

Our four research themes for 2016 are: Governance for Growth, Sustainable Production, Climate Change and Modern Living. Last quarter, our letter focused on governance and share structures, a subject that falls into the Governance for Growth category.

Another of the areas on which we are focusing this year is Sustainable Production. This presents a similarly complex series of challenges and opportunities for active, long-term investors such as Baillie Gifford. It is a broad topic and the direction our research will follow depends on a range of factors which influence companies in different ways. These include the location of headquarters and operational sites, primary customer markets and the attitudes of the companies themselves.

This element of our research programme incorporates sub-categories including operational effectiveness, particularly how natural resources are used and whether water and energy are consumed efficiently. We also consider the capacity that exists for a company to innovate and the impact of product design on the sustainability of production. And one of the most complex areas relates to the labour force, particularly health and safety standards, general working conditions and the issue of child, youth and forced labour.

Our experience shows that there can be a range of outcomes depending on the nature of the business. This underlines the need for a differentiated approach according to the company we are analysing. A good example of one corporate that has taken a proactive approach to understanding the environmental risk embedded in its supply chain is Kering. The luxury goods company owns Alexander McQueen, Gucci, Puma and other lifestyle brands.

In 2011, Puma was the first brand in the group to produce an environmental profit and loss account, which places a financial value on environmental impacts along each link of the value chain in the production process. This type of reporting enables companies to combine sustainability metrics with traditional business management and to conduct their business in a more considered and considerate fashion. In 2013, the environmental accounting approach was extended to the whole Kering group. Kering's focus on reducing its environmental footprint was underlined in the most recent report, covering the 2014 financial year, which shows that whilst overall revenue increased by 4.5% compared to the previous year's results, environmental costs only rose 2.2%.

In November 2015, Kering worked with the non-government organisation, Business for Social Responsibility, (BSR) to produce a report titled *Climate Change: Implications and Strategies for the Luxury Fashion Sector*. This report highlights the importance of having a thorough understanding of supply chains, right down to the agricultural production level, and the development of a resilience agenda to ensure security and quality of supply. Clearly, Kering is already well advanced in this, and the company's commitment comes from a strong belief that having no active strategy will damage its bottom line. Similar issues apply at the other end of the price spectrum, the category labelled 'fast fashion'.

From delving into conversations around sustainable fashion at the value end of the market over recent months, three messages have become fairly clear. First, our attachment to fast cheap fashion is unlikely to abate and consumption is expected to increase both within developed and developing economies. Fast fashion appeals to a young demographic – fashion conscious, influenced by social media and celebrity, with little disposable income – and the demand for newness is paramount. Second, as consumers, we are not prepared to pay more for a higher-sustainability performing product, and those operating at the value end of the market know that they cannot expect a price premium for their efforts.



Cotton field.



Factory workers in India.

However, the final message is that the business as usual approach to production is not going to cut it in the medium to long term. Fast fashion relies on cheap materials, cheap labour and cheap production costs which are all currently achieved by ignoring the environmental and social externalities. This leaves the value end of the apparel industry with a conundrum – how to deliver to this huge and eager audience.

Sustainability is equally contentious among other areas in which we invest, although the extent of its impact will vary. For example, in the technology sector, it is essential to consider energy efficiency and recyclability, and how these factors are built into the design and production processes. The US Green Building Council, which promotes sustainability in buildings' design construction and operation, considers technology company Naver to be at the forefront of the Korean green building movement. Both Naver's headquarters and main data centre are rated at the highest level by the council and the business has committed to powering its data centre with 100% renewable energy.

Another area receiving increased attention is the growth in electric cars. Here, one noteworthy development has been the work that has gone into

production. For example, Tesla's recently released Model 3 has specifically been designed to be very easy to assemble and therefore has a limited impact on both human and environmental resources. Elsewhere, US-listed Alphabet is working on a range of projects from driverless cars to smart meters for homes and businesses.

There are instances of good practice across Baillie Gifford's portfolios, and many industries are giving greater consideration to the sustainability of their production methods. However, while levels of impact vary, some aspects are relevant regardless of the item being assembled. Whether the end product is a pair of jeans, a washing machine or a tablet, energy and water will be consumed during the manufacturing process. Energy has a clear economic cost, but the environmental cost is less defined and will vary depending on location of operations and the abundance of resources.

Our research is beginning to look at all stages and components in the process and is seeking to establish what sustainable production means in practice. This covers everything from the use of natural resources and the impact of climate change, to what companies are doing to mitigate these challenges. It also incorporates human aspects such as working conditions.

Voting Activity

Votes Cast in Favour		Votes Cast Against		Votes Abstained/Withheld	
Companies	19	Companies	6	Companies	2
Resolutions	216	Resolutions	16	Resolutions	3

Sustainable Production has been identified as an area of focus. Incorporating issues such as operational effectiveness and the use of natural resources, this presents a complex series of challenges and opportunities for active, long-term investors

It is a material consideration for the apparel industry in particular, influencing the design and production of value, fast fashion items as well as expensive, luxury goods

Our research will concentrate on understanding what sustainable production means in practice and the approach taken by current and future holdings to improve sourcing and production techniques and their efforts to promote brand resilience

Firmwide Company Engagement

Engagement Type	Company
Corporate Governance	Tencent Holdings Limited
AGM or EGM Proposals	ARM Holdings plc, Alphabet Inc., Illumina Inc., Intuitive Surgical Inc., Kering SA, Rocket Internet SE, Tesla Motors Inc., Workday Inc.

Notes on company engagements highlighted in blue can be found in this report. Notes on other company engagements are available on request.

Company	Engagement Report
Tencent Holdings Limited	<p>Tencent provides internet and mobile services, as well as online advertising in Mainland China, the United States, Europe, and internationally. We had a call with the company to discuss the agenda for its annual general meeting and took the opportunity to speak about board refreshment, company culture, cyber security and sustainability disclosure. The company highlighted that it can be difficult to find suitable director candidates in Hong Kong/China but that it regularly reviews board composition and assesses suitable candidates. We noted that Tencent produced a Chinese language sustainability report in 2015 and asked if it plans to produce an English language version. The company cited challenges in translating the document but realises that such a report would be desirable so will review the position. Overall the discussion was informative and we look forward to continuing the conversation.</p>

Votes Cast in Favour

Company	Meeting Details	Resolution(s)	Voting Rationale
Netflix Inc	Annual 09/06/16	4, 5	We supported two shareholder resolutions regarding the introduction of a majority voting standard for director elections and a proxy access provision. We believe both requests are in shareholders' best interests.
Companies		Voting Rationale	
AIA Group, ARM Holdings, Amazon.com, Atlas Copco A, Bluebird Bio Inc, Facebook, Hermes International, Illumina, Intuitive Surgical, Ionis Pharmaceuticals, Kering, L'Oreal, LinkedIn Corp A, Netflix Inc, Salesforce.com, Seattle Genetics, Tencent, TripAdvisor, Under Armour Inc Class A		We voted in favour of routine proposals at the aforementioned meeting(s).	

Votes Cast Against

Company	Meeting Details	Resolution(s)	Voting Rationale
Amazon.com	Annual 17/05/16	3-5	We opposed three shareholder resolutions as they were overly prescriptive and of limited benefit to shareholders.
Facebook	Annual 20/06/16	8	We opposed amendments to the Equity Incentive Plan as it allows repricing which we do not believe is in shareholders' best interests.
Facebook	Annual 20/06/16	9-13	We opposed five shareholder resolutions as we believe they are overly prescriptive.
LinkedIn Corp A	Annual 09/06/16	3	We opposed a shareholder resolution on board diversity as it is overly prescriptive.
Netflix Inc	Annual 09/06/16	6, 7	We opposed two shareholder resolutions regarding the elimination of the supermajority voting requirements and the declassification of the board as we are satisfied with the company's current governance provisions.
Salesforce.com	Annual 02/06/16	5, 6	We opposed two shareholder resolutions which were overly prescriptive.
Companies		Voting Rationale	
ARM Holdings		We opposed the proposal that gave the company the right to issue up to two-thirds of its issued share capital via a rights issue under Section 551 of the Companies Act 2006. We do not believe that it is in our clients' best interests to forego the right to vote on a large rights issue at an EGM.	
ARM Holdings		We opposed the resolution which sought authority to issue equity because the potential dilution levels are not in the interests of shareholders.	

Votes Abstained

Company	Meeting Details	Resolution(s)	Voting Rationale
Hermes International	MIX 31/05/16	E.14, E.15	We abstained on two resolutions due to a lack of disclosure.
Kering	MIX 29/04/16	O.11	We abstained on the remuneration report as we do not feel the award for benefits are appropriate and are continuing to engage with the company on this.

Votes Withheld

We did not withhold on any resolutions during the period.