act (CISA). RobecoSAM AG has been authorized by the FINMA as Swiss representative of the Fund(s), and UBS Switzerland AG, Bahnhofstrasse 45, 8001 Zurich, postal address: Badenerstrasse 574, P.O. Box, CH-8098 Zurich, as Swiss paying agent. The prospectus, the key investor information documents (KIIDs), the articles of association, the annual and semi-annual reports of the Fund(s), as well as the list of the purchases and sales which the Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, at the head office of the Swiss representative RobecoSAM AG, Josefstrasse 218, CH-8005 Zurich.
If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. The value of the investments may fluctuate. Past performance is no guarantee of future results.

The performance data do not take account of the commissions and costs incurred on the issue and redemption of units.
The prices used for the performance figures of the Luxembourg-based funds are the end-of-month transaction prices net of fees up to 4 August2010. From 4 August 2010, the transaction prices net of fees will be those of the first business day of the month. Return figures versus the benchmark show the investment management result before management and/or performance fees; the fund returns are with dividends reinvested and based on net asset values with prices and exchange rates of the valuation moment of the benchmark. Please refer to the prospectus of the funds for further details. The prospectus is available at the company's offices or via the www.robeco.ch website. Performance is quoted net of investment management fees. The ongoing charges mentioned in this publication is the one stated in the fund's latest annual report at closing date of the last calendar year.

The material and information in this document are provided "as is" and without warranties of any kind, either expressed or implied. Robeco and its related, affiliated and subsidiary companies disclaim all warranties, expressed or implied, including, but not limited to, implied warranties of merchantability and fitness for a particular purpose.
All information contained in this document is distributed with the understanding that the authors, publishers and distributors are not rendering legal, accounting or other professional advice or opinions on specific facts or matters and accordingly assume no liability whatsoever in connection with its use. In no event shall Robeco and its related, affiliated and subsidiary companies be liable for any direct, indirect, special, incidental or consequential damages arising out of the use of any opinion or information expressly or implicitly contained in this document

Additional Information for investors with residence or seat in the United Kingdom

Robeco is subject to limited regulation in the UK by the Financial Conduct Authority. Details about the extent of our regulation by the Financial Conduct Authority are available from us on request.

Additional Information for investors with residence or seat in Hong Kong

Investment returns not denominated in HKD/USD are exposed to exchange rate fluctuations. Investors should refer to the fund's Hong Kong prospectus before making any investment decision. Investors should ensure that they fully understand the risk associated with the fund. Investors should also consider their own investment objective and risk tolerance level. Any opinions, estimates or forecasts may be changed at any time without prior warning. If in doubt, please seek independent advice. The content of this document is based upon sources of information believed to be reliable. This fund may use derivatives as part of its investment strategy and such investments are inherently volatile and this fund could potentially be exposed to additional risk and cost should the market move against it. Investors should note that the investment strategy and risks inherent to the fund are not typically encountered in traditional equity long only funds. In extreme market conditions, the fund may be faced with theoretically unlimited losses. This document has not been reviewed by the Securities and Futures Commission. This document has been distributed by Robeco Hong Kong Limited ('Robeco'). Robeco is regulated by the Securities and Futures Commission in Hong Kong.

Additional Information for investors with residence or seat in Singapore

This document is not intended as a recommendation or for the purpose of soliciting any action in relation to Robeco Capital Growth Funds or other Robeco Funds (the "Fund") and should not be construed as an offer to sell shares of the Fund (the "Shares") or solicitation by anyone in any jurisdiction in which such an offer or solicitation is not authorised or to any person to whom it is unlawful to make such an offer and solicitation.

Nothing in this document constitutes accounting, legal, regulatory, tax or other advice. Any decision to subscribe for interests in the Fund must be made solely on the basis of information contained in the prospectus (the "Prospectus"), which information may be different from the information contained in this document, and with independent analyses of your investment and financial situation and objectives. The information contained in this document is qualified in its entirety by reference to the Prospectus, and this document should, at all times, be read in conjunction with the Prospectus. Detailed information on the Fund and associated risks is contained in the Prospectus. Any decision to participate in the Fund should be made only after reviewing the sections regarding investment considerations, conflicts of interest, risk factors and the relevant Singapore selling restrictions (as described in the section entitled "Important Information for Singapore Investors") contained in the Prospectus. You should consult your professional adviser if you are in doubt about the stringent restrictions applicable to the use of this document, regulatory status of the Fund, applicable regulatory protection, associated risks and suitability of the Fund to your objectives.

This document is not directed to, or intended for distribution to or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, publication, availability or use would be contrary to law or regulation or which would subject the Fund and its investment manager to any registration or licensing requirement within such jurisdiction. Investors should note that only the sub-funds listed in the appendix to the section entitled "Important Information for Singapore Investors" of the Prospectus (the "Sub-Funds") are available to Singapore investors. The Sub-Funds are notified as restricted foreign schemes under the Securities and Futures Act,

Chapter 289 of Singapore ("SFA") and are invoking the exemptions from compliance with prospectus registration requirements pursuant to the exemptions under Section 304 and Section 305 of the SFA. The Sub-Funds are not authorised or recognised by the Monetary Authority of Singapore and Shares in the Sub-Funds are not allowed to be offered to the retail public in Singapore. The Prospectus of the Fund is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses would not apply. The Sub-Funds may only be promoted exclusively to persons who are sufficiently experienced and sophisticated to understand the risks involved in investing in such schemes, and who satisfy certain other criteria provided under Section 304, Section 305 or any other applicable provision of the SFA and the subsidiary legislation enacted thereunder. You should consider carefully whether the investment is suitable for you.
This document may contain projections or other forward looking statements regarding future events or future financial performance of countries, markets or companies and such projection or forecast is not indicative of the future or likely performance of the Fund. Neither the Fund, its investment manager nor any of their associates, nor any director, officer or employee accepts any liability whatsoever for any loss arising directly or indirectly from the use of this document. The information contained in this document, including any data, projections and underlying assumptions are based upon certain assumptions, management forecasts and analysis of information available as at the date of this document and reflects prevailing conditions and our views as of the date of the document, all of which are accordingly subject to change at any time without notice and the Fund and its investment manager are under no obligation to notify you of any of these changes. Prospective investors should not view the past performance of the Fund or its investment manager as indicative of future results.

Additional Information for investors with residence or seat in Shanghai
This material may not be copied or used with the public. This material is prepared by Robeco Investment Management Advisory (Shanghai) Limited Company (Robeco Shanghai for short) and is only provided to the specific objects under the premise of confidentiality. This material must not be wholly or partially reproduced, distributed, circulated, disseminated, published or disclosed, in any form and for any purpose, to any third party without prior approval from Robeco Shanghai. The information and/or analysis contained in this material have been compiled or arrived at from sources believed to be reliable but Robeco Shanghai does not make any representation as to their accuracy, correctness, usefulness or completeness and does not accept liability for any loss arising from the use hereof or the information and/or analysis contained herein. Neither Robeco Shanghai or its affiliates, nor any of their directors, officers or employees shall assume any liability or responsibility for any direct or indirect loss or damage or any other consequence of any person acting or not acting in reliance on the information contained herein. The information in this material may contain projections or other forward-looking statements regarding future events, targets, management discipline or other expectations which involve assumptions, risks, and uncertainties and is only as current as of the date indicated. Based on this, there is no assurance that such events will occur, and may be significantly different than that shown here, and we cannot guarantee that these statistics and the assumptions derived from the statistics will reflect the market conditions that may be encountered or future performances of Robeco Shanghai. The information in this material is based on current market conditions, which will fluctuate and may be superseded by subsequent market events or for other reasons. The information contained herein may not reflect the latest information on account of the changes and Robeco Shanghai is not responsible for the updating of the material or the correction of inaccurate or missing information contained in the material. Robeco Shanghai has not yet been registered as the private fund manager with the Asset Management Association of China. This material was prepared solely for informational purposes and does not constitute a recommendation, professional advice, an offer, solicitation or an invitation by or on behalf of Robeco Shanghai to any person to buy or sell any product. This material should not be viewed as a recommendation to buy or sell any investment products or to adopt any investment strategies. Nothing in this material constitutes investment, legal, accounting or tax advice, or a representation that any investment or strategy is suitable or appropriate to your individual circumstances, or otherwise constitutes a personal recommendation to you. Robeco Shanghai is a wholly foreign-owned enterprise established in accordance with the PRC laws, which enjoys independent civil rights and civil obligations. The statements of the shareholders or affiliates in the material shall not be deemed to a promise or guarantee of the shareholders or affiliates of Robeco Shanghai, or be deemed to any obligations or liabilities imposed to the shareholders or affiliates of Robeco Shanghai.

Additional Information for investors with residence or seat in Australia
This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) ('Robeco') which is exempt from the requirement to hold an Australian financial services licence under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws. This document is distributed only to "wholesale clients" as that term is defined under the Corporations Act 2001 (Cth). This document is not for distribution or dissemination, directly or indirectly, to any other class of persons. It is being supplied to you solely for your information and may not be reproduced, forwarded to any other person or published, in whole or in part, for any purpose. In New Zealand, this document is only available to wholesale investors within the meaning of clause 3(2) of Schedule 1 of the Financial Markets Conduct Act 2013 ('FMCA'). This document is not for public distribution in Australia and New Zealand.

Additional Information for investors with residence or seat in the Dubai International Financial Centre (DIFC), United Arab Emirates
Robeco Institutional Asset Management B.V. (Dubai Office), Office 209, Level 2, Gate Village Building 7, Dubai International Financial Centre, Dubai, PO Box 482060, UAE. Robeco Institutional Asset Management B.V. (Dubai office) is regulated by the Dubai Financial Services Authority ("DFSA") and only deals with Professional Clients and does not deal with Retail Clients as defined by the DFSA.

Additional Information for investors with residence or seat in Brazil
The fund may not be offered or sold to the public in Brazil. Accordingly, the fund has not been nor will be registered with the Brazilian Securities Commission - CVM nor have they been submitted to the foregoing agency for approval. Documents relating to the fund, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of the fund is not a public offering of securities in Brazil, nor used in connection with any offer for subscription or sale of securities to the public in Brazil.

Additional Information for investors with residence or seat in Colombia
This document does not constitute a public offer in the Republic of Colombia. The offer of the fund is addressed to less than one hundred specifically identified investors. The fund may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations related to the promotion of foreign funds in Colombia. The distribution of this document and the offering of [Shares] may be restricted in certain jurisdictions. The information contained in this document is for general guidance only, and it is the responsibility of any person or persons in possession of this document and wishing to make application for the fund to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for the fund should inform themselves of any applicable legal requirements, exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile.

Additional Information for investors with residence or seat in Panama
The distribution of this fund and the offering of Shares may be restricted in certain jurisdictions. The above information is for general guidance only, and it is the responsibility of any person or persons in possession of the prospectus of the fund and wishing to make application for Shares to inform themselves of, and to observe, all applicable laws and regulations of any relevant jurisdiction. Prospective applicants for Shares should inform themselves as to legal requirements also applying and any applicable exchange control regulations and applicable taxes in the countries of their respective citizenship, residence or domicile. This document does not constitute an offer or solicitation to any person in any jurisdiction in which such offer or solicitation is not authorized or to any person to whom it would be unlawful to make such offer or solicitation.

Additional Information for investors with residence or seat in Peru
The fund has not been registered before the Superintendencia del Mercado de Valores (SMV) and are being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is only for the exclusive use of institutional investors in Peru and is not for public distribution.

Additional Information for investors with residence or seat in Uruguay
The sale of the fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The fund must not be offered or sold to the public in Uruguay, except in circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.

Additional Information for US offshore investors
The Robeco Capital Growth Funds have not been registered under the United States Investment Company Act of 1940, as amended, nor the United States Securities Act of 1933, as amended. None of the shares may be offered or sold, directly or indirectly in the United States or to any US Person. A US Person is defined as (a) any individual who is a citizen or resident of the United States for federal income tax purposes; (b) a corporation, partnership or other entity created or organized under the laws of or existing in the United States; (c) an estate or trust the income of which is subject to United States federal income tax regardless of whether such income is effectively connected with a United States trade or business.