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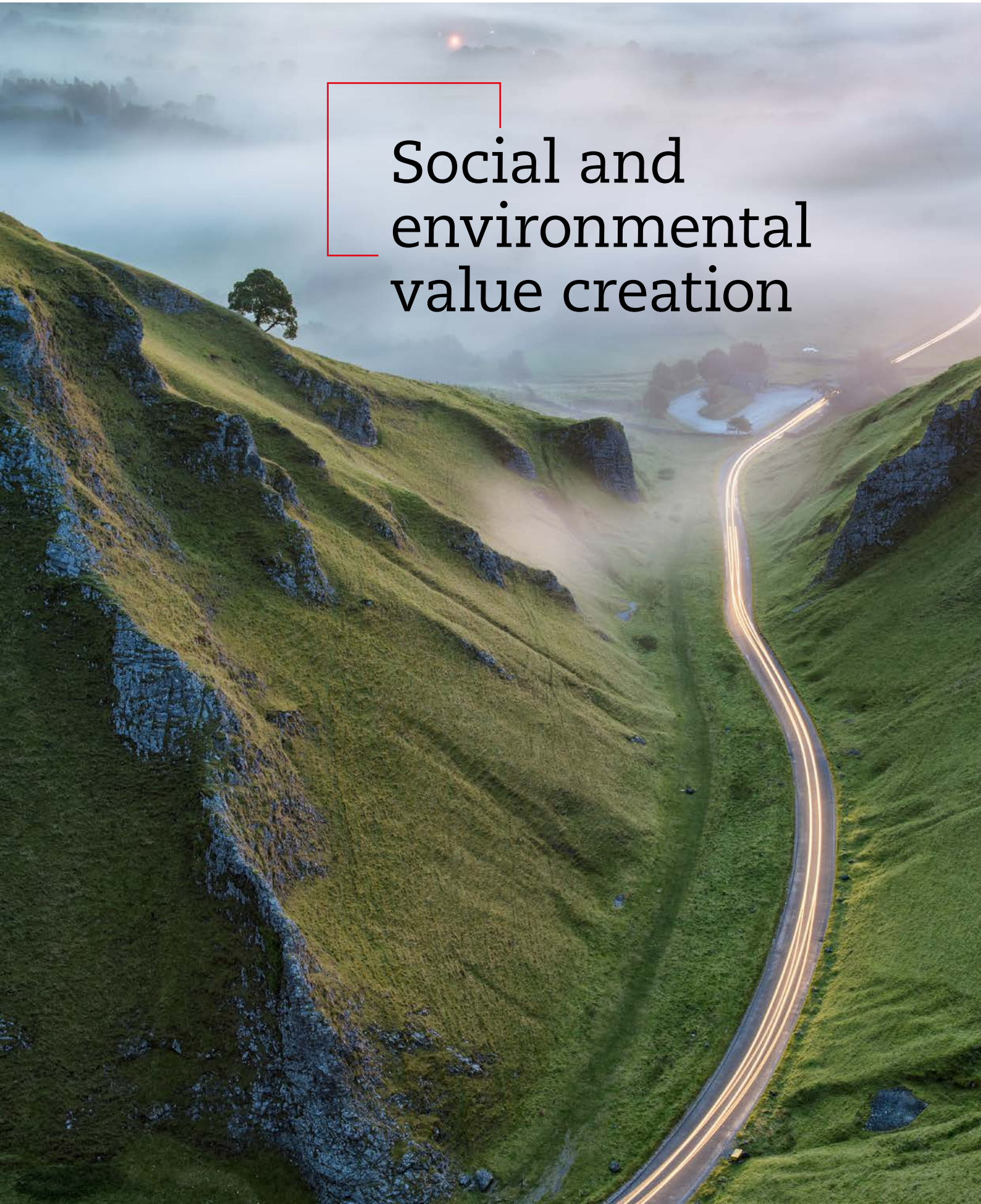

Social and environmental value creation

About ACCA

ACCA (the Association of Chartered Certified Accountants) is the global body for professional accountants, offering business-relevant, first-choice qualifications to people of application, ability and ambition around the world who seek a rewarding career in accountancy, finance and management.

ACCA supports its **219,000** members and **527,000** students (including affiliates) in **179** countries, helping them to develop successful careers in accounting and business, with the skills required by employers. ACCA works through a network of **110** offices and centres and **7,571** Approved Employers worldwide, and **328** approved learning providers who provide high standards of learning and development.

Through its public interest remit, ACCA promotes appropriate regulation of accounting and conducts relevant research to ensure accountancy continues to grow in reputation and influence.

ACCA has introduced major innovations to its flagship qualification to ensure its members and future members continue to be the most valued, up to date and sought-after accountancy professionals globally.

Founded in 1904, ACCA has consistently held unique core values: opportunity, diversity, innovation, integrity and accountability.

More information is here: www.accaglobal.com

About CFA Institute

CFA Institute is the global association of investment professionals that sets the standard for professional excellence and credentials.

The organization is a champion of ethical behavior in investment markets and a respected source of knowledge in the global financial community. Our aim is to create an environment where investors' interests come first, markets function at their best, and economies grow. There are more than **167,000** CFA charterholders worldwide in **164** markets and regions. CFA Institute has **nine** offices worldwide and there are **156** local member societies.

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September 2019

Social and environmental value creation

About this report

Governments, their citizens and investors want economies to recognise the totality of the value and impacts that they create to be able to distribute resources in a way that generates inclusive and sustainable prosperity. This report explores these complex challenges. It examines the role of business in rethinking value creation and the rise of importance in environmental, social and governance (ESG) issues for investors. Using big data analysis from insights provider Datamaran, it examines corporate disclosures on key ESG issues before outlining five disclosure and decision-making approaches that can support business to meaningfully engage with complex challenges to create inclusive and sustainable value over the long-term.

Foreword

Around the world delivering prosperity is becoming a challenge. As a result, demands from government and civil society for business and finance action on social and environmental issues are growing exponentially.

Improving corporate disclosures on a range of social and environmental risk areas is a domain that professional accountants are well placed to lead on. Rigorous approaches to risk analysis of issues such as climate change, social impact evaluation and assessment of non-financial information quality are key areas for the future of the accountancy profession around the world.

Demands for better disclosures must also be accompanied by a new strategic approach to business model innovation that embraces social and environmental value creation. Natural capital and circular principles, for example, must become part of the mainstream of finance. And as the 17 UN Sustainable Development Goals approach their fifth year anniversary, leaving just ten years to achieve them by 2030, they are becoming better understood as tools for governments, business, investors and civil society to coalesce around in order to improve how economies can deliver inclusive and sustainable prosperity.

Professional accountants and finance teams can support social and environmental value creation in many ways with their existing skillset. By reaching out across their own organisations and also by interacting with wider stakeholders on complex challenges, they will be able to speed up the urgently needed transition to a more socially just and environmental aware future for the global economy. It is a pleasure to partner with CFA Institute on this report to demonstrate the combined role that, together, our members and professions have on these issues.

Alan Hatfield
Executive Director – Strategy and Development
ACCA

CFA Institute is pleased to partner with ACCA on this research report on *Social and Environmental Value Creation*. In it, we aim to highlight the positive role businesses and investors can play in the preservation and creation of more sustainable business models which create value for shareholders, stakeholders and the environment in which they operate.

Sustainability forces us to think about the role of finance, and the role of investment management in directing capital toward enterprises that align with the transition toward a sustainable economy. And it is incumbent on us to understand, measure, and report on the impact of these actions.

In its most recent report, the Global Sustainable Investment Alliance identified a 34% increase in sustainable investment assets from 2016 to 2018. It highlights a clear shift towards greater consideration of sustainability by investors and the integration of environmental, social and governance (ESG) factors in investment portfolios.

Yet corporate reporting on sustainability and associated ESG data are often incomplete, inconsistent, or incomparable. The best company annual reports will highlight the sustainability measures that an individual company is taking, but they will almost certainly avoid mentioning the measures they are not taking. This information deficit makes it challenging for investors to fully understand the impact of their investment decisions. In turn, firms are disincentivized from embedding corporate responsibility into the heart of their business models.

This is a wasted opportunity. The global finance industry has the power to utilise the trillions of pounds worth of assets under management to effect societal and environmental change, as well as improving the overall governance of companies. Over the long-term, action in this sphere can only be beneficial for companies and the shareholders and stakeholders they serve. Companies that drive short-term profit and ignore long-term risk will be unsustainable and ultimately will be divested from investment portfolios; capital will be redirected toward more productive enterprises that generate real long-term value creation.

Now is the time for our professions to realise the crucial role they hold in driving sustainable businesses, and in leading the financial industry to deliver positive impact on society and the environment.

Gary Baker, CFA
Managing Director, Europe, Middle East and Africa
CFA Institute

Contents

Executive summary

Social and environmental challenges are becoming more complex. Climate change disrupts livelihoods, inequality restricts opportunity. Increasingly, these two issues, and the ecosystems of impact areas that they encompass, are seen by government, business and finance as interconnected priorities.

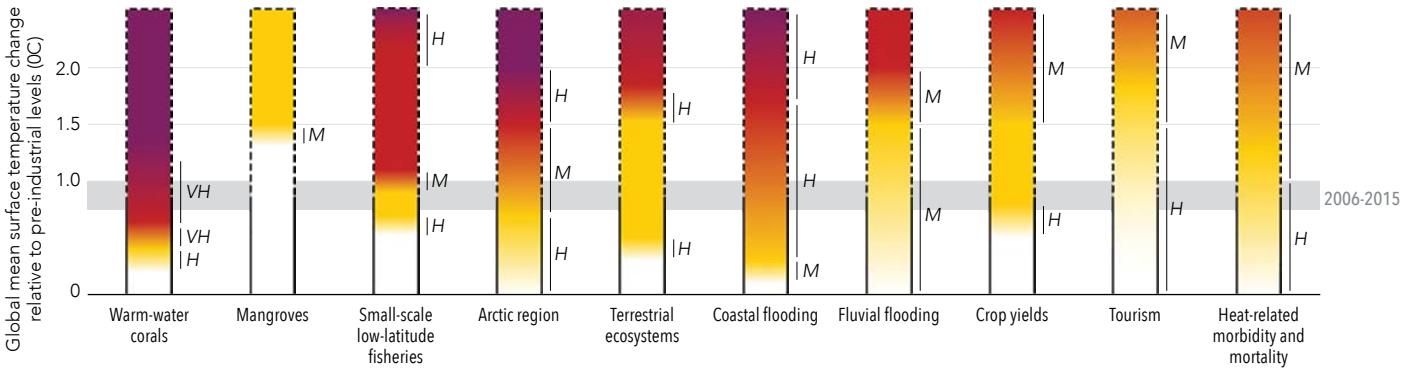
IMPACTS AND RISKS – NATURAL AND HUMAN SYSTEMS

Governments and regulators are asking business and finance to better manage their social and environmental impacts to support sustainable prosperity creation. As global temperatures rise, this becomes even more urgent (See Figure ES.1). And in the same way that citizens are asking their governments to do more to protect the environment and resolve societal issues, customers are also asking the same questions of business and finance. New products and services must be as socially just as they are environmentally aware if they are to succeed.

The tools and frameworks exist for business and finance to engage on these issues. Businesses, and the multi-stakeholder coalitions that they are a part of, have over two decades' of experience in managing and reporting on environmental and social impacts. This experience will be vital. That's because, as the urgency increases, this foundation will become more essential to draw from and build upon with a greater focus on science, precision, context, and, critically, collaboration.

The investment industry is increasingly focusing on the role and importance of environmental, social, and governance (ESG) factors in corporate value creation and risk mitigation. These considerations

FIGURE ES.1: Impacts and risks for selected natural, managed and human systems



Confidence level for transition: *L*=Low, *M*=Medium, *H*=High and *VH*=Very high

Source: IPCC (2018) https://www.ipcc.ch/sr15/chapter/spm/

As the demands have become more precise and increasingly strategic, there is a clear role for finance teams to be more engaged in the creation of sustainable value.

are being incorporated into investment processes including asset valuation, asset allocation, and risk management. Corporate disclosures and wider ESG data serve as the bedrock for these investment processes.

There are several obstacles to more widespread adoption of ESG investment approaches, including a lack of comparability of ESG data and disclosures across firms, which may reflect the multitude of corporate reporting practices and standards around non-financial information, as well as incomplete, unreliable, or unspecific data prohibiting a consistent appraisal of ESG risks and opportunities. Using big data analysis from insights partner Datamaran, this report assesses the growth, range and quality of corporate disclosures from different regions and across sectors.

At present, although coverage and quality of corporate disclosures on a widening range of social and environmental issues is improving, (see Figure ES.2), on key issues they remain below the standards demanded by governments, investors and civil society.

Furthermore, analysis of emphasis placed on critical social and environmental issues across sectors and regions, for example, on climate change and air quality (see Figure ES.3) finds that, while largely improving year-on-year, most businesses do not place a high degree of emphasis on key ESG issues.

Further analysis of the strength of disclosure quality set against the strength of regulatory regimes, voluntary initiatives and news issues, finds that there are few examples where disclosures are sufficient to meet what is currently required of them and expected of them by civil society.

As the demands have become more precise and increasingly strategic, there is a clear role for finance teams to be more engaged in the creation of sustainable value. Their ability to understand and communicate financial risk is essential as new areas of risk governance emerge, such as climate change. Their skills are critical for faithful and rigorous disclosure, and the creation of controls that inform this disclosure, particularly in a world that requires investment grade ESG data. And with a unique view across a business model, from proposition, to creation and capture of value, the role of finance professionals in collaborating with and leading on innovation that supports multi-capital value creation is essential.

There are a number of approaches that businesses and their finance teams can use to engage with these emerging risks and take advantage of value creation opportunities. This report summarises five of them. They are climate risk reporting, better understanding of natural capital, circular business model innovation, social impact measurement and evaluation linked to the SDGs and, finally, purpose-led strategies.

Taken together, they provide business around the world, from micro to multinational, with a range of relevant approaches to engage with. For professional accountants and finance teams, their involvement in these activities is essential. But to take up the challenges ahead they will need to build on their competencies in four areas.

- **To build scientific literacy** – facility with new domains of knowledge and a deepening of experience linked to environmental limits, risks and opportunities.
- **To understand societal impact** – valuing impact to better define context and open up opportunity for value creation.
- **To collaborate more** – working with others from different fields, in pre-competitive alliances, or multi-stakeholder groups, to speed progress in engaging with complex challenges.
- **To recognise the interconnectedness of social and environmental issues** – there will be no low carbon transition without a commitment to inclusive opportunity creation. Strategies and priorities must reflect this.

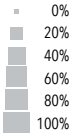
FIGURE ES.2: Average percentage of key ESG issues mentions compared to the increase in mentions from 2014 to 2018 (Annual Financial reports and Sustainability reports) – **Oceania, Asia, Africa**

Key messages:

- Growth in number of mentions of issues over time, particularly across Asia, highlights growing importance of a range of ESG issues
- Many ESG issues remain poorly covered

			REGION (reporting) / INDUSTRY (reporting)								
			Oceania			Asia				Africa	
GROUP	ISSUE	TOPIC	Consumer Goods & Services	Industrials	Financial Services	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services	Consumer Goods & Services	Financial Services
Environmental	Waste management	Recycling, waste management & reduction	61%	62%	46%	70%	67%	64%	62%	78%	50%
		Non-hazardous waste	57%	57%	33%	68%	53%	55%	39%	51%	37%
		Hazardous waste	6%	12%	16%	44%	23%	24%	13%	11%	13%
	Climate change & air quality	Greenhouse gases	71%	74%	52%	77%	62%	65%	54%	83%	67%
		Climate change	40%	55%	51%	68%	55%	60%	48%	71%	60%
		Air emissions	12%	34%	18%	81%	45%	53%	32%	33%	22%
		Eco-efficient transportation	4%	34%	13%	25%	27%	31%	14%	14%	7%
		Emission trading	8%	18%	21%	27%	9%	13%	10%	29%	19%
	Water	Water recycling, efficiencies & remediation	57%	58%	37%	75%	60%	59%	49%	84%	55%
		Water resources	36%	56%	33%	74%	49%	47%	40%	71%	50%
		Fisheries	8%	10%	3%	33%	17%	16%	18%	25%	12%
	Natural capital	Materials management	48%	49%	36%	64%	62%	59%	53%	58%	48%
		Biodiversity	34%	48%	21%	64%	46%	47%	33%	41%	34%
		Land	22%	48%	17%	74%	38%	43%	30%	22%	28%
		Forests	22%	28%	28%	43%	41%	37%	34%	35%	19%
		Animal welfare	14%	4%	4%	2%	6%	1%	1%	8%	2%
	Pollution	Water pollution	23%	31%	19%	83%	52%	60%	33%	50%	26%
		Harmful substances	19%	26%	7%	47%	31%	37%	10%	12%	8%
		Noise pollution	3%	45%	6%	36%	25%	40%	13%	9%	6%
		Spills	15%	31%	10%	64%	23%	29%	14%	14%	11%
Social	Fair and inclusive workplace	Workforce diversity & inclusion	91%	93%	80%	75%	71%	69%	68%	88%	86%
		Fair remuneration	51%	38%	41%	33%	17%	16%	20%	44%	25%
	Responsible supply chains	Supply chain management	38%	42%	24%	55%	53%	46%	28%	69%	21%
		Responsible procurement	35%	28%	23%	51%	40%	36%	27%	59%	35%
		Supply chain engagement	36%	21%	17%	36%	32%	25%	18%	46%	14%
	Product responsibility	Product & service safety	37%	48%	23%	58%	66%	61%	35%	70%	26%
		Product stewardship	35%	17%	18%	54%	52%	45%	39%	45%	28%
		Nutrition	33%	11%	21%	40%	48%	29%	27%	61%	47%
		Product labelling	9%	0%	4%	28%	26%	13%	13%	32%	4%
	Human rights	Human rights	37%	43%	28%	73%	56%	55%	48%	64%	49%
		Forced labour	16%	12%	12%	54%	38%	38%	29%	24%	12%
		Children rights	19%	12%	4%	57%	38%	38%	29%	24%	17%
		Human trafficking	1%	3%	7%	1%	6%	4%	2%	2%	4%
		Conflict minerals	0%	0%	0%	1%	9%	8%	0%	0%	0%
		Sexual exploitation	2%	0%	0%	0%	0%	0%	1%	2%	1%

Avg. % Mentions



Difference since 2014

How to view this chart

The squares in the chart represent a topic (eg air emissions) that forms part of an issue (eg climate change and air quality).
The size of the square indicates the average percent of mentions for the years 2014-2018.
Four sectors are presented by region. These are: financial services, consumer goods and services, industrials and oil and gas.
Where analysis of a sector is not present in a particular region relates to a low incidence of mentions.
The colour of the square indicates the difference in the number of mentions over time: blue to green = increasing, grey = no change, red = decreasing.

FIGURE ES.2: Average percentage of key ESG issues mentions compared to the increase in mentions from 2014 to 2018 (Annual Financial reports and Sustainability reports) – **Europe, Americas**

Key messages:

- Coverage across Europe on a range of environmental issues is reasonably broad, but is not improving
- Social issue areas across the Americas remain very poorly covered

			REGION (reporting) / INDUSTRY (reporting)							
			Europe				Americas			
GROUP	ISSUE	TOPIC	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services
Environmental	Waste management	Recycling, waste management & reduction	73%	75%	74%	60%	49%	50%	53%	32%
		Non-hazardous waste	69%	64%	65%	46%	62%	50%	49%	31%
		Hazardous waste	48%	31%	39%	19%	48%	24%	40%	11%
	Climate change & air quality	Greenhouse gases	88%	82%	88%	74%	87%	50%	57%	35%
		Climate change	79%	65%	71%	62%	82%	52%	49%	41%
		Air emissions	79%	50%	64%	38%	73%	32%	45%	22%
		Eco-efficient transportation	26%	31%	45%	23%	8%	17%	23%	10%
		Emission trading	44%	15%	21%	16%	53%	7%	14%	7%
	Water	Water recycling, efficiencies & remediation	73%	65%	69%	52%	56%	46%	43%	28%
		Water resources	72%	47%	52%	35%	70%	44%	45%	28%
		Fisheries	25%	14%	8%	10%	12%	8%	3%	3%
	Natural capital	Materials management	65%	72%	75%	60%	68%	59%	59%	35%
		Biodiversity	67%	52%	43%	39%	59%	33%	26%	17%
		Land	66%	42%	48%	31%	67%	33%	39%	24%
		Forests	39%	50%	32%	38%	21%	30%	24%	19%
		Animal welfare	3%	14%	2%	3%	0%	10%	1%	0%
	Pollution	Water pollution	75%	47%	56%	27%	70%	38%	45%	20%
		Harmful substances	55%	31%	46%	11%	72%	36%	57%	34%
		Noise pollution	35%	29%	55%	15%	16%	11%	25%	5%
		Spills	84%	24%	29%	15%	82%	23%	35%	17%
Social	Fair and inclusive workplace	Workforce diversity & inclusion	85%	82%	83%	81%	32%	53%	51%	39%
		Fair remuneration	29%	38%	36%	35%	5%	21%	12%	10%
	Responsible supply chains	Supply chain management	52%	60%	58%	29%	17%	41%	36%	13%
		Responsible procurement	31%	49%	42%	38%	9%	30%	20%	13%
		Supply chain engagement	29%	40%	31%	22%	11%	33%	17%	10%
	Product responsibility	Product & service safety	50%	66%	70%	34%	46%	69%	66%	19%
		Product stewardship	42%	60%	57%	37%	19%	42%	36%	19%
		Nutrition	26%	49%	22%	27%	13%	48%	22%	17%
		Product labelling	12%	23%	11%	9%	5%	25%	7%	3%
	Human rights	Human rights	81%	76%	74%	68%	28%	44%	33%	33%
		Forced labour	45%	49%	49%	34%	9%	26%	14%	7%
		Children rights	40%	46%	44%	30%	10%	25%	11%	8%
		Human trafficking	9%	11%	10%	9%	3%	11%	9%	2%
		Conflict minerals	7%	7%	11%	1%	3%	13%	18%	1%
		Sexual exploitation	2%	5%	2%	1%	1%	3%	3%	1%

Avg. % Mentions

0%
20%
40%
60%
80%
100%

Difference since 2014

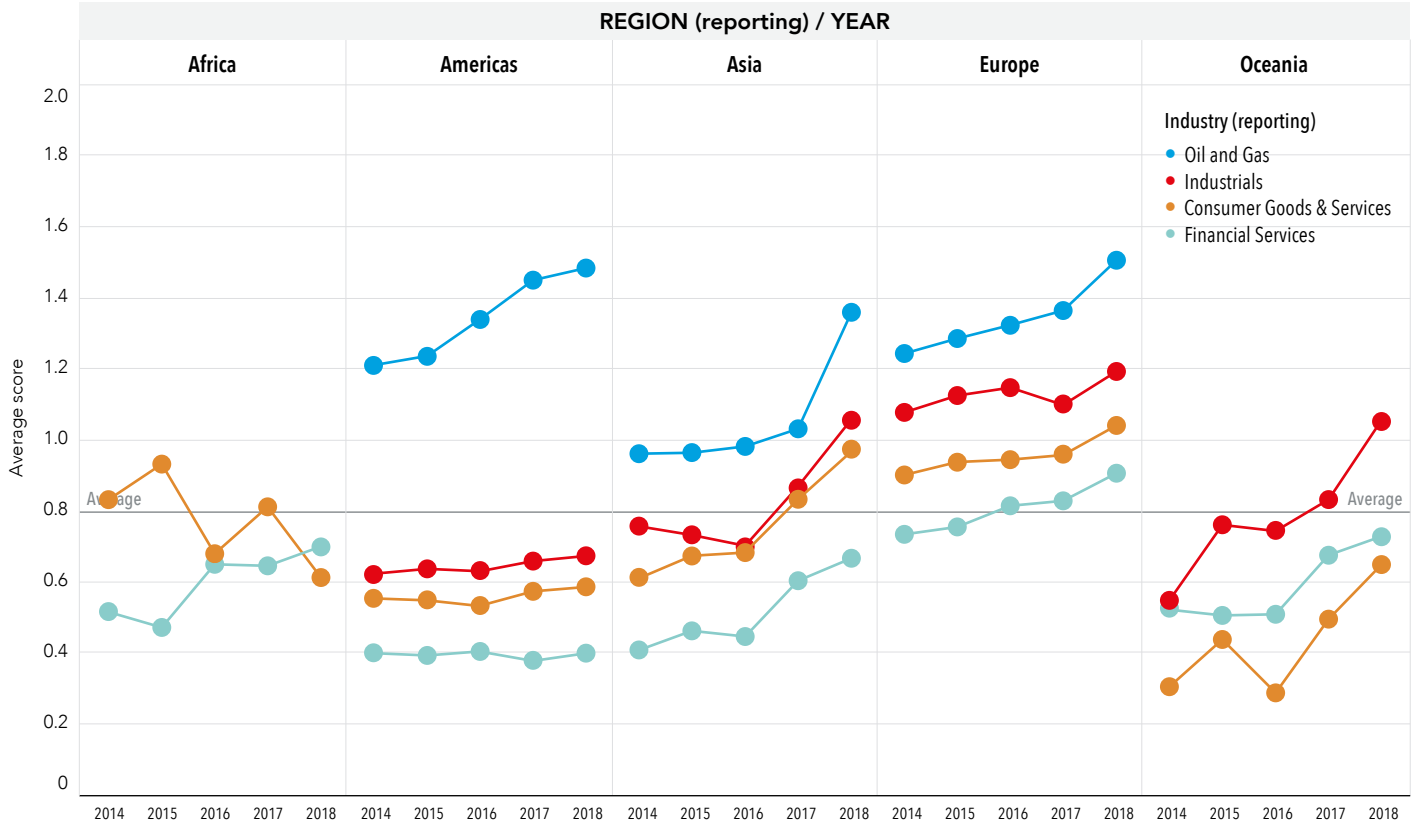
−22.63% +52.80%

How to view this chart

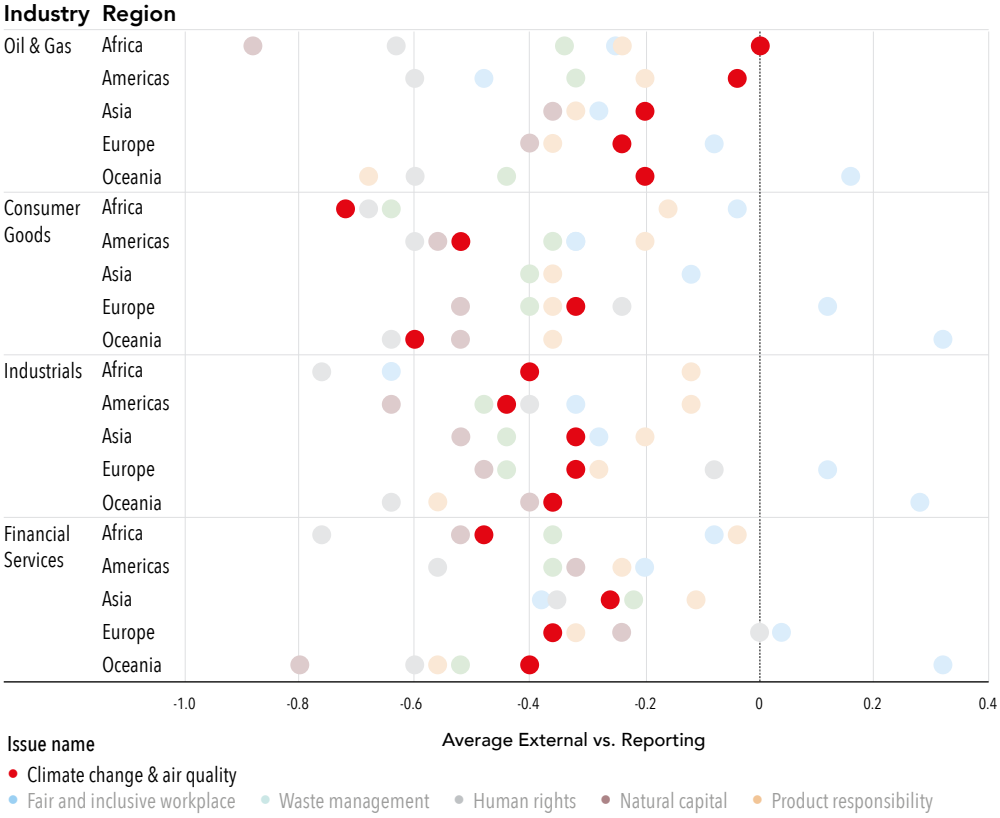
The squares in the chart represent a topic (eg air emissions) that forms part of an issue (eg climate change and air quality).
The size of the square indicates the average percent of mentions for the years 2014-2018.
Four sectors are presented by region. These are: financial services, consumer goods and services, industrials and oil and gas.
Where analysis of a sector is not present in a particular region relates to a low incidence of mentions.
The colour of the square indicates the difference in the number of mentions over time: blue to green = increasing, grey = no change, red = decreasing.

FIGURE ES.3: Climate change and air pollution year-on-year disclosure emphasis

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019



What is 'emphasis'?

The emphasis takes into account variables such as the number of times the topic is mentioned in a sentence (also a number of sentences mentioning it), its location (eg CEO letter).

Regulation + news vs reporting

The distance of the coloured dot in relation to zero indicates the gap between strength of regulatory activity combined with voluntary initiative reporting and news interest in an issue vs. corporate reporting on the issue. A negative score indicates that reporting is weaker than regulation, voluntary initiatives and civil society importance.

Key points

- Climate change and air quality reporting has been given greater emphasis by businesses over time in almost all cases, with the Oil and Gas sector leading other sectors.
- Despite the importance of this issue, and the increase in emphasis over time, the low to medium scores indicate that it is still given a relatively low priority.

Overview

ABOUT THIS REPORT

Today, businesses are being called on to meet:

1. increasing requirements from governments for better social and environmental performance
2. greater demands for more precise environmental, social and governance disclosures from investors
3. calls from central bank governors to understand the financial stability risk that financial markets are exposed to due to climate change
4. fast-shifting customer preferences that need new business models to produce products and services that meet new social and environmental expectations, and
5. a volatile environmental landscape in crisis and escalating social problems that impact the biophysical possibility and moral rationale for continuing with business as usual.

At present, many tools do exist for companies to use to align their strategies with social and environmental outcomes. But companies and their finance teams often lack the mandate to make the case and put the processes in place to monitor, and report on social and environmental risks and improve business models to redefine how they create value. This is now changing. It is becoming a genuine and strategic shift in effectively disclosing and managing risks, understanding liabilities and exploring new opportunities for participating in, and contributing to, a changing economy that is decoupled from environmental degradation and recoupled to societal benefit.

Governments, their citizens and investors want economies to recognise the totality of the value and impacts that they create to then be able to distribute resources in a way that generates inclusive and sustainable prosperity.

Across environmental and social issues there are number of well established and emerging tools to help companies to act. This report explores five of them that build on a wide range of tools and frameworks that have been developed over the past two decades. Together they provide a means for navigating some of the demands of today's economy.

Hence this report looks at the ways in which climate risk, natural capital, circular business model innovation, social impact evaluation linked to the SDGs and purpose-led strategies can be addressed in collaboration with the profession.

Through a combination of emerging risk and reporting analysis and semi-structured interviews with industry experts, this report uncovers some of the challenges of social and environmental value creation within businesses.

The report also examines the rapid rise of environmental, social and governance (ESG) issues for finance. It sets out the different ways in which investors integrate ESG into their investment decision making and the challenges faced in furthering the role of ESG as demand continues to grow.

Global engagement

To support this research, ACCA, alongside partners, convened members and experts in a series of roundtables in Delhi, Kuala Lumpur, Karachi, Islamabad and Ho Chi Minh City.

ACCA is grateful to all participants in these sessions and the Institute of Directors (IoD), India, the Centre for Responsible Business (CERB), Pakistan and the Ho Chi Minh Stock Exchange, Vietnam, for their invaluable support.

Data analysis

This report features analysis from insights partner Datamaran. Their proprietary technology tracks 100 non-financial topics that consist of over 6,000 key terms from corporate reports (financial, sustainability reports, and SEC filings), regulations, news and social media.

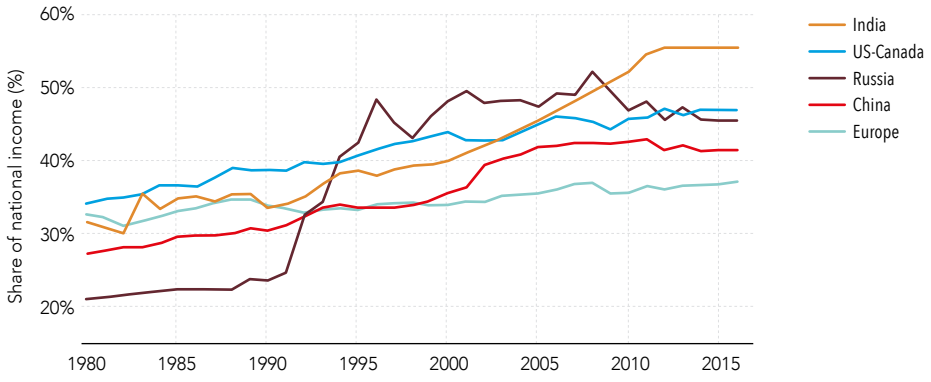
The Natural Language Processing (NLP) technique – that analyses text and derives meaning from human language – is then applied to these sources to extract comparable information.

1. The social and environmental problem with modern economies

ECONOMIES

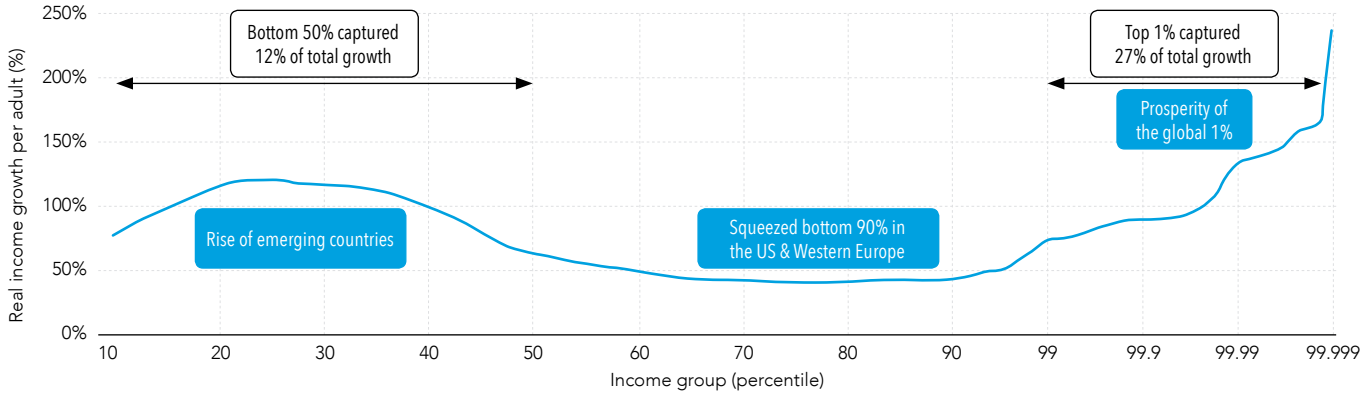
Economies – the means by which scarce resources are distributed through societies – are not functioning effectively. Despite decades of gains for many around the world, many remain locked out of access to resources that are becoming more scarce. In all regions of the world per capita income growth remains skewed in favour of the highest earners (see Figures 1.1 and 1.2).

FIGURE 1.1: Top ten percent share of national income growth 1980-2016



Source: WID.world (2017). See wir2018.wid.world/methodology.html for data series and notes.

FIGURE 1.2: Total income growth by percentile across all world regions, 1980-2016



Source: WID.world (2017). See wir2018.wid.world/methodology.html for more details.

On the horizontal axis, the world population is divided into a hundred groups of equal population size and sorted in ascending order from left to right, according to each group's income level. The Top 1% group is divided into ten groups, the richest of these groups is also divided into ten groups, and the very top group is again divided into ten groups of equal population size. The vertical axis shows the total income growth of an average individual in each group between 1980 and 2016. For percentile group p99p99.1 (the poorest 10% among the world's richest 1%), growth was 74% between 1980 and 2016. The Top 1% captured 27% of total growth over this period. Income estimates account for differences in the costs of living between countries. Values are net inflation.

Technological advances, as they have always done (think of the spinning jenny or the steam engine), are rapidly changing business, work and social life.

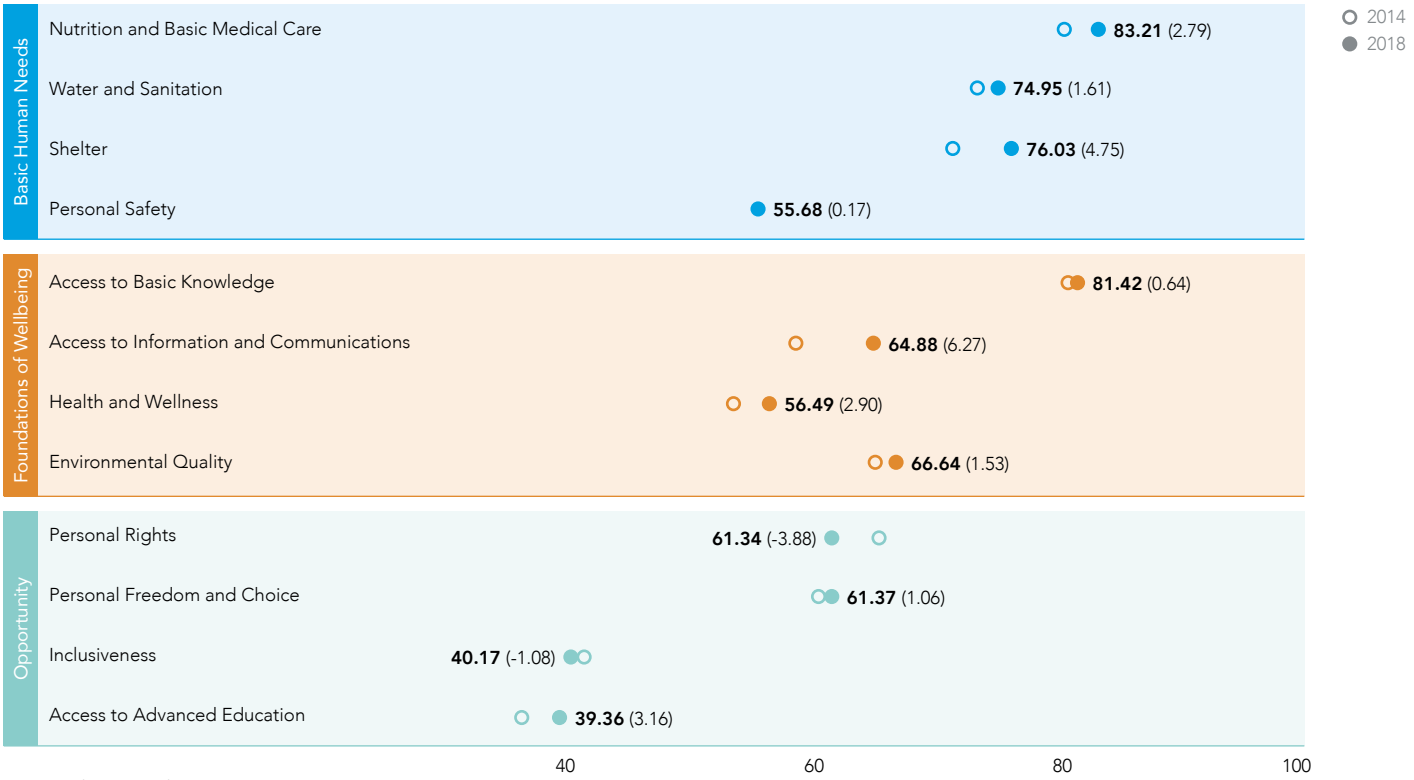
At a global level, a more holistic view of prosperity, such as that of the composite Social Progress Index (SPI), shows that in recent years the world as a whole has improved certain aspects that contribute to living well. Across three pillars of the SPI – opportunity, foundations to wellbeing and basic human needs – gains have been made, though many indicators remain at low levels (see Figure 1.3). This is echoed in improvement over time in other composite indices of opportunity and wellbeing, such as the UN's Human Development Index (HDI). Unfortunately, inequality remains a difficult challenge. According to the 2019 UN Secretary General's Report, which shared progress achieved so far towards the Sustainable Development Goals (SDGs), `inequality within and among nations continues to be a significant concern despite progress in and efforts at narrowing disparities of opportunity, income and power' (UN, 2019).

DIGITAL DIVIDES

Technological advances, as they have always done (think of the spinning jenny or the steam engine), are rapidly changing business, work and social life. Appropriate and agreed-upon governance of the negative impacts of new technologies, related to, for example, business ethics, market concentration and online platform marketplace issues are not robust enough yet to truly enable these new technologies to allow people to flourish.

FIGURE 1.3: Social Progress Index 2014-2018

From 2014 to 2018 the world improved on 9 of 12 components of the Social Progress Index



Source: Deloitte/ Social Progress Imperative (2018)

Long-term, complex consensus building is required to engage with new and increasingly urgent problems. These are becoming more important, particularly for a younger generation.

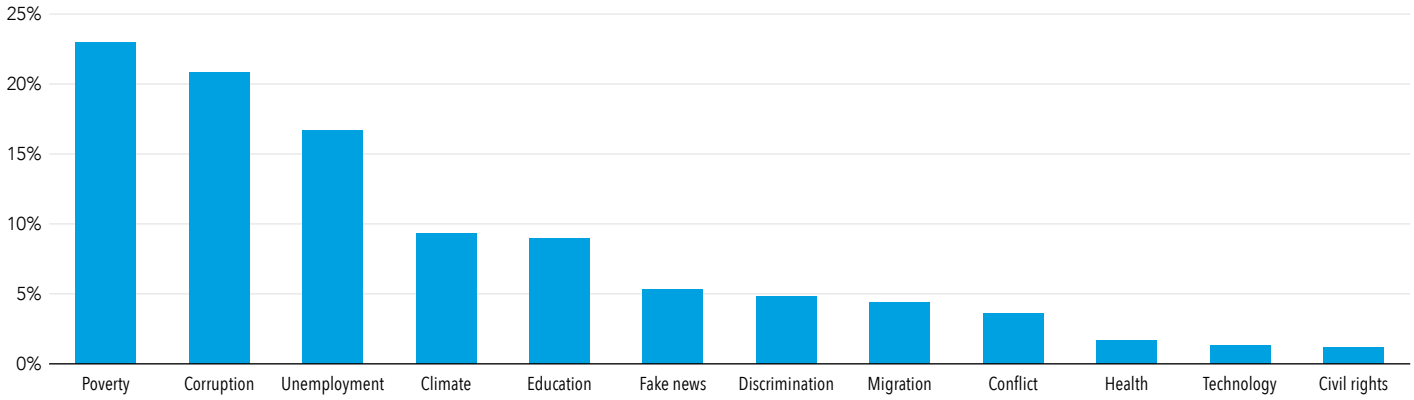
In response to issues, some countries have proposed a levy on large technology companies, such as in France and the so-called GAFA Tax. The UK, for example, has set out to explore what a new type of digital economy competition authority could look like (Gov UK, 2019). This lag in the creation of appropriate institutional infrastructure reduces the potential role of the digital economy around the world. According to UNCTAD, for example, the USA and China account for 75 percent of all patents related to blockchain technologies, 50 percent of global spending on Internet of Things (IOT), more than 75 percent of the world market for public cloud computing and 90 percent of the market capitalization value of the world's 70 largest digital platforms (UNCTAD, 2019).

COMPLEX CHALLENGES

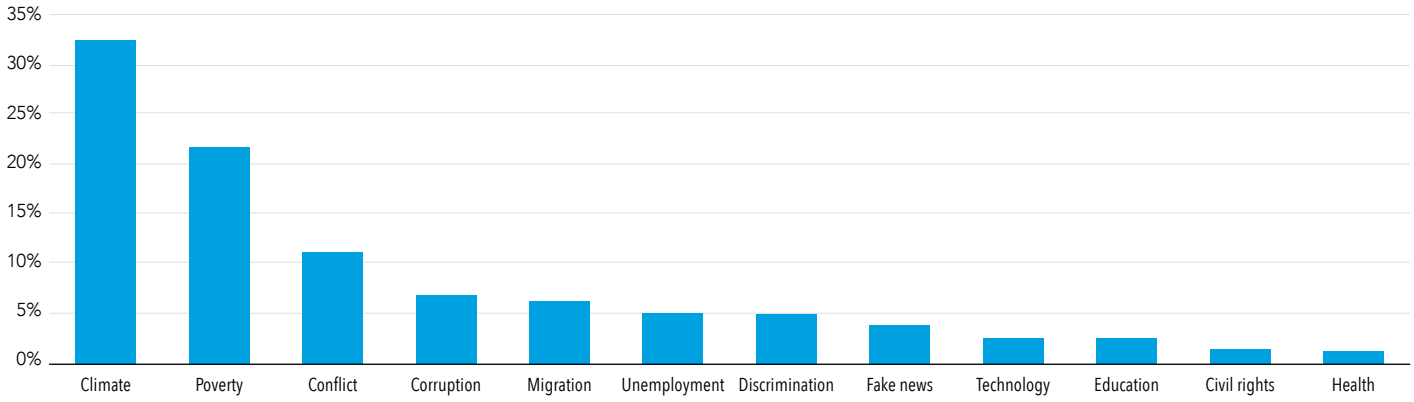
Long-term, complex consensus building is required to engage with new and increasingly urgent problems. These are becoming more important, particularly for a younger generation (see Figure 1.4). Many of these challenges are made more difficult due to their global nature, which require international cooperation for resolution.

FIGURE 1.4: The biggest global issues for young people

What do you see as the most important issue facing your country?



What do you see as the most important issue facing the world in 2019?



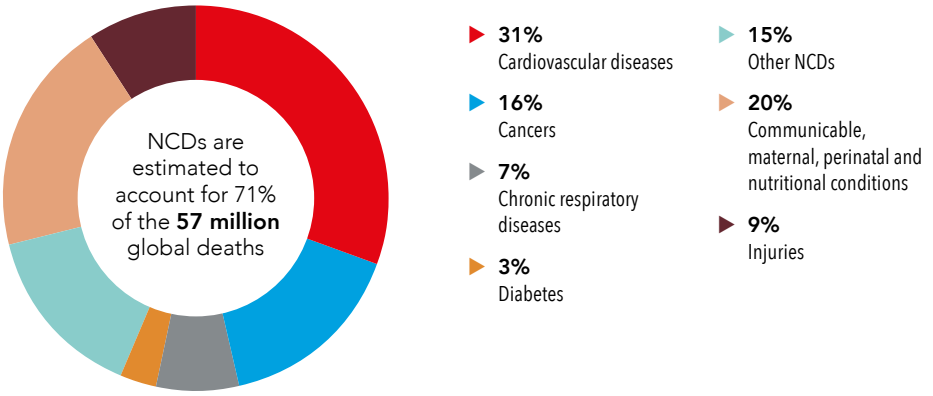
Source: Chatham House (2019) https://medium.com/chatham-house/common-futures/home

Demography dictates that many countries will not generate the income they need to pay for their ageing populations' demands while struggling to cope with the burden of non-communicable diseases.

DIETS AND AGEING IMPACTS

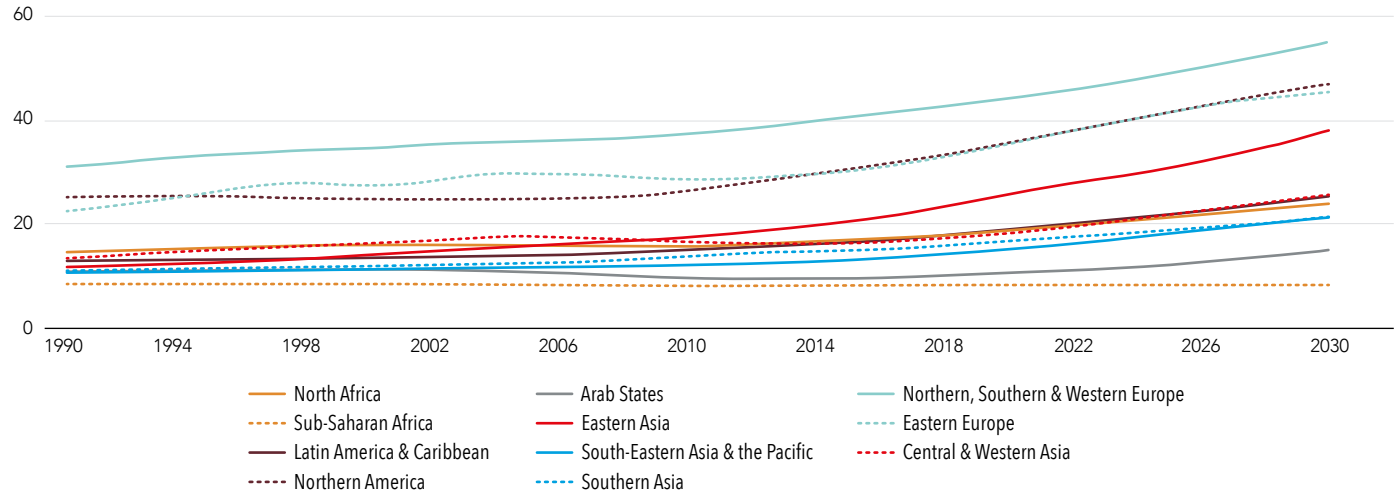
When considering the healthcare burden on the state of ageing populations afflicted by a growing list of non-communicable diseases, many of which are related to dietary and environmental factors, and a widening old-age economic dependency ratio (the ratio between the elderly population, over 65, and people in the labour force), the challenge becomes greater. Demography dictates that many countries will not generate the income they need to pay for their ageing populations' demands while struggling to cope with the added burden of non-communicable diseases.

FIGURE:1.5: Global Mortality (% of total deaths), all ages, 2016



Source: WHO (2016)

FIGURE 1.6: Old-Age Economic Dependency Ratio, 1990-2030 (%)



Note: The old-age economic dependency ratio is the ratio between the elderly population (+65) and people in the labour force.

Source: ILOSTAT, ILO Labour Force Estimates and Projections, 2017; UN World Population Prospects, 2017 Revision

Overuse of finite environmental goods, balanced environmental services and natural habitats is making it harder to deliver shared prosperity.

THE ENVIRONMENT IN CRISIS

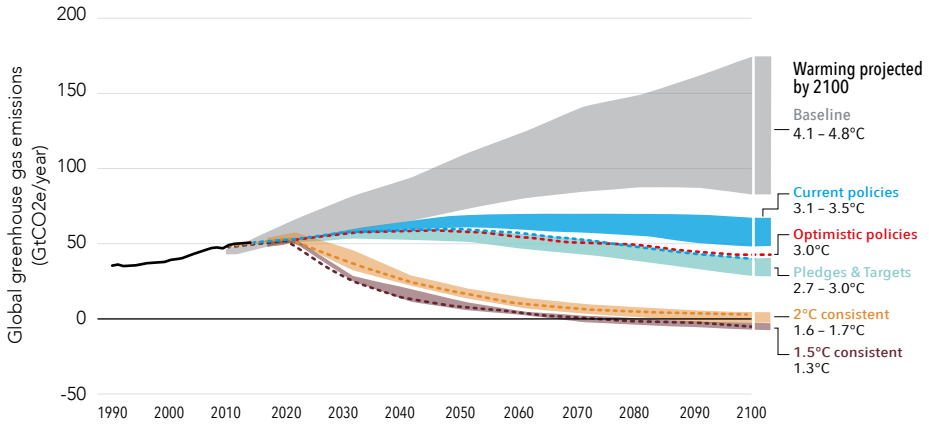
At the same time, overuse of finite environmental goods, balanced environmental services and natural habitats is making it harder to deliver shared prosperity. At the current rate of temperature increases, the world is heading into a less hospitable place (see Figure 1.7). These extremes will have an impact not only on nature but also on daily life.

'Nature underpins every person's wellbeing and ambitions – from health and happiness to prosperity and security'.
Sir Robert Watson, Chair of IPBES

Rising global temperatures will radically disrupt all forms of economic activity around the world (see Figure 1.8). Environmental carrying capacity is becoming a more immediate concern for governments, business and finance. According to economist Kamiar Mohaddes, co-author of a study published by the National Bureau of Economic Research into the long-term macroeconomic effects of climate change, 'the economics of climate change stretch far beyond the impact on growing crops. Heavy rainfall prevents mountain access for mining and affects commodity prices. Cold snaps raise heating bills and high street spending drops. Heatwaves cause transport networks to shut down. All these things add up.' (Mohaddes, 2019).

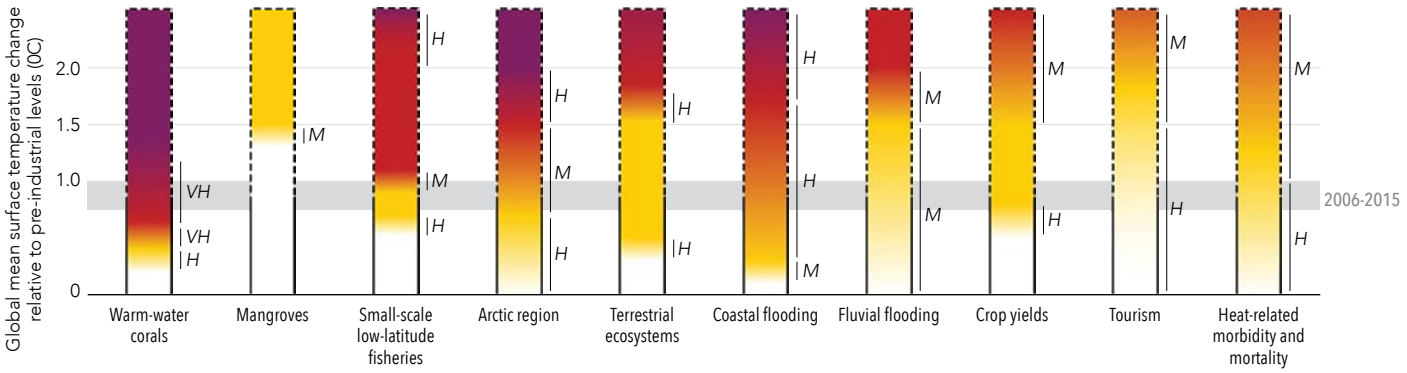
FIGURE 1.7: 2100 emissions and temperature projections

Emissions and expected warming based on pledges and current policies



Source: Climate Tracker (2019) https://climateactiontracker.org/global/temperatures/

FIGURE 1.8: Impacts and risks for selected natural, managed and human systems



Confidence level for transition: *L*=Low, *M*=Medium, *H*=High and *VH*=Very high

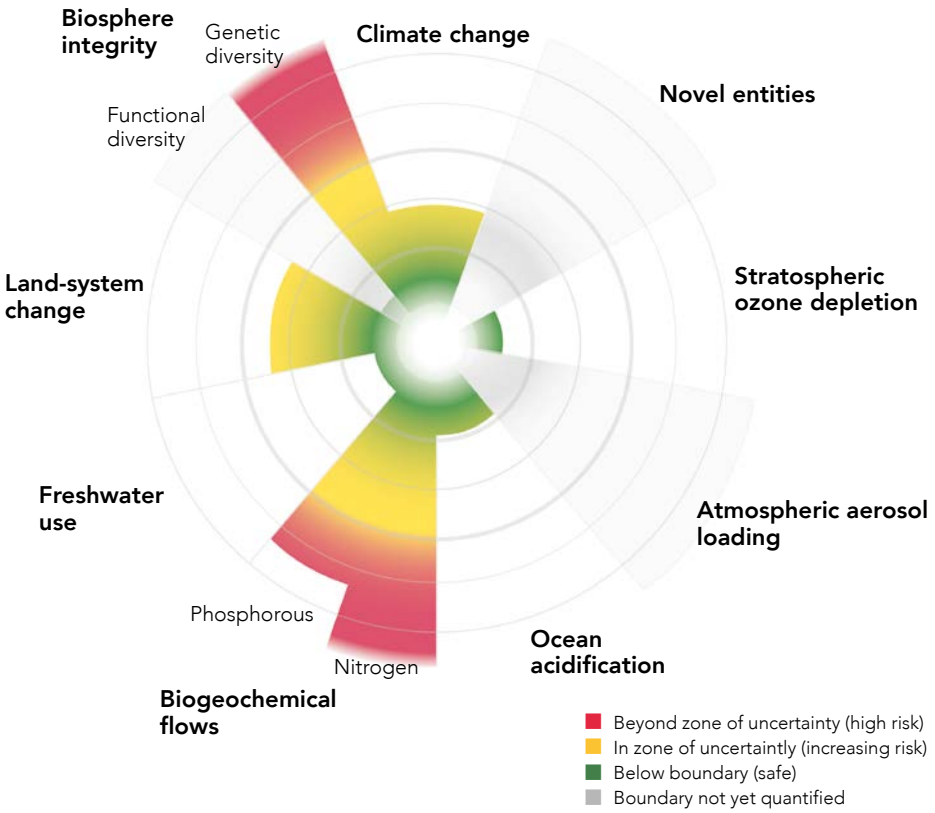
Source: IPCC (2019) https://www.ipcc.ch/sr15/chapter/spm/

The actual boundaries articulated within the Planetary Boundaries Framework define the "safe operating space" for humanity.

THE ANTHROPOCENE

The environmental limits problems have been quantified. For example, the Planetary Boundaries Framework sets out nine fundamental global processes that, together, define the state of the Earth System (Figure 1.9). The actual boundaries articulated within the Planetary Boundaries Framework define the "safe operating space" for humanity. These are, in turn, based on nine global processes: climate change, biosphere integrity, land-system change, freshwater use, biogeochemical flows, ocean acidification, atmospheric aerosol loading, stratospheric ozone depletion, and novel entities (Steffen et al., 2015). Since their introduction, others have added complementary social aspects to the planetary boundaries (Raworth, 2017). Combining the two with supporting evidence provides a country level assessment of a 'safe and just' operating space. This is where resource use is above the level required to meet people's basic needs, but below the level that carries a substantial risk of crossing the nine planetary boundaries (https://goodlife.leeds.ac.uk/countries/).

FIGURE 1.9: The Nine Planetary Boundaries



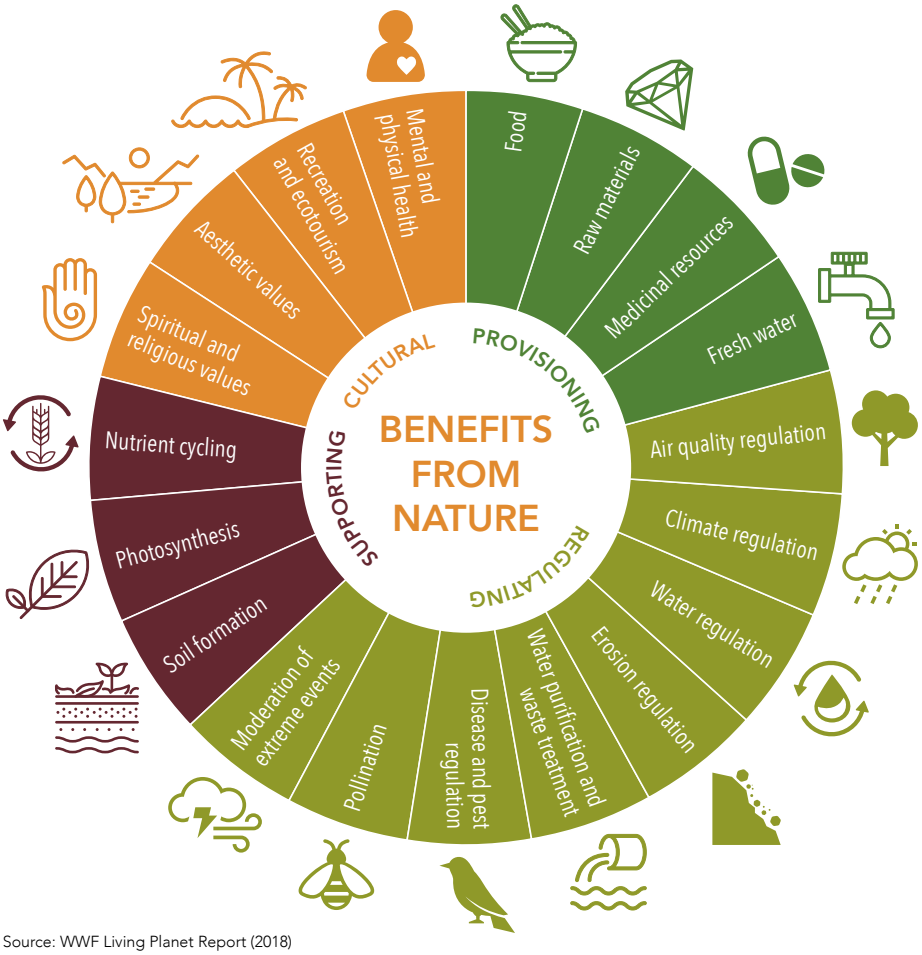
Source: Steffen et al. (2015)

The natural world provides humans with the systems upon which we rely, the means by which these systems are regulated as well as cultural and wellbeing benefits.

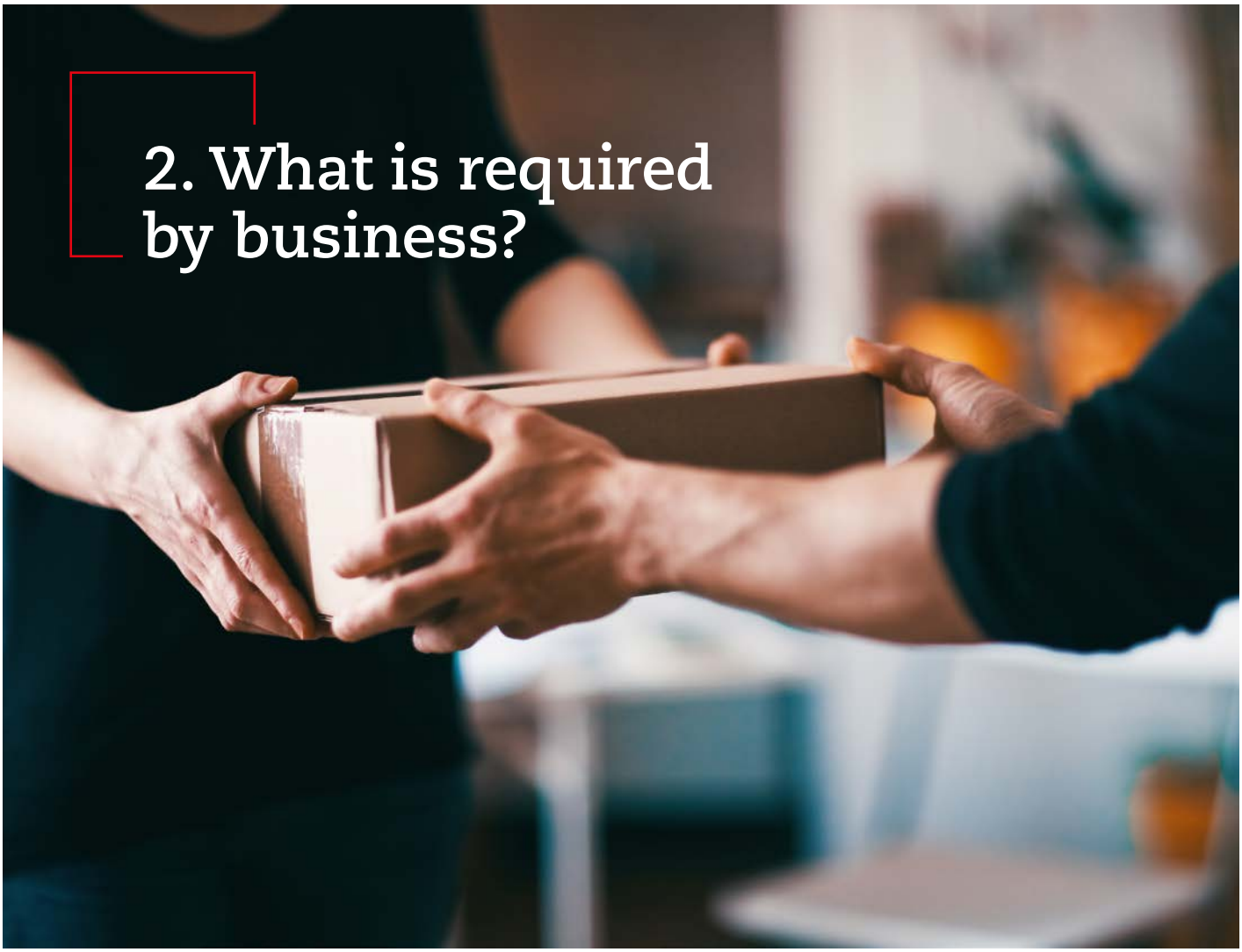
THE CHANGING NATURAL WORLD

Not only do temperature increases threaten our economies and the natural world, industrial activities also put them in jeopardy. The natural world provides humans with the systems upon which they rely, the means by which these systems are regulated as well as cultural and wellbeing benefits (see Figure 1.10). These are under threat. For example, three-quarters of the land-based environment and about 66 percent of the marine environment have been significantly altered by human actions and one million species are at risk (IPBES, 2019). Plastic waste is now even detectable in the earth's sedimentary record. Every year the world produces approximately 300 million tonnes of plastic waste and approximately eight million tonnes of plastic ends up in the ocean. It has been estimated that ten rivers alone carry up to 90 percent of this plastic into the sea (UN, 2018). Together these new risks must become the driving force for action by business and finance around the world. The next chapter will explore what is required by business.

FIGURE 1.10: Provisioning, regulating, cultural – benefits from nature



Source: WWF Living Planet Report (2018)



2. What is required by business?

How to proceed? If the goal is to provide all of humankind with the means to live a good life on an ecologically flourishing planet, the challenge ahead is a formidable one.

Who is involved and what does it entail? There are many actors needing to collaborate, from governments and regulators to companies and investors.

Governments have their own national development visions, industrial strategies, and environmental plans, tailored to their own characteristics and civic outcomes. Business and investors also have their own unique footprints and objectives. But a unifying agenda for all that spoke a common language had been absent.

This changed in 2015 with the launch of The UN Sustainable Development Goals (SDGs), which set out 17 interconnected areas for countries to achieve by 2030. These span social, environmental, economic and institutional issues. While these goals are aimed at nation states, it is clear that they will require the support of finance and business to be achieved. The overarching SDGs provide a useful common-language roadmap for all actors to follow and interpret.

The SDGs have formed the basis for activity by both government and the private sector. Governments are reporting on their progress towards the SDGs through Voluntary National Reviews (VNRs), supported by National Audit Offices and Supreme Audit Institutions, presented to the UN and connected to an on-going follow-up and review process.

FIGURE 2.1: The UN Sustainable Development Goals

Source: UN

Indirectly, the rise of environmental, social and governance (ESG) performance as a means by which finance assesses business exposure to, and management of, risks and opportunities links private sector activity to delivery of the SDGs.

In some cases, businesses and investors have been using the SDGs directly, as a means to better understand the context of the interconnected issues and regions that they are operating in and as a guide for targeting activities (ACCA, 2017). Indirectly, the rise of ESG performance as a means by which finance can assess business exposure to, and management of, risks and opportunities, links private sector activity to delivery of the SDGs. This is explored further in chapter five.

As the SDGs, and the universe of issues that they encompass, become better understood as a set of complex interconnected risks and opportunities, new approaches are being developed to help set out how business, finance and governments can help deliver them.

For example, the World Benchmarking Alliance, which aims to drive corporate activity through assessment of progress towards the Goals, view the SDGs as seven systems for transformation (see Figure 2.2). Other networks looking to activate multi-stakeholder progress towards the SDGs include IMPACT 2030 - using employee volunteering, and the UNDP Accelerator Labs – using entrepreneurship.[1] These coalitions and frameworks are examples of a growing movement visible across business, finance, civil society and government to recognise interdependencies, move beyond linear thinking, appreciate networks and to build cross-cutting coalitions and alliances in order to realise more effective ways to embrace transformative change and generate positive social and environmental impact.

FIGURE 2.2: The SDGs and seven systems transformation

1. Social transformation: Achieve universal human development by respecting human rights, promoting equality and empowering people to pursue the opportunities and choices they value.
2. Agriculture and food system transformation: Produce healthy and nutritious food to feed a growing world population, while staying within planetary boundaries, and offer farmers, fishers and their families a decent standard of living.
3. Decarbonisation and energy transformation: Provide universal access to modern energy services while significantly reducing the world's dependency on carbon-based energy.
4. Circular transformation: Decouple consumption and production from natural resource use and design out waste and pollution.
5. Digital transformation: Harness the potential and benefits of digital technologies for all while managing risks, including safeguarding against undesirable effects.
6. Urban transformation: Create sustainable, inclusive and connected cities that are safe, resilient and clean.
7. Financial system transformation: Reorient the flow of resources and exercise good stewardship to accelerate the economy's transition towards long-term sustainable development.

Source: WBA (2019) https://www.worldbenchmarkingalliance.org/wp-content/uploads/2019/07/WBA-sevensystemstransformations-report.pdf

1 https://www.impact2030.com/ and https://acceleratorlabs.undp.org/

There has been a growing understanding and evidence base that better social and environmental performance leads to a better managed business, one that is more engaged with the society in which it operates.

IS BUSINESS THE SOLE ROLE OF BUSINESS: RETHINKING VALUE CREATION

Over the last two decades business has taken a more systematic approach to understanding its impact on all of its stakeholders. Part of this new approach is dependent on rethinking value creation. Business creates value by using inputs which it transforms to create outcomes. In the past, business may have been focused on financial returns alone as being the compensation for the value that they are creating.

Rerouting how businesses assess and realise risks and opportunities so that they can support social and environmental dimensions is a vital task. The ten elements of value creation provide an excellent example of how business ought to visualise the outcome of its activities (see Figure 2.3). They formed part of the foundational work towards creating the 'multi-capital' approach of Integrated Reporting, where financial capital is joined by manufactured, human, social and relationship and natural capital, as elements that are transformed by businesses and their business models (IIRC, 2015). This is part of a growing understanding and academic evidence base that affirms that improved social and environmental performance leads to a better managed business that is more engaged with the society in which it operates.

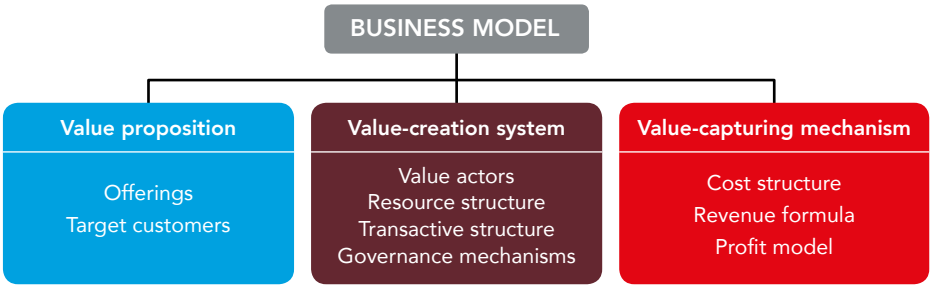
Strategic decisions to better manage risks and also to take advantage of opportunities will be routed through senior management and then via relevant parts of the business. Professional accountants and finance teams have a unique view across a business that wants to take advantage of an opportunity. They are involved across all elements of business model – the proposal to set out how to create value, the creation of the value itself and how to capture and report on the value that is being created (see Figure 2.4).

FIGURE 2.3: 10 elements of value creation

TEN THEMES THAT INFORM THE MEANING OF VALUE CREATION
Value creation takes place within a context
Financial value is relevant, but not sufficient, for assessing value creation
Value is created from tangible and intangible assets
Value is created from private and public/common resources
Value is created for an organization and for others
Value is created from the connectivity between a wide range of factors
Value creation manifests itself in outcomes
Innovation is central to value creation
Values play a role in how and what type of value is created
Measures of value creation are evolving

Source: IIRC (2013)

FIGURE 2.4: Value proposition, creation and capture



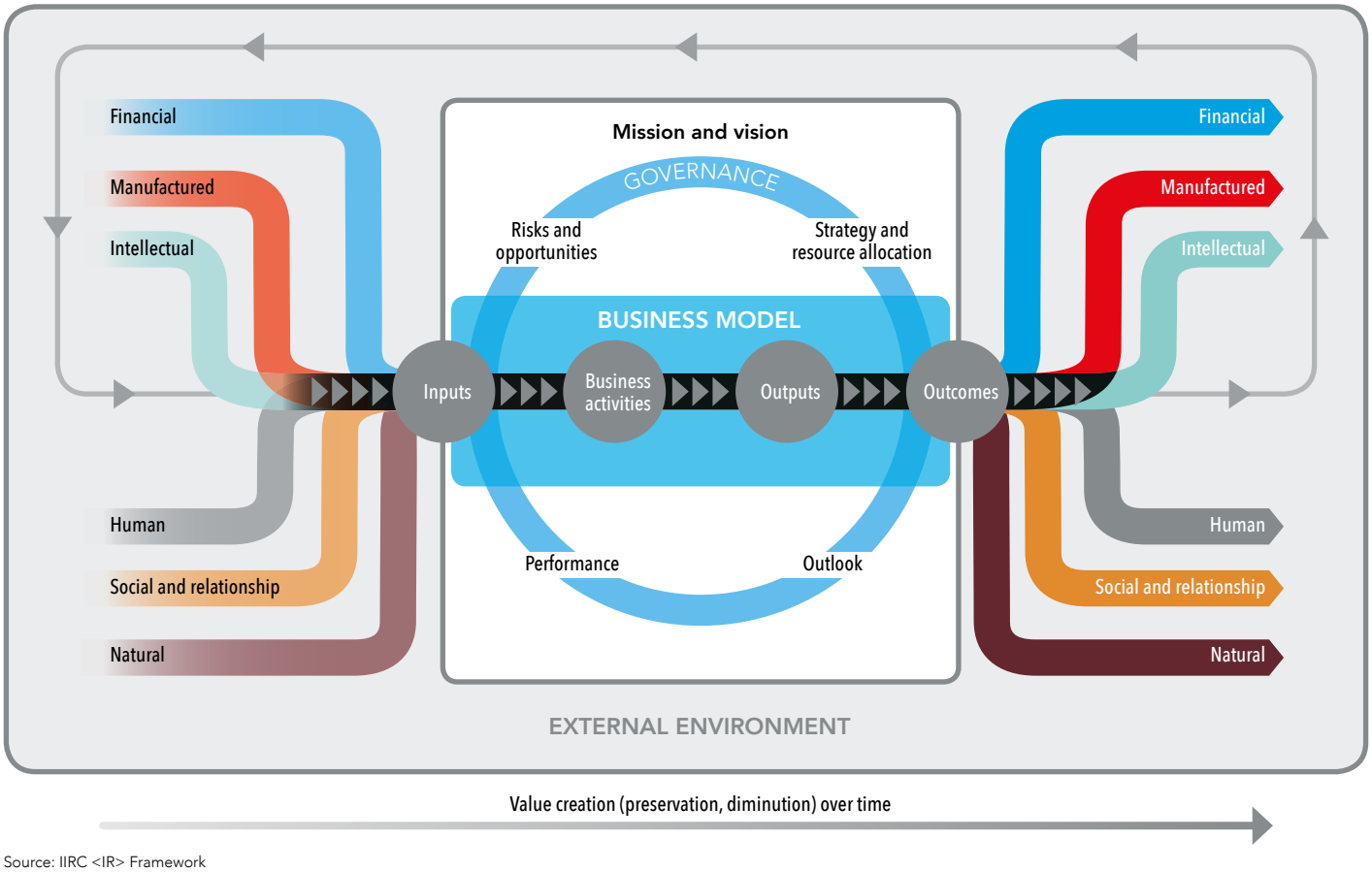
Source: Teece

Transforming these processes so that they include a social and environmental focus is essential. Not least because companies need to understand their exposure to growing social and environmental risks.

Transforming these processes so that they include a social and environmental focus is essential. Not least because businesses need to understand their exposure to growing social and environmental risks. This better understanding of social and environment risks is also increasingly required by governments and demanded by investors. And also because fast-shifting customer preferences mean that new business models that are socially just and environmentally aware can open up new market opportunities that are decoupled from negative environmental and social impacts. The IIRC <IR> Framework asks businesses to set out their business model in a way that recognises how it explicitly transforms capitals, including natural and social capital to create value (See Figure 2.5).

This more complete understanding is being supported by governments and institutions that see the challenges ahead and also by finance that is rerouting itself towards supporting more sustainable outcomes.

FIGURE 2.5: IIRC business model: transforming capitals into outcomes



Source: IIRC <IR> Framework

Returns to the environment and to society are now viewed as complementary driving forces behind better corporate performance.

BUSINESS MODELS OF THE FUTURE

Furthermore, thanks to technology, business model innovation is happening faster than ever before. Today, business models are being combined in multiple new ways and hybrid models are emerging that draw on different characteristics to create unique value creation opportunities. In the report *Business models of the future: systems, convergence and characteristics,* ACCA uncovered 12 characteristics that were being combined in different ways to create new sources of value by forward thinking businesses (see Figure 2.6) (ACCA, 2018).

In sum, this more complete understanding of what a business model is and how a business contributes value to society is being supported by governments and institutions that see the challenges ahead, and also by finance that is rerouting itself towards supporting more sustainable outcomes.

THE CALL TO ACTION

Financial to non-financial returns

Financial reporting is now complemented by wider corporate reporting that includes social and environmental disclosures. The evolution of coverage of these issues has been supported by a range of strategic performance tools and reporting frameworks that cover ESG impacts and outcomes.

ESG impacts and outcomes have been accounted for through different types of corporate reporting, most prominently sustainability reporting, and has taken forms such as reporting on community engagement activities, eg employee volunteering and philanthropic giving. Historically, for most businesses, these activities involving wider stakeholders have typically occurred outside of the strategy, finance and audit and assurance teams, often coming within the remit of marketing and external communications functions.

This approach of recognising of wider stakeholder value that exists outside of business strategy is now giving way to a more concrete, robust and rigorous approach to social and environmental value creation that involves finance teams.

Returns to the environment and to society are now viewed as complementary driving forces behind better corporate performance. Risks to business activity

FIGURE 2.6: Characteristics of business models of the future

1. **Multi-layered** – possess the ability to have many different components come together and cooperate to create value.
2. **Participatory** – an expectation of participation, over transactional consumption alone, means that organisations can rethink how they interact with customers and other stakeholders.
3. **Platform-ready** – online platforms provide an opportunity to unlock value through building communities, empowering individuals and benefitting from network effects.
4. **Multi-capitalist** – understanding that value creation through a business model is not just composed of by financial capital but also includes other capitals, including intellectual, natural, relational and many others.
5. **Purposeful** – engendering a sense of purpose – and communicating these sincerely to employees, customers and partners – builds resilience and long-term value.
6. **Data sensible** – recognising the importance of data, its sensitivity and its owners' rights, including being portability ready, is key.
7. **Boundary-testers** – going beyond perceived natural boundaries to create enduring value in areas previously considered beyond an organisation's domain.
8. **Open** – openness allows for more sharing and collaboration and the potential to benefit by contributing to an ecosystem and to build on knowledge and learning of others.
9. **Potential enhancing** – providing tools for people and places to realise their potential creates outsized returns for all.
10. **Fair players** – ethics is at the heart of organisations. The need for sound business ethics is even more acute in a digital environment where a lack professional competence and due care can cause ethical issues to emerge in unexpected places.
11. **Convening** – convening groups in a virtual or physical space, or around an idea, and building a community that people value, contributes to social and civic systems.
12. **Restorative** – being able to fix, renew and repair is not only more efficient but has the potential to unlock new sources of value.

But this most recent move to create socially just and environmentally aware prosperity is not without its implementation challenges.

FIGURE 2.7: Value shifts over time

from environmental and social factors are being incorporated into business planning and reporting.

But this most recent move to create socially just and environmentally aware prosperity is not without its implementation challenges. The markets, systems and institutions in which this type of value is hoped to emerge, do not automatically encourage its creation.

ACCA research has noted that many tools have been created to help companies assess their social and environmental dependencies and impacts. Questions about whether, to what extent and how business should take responsibility for environmental and social issues manifest themselves in the development of new criteria and indicators for assessing corporate performance, which increasingly associate performance with responsible business conduct and sustainable outcomes.

Those criteria and indicators originate from a wide variety of sources, including governments, non-governmental organisations (NGOs), businesses, investors and customers. This reflects the range of stakeholders interested in new ways of interpreting and assessing corporate performance.

New expectations about corporate performance and the criteria used to measure it are also calling into question the role of the corporation – what is its purpose, the definition of corporate performance and the range of stakeholders whose criteria are used to assess performance.

New subject matter, for example on climate risk, social impact, community involvement, supplier relationships and environmental management, is gradually being introduced into corporate reporting, to respond to, or in anticipation of, the factors that stakeholders, including financial and wider stakeholders, will consider when assessing the reporting organisation's performance (ACCA, 2016). For example, in relation to climate risk, the UK's Financial Reporting Council (FRC) recently stated that: 'Reporting should set out how the company has taken into account the resilience of the company's business model and its risks, uncertainties and viability in both the immediate and longer-term in light of climate change. Companies should also reflect the current or future impacts of climate change on their financial position, for example in the valuation of their assets, assumptions used in impairment testing, depreciation rates, decommissioning, restoration and other similar liabilities and financial risk disclosures' (FRC, 2019).

RISKS, OPPORTUNITIES AND A RENEWED ROLE FOR BUSINESS

Business recognition and understanding of the new risk landscape is improving. The tools and frameworks for engaging with these new risks are also becoming more precise and more widely used.

This is helping business activities to reconfigure so that financial performance that is augmented with more factors including social and environmental outcomes and impact is rewarded.

But this is a first step. For at the same time, some of these areas also present opportunities for business model innovation. Opportunity exists for whole sectors to transform, to recalibrate their purpose and to create social and environmental value. Many organisations have been working together to develop the tools needed to meet the new tasks at hand.

3. The growing demand for more environmental, social and governance disclosures from investors

The investment industry is increasingly focused on the role and importance of ESG factors in corporate value creation and risk mitigation. These considerations are being incorporated into investment processes including asset valuation, asset allocation, and risk management. Corporate disclosures and wider ESG data serve as the bedrock for these investment processes.

The increased focus on ESG factors comes in response to demand from asset owners – such as pensions funds, insurance companies, sovereign wealth funds, foundations, and others – for asset managers to take these factors into account when implementing their investment mandates. Retail investors are also increasingly interested in investing in ESG products and strategies. ESG funds have experienced tremendous growth in recent years; according to Morningstar, assets under management in ESG-related funds increased by 60% from $655bn in 2012 to $1.05 trillion in 2019.

This demand for ESG investments reflects several factors. Firstly, with greater societal attention to environmental factors such as climate change, there is greater interest among some investors in investing beyond traditional risk/return considerations. This can be considered a paradigm shift in which investor utility is a function not only of risk and return, but of non-financial considerations, such as the impact of a given company's activities on the local community, or toward achieving specific social or environmental outcomes.

Investor preferences for ESG considerations vary across generations and different geographic or societal segments. This reflects a shift toward greater demand for product personalisation and alignment of investments with personal values and beliefs, which may incorporate ESG factors.[2] The millennial generation, in particular, is more likely to attach higher importance to ESG considerations and their alignment with personal values in their investment decisions.

The demand for ESG also reflects push- and pull-factors for investment managers. Push factors include regulation, largely stemming from Europe and parts of Asia, where sustainability has become a specific policy objective in several jurisdictions. This policy-push is manifested in corporate reporting standards, obligations for investment managers to take sustainability factors into account in the investment process, and to enhance the reporting and disclosure of such practices to clients. There is also growing focus among central banks on the financial stability implications of climate change risk, including balance sheet exposure to stranded assets and associated capital adequacy provisioning, which is driving investors to form a more holistic view of risk.

Pull factors include enablers such as more widely available and better quality ESG data, metrics and analytics, as well as an emerging and broadly-supportive body of academic literature on ESG issues in investment management.

However, there are several obstacles to more widespread adoption of ESG investment approaches, including a lack of comparability of ESG data and disclosures across firms, which may reflect the multitude of corporate reporting practices and standards around non-financial information, as well as incomplete, unreliable, or unspecific data prohibiting a consistent appraisal of ESG risks and opportunities.

2 We describe this scenario as "parallel worlds" – where different segments of society, geography, or generation – engage differently with financial services. See *Future State of the Investment Profession*, CFA Institute (2017) at https://www.cfainstitute.org/en/research/survey-reports/future-state-of-investment-profession

Particularly in the case of environmental and social factors, the quality and availability of information typically lags compared with corporate governance disclosures.

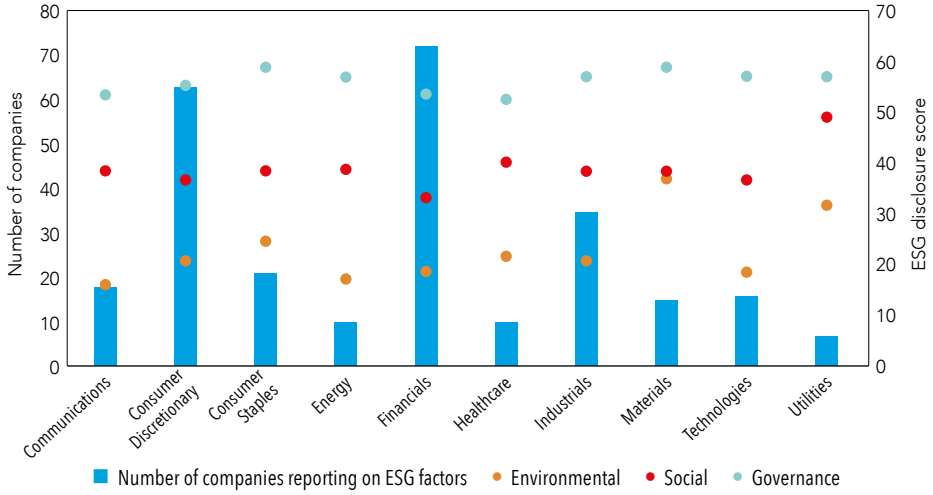
In the case of environmental and social factors, the quality and availability of information typically lags compared with corporate governance disclosures. This situation is illustrated in Figure 3.1, which shows the median environmental, social and governance disclosure scores for UK-listed companies, by sector, for 2016.

Enhancing the completeness of and comparability of ESG information are therefore priorities for enabling more widespread application of ESG approaches in investment management.

a) How ESG factors are incorporated into the investment process

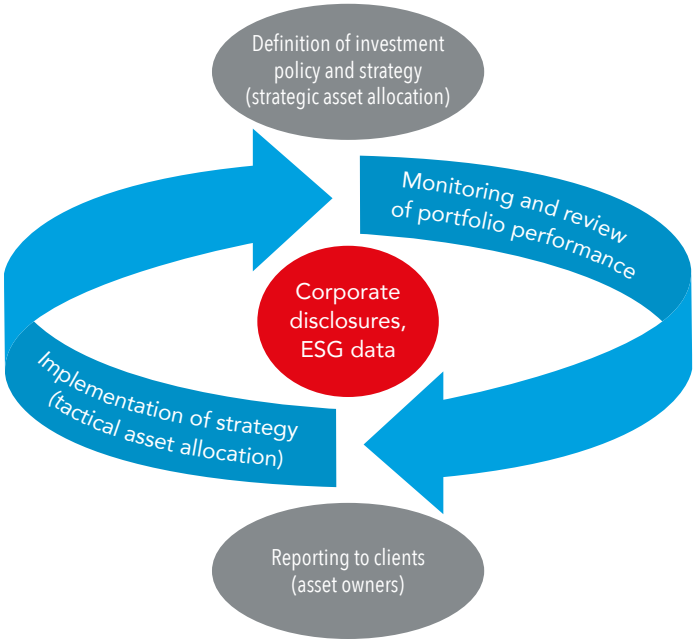
There are several approaches to incorporating ESG factors into the investment process. A stylised process flow is illustrated in Figure 3.2. It begins with the definition of the investment policy including the consideration ESG factors, followed by implementation of the strategy, portfolio monitoring (feeding back into implementation and tactical portfolio adjustments), and reporting to clients.

FIGURE 3.1: ESG Disclosure Scores for UK Listed Companies, 2016



Source: CFA Institute and PRI (2019)

FIGURE 3.2: Stylised ESG Investment Process Flow



Incorporating specific ESG criteria into the investment strategy that align with the investor's values or investing to achieve specific environmental or societal outcomes.

At the heart of this process, the implementation of an ESG strategy can be generally classified into three approaches:

1. **Active ownership / Engagement.** Direct engagement with investee company management or boards, including exercise of voting rights and tabling shareholder proposals, consistent with ESG objectives.

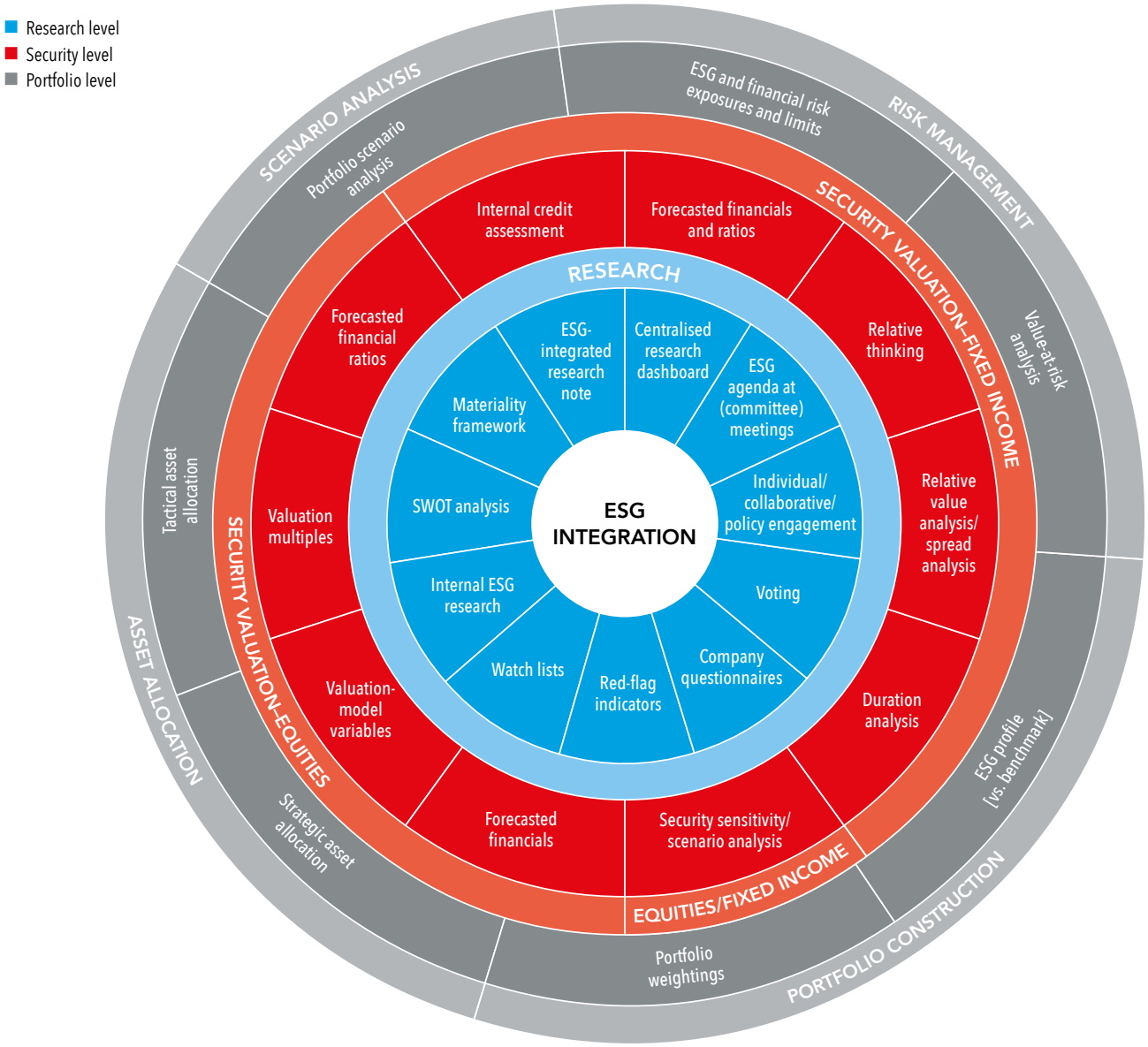
2. **Values-based investing.** Incorporating specific ESG criteria into the investment strategy that align with the investor's values or investing to achieve specific environmental or societal outcomes. Examples include (i) negative screening (excluding companies or entire sectors from an investment portfolio according to specific ESG or ethical criteria); (ii) positive screening (inclusion of certain companies or sectors according to certain minimum ESG criteria, or overweighting best-in-class companies that score highly on ESG criteria relative to peers); (iii) thematic investment (investing in certain ESG themes, such as sustainable energy, sustainable agricultural practices, etc.), and (iv) impact investment (investing to achieve certain environmental or social outcomes, such as increasing access to education, clean water, or reducing poverty, etc).

3. **Full integration into security valuation.** The explicit integration of ESG factors into investment analysis. ESG factors are incorporated into the investment decision-making process to form a complete picture of risks and opportunities.

A related set of approaches are quantitative investment approaches incorporating ESG factors, including investment strategies based on exposure to systematic risk factors such as size, value, or momentum, as well as smart beta strategies, and portfolio overlays or tilts (the use of certain investment strategies to tilt portfolio ESG characteristics to a desired level).

At a more holistic level, the full range of ESG integration applications is captured in the framework shown in Figure 3.3. It spans research, security valuation, and portfolio level actions (asset allocation, portfolio construction, risk management, scenario analysis).

FIGURE 3.3: ESG Integration Framework



Source: CFA Institute and PRI (2019)

The investment industry is evolving toward a more purposeful form of capitalism, in which sustainability considerations are embedded throughout the investment process.

b) Environmental and Social considerations: from integration of values, to value creation

The ESG approaches described herein can be calibrated to address a variety of specific environmental and social considerations. Within the values-based investing approaches, thematic and impact investment provide opportunities to target specific sustainability themes or challenges. These are exemplified in Table 3.1 (note this is an illustration only and is not exhaustive).

Consider the transition to a low-carbon economy. The required information to inform a clean energy thematic investment strategy would start with a carbon footprint analysis (comparison of investee companies' carbon intensity against an industry benchmark).[3] Other important data points would include indirect emissions, fossil reserves analysis, utility generation mix, forward looking indicators on companies' climate strategy, 2-degrees scenario compliance checks, and others.[4]

Impact investment aims to positively address these sustainability challenges in addition to generating an acceptable risk-adjusted return. These investments provide portfolio diversification opportunities given their low correlation with other assets.

Impact investment involves allocating capital to business ventures that target specific sustainability outcomes. In this context, it not only encapsulates the integration of sustainability preferences and values into the investment process, but explicitly aims to create societal value by generating positive, targeted outcomes to sustainability challenges. The ability to measure and report on impact is a key consideration for asset owners in evaluating the performance of the investment strategy.

The investment industry is evolving toward a more purposeful form of capitalism, in which sustainability considerations are embedded throughout the investment process. By allocating capital toward sustainable business models, investors can support the creation of value for wider societal impact.

TABLE 3.1: Sustainable Investment Themes and Associated Sustainability Challenges

SUSTAINABLE THEME	SUSTAINABILITY CHALLENGE TO BE ADDRESSED
Water	Global water scarcity and quality
Security	Personal safety and security
Nutrition	Reducing global food production imbalance
Healthy living	Improved health
Forestry	Sustainable forestry management
Education	Access to information and educational opportunities
Climate change	Mitigate and adapt to climate change
Clean energy	Accelerating energy transition to a low-carbon economy
Biotech	Treatment and cure of rare diseases
Real estate	Building energy-efficient housing

Source: Swiss Sustainable Finance (2017)

3 See Swiss Sustainable Finance, 2017, *Handbook on Sustainable Investments: Background Information and Practical Examples for Institutional Asset Owners*, CFA Institute Research Foundation (p.137, Investment Carbon Footprinting)

4 ibid

4. Disclosure data: issues, context and emphasis across regions and sectors

Around the world, different regions face shared and unique social and environmental challenges. What's more, their history and geographical location inform their mix of industrial activities, as do their regulatory regimes and institutional contexts.

Given the scale of the challenges outlined, and the role that business has played so far, it is useful to explore in further detail the areas where business needs to improve social and environmental disclosures. Where it is falling behind and by how much; where it is improving; and the extent to which it is meeting regulatory and societal expectations.

Analysis across regions and sectors of the degree to which businesses are communicating their progress on specific social and environmental issues helps understand gaps, areas of growth and exposure of sectors to certain issues.

Datamaran, the Software as a Service (SaaS) non-financial risk management solution provider, examined corporate disclosure of approximately 2800 companies by assessing their annual financial reports, sustainability reports or both (in which case a combined score from both was created) over the past five years.

1. SOCIAL AND ENVIRONMENTAL PERFORMANCE: A GROWING UNIVERSE OF ISSUES AND TOPICS

Key findings:

- From 2014 to 2019 the volume of reporting on key social and environmental issues has increased.
- But a number of key areas, such as animal welfare and human trafficking, still receive low coverage. Legislation, such as the UK's Modern Slavery Act of 2015, led to an increase in forced labour disclosures (of which human trafficking is a component), for that region. As this type of legislation is introduced in other regions, such as recently happened in Australia, this will likely to lead to an increase in disclosures.
- Asia has seen the strongest growth in topic areas covered, catching up with Europe where coverage of a majority of issues is widespread but has not grown in most areas.
- Across all sectors, some issue areas that are linked to critical social and environmental issues are under-reported. On the one hand, this may be due to an issue not being material to a business. One the other, this may be due to a lack of awareness of the issue and its importance to investors or other stakeholders.

The range of environmental and social issues, and their recognition by business as issues to consider, provides a useful snapshot of the breadth of areas that business today needs to engage with and have an understanding of how it impacts them.

Data analysis

- Datamaran's proprietary technology tracks 100 non-financial topics that consist of over 6,000 key terms from corporate reports (financial, sustainability reports, and SEC filings), regulations, news and social media.
- The Natural Language Processing (NLP) technique – that analyses text and derives meaning from human language – is then applied to these sources to extract comparable information.
- As a result, such analysis gives an evidence-based perspective into regulatory, strategic and reputational risks as well as reporting patterns relevant for a particular company.

FIGURE 4.1: Average percentage of key ESG issues mentions compared to the increase in mentions from 2014 to 2018 (Annual Financial reports and Sustainability reports) – **Oceania, Asia, Africa**

			REGION (reporting) / INDUSTRY (reporting)								
			Oceania			Asia				Africa	
GROUP	ISSUE	TOPIC	Consumer Goods & Services	Industrials	Financial Services	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services	Consumer Goods & Services	Financial Services
Environmental	Waste management	Recycling, waste management & reduction	61%	62%	46%	70%	67%	64%	62%	78%	50%
		Non-hazardous waste	57%	57%	33%	68%	53%	55%	39%	51%	37%
		Hazardous waste	6%	12%	16%	44%	23%	24%	13%	11%	13%
	Climate change & air quality	Greenhouse gases	71%	74%	52%	77%	62%	65%	54%	83%	67%
		Climate change	40%	55%	51%	68%	55%	60%	48%	71%	60%
		Air emissions	12%	34%	18%	81%	45%	53%	32%	33%	22%
		Eco-efficient transportation	4%	34%	13%	25%	27%	31%	14%	14%	7%
		Emission trading	8%	18%	21%	27%	9%	13%	10%	29%	19%
	Water	Water recycling, efficiencies & remediation	57%	58%	37%	75%	60%	59%	49%	84%	55%
		Water resources	36%	56%	33%	74%	49%	47%	40%	71%	50%
		Fisheries	8%	10%	3%	33%	17%	16%	18%	25%	12%
	Natural capital	Materials management	48%	49%	36%	64%	62%	59%	53%	58%	48%
		Biodiversity	34%	48%	21%	64%	46%	47%	33%	41%	34%
		Land	22%	48%	17%	74%	38%	43%	30%	22%	28%
		Forests	22%	28%	28%	43%	41%	37%	34%	35%	19%
		Animal welfare	14%	4%	4%	2%	6%	1%	1%	8%	2%
	Pollution	Water pollution	23%	31%	19%	83%	52%	60%	33%	50%	26%
		Harmful substances	19%	26%	7%	47%	31%	37%	10%	12%	8%
		Noise pollution	3%	45%	6%	36%	25%	40%	13%	9%	6%
		Spills	15%	31%	10%	64%	23%	29%	14%	14%	11%
Social	Fair and inclusive workplace	Workforce diversity & inclusion	91%	93%	80%	75%	71%	69%	68%	88%	86%
		Fair remuneration	51%	38%	41%	33%	17%	16%	20%	44%	25%
	Responsible supply chains	Supply chain management	38%	42%	24%	55%	53%	46%	28%	69%	21%
		Responsible procurement	35%	28%	23%	51%	40%	36%	27%	59%	35%
		Supply chain engagement	36%	21%	17%	36%	32%	25%	18%	46%	14%
	Product responsibility	Product & service safety	37%	48%	23%	58%	66%	61%	35%	70%	26%
		Product stewardship	35%	17%	18%	54%	52%	45%	39%	45%	28%
		Nutrition	33%	11%	21%	40%	48%	29%	27%	61%	47%
		Product labelling	9%	0%	4%	28%	26%	13%	13%	32%	4%
	Human rights	Human rights	37%	43%	28%	73%	56%	55%	48%	64%	49%
		Forced labour	16%	12%	12%	54%	38%	38%	29%	24%	12%
		Children rights	19%	12%	4%	57%	38%	38%	29%	24%	17%
		Human trafficking	1%	3%	7%	1%	6%	4%	2%	2%	4%
		Conflict minerals	0%	0%	0%	1%	9%	8%	0%	0%	0%
		Sexual exploitation	2%	0%	0%	0%	0%	0%	1%	2%	1%

Avg. % Mentions

0%
20%
40%
60%
80%
100%

Difference since 2014

-22.63% +52.80%

How to view this chart

The squares in the chart represent a topic (eg air emissions) that forms part of an issue (eg climate change and air quality).

The size of the square indicates the average percent of mentions for the years 2014-2018.

Four sectors are presented by region. These are: financial services, consumer goods and services, industrials and oil and gas. Where analysis of a sector is not present in a particular region relates to a low incidence of mentions.

The colour of the square indicates the difference in the number of mentions over time: blue to green = increasing, grey = no change, red = decreasing.

FIGURE 4.1: Average percentage of key ESG issues mentions compared to the increase in mentions from 2014 to 2018 (Annual Financial reports and Sustainability reports) – **Europe, Americas**

			REGION (reporting) / INDUSTRY (reporting)							
			Europe				Americas			
GROUP	ISSUE	TOPIC	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services	Oil and Gas	Consumer Goods & Services	Industrials	Financial Services
Environmental	Waste management	Recycling, waste management & reduction	73%	75%	74%	60%	49%	50%	53%	32%
		Non-hazardous waste	69%	64%	65%	46%	62%	50%	49%	31%
		Hazardous waste	48%	31%	39%	19%	48%	24%	40%	11%
	Climate change & air quality	Greenhouse gases	88%	82%	88%	74%	87%	50%	57%	35%
		Climate change	79%	65%	71%	62%	82%	52%	49%	41%
		Air emissions	79%	50%	64%	38%	73%	32%	45%	22%
		Eco-efficient transportation	26%	31%	45%	23%	8%	17%	23%	10%
		Emission trading	44%	15%	21%	16%	53%	7%	14%	7%
	Water	Water recycling, efficiencies & remediation	73%	65%	69%	52%	56%	46%	43%	28%
		Water resources	72%	47%	52%	35%	70%	44%	45%	28%
		Fisheries	25%	14%	8%	10%	12%	8%	3%	3%
	Natural capital	Materials management	65%	72%	75%	60%	68%	59%	59%	35%
		Biodiversity	67%	52%	43%	39%	59%	33%	26%	17%
		Land	66%	42%	48%	31%	67%	33%	39%	24%
		Forests	39%	50%	32%	38%	21%	30%	24%	19%
		Animal welfare	3%	14%	2%	3%	0%	10%	1%	0%
	Pollution	Water pollution	75%	47%	56%	27%	70%	38%	45%	20%
		Harmful substances	55%	31%	46%	11%	72%	36%	57%	34%
		Noise pollution	35%	29%	55%	15%	16%	11%	25%	5%
		Spills	84%	24%	29%	15%	82%	23%	35%	17%
Social	Fair and inclusive workplace	Workforce diversity & inclusion	85%	82%	83%	81%	32%	53%	51%	39%
		Fair remuneration	29%	38%	36%	35%	5%	21%	12%	10%
	Responsible supply chains	Supply chain management	52%	60%	58%	29%	17%	41%	36%	13%
		Responsible procurement	31%	49%	42%	38%	9%	30%	20%	13%
		Supply chain engagement	29%	40%	31%	22%	11%	33%	17%	10%
	Product responsibility	Product & service safety	50%	66%	70%	34%	46%	69%	66%	19%
		Product stewardship	42%	60%	57%	37%	19%	42%	36%	19%
		Nutrition	26%	49%	22%	27%	13%	48%	22%	17%
		Product labelling	12%	23%	11%	9%	5%	25%	7%	3%
	Human rights	Human rights	81%	76%	74%	68%	28%	44%	33%	33%
		Forced labour	45%	49%	49%	34%	9%	26%	14%	7%
		Children rights	40%	46%	44%	30%	10%	25%	11%	8%
		Human trafficking	9%	11%	10%	9%	3%	11%	9%	2%
		Conflict minerals	7%	7%	11%	1%	3%	13%	18%	1%
		Sexual exploitation	2%	5%	2%	1%	1%	3%	3%	1%

Avg. % Mentions

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20%
40%
60%
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Difference since 2014

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The colour of the square indicates the difference in the number of mentions over time: blue to green = increasing, grey = no change, red = decreasing.

The emphasis of business reporting on key social and environmental issues is growing year-on-year. But critical issues are not being given due care and attention.

SOCIAL AND ENVIRONMENTAL PERFORMANCE: EMPHASIS SCORE

The emphasis of business reporting on key social and environmental issues is growing year-on-year. But critical issues are not being given due care and attention. The following emphasis score charts score businesses on a scale of 0-3.

What is 'emphasis'?

The emphasis takes into account variables, such as, the number of times the topic is mentioned in a sentence (also a number of sentences mentioning it), its location (e.g. CEO letter).

- High emphasis topics are found a high number of times in a source and/ or in key sections of a source.
- Medium emphasis topics are found a moderate number of times in a source, or rarely but in a key section.
- Low emphasis topics appear, only rarely in a source
- No mention of a topic means that the analysis sees no mention of any topic related keyword across the analysed report.

FIGURE KEY:

Industry (reporting)

- Oil and Gas
- Industrials
- Consumer Goods & Services
- Financial Services

SOCIAL AND ENVIRONMENTAL DISCLOSURE: KEEPING UP WITH REGULATORS AND CITIZENS

This analysis includes over 5700 regulations and initiatives and over 1000 news sources. These three sources are weighted then combined.

Weighting:

Mandatory regulation: 55%
Voluntary initiatives: 35%
News articles: 10%

The formula ensures that that there is a greater focus on regulation due to its higher impact on businesses than voluntary initiatives and news.

The score is then compared to corporate reporting on that issue.

The distance of the coloured dot in relation to zero indicates the gap between strength of regulatory activity and corporate reporting on the issue. A negative score indicates that reporting is weaker than regulation, voluntary initiatives and civil society importance. A positive score indicates that reporting is stronger than regulation, voluntary initiatives and civil society importance.

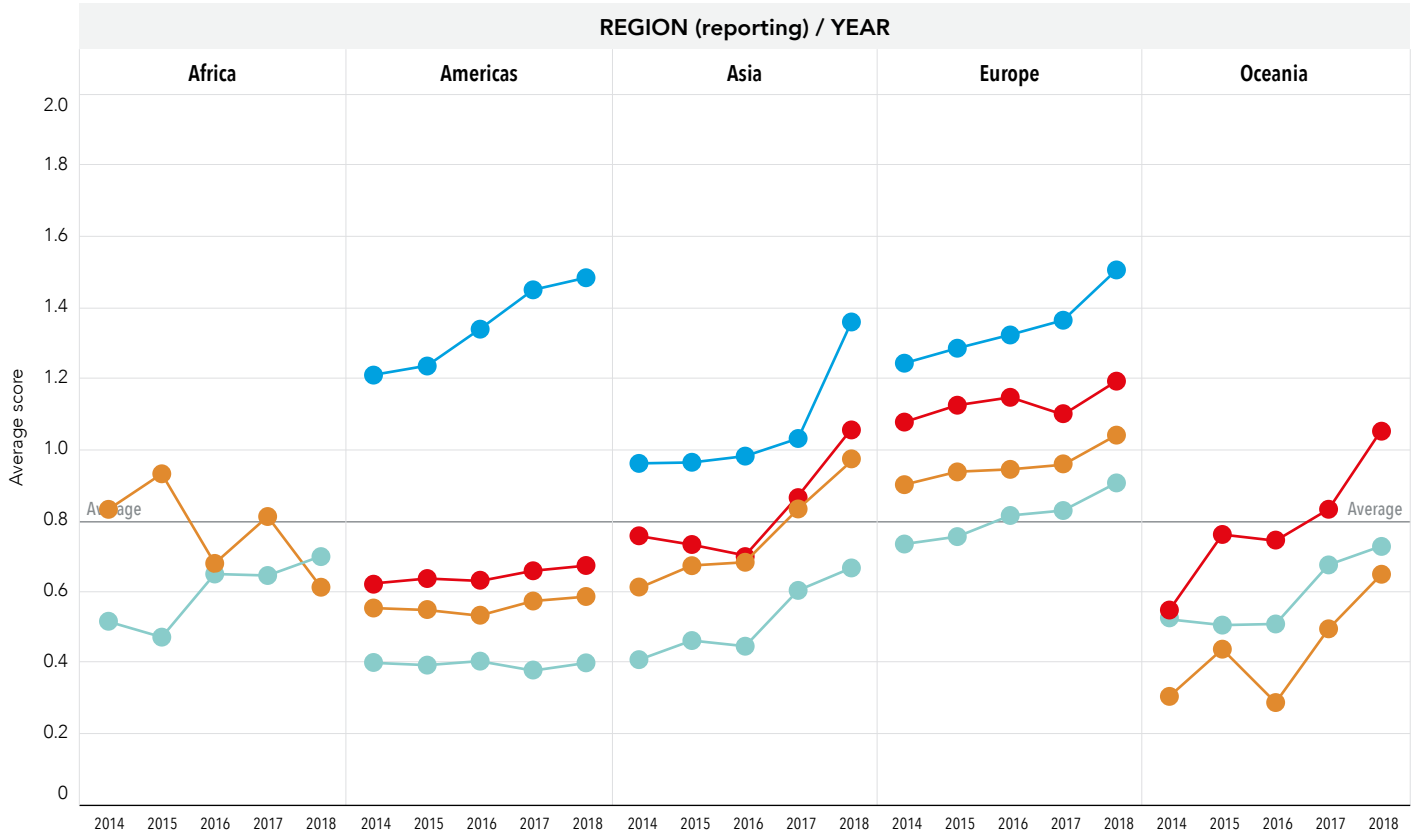
FIGURE KEY:

Issue name

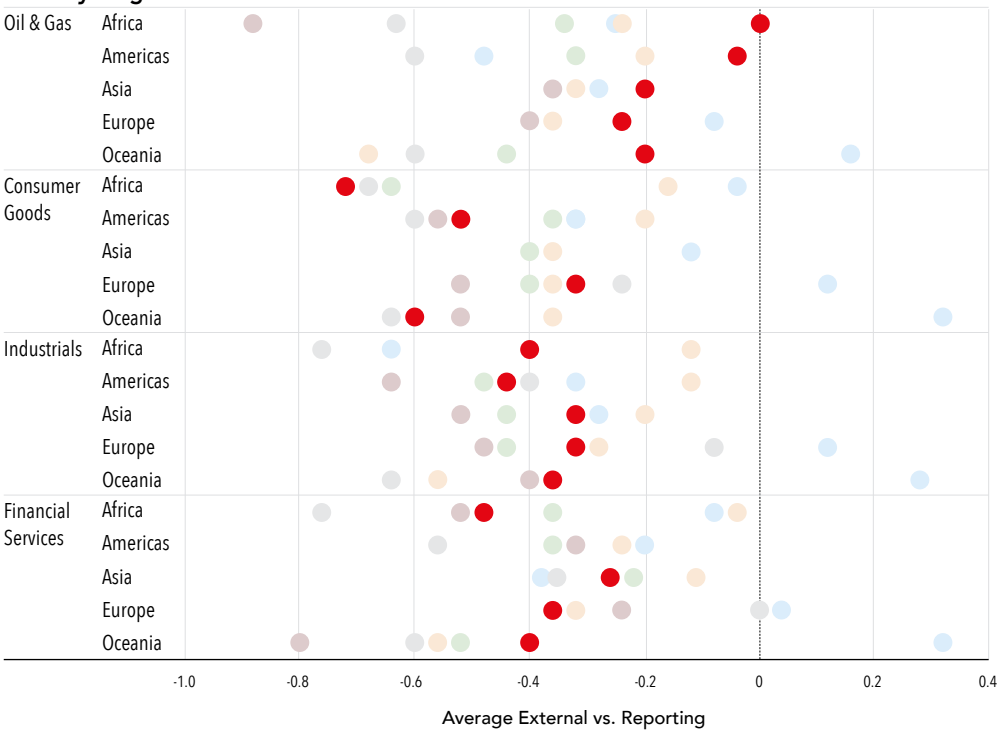
- Climate change & air quality
- Fair and inclusive workplace
- Waste management
- Human rights
- Natural capital
- Product responsibility

FIGURE 4.2: CLIMATE CHANGE AND AIR QUALITY

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019

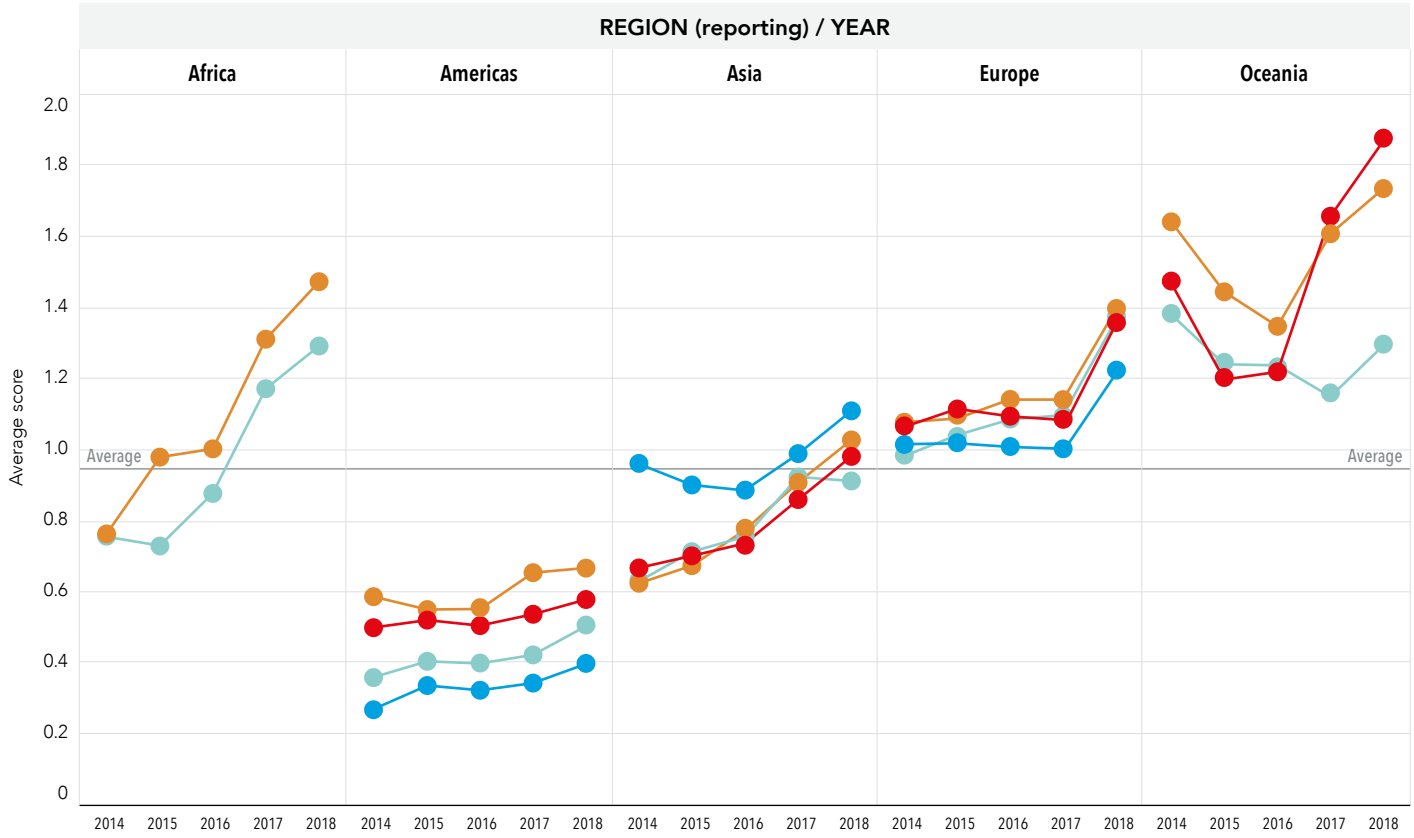


Key points

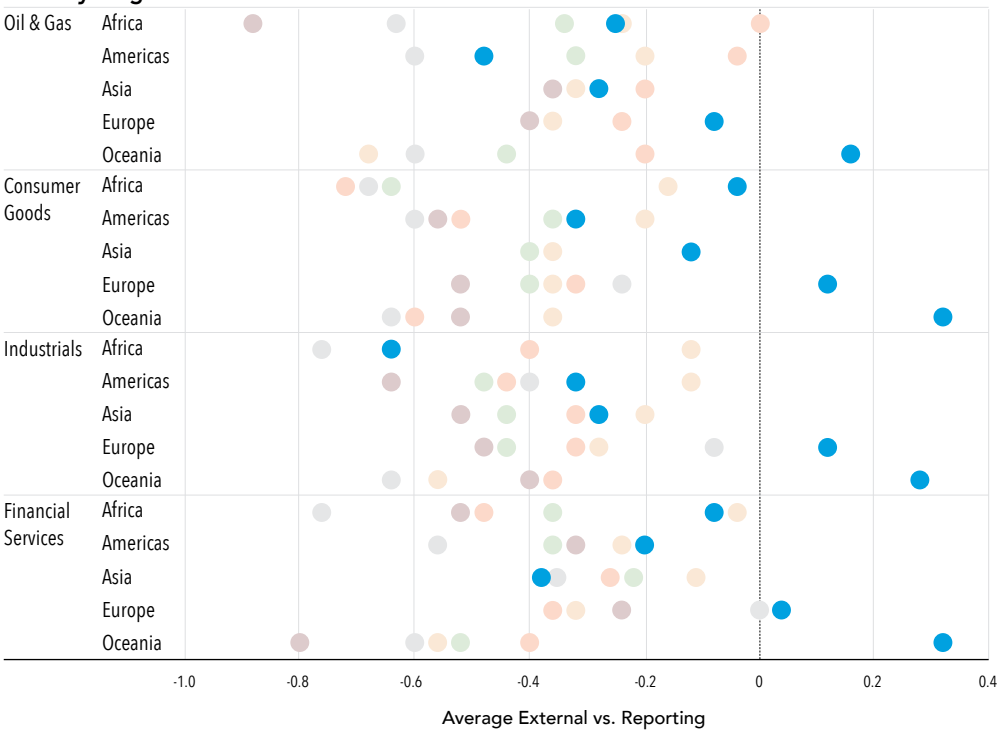
- Climate change and air quality reporting has been given greater emphasis by businesses over time in almost all cases, with the Oil and Gas sector leading other sectors.
- Despite the importance of this issue, and the increase in emphasis over time, the low to medium scores indicate that it is still given a relatively low priority.

FIGURE 4.3: FAIR AND INCLUSIVE WORKPLACE

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019

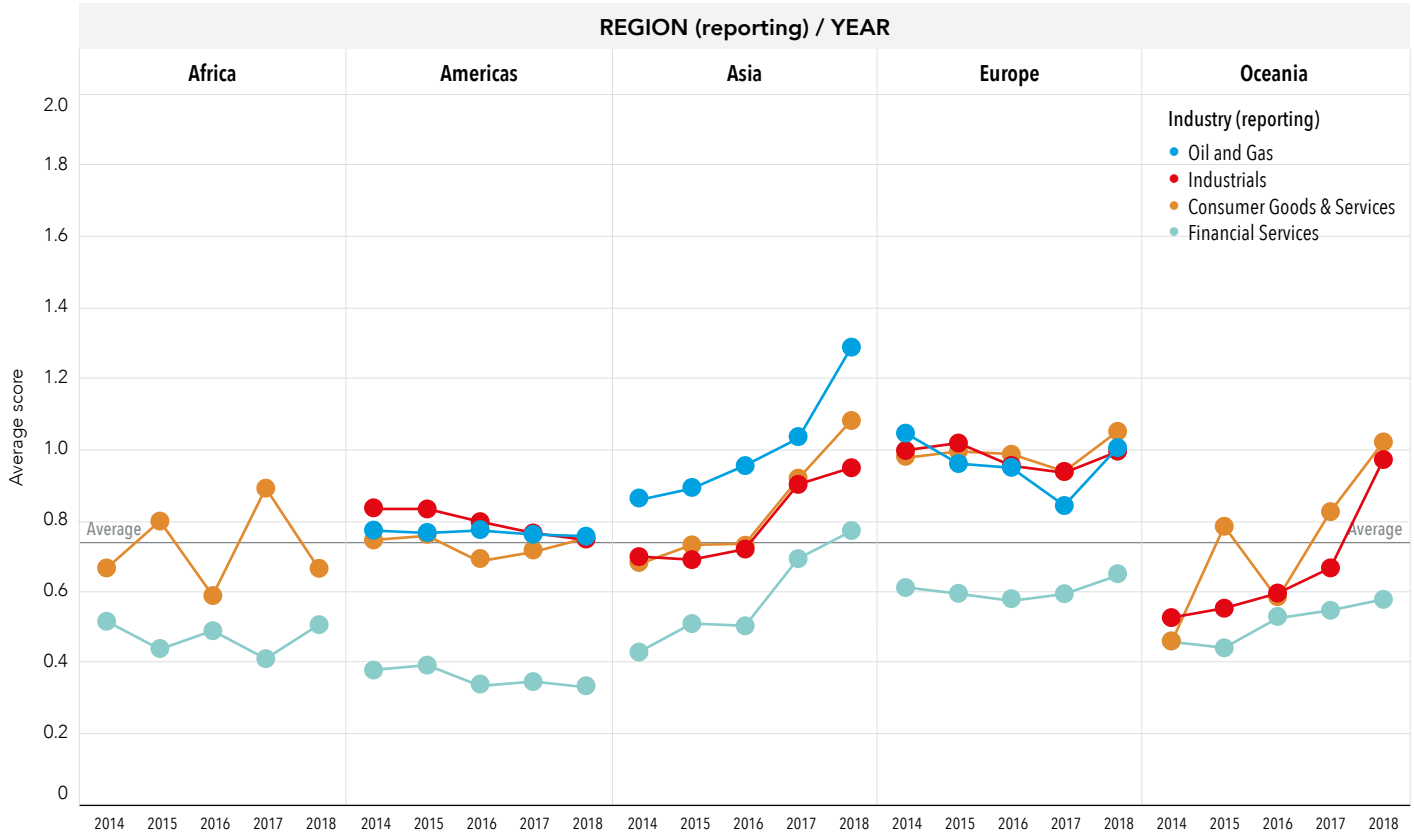


Key points

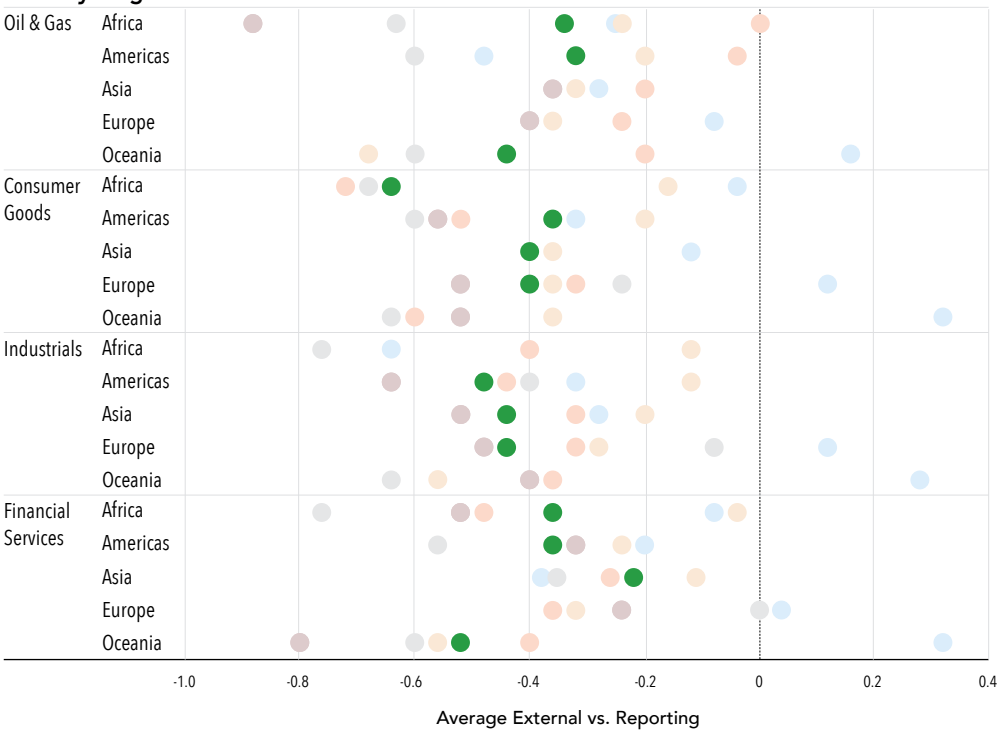
- Reporting on workplace and fairness and inclusion is also improving though still low to medium in aggregate.
- However, the Americas region, across all four sectors, falls significantly below the low global average. Oceania outperforms other regions significantly, but financial services in that region perform less well.
- Businesses in Oceania report with higher emphasis on fair and inclusive workplace criteria compared to how regulators and news outlets cover this issue.
- Globally, only two sectors in different regions, Oil and Gas in the Americas and Industrials in Africa have a lower than -0.40 score.

FIGURE 4.4: WASTE MANAGEMENT

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019

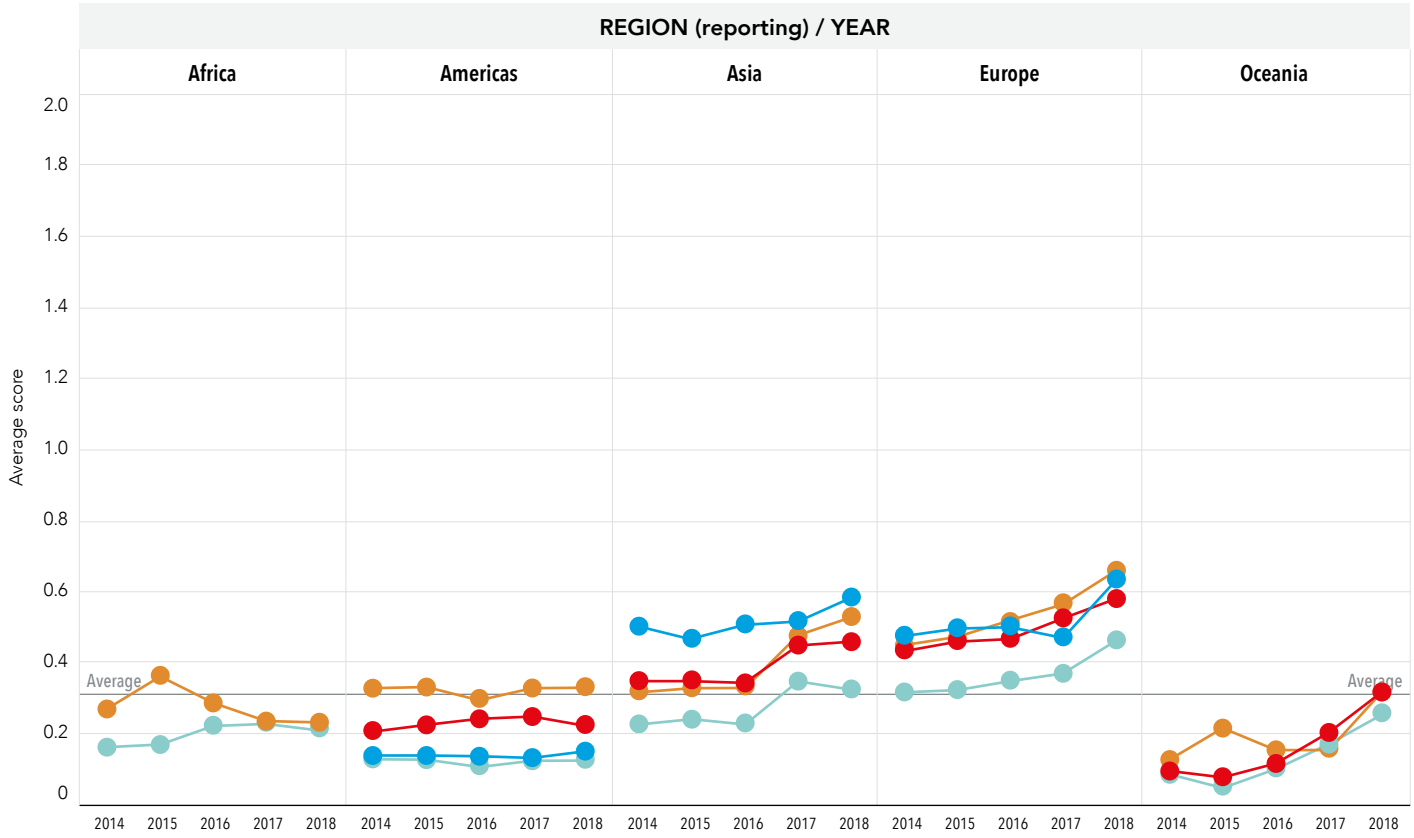


Key points

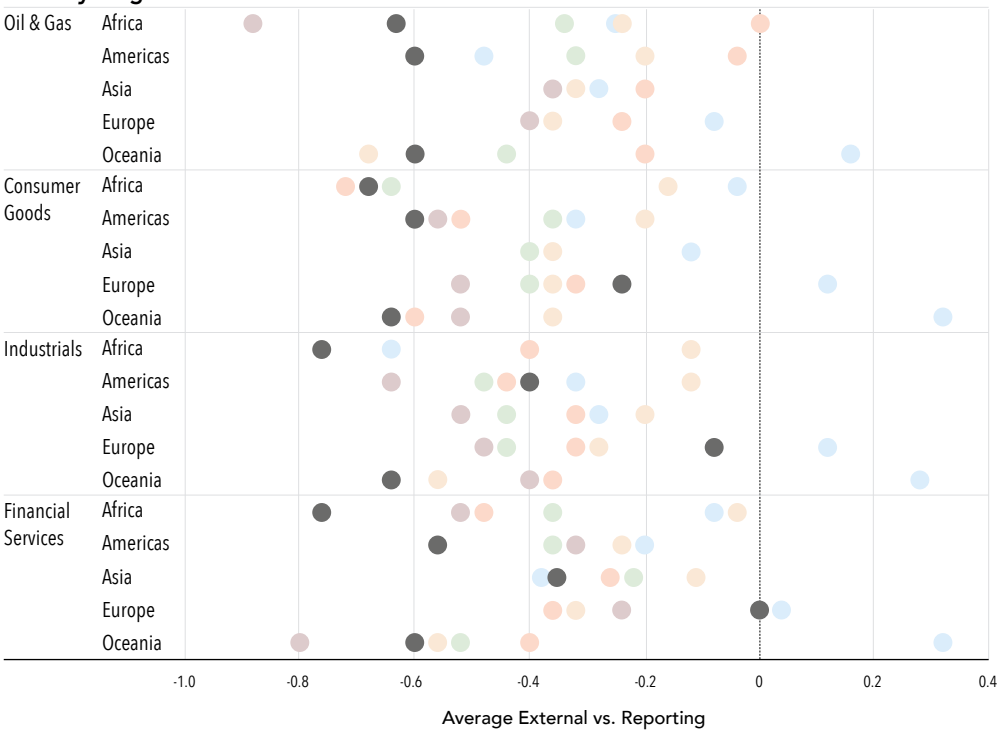
- Waste management is poorly addressed across all regions and sectors with is trending down in the Americas. Though this issue is often highly regulated, this lack of emphasis demonstrates that businesses are yet to define and explain a value proposition in relation to the topics that form part of this issue.
- Recent growth in emphasis in Asia and Oceania does reflect a push in regulatory activity in those regions. However this is not enough at this point.
- Even consumer goods and industrials, for whom this issue would be expected to be given a high and increasing emphasis score, do not score well.
- Globally, no sector in any region's level of corporate reporting met the importance placed on waste management by regulations, voluntary initiatives and news mentions.

FIGURE 4.5: HUMAN RIGHTS

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019

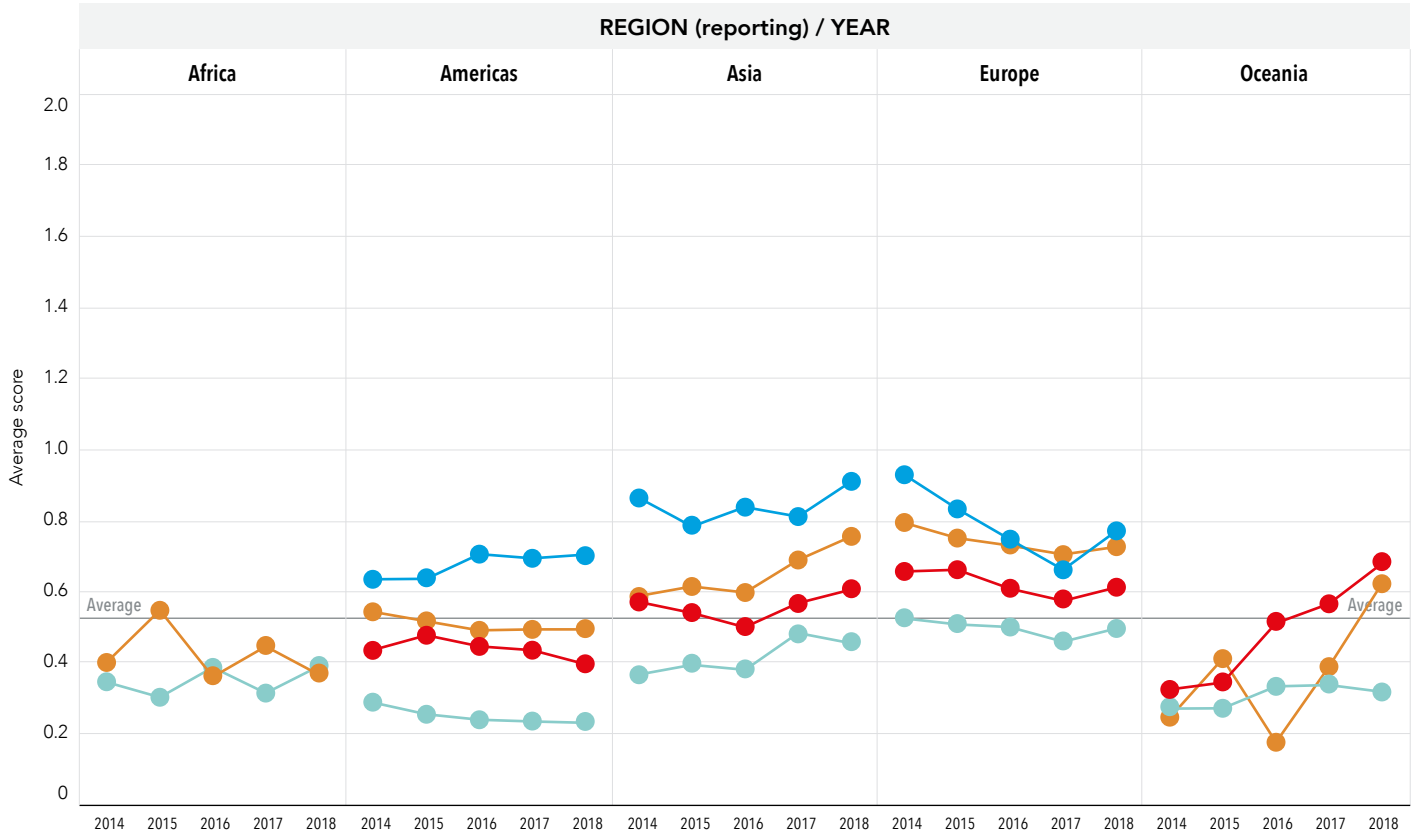


Key points

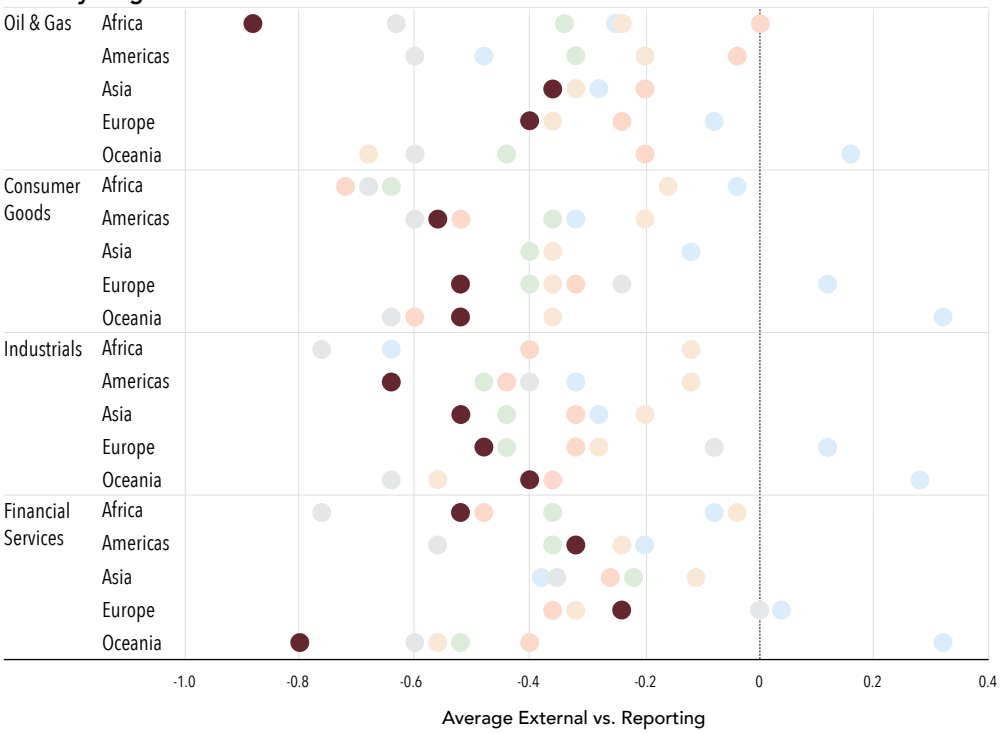
- There is a very low emphasis placed on human rights disclosures in all regions, though Europe and Asia outperform other regions. Recent growth in Europe and connected to Asia via value and supply chain reporting may be attributable to the UK's 2015 Modern Slavery Act.
- This recent improvement is visible in financial services reporting in Europe which meets regulatory and news demands for disclosures.
- Outside of this positive development, the very weak disclosures across almost all sectors and regions, relative to it's important for regulation and news demonstrates a lack of awareness of this issue to businesses and a entrenched lack of commitment from the private sector to engagement.

FIGURE 4.6: NATURAL CAPITAL

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019

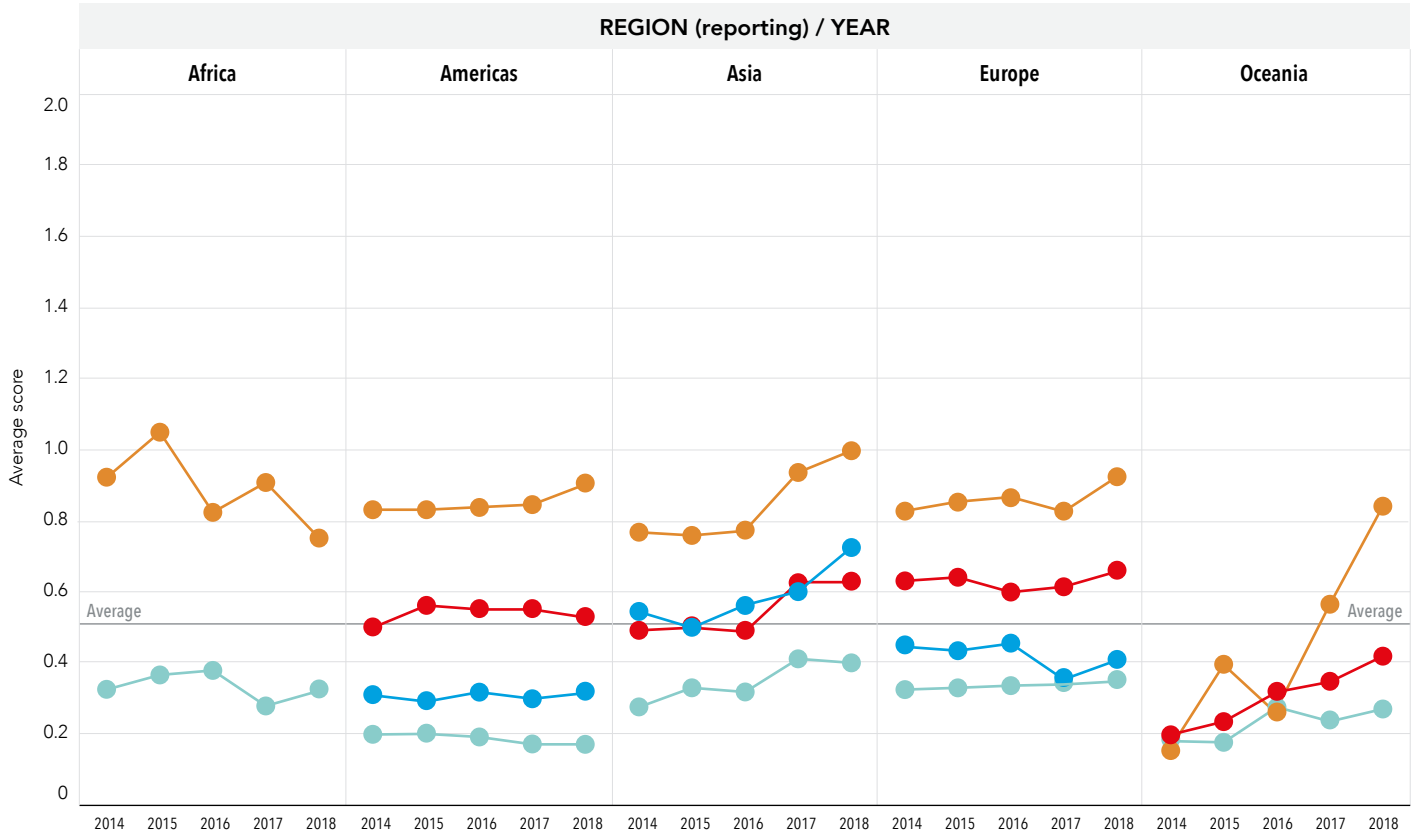


Key points

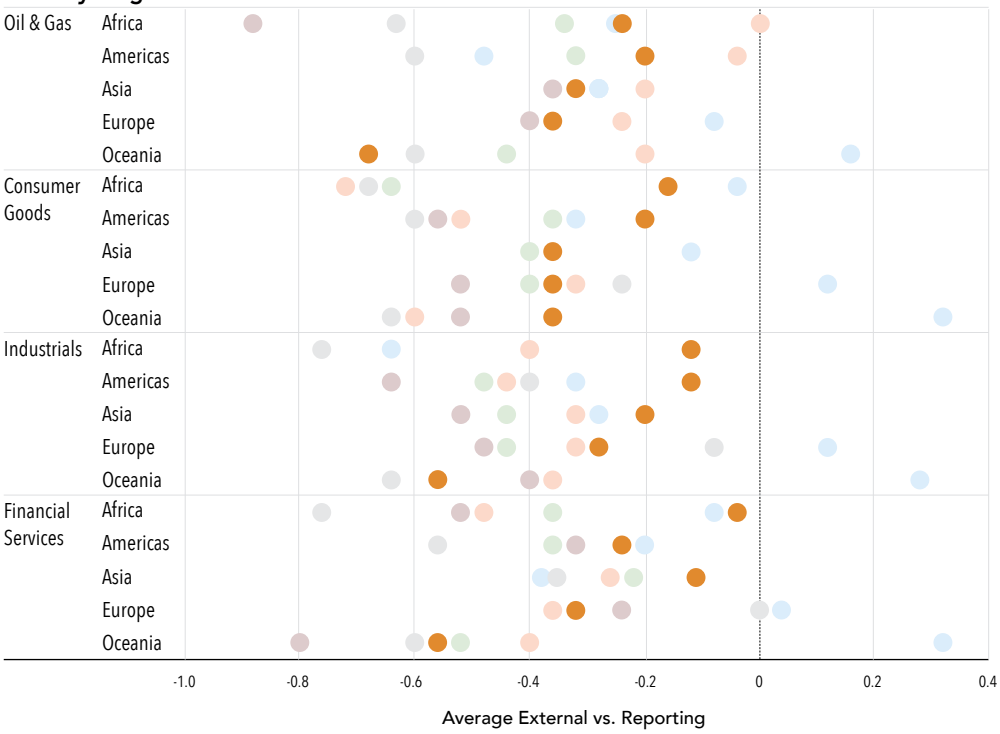
- Though Asia matches Europe in terms of emphasis assigned to natural capital, the issue is given a very low emphasis by all business and sectors. While financial services disclose the least on natural capital – to be expected as their immediate business model is not directly related to natural capital use compared to, for example, oil a gas, the financial impact of natural capital issues can be significant. Hence under-prioritisation is a concern.
- The fastest growth across sectors in natural capital emphasis is in Oceania.
- Globally, no sector in any region's level of corporate reporting met above -0.20 for importance placed on natural capital in contrast with regulations, voluntary initiatives and news mentions.

FIGURE 4.7: PRODUCT RESPONSIBILITY

Emphasis score



Regulations + voluntary initiatives + news vs. company reporting in 2019



Key points

- The emphasis of reporting on product responsibility is very low.
- It is improving for consumer goods and services in all regions except for Africa where it is declining.
- Globally, no sector in any region's level of corporate reporting met the importance placed on product responsibility by regulations, voluntary initiatives and news mentions.

5. Big issues to concrete actions

How to move from one era, where the foundations of wider corporate reporting were laid and a significant but incremental change in corporate behaviour is taking place, to one that sets free an emergent phase, that meets worsening risks, that responds to major issues like extinction threats, and that truly creates a means for investing in innovation and improving returns to society in new sectors.

This new era will require the strategic planning efforts of organisations and the coordination of multiple teams, including finance, and more robust, accountable action from boards and senior management.

Large scale and complex problems such as climate change, plastics, waste and pollution, species extinction, biodiversity loss and worsening inequality will require a strategic rethink. Concrete actions using multi-stakeholder-developed tools and frameworks can be taken by companies and their finance teams to engage with these issues.

These processes are essential first steps for businesses to take. For many businesses already engaging with sustainability issues, these may form part of a structured plan, while others may be taking their first steps. Regardless of the starting point, these five areas allow businesses to create real social and environmental value. Finance teams can play a pivotal role in contributing to strategic transformation by providing a robust supporting business case for change.

Building on the foundations of sustainability strategy and reporting that have come before them, these five areas are strong drivers of further prosperity creation that is decoupled from environmental degradation and recoupled to societal inclusion. They can act as new platforms from which to embark on even more purposeful social and environmental value creation missions. As noted in ACCA's research exploring business models of the future: 'financial acumen, technical knowledge and ethical judgment are attributes that the accountancy profession can uniquely bring to support business model innovation across the three spheres of value proposition, value creation and value capture (ACCA, 2018). Combining these qualities with the activation of emerging decison-making tools and frameworks has the potential to make an enduring contribution.

Alongside reporting on a set of criteria that are closely aligned to other reporting frameworks, such as the <IR> Framework, the TCFD recommendations also ask companies to prepare 2°C scenarios for their business.

1. CLIMATE RISK AND THE TCFD

The Taskforce for Climate-related Financial Disclosures (TCFD) recommendations set out a new way to approach corporate reporting on climate risk that responds to the current crises and demands in a new way that dramatically improves existing non-financial reporting. It has a number of differences from reporting frameworks, the main three being as follows:

- The focus is not on how a company contributes to climate change and the environment but rather on how climate change risks affect that company.
- Reporting must be incorporated into existing financial reporting – as a minimum in the annual report, but more frequent reporting is recommended.
- The recommendations are strongly forward-looking, involving scenarios, risk evaluations and stress tests, which the TCFD wishes to have incorporated in the current risk statements. The purpose of this information is for the financial community to gain insights into how climate-related risks and opportunities will affect the company's future cash flow, assets and liabilities (see Figure 5.1).

This information is crucial in enabling the financial sector to evaluate the risk profiles of companies and then to make efficient capital allocations. Another key distinguishing feature of the TCFD's framework is that in addition to demanding regular disclosures from large businesses, it also covers investors' disclosure demands.

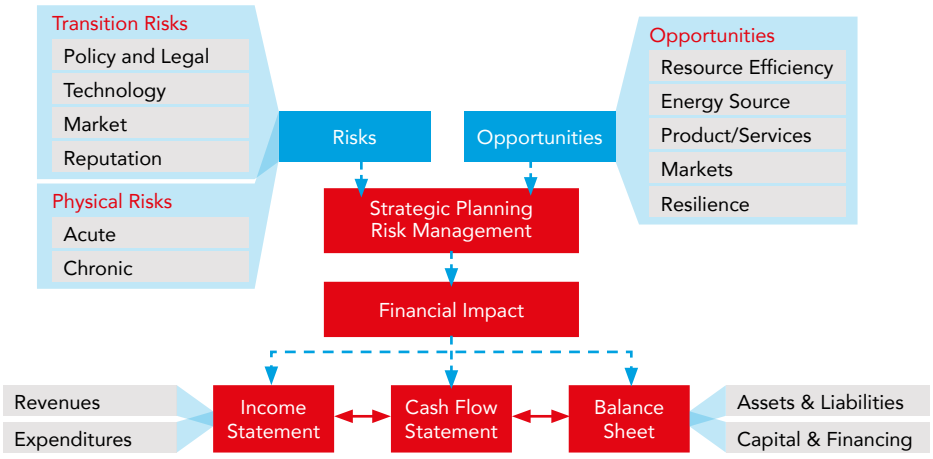
Alongside reporting on a set of criteria that are closely aligned to other reporting frameworks, such as the <IR> Framework, the TCFD recommendations also ask companies to prepare 2°C scenarios for their business. This is to report on a scenario in which the world average temperature increases by a 2°C.

Risks to be factored in include direct physical and environmental impacts on a company. For example, rising water levels could flood a factory, or operating facility or wildfires could destroy a food producer's crops. But other risks arise from new laws and taxes. For instance, suppose a fleet of trucks, running on diesel, are banned from city centres – or owners of an existing shipping fleet, running on petrol, are charged extra taxes in order to approach certain harbours. Rising sea levels could make property values slide or shifting rainfall patterns could alter harvest outputs. But other risks relate to regulation and taxation. Cars or a certain engine type could be fined or banned, levies could be added to unhealthy foods. How do such issues affect the market value of such assets and the profitability of a business as a whole (ACCA, 2017)?

But at the same time, new products and services could open up markets and meet shifting customer preferences. More resource-appropriate local agriculture might gain relevance or new ways of offering mobility may overtake traditional models.

These disclosures close the knowledge gap and aim to move investors out of carbon intensive businesses and sectors that are exposed to climate risk.

FIGURE 5.1: TCFD climate-related risks opportunities and financial impact



Source: TCFD (2017)

By June 2019, over 800 private and public organisations had announced their support for the TCFD including financial firms responsible for $118 trillion.

What challenges lie ahead?

By June 2019, over 800 private and public organisations had announced their support for the TCFD including financial firms responsible for $118 trillion (TCFD, 2019). TCFD disclosures are growing but the quality of this information is still below what is required by investors and analysis has revealed a gap in reporting on resilience of strategies to climate-related risk (TCFD, 2019). In order to mainstream TCFD into business processes, the involvement of finance teams is essential. For example, in its work on TCFD disclosures, Unilever has explored the P&L impact of a 2°C degree and 4°C degree warming scenario (see Figure 5.2).

2. CIRCULAR BUSINESS MODEL INNOVATION

What is a circular business model? What if you could redesign everything so that waste is excluded and materials are reused?

A circular model has three core principles:

1. Waste and pollution are designed out of the business model
2. Materials used are kept in use
3. Regenerate natural system – be more like nature (Ellen Macarthur Foundation, 2015).

Three `dynamic capabilities' have been identified as being key to how organisations unlock new sources of value through business model innovation.

They are the capacity to:

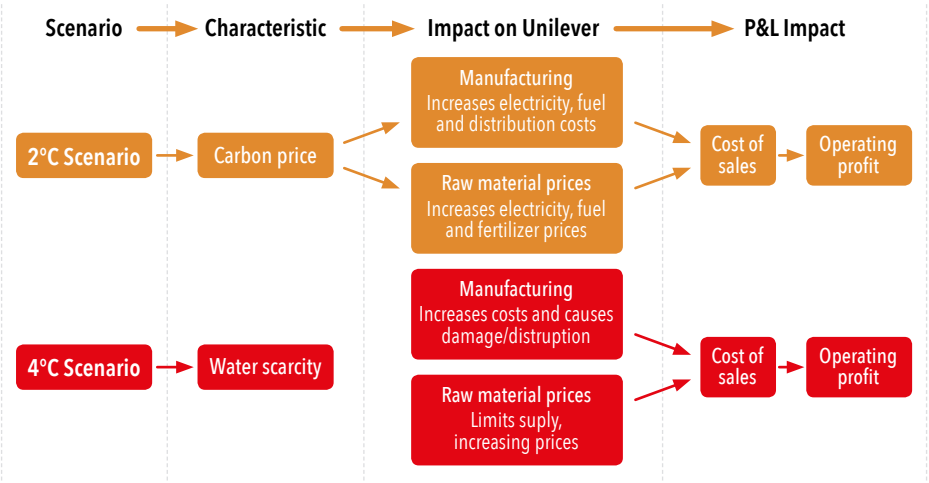
1. Sense and shape opportunities and threats
2. Seize opportunities, and
3. Maintain competitiveness through enhancing, combining, protecting, and, when necessary, reconfiguring the business enterprise's intangible and tangible assets (Teece).

Combined, circular principles augment the potential of the dynamic capabilities to create social and environmental value.

Circular business models move business from a linear process to one that is more like a closed loop.

But circular business models go beyond materials innovation to include a rethinking of how a customer interacts with a product or service. A number of trends are driving this forward. According to Sitra, `technology, customer-centricity and sustainability are the key drivers that support companies to become circular and increase their competitiveness' (Arponen, 2019).

FIGURE 5.2: Unilever Scenario Impact Flow



Source: A4S (2019)

While there are many environmental efficiencies that may, over time, reduce costs, and improve regulatory and reputational risk issues, there are funding requirements and financial implications that vary depending on issue being approached.

This could be a move, for example, from ownership to access or, from purchasing to leasing. Product-based businesses that can transform what they do into a service-based business can create less waste, becoming more efficient and more appropriate for their customers. For example, instead of buying light bulbs, customers can pay for lighting-as-a-service (LaaS). This approach has been taken by Philips Lighting. Philips Lighting installs, manages and maintains the lighting, removing the need for further hardware investment from customers (Philips).

Circular that turns inefficiencies in linear value chains into business value also requires a financial rethink.

For though environmental efficiencies have the potential to reduce costs, and improve regulatory and reputational risk issues, there are funding requirements and financial implications that vary depending on the issue being approached (see Figure 5.3).

For example, changing production and returns processes that improve issues such as circularity of supply chains, extension of product life or aid recovery, repair and recycling initiatives may have operational expenditure, revenue and cashflow implications. Offering services to customers, instead of a product may involve extending balance sheets in order to pre-finance services that were once paid for when customers bought products. In addition, assets may have limited value as collateral.

Finally, transformation into platform-based businesses, either to build a more p-2-p type models or to make use of platform-based matching opportunities requires a significant digital transformation and a reconfiguration of how value is created and captured and what metrics are being used to report this (Sitra, 2018).

3. NATURAL CAPITAL: DECISION-MAKING AND DISCLOSURE

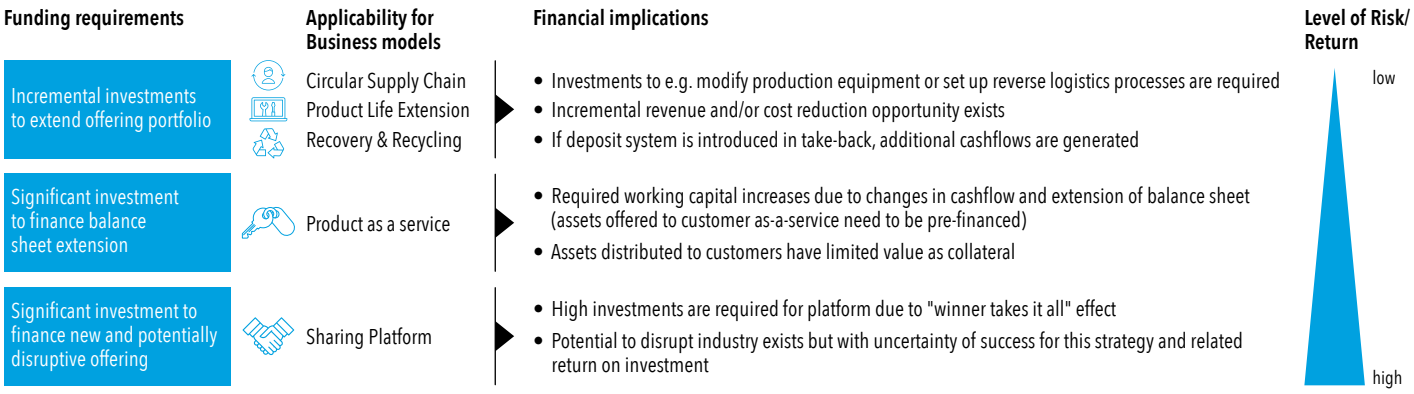
Natural capital refers to the stock of natural resources from which people can derive benefits. As the natural world deteriorates at pace, what role can business play in protecting species, supporting the natural world and the life giving systems and cultural activities that it supports?

Furthermore, outside of the responsibility of business to regenerative and restorative use of natural capital, it is important to understand business dependencies on nature. These have been identified by the Business for Nature Coalition and include:

- The resources they use such as food, fibre, minerals and building material
- Securing a steady flow of ecosystem services, such as pollination of crops, water filtration, waste decomposition, carbon sequestration and climate regulation worth around $125 trillion dollars annually
- Healthy and prosperous societies in which to operate.

FIGURE 5.3: Funding and financial implications of circular models

Circular business models have three funding requirements that vary in level of risk and return



Source: Circularplaybook.fi
https://www.sitra.fi/en/blogs/nordic_industrial_companies_can_be_winners

The Natural Capital Protocol allows businesses to measure, value and integrate natural capital impacts and dependencies into existing business processes such as risk mitigation, sourcing, supply chain management and product design.

Hence these risks include risks to operations; supply chain continuity, predictability and resilience; liability risks; and regulatory, reputational, market and financial risks (Business for Nature, 2019).

There are a number of tools and frameworks that businesses can use for accounting for their natural capital use. Two specific examples include:

1. The Natural Capital Protocol – a decision-making tool (internal).
2. The CDSB Framework – an (external) reporting tool.

The Natural Capital Protocol allows businesses to measure, value and integrate natural capital impacts and dependencies into existing business processes such as risk mitigation, sourcing, supply chain management and product design (see Figure 5.4).

It is focused at a business decision-making level and helps organisations to understand the value of their dependence on ecosystem flows, rather than the value of natural capital stocks (Natural Capital Coalition, 2017).

The CDSB Framework

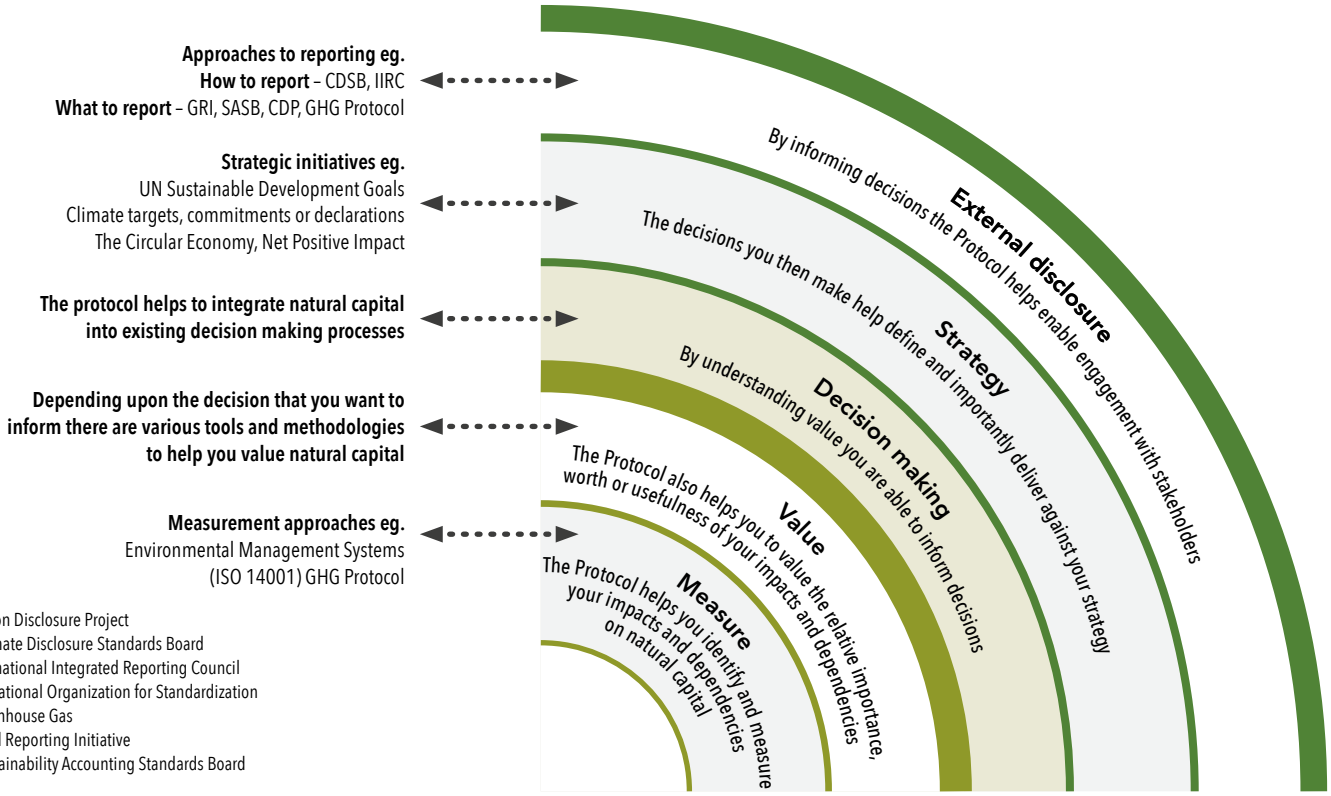
The CDSB Framework sets out an approach for reporting environmental, climate and natural information in mainstream reports, such as annual reports, 10-K filing, or integrated reports. It allows investors to assess the relationship between specific environmental matters and the organisation's strategy, performance and prospects (CDSB).

4. SOCIAL IMPACT AND THE SDGS

For business, understanding how to monitor, evaluate and report on the social impact it creates through the outcomes it is achieving remains challenging. These impacts are an important signal for financial markets and the growing interest of investors in impact.

To move from management of social and environmental risks to providing a place for investment that is looking for returns with a high societal impact is essential if economic transformation is going to happen fast enough.

FIGURE 5.4: Natural Capital Protocol landscape



CDP – Carbon Disclosure Project
CDSB – Climate Disclosure Standards Board
IIRC – International Integrated Reporting Council
ISO – International Organization for Standardization
GHG – Greenhouse Gas
GRI – Global Reporting Initiative
SASB – Sustainability Accounting Standards Board

Source: The Natural Capital Protocol, https://naturalcapitalcoalition.org/natural-capital-protocol/ This landscape is not exhaustive. The Natural Capital Coalition will continue to explore the landscape as it evolves.

Understanding the information needs of different types of capital can accelerate the flows to different areas of social impact.

There are a number of tools and frameworks for helping business to better understand what their impact looks like. The Impact Management Project, a multi-stakeholder coalition has identified five dimensions of impact for businesses to consider (see Figure 5.5).

Other impact and context-based approaches are also being developed and aligned with each other. The SDGs are being used as a management tool to better understand business impacts that are context specific and linked to Goals. Using tools such as the SDG Compass and the UNGC Indicator Guide, businesses can map their value chains to the SDGs and address relevant indicators (ACCA, 2017). Improving credibility of reporting is essential in this emerging domain. A recent paper that examines improving business SDG disclosures explores this issue. Among its proposals, it recommends a range of sources of information that can provide an alternative to, often costly, external assurance. This information, related to four disclosure areas of management approach, strategy, governance and performance and metrics, can provide a quality guide for users of the information.

They include, presentations to investors, terms of reference for board members, examinations of internal controls and interviews with internal auditor (Adams, Picot, Druckman, 2019). This inclusive, transparent and cost-effective approach to better disclosure and assurance of SDG-related information is a useful step forward in business approaches to context-based impact reporting. It is likely that better use of new technologies will also provide large amounts of unstructured data to fill impact disclosure gaps. Verification and communication of the relevance of this information will become increasingly important.

Alongside this better reporting of impact is a recognition of the different types of capital that can be allocated towards achieving social impact (see Figure 5.6). Understanding the information needs of different types of capital can accelerate the flows to different areas of social impact.

Linking the SDGs with multidimensional characteristics of impact, a more inclusive and context-based approach to SDG disclosures and an understanding of the spectrum of capital can help build a culture of impact-driven activity by business.

FIGURE 5.5: Impact dimensions and impact questions

IMPACT DIMENSION	IMPACT QUESTIONS EACH DIMENSION SEEKS TO ANSWER
WHAT	• What outcome(s) do business activites drive? • How important are these outcomes to the people (or planet) experiencing them?
WHO	• Who experiences what outcome? • How underserved are the affected stakeholders in relation to the outcome?
HOW MUCH	• How much of the outcome occurs – across scale, depth and duration?
CONTRIBUTION	• What is the enterprise's contribution to the outcome, accounting for what would have happened anyway?
RISK	• What is the risk to people and planet that impact does not occur as expected?

Source: Impact Management Project, https://impactmanagementproject.com/impact-management/how-enterprises-manage-impact/

Understanding the information needs of different types of capital can accelerate the flows to different areas of social impact.

5. PURPOSE–LED STRATEGIES

Purpose-led strategies provide a way for ethics to come to the fore and for mission-led businesses to embed their values into business performance.

A 2019 statement by the US-based Business Roundtable demonstrates how purpose is now a defining issue for mainstream business strategy. 'Each of our stakeholders is essential. We commit to deliver value to all of them, for the future success of our companies, our communities and our country (Business Roundtable, 2019)'. This follows a wide range of commitments to purpose and long-term value creation by business and investor communities in recent years.

Outside of reputation advantages, for example, employer and customer branding propositions and competitive positioning, purpose-led strategies can act as a 'north star' for ethical conduct across business units, supply and value chains.

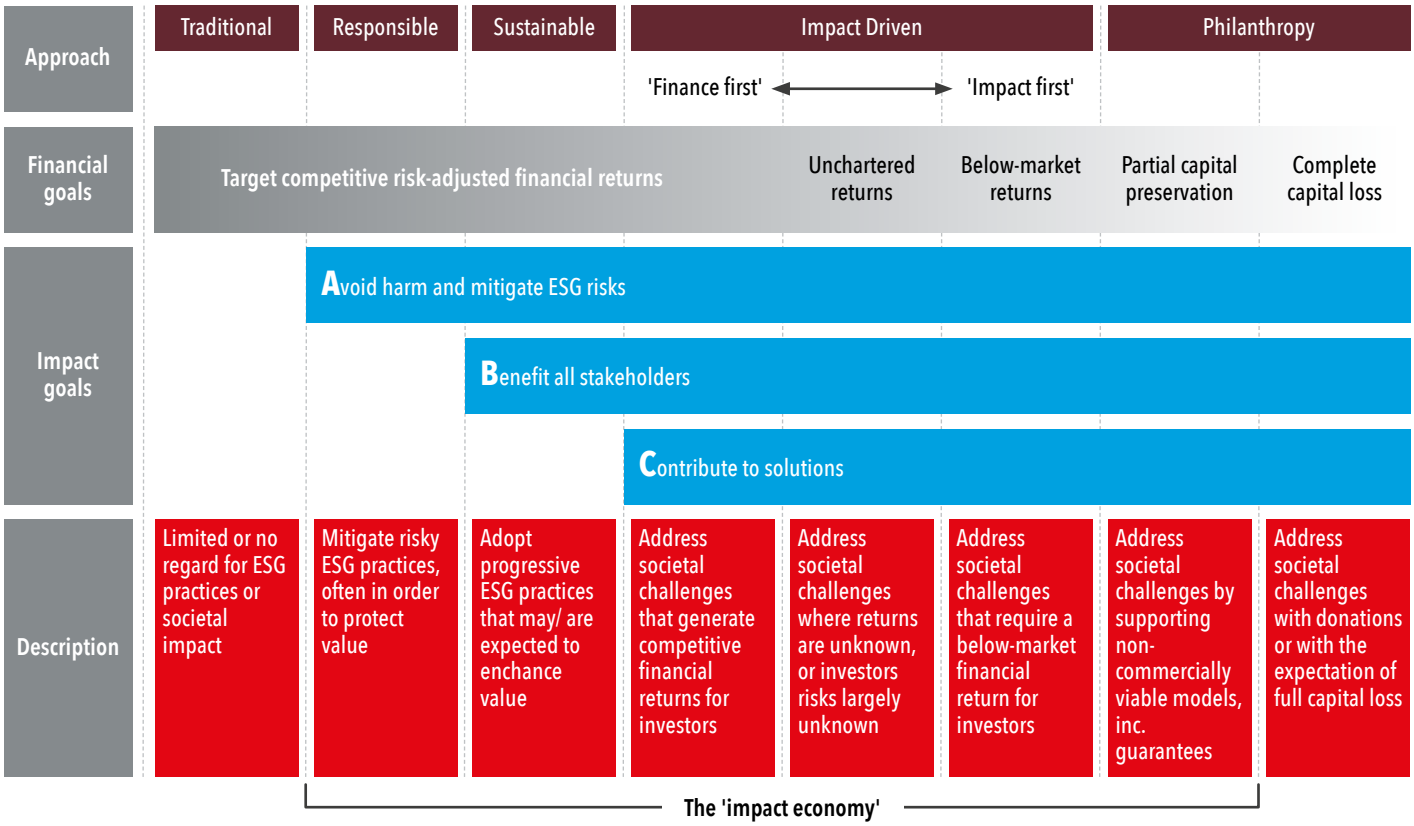
A key benefit of defining and embedding purpose into business is that it can support longer-term over short-term decision-making. In practice, this can reduce the preference for near-term financially motivated choices that destroy long-term value creation.

Research exploring corporate purpose has quantified its value to financial performance. It has found that businesses where purpose is clearly defined, and led by senior management with the genuine buy-in of middle management, financially outperformed their peers by 5-7% (Serafeim, Gartenburg 2016).

In some countries, different legal forms allow for the adoption of purpose to be formally recognised in articles of association. For example, social enterprises in the UK are distinct legal forms where social purpose is legally enshrined as equally important as financial returns (ACCA, 2018a).

Other initiatives, such as the Benefit Corporation (BCorp) certification, allow businesses to be associated with a set of principles that, dependant on a range of social, environmental and performance metrics being satisfied, permit purpose to be recognised as materially important to success.

FIGURE 5.6: The Spectrum of capital and the impact economy



Source: Bridges Impact+ and the Impact Management Project

Recommendations for building the future

The global economy is entering a new era where social and environmental issues are strategic to all activities undertaken by business. The level of engagement with these issues by business and finance will determine the quality of life for people and other species.

Regulators can play a role in monitoring risk and demanding higher standards. Meanwhile investors are also fundamental to accelerating the transition to a more sustainable future. But to what extent can these issues be meaningfully resolved in a way that is commensurate with the scale of the task at hand?

This report has set out that the challenges are immense, complex and urgent. But it has also shown how value creation can be realised with the use of existing tools and processes that build on established foundations. They require a shift in values and mindsets by business and a new set of skills for finance teams.

And, if supported with a better institutional infrastructure, it is likely that managing to exist with the changes to the planet caused by climate change and providing socially just and sustainable livelihoods to current and future generations will be within reach. Four interconnected recommendations for professional accountants and finance teams are:

- To build better scientific literacy for business, particularly around climate risk and environmental issues and how they relate to value creation. Investment in these skills for finance professionals has become an absolute must.
- To engage with context, precision, resources and resolve to understand and disclose impact. Ultimately it will be the understanding and disclosure of societal impact that will radically shift capital and business ecosystems into social and environmental value creation opportunities.
- Better collaboration. Softer skills that complement new technical competencies, along with an ability to work in networked, cross-functional teams will matter more and more. Working in multidisciplinary alliances will become more commonplace. Having the emotional intelligence skills to create value with and through alliances of different groups will be a core future skill.
- Recognition of the interconnectedness of social and environmental value – a socially just transition to a low carbon economy is the vital component. This will require moral companies with societal purpose and a propensity for reciprocity. High quality livelihoods for all must be the goal – this will require empathy, fairness and compassion from business.

References

A4S (2019), *Accounting for Sustainability: Implementing the TCFD Recommendations*, <https://www.accountingforsustainability.org/content/dam/a4s/corporate/home/KnowledgeHub/Guide-pdf/Unilever%20TCFD%20Implementation%20Practical%20Example.pdf.downloadasset.pdf>, accessed 19 September 2019.

ACCA (2016), *Mapping the Sustainability Reporting landscape: Lost in the Right Direction*, <https://www.accaglobal.com/content/dam/ACCA_Global/Technical/sus/ACCA_CDSB%20Mapping%20the%20sustainability%20landscape_Lost%20in%20the%20right%20direction.pdf>, accessed 19 September 2019.

ACCA (2018a), *Business forms: A brief guide to starting up*, <https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/business-forms/pi-business-forms-UK.pdf>, accessed 19 September 2019.

ACCA (2017), *The Sustainable Development Goals: Redefining Context, Risk and Opportunity*, <https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/The-sustainable-development-goals/pi-sdgs-accountancy-profession.pdf>, accessed 19 September 2019.

ACCA (2018), *Business Models of the Future: Systems, Convergence and Characteristics*, <https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/Business-models-2/pi-business-models-future.pdf>, accessed 19 September 2019.

Adams, Picot, Druckman (2019), *Recommendations for SDGs Disclosures*, <https://www.accaglobal.com/content/dam/ACCA_Global/professional-insights/SDGs-Africa/Recommendations%20for%20SDG%20Disclosures.pdf>, accessed 19 September 2019.

Amel-Zadeh, A. and Serafeim, G. (2017), 'Why and How Investors Use ESG Information: Evidence from a Global Survey', *Financial Analysts Journal* 74 (3).

Arponen (2019), *Nordic Industrial Companies Can Be The Winners In The New Era of Sustainable Business*, <https://www.sitra.fi/en/blogs/nordic_industrial_companies_can_be_winners/>, accessed 19 September 2019.

Bank of America (2018), '2018 US Trust Insights on Wealth and Worth' [website article] <https://www.privatebank.bankofamerica.com/articles/insights-on-wealth-and-worth-2018.html>, accessed 19 September 2019.

Business for Nature (n.d.), <https://www.businessfornature.org/businesscase>, accessed 19 September 2019.

Business Roundtable (2019), *Statement on the Purpose of a Corporation*, <https://opportunity.businessroundtable.org/wp-content/uploads/2019/09/BRT-Statement-on-the-Purpose-of-a-Corporation-with-Signatures-1.pdf>, accessed 19 September 2019.

CDSB, *Communicating your business' relationship with nature to investors*, <https://www.cdsb.net/sites/default/files/ncdp-cdsb.pdf>, accessed 19 September 2019.

CFA Institute (2017), *Future State of the Investment Profession*, <https://www.cfainstitute.org/-/media/documents/survey/future-state-of-investment-profession.ashx>, accessed 19 September 2019.

CFA Institute and PRI (2019), *ESG Integration in Europe, the Middle East, and Africa: Markets, Practices, and Data*, <https://www.cfainstitute.org/-/media/documents/survey/esg-integration-in-emea.ashx> accessed 19 September 2019.

FRC (2019), *FRC statement on the Government's Green Finance Strategy*, <https://www.frc.org.uk/news/july-2019/frc-statement-on-the-government%E2%80%99s-green-finance-st>, accessed 19 September 2019.

IIRC (2013), *Value Creation Background Paper* <http://integratedreporting.org/wp-content/uploads/2013/08/Background-Paper-Value-Creation.pdf>, accessed 19 September 2019.

ILO (2017), *ILO Labour Force Estimates and Projections: 1990-2030*, <https://www.ilo.org/ilostat-files/Documents/LFEP.pdf>, accessed 21 July 2018.

IIRC (2013), *The International <IR> Framework*, <http://integratedreporting.org/wp-content/uploads/2013/12/13-12-08-THE-INTERNATIONAL-IR-FRAMEWORK-2-1.pdf>, accessed 19 September 2019.

IPBES (2019), *IPBES Summary for policymakers*, <https://www.ipbes.net/sites/default/files/downloads/spm_unedited_advance_for_posting_htn.pdf>, accessed 19 September 2019.

IPCC (2018), *Special Report, Global Warming of 1.5 Degrees, Summary for Policymakers*, <https://www.ipcc.ch/sr15/chapter/spm/>, accessed 19 September 2019.

Mohaddes (2019), *Climate change to shrink economies of rich, poor, hot and cold countries alike unless Paris Agreement holds*, <https://www.cam.ac.uk/research/news/climate-change-to-shrink-economies-of-rich-poor-hot-and-cold-countries-alike-unless-paris-agreement>, accessed 19 September.2019.

Natural Capital Coalition (2016), *The path Towards a Natural Capital Protocol, A Primer for Business*, <https://naturalcapitalcoalition.org/wp-content/uploads/2016/07/NCC_Primer_WEB_2016-07-08.pdf>, accessed 19 September 2019.

Raworth, K., *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist* (Random House, London, 2017).

Serafeim, Gartenberg (2016), *The Type of Purpose That makes Companies More Profitable*, <https://hbr.org/2016/10/the-type-of-purpose-that-makes-companies-more-profitable>, accessed September 2019.

Sitra (2018), *Circular economy business models for the manufacturing industry*, <https://www.sitra.fi/en/publications/circular-economy-business-models-manufacturing-industry/>, accessed 19 September 2019.

Social Progress Imperative (2018), *2018 Social Progress Index Executive Summary*, <https://www.socialprogress.org/assets/downloads/resources/2018/2018-Social-Progress-Index-Exec-Summary.pdf>, accessed 19 September 2019.

Steffen et al. 2015. Planetary Boundaries: Guiding human development on a changing planet. *Science* Vol. 347 no. 6223

TCFD (2019), *TCFD 2019 Status report*, <https://www.fsb-tcfd.org/wp-content/uploads/2019/06/2019-TCFD-Status-Report-FINAL-053119.pdf>, accessed September 2019.

TCFD (2017), *Final Report: Recommendations of the Task Force on Climate-related Financial Disclosures*, <https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf>, accessed 19 September 2019.

Teece (n.d.), *Dynamic Capabilities*, <https://www.davidjteece.com/dynamic-capabilities>, accessed 19 September 2019.

UN (2018), *The State of Plastics: World Environment Day Outlook 2018*, <https://wedocs.unep.org/bitstream/handle/20.500.11822/25513/state_plastics_WED.pdf?isAllowed=y&sequence=1>, accessed 19 September 2019.

WHO (2018), *Noncommunicable diseases country profiles 2018*, <https://www.who.int/nmh/publications/ncd-profiles-2018/en/>, accessed 19 September 2019.

WID.world (2017), *World Inequality report 2018* <https://wir2018.wid.world/files/download/wir2018-full-report-english.pdf>, accessed 19 September 2019.

World Benchmarking Alliance (2019), *Measuring what matters most: Seven systems transformations for benchmarking companies on the SDGs*, <https://www.worldbenchmarkingalliance.org/wp-content/uploads/2019/07/WBA-sevensystemstransformations-report.pdf>, accessed 19 September 2019.

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