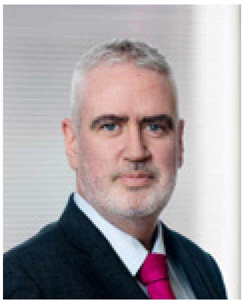
KPMG

The Business Case for Climate Action

KPMG
Sustainable
Futures

Introduction



Mike Hayes
Global Head of Renewables

Historically in times of global crisis, all parts of society have joined together to pursue a common purpose to achieve success. We should see the climate catastrophe as no different to any other global crisis that has occurred historically. At the 2020 World Economic Forum Annual General Meeting at Davos, climate change was by far the most important issue discussed, with a real sense of alarm that the world is quickly running out of time. While much of the focus was around the role of Governments and the wider public sector taking the requisite policy actions to fight climate change, it is clear that the private sector has an equally important role to play. In fact, the great challenge of our times is to find a way of effectively aligning the public and private sectors to take the critical actions and to put aside existing separate approaches and objectives. Otherwise we will not succeed in averting this crisis.

There are a number of key areas where the private sector has a vital role in the transition to a net zero carbon society:

- Investors, business owners and employees need to become fully informed and understand the potential impact of climate risk for their businesses, as there will be winners and losers during this transition. Quantification of the financial risks is becoming an incredibly important consideration as it is almost certain that these risks will have to be reflected in financial statements in the future.
- New innovative financial solutions are being developed to mobilise capital to invest in some of the critical frontier areas including cleantech innovation, sustainable energy for developing countries and to help finance other emerging sustainable investment opportunities. Many of these solutions involve aligning public and private capital through the use of blended finance and other structured solutions in order to de-risk the investment opportunity for the private sector as much as possible. In other words, through the use of appropriate financing structures, public finance can be used to leverage much greater amounts of private finance.
- Global corporations have started to decarbonise their businesses rapidly and over time, this will make a meaningful difference. Much of this is as a result of pressure from investors embracing the environmental, social and governance (ESG) agenda ,where there is now a much better understanding of the financial risks of climate change. While many investors globally are now embracing the ESG agenda to force action on climate change, many more have not yet made the connection between a sustainable investment policy and financial returns. For some it will eventually be too late. This is why initiatives such as the Task Force on Climate-related Financial Disclosure (TCFD) is so important as it helps investors understand the real risks they are facing with investee companies. The cold reality is that we are only at the beginning of a journey and all of these solutions and initiatives are only in their infancy.
- On a more positive note, many private sector players are realising that this transformation will create many new business opportunities and ultimately there will be winners and losers. Already we are seeing new business models emerging with a wide variety of new green or sustainable products and services.

Therefore, while much is expected of the private sector, the fact that climate change has been linked to financial risk will result in much more meaningful action in the years ahead.

Executive Summary

Russell Smyth
Head of Sustainable Futures

2019 was the year when climate change and sustainability moved from being marginal Corporate Social Responsibility (CSR) issues to among the most important boardroom challenges facing businesses. The next decade will see the climate change agenda fundamentally alter many aspects of society, while pressure from regulators and stakeholders will change the commercial landscape for virtually all businesses.

The evolution of this agenda is clearly presented in the recently published World Economic Forum Global Risk Report 2020 (as shown below). For the first time climate and environmental risks are listed as the top five global risk areas, edging out other significant issues such as cyber attacks and terrorism.

As business leaders contemplate their response, this paper by KPMG Ireland presents four compelling business cases, supported by evidence, which can be used by Irish businesses to support and justify action on climate and the broader sustainability agenda.

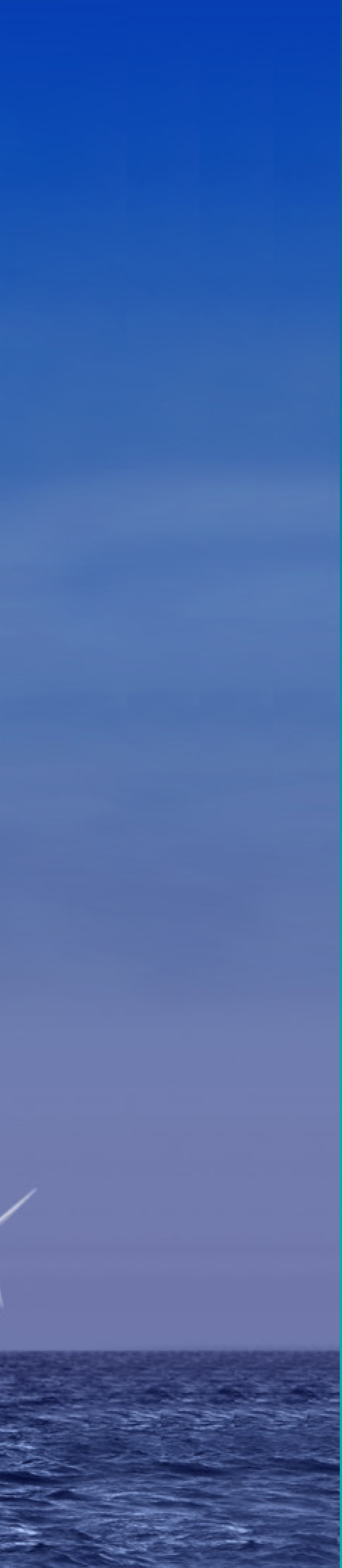
In particular we have been keen to focus on the positive opportunities decarbonisation and sustainability can bring for businesses, in contrast to the more typical risk-based narrative. From encouraging longer-term thinking, identifying market differentiation and revenue opportunities, through to attracting the right talent in an increasingly millennial-dominated workforce. The impact for individual businesses will be increasingly defined by the response they make over the formative years of this new decade.

To support our case for change, we also set out the climate policy ambitions at national and EU level which will be key drivers of change for this fast evolving topic.

WEF Global Risks Perception Survey (Top 5)

2015	2016	2017	2018	2019	2020
Interstate conflict	Involuntary migration	Extreme weather	Extreme weather	Extreme weather	Extreme weather
Extreme weather	Extreme weather	Involuntary migration	Natural disasters	Climate action failure	Climate action failure
Failure of national governance	Climate action failure	Natural disasters	Cyberattacks	Natural disasters	Natural disasters
State collapse or crisis	Interstate conflict	Terrorist attacks	Data fraud or theft	Data fraud or theft	Biodiversity loss
Unemployment	Natural castastrophes	Data fruad or theft	Climate action failure	Cyberattacks	Human-made enviommental disasters

Economic   Environmental   Geopolitical   Societal   Technological



What are the business cases for action in Ireland?

Many business leaders recognise the growing body of evidence suggesting that we have reached a tipping point for climate action, yet remain unclear on how or if they should respond, with many concerned that embracing the climate change agenda may impact profitability or create a competitive disadvantage.

However this paper argues that a sustainable transition for businesses can deliver positive results for all stakeholders, and will in fact be critical to creating long-term shareholder value. Below we present KPMG's four business cases for action on climate and sustainability and throughout the following pages we explore these cases in greater depth and with supporting evidence:

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Long-term oriented companies are more successful

One of the key concerns facing many businesses considering the climate change and sustainability agenda is implementation costs and impact on short-term profitability. Indeed research has shown that 87% of executives and directors feel pressured to demonstrate investment return within a two year timeframe.

Until now there has been limited quantitative evidence that businesses run for the long term are financially more successful than companies with short-term orientation. The short-term performance pressures that many senior executives are under has tended to be a barrier to them committing to a more long-term business approach.

Now more than ever before, the climate change and sustainability agenda is requiring business leaders, and politicians, to think beyond quarterly earnings to the longer term. As Sir David Attenborough recently noted "It is very difficult to persuade politicians that they should give money and time and attention and worry about an issue which is not going to come to a climax - and people won't know if it is successful or not for 10 to 15 years,"

In 2019 KPMG undertook a detailed analysis of companies across multiple sectors. Our research shows that companies that focus on long-term value creation in their daily business can deliver superior and more stable financial performance than their peers, both in the short and longer term. Not only this, but business strategies that emphasize decisions taken for the long term are also more effective in an economic downturn.

The average **annual revenue growth** for long-term oriented companies was 6.1% compared to 4.2% for the other companies over the 15-year period.

The average **annual earnings growth** for the long-term oriented companies was 8.5% compared to 4.6% for the others over the 15-year period.

6.1%
Long-term oriented companies

4.2%
Short-term oriented companies

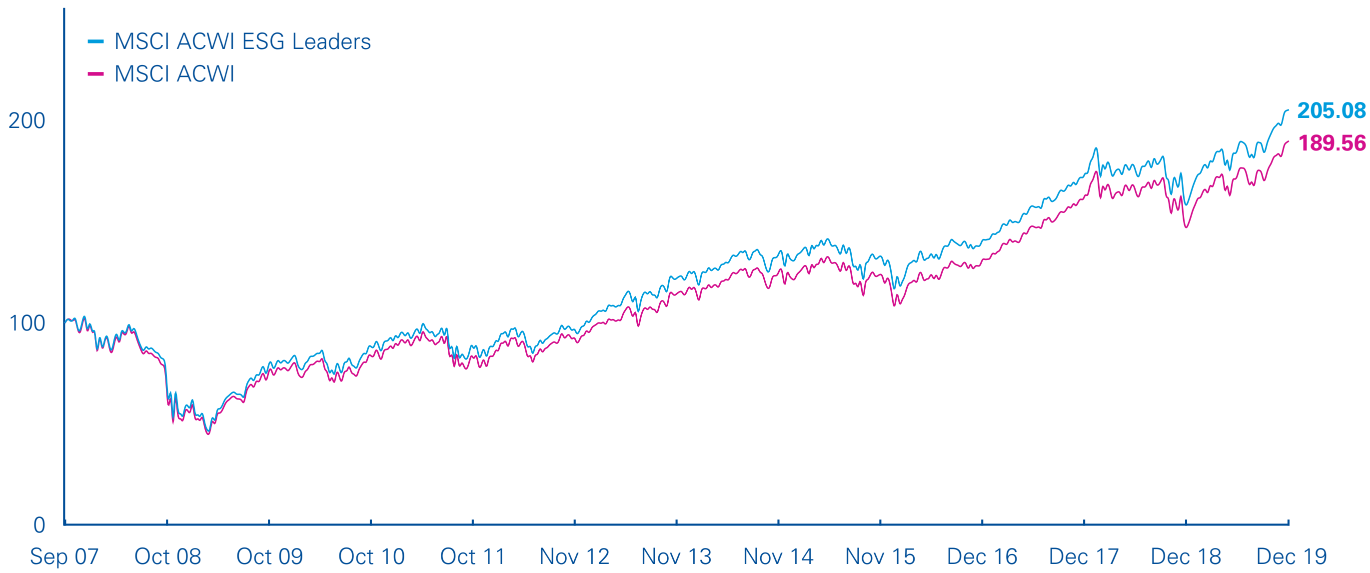
8.5%
Long-term oriented companies

4.6%
Short- term oriented companies

The dataset for this paper consisting of 335 listed mid- and large-cap companies from Germany (DAX + MDAX), the Netherlands (AEX), the United Kingdom (FTSE 350) and the United States (S&P 500), with a minimum reported average annual revenue greater than US$250m. Companies were selected based on random uniform selection across all sectors in the economy. In undertaking the analysis we identified financial indicators for long-term thinking - we hypothesised that long-term oriented companies invest more, and more consistently, in making their business models sustainable by delivering 'inclusive growth' – growth that is shared among relevant stakeholders, such as customers, employees and society. Short-term oriented companies, meanwhile, would be more inclined to reduce investments in human capital, branding, marketing and advertising if they fail or are at risk of failing to meet quarterly analyst forecasts.

Specifically, in relation to climate change and ESG, the OECD observed a growing consensus, supported by academic research, that financial markets reward good ESG performance by companies. The analysis below from rating agency MSCI shows that their ESG Leaders group perform better over the long term compared to the MSCI average.

Cumulative Index Performance - Gross Returns (USD)
Sep 2007 - Dec 2019



Drivers of enhanced performance

It is our view that there are three significant reasons why businesses with a multi-year outlook are more successful:

1. Businesses with a long term perspective are better at planning for and addressing long term risks that have more significant value impact than short term risks.
2. There is a strong correlation between environmental activity and efficient resource use.
3. Companies that build a positive reputation over a sustained period will be more appealing to customers and will find it easier to access higher quality partners.

How can companies think longer term?

To support senior executives to solve this challenge, we have identified ten critical organisational capabilities that enhance a company's capacity to blend short and long-term thinking in strategy and performance management.

There is no 'one-size-fits-all' approach to blending short and long-term thinking. Some companies may focus on building their financial (and non-financial) model around corporate responsibility or sustainability, and aligning their business and operating model accordingly. Other companies may focus on long-term shareholder value creation. No matter which approach a company takes, it is critical that the long-term perspective is integrated into the entire organisation and that all ten capabilities set out on the next page are fully aligned.

Align senior management by creating financial and non-financial ambitions that blend short- and long-term value creation

1. **Create a corporate purpose:** formulate a purpose that goes beyond the financials and shareholder value. A strong purpose should clarify for whom the company aims to create value and act as a lens through which new growth options can be identified and short-term management decisions shaped.

2. **Determine an alternative Total Shareholder Returns (TSR):** move away from the traditional definition of TSR to avoid short-term behavior and one-dimensional thinking. The underlying parameters of this traditional definition - the company's stock price and free cash flow - only reflect one part of business performance. A wider perspective is needed. To become long-term oriented, the company needs to create an alternative definition.

3. **Resources and capital stewardship:** focus on investments and divestments of both tangible and intangible assets over diverse time horizons. This requires more flexible resources and capital allocation frameworks. For example, the investment and financial thresholds for long-term bets should be different from the parameters for short-term investments (e.g. the next 1 to 2 years).

Create an agile organisation that can deliver both short- and long-term performance ambitions

4. **Integrate a long-term perspective into strategic planning, risk management and innovation:** in a continuously changing business environment, the organisation's strategic planning, risk management and innovation processes should facilitate the continuous development of growth options across different timescales and manage the business risks accordingly. This includes the incorporation of ESG factors and key stakeholder interests into core business processes.

5. **Integrated governance:** governance structures and systems should be designed to enable the company to be run for the long term while also managing short-term demands. Critical elements include the incorporation of a long-term perspective into executive compensation schemes, the integration of stakeholder interests into decision-making processes, and increasing the focus of Supervisory and Management Board discussions on the longer-term perspective.

6. **Foster a dynamic culture:** the culture of the company should facilitate and stimulate long-term thinking. The right tone at the top, outside-in orientation, clarity on how to handle trade-offs among diverging stakeholder interests, openness to new ideas and experimentation – these are all fundamental aspects of an adaptive culture that embeds a long-term focus.

Develop a dynamic business model that creates value across multiple time horizons

7. **Create growth options for the short, medium and long term:** it is important to have a portfolio of growth options across different time horizons. One of the key competencies to develop is the ability to identify long-term societal and/or industry trends and link them to the markets and customer segments the business wants to play in.

8. **Secure and enhance strategic intangible assets:** today's and tomorrow's winning business models are increasingly driven by intangible assets - such as data, partnerships, technologies, R&D, brands, customer and stakeholder relationships. Intangible assets increasingly determine the value of any company. Investments in these assets are needed to blend long-term value creation with shorter-term results.

9. **Make stakeholder value creation an integral part of the business model:** stakeholder value creation should be at the core of a business model. To create a business model that embraces long-term thinking, the products and services the company delivers need to be focused on building and enhancing relationships with such groups. In addition, stakeholder value creation is a goal in itself due to changing expectations of the role that companies play in society.

Align KPI dashboards and management information to track and motivate progress towards goals

10. **Performance measures, investor story and integrated reporting:** if a company is serious about becoming more long-term oriented, it needs to develop KPI dashboards and management information that go beyond the financial and backward-looking metrics that are traditionally used to measure business performance and align their investor story accordingly.

    First, internal and external performance reporting should place more emphasis on the future performance and competitive position of the company. Alongside short-term financial and operational metrics, companies could disclose metrics that give an indication of the robustness of future performance and whether the organisation is on track against the long-term strategy.

    In addition, companies could spend more time measuring what needs to be measured - not just what is easy. To give investors and other stakeholders a more holistic picture of current and potential future performance, companies could provide more insight into the performance of their key intangible value drivers.

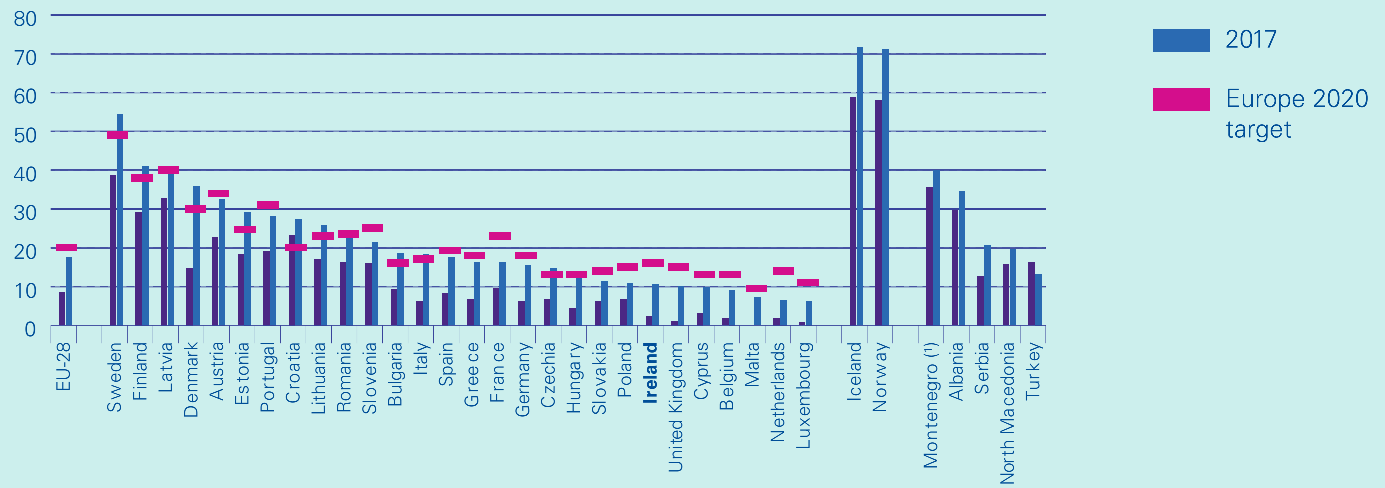
European level policy update

The EU's first climate action initiative has just concluded:

- **20% GHG reduction**
- **20% of primary energy from renewables**
- **20% energy efficiency improvement**

In aggregate, the EU is likely to achieve its targets albeit that some countries, including Ireland, are unlikely to meet their national target.

Share of renewable energy in gross final energy consumption, by country, 2004 and 2017



Although there are new targets to 2030, the main focus of discussion is now 2050 targets. A package of measures within the European Green Deal (the EGD) has been proposed by the new President of the European Commission, Ursula Von der Leyen. The ambition outlined in the EGD is for Europe to become carbon-neutral by 2050, which means reduced significantly GHG emissions and any residual amounts physically removed from the atmosphere.

The most noteworthy elements proposed within the EDG are:

- **Carbon Pricing:** Harmonised carbon pricing to maximise efficiency and reduce distortions (GHG emissions unintentionally push from one area to another). To protect EU companies against imports from markets with lesser standards, the Commission intends a carbon border adjustment mechanism.
- **Broader Sectoral Focus:** Agricultural emissions are likely to receive more attention with Common Agricultural Policy funding the major policy tool to give effect. Aviation and shipping do not have significant targets at present – this will be addressed.
- **Sustainable Transport:** The EGD will seek to prioritise inland shipping and rail freight over road transport though the mechanisms to achieve this are unclear. Furthermore, national governments will be required to deliver infrastructure for low-carbon transport networks to operate across the block through investment in electrical charging infrastructure and possibly hydrogen/biogas refuelling.
- **Financing:** If the EGD is adopted, the EIB will double the proportion of its activities that support climate change (from 25% to 50%).
- **Circular Economy:** The EGD contemplates several initiatives in the area of circular economy which are aimed at incentivising a reduction in the quantities of 'new materials', encouraging longer-life products and reducing waste through re-use of waste materials.
- **Just Transition:** The EGD commits to establishing a fund to ensure that particular groups of citizens and Member States are not disadvantaged as part of the transition to a net zero carbon economy. Such groups may include those who cannot afford to invest in new low carbon technologies or countries such as Poland that depend heavily on coal generation to meet electricity demand.

The EGD will require a legislative basis which is not yet in place. Nonetheless, the package of measures is consistent with citizens' sentiments, with some 93% of EU citizens polled considering climate change to be a serious problem.

Climate change presents new revenue growth and cost reduction opportunities

Evidence to support this statement:

Over the last number of years consumer awareness of the environmental impact of the goods and services they are purchasing has continued to grow. There is an abundance of research and literature that demonstrates that this is a trend that is now well established and will impact all businesses over the long term. This presents significant new opportunities for businesses to grow new and existing revenue lines that have proven sustainability credentials.

In terms of recognising the scale of these opportunities globally, 225 of the world's 500 largest companies surveyed by Carbon Disclosure Project ("CDP") reported that climate-related opportunities represented potential financial impacts totalling over US$2.1 trillion dollars. The majority of this impact is driven by the potential increase in revenue due to demand for low emission products and services.

Growing consumer demand for sustainable goods and services

Sustainably sourced and produced products and services is one of the major shifts in consumer buying patterns at present, and this trend is expected to continue to grow. A recent global online survey noted a remarkable 81% of global respondents feel strongly that companies should help improve the environment. This desire for corporate responsibility is shared across gender lines and generations. Millennials, Gen Z and Gen X are the most supportive, but their older counterparts aren't far behind.

This global trend is evident in the Irish market, with sustainability and plastics recognised as one of the top trends influencing consumer shopping behaviour in 2019.

The financial benefits of understanding and capitalising on these trends is substantial. When Unilever released its new dishwashing liquid brand Sunlight, which consumed much less water than its other brands, sales of Sunlight and Unilever's other water saving products proceeded to outpace competing products in its category by 20 per cent in a number of markets where water scarcity was a key consumer issue.

Awareness of these trends can help Irish businesses ensure that their strategies remain responsive to the changing landscape. Critically, in order for Irish businesses to thrive they need to understand how trends will impact their business strategy and sustainability is now critical to this.

In addition to the points above, businesses need to be mindful of the longer term impacts of greenwashing within their sustainability strategies. As this subject area matures and education and awareness of the customer and investor base continues to grow, it is important for businesses to look long term with their strategies to avoid short term costs or damage to reputation. This means taking into consideration the full value chain and circularity of their products instead of just considering their sustainability credentials at point of use. For example, the shift away from dairy to soya and almond alternatives is an example of where marketing to change culture without consideration of the complete value chain impacts of the alternative product can be called into question. A similar example is around the cradle to grave footprint of some new 'low carbon products' which would be better resolved through decreased consumption or increased circularity as opposed to the use of new virgin materials.

We can see evidence of this shift through a rise in the availability and uptake of green products and services in a variety of sectors:

Food & Agri

7.5% share of Irish farms certified as organic

€210 million value of organic retail sales in Ireland

€225 billion value of global organic food market in 2022

Company Examples

7 of **Unilever's** top 10 brands are Sustainable Living Brands. Revenue from sustainable brands grew 69% faster than from general brands in 2018, an increase of 23% from 2017

IKEA is investing €200 million in green energy and forest planting to become carbon neutral by 2030. The firm's product lines that enable customers to save energy, water, waste and money have grown from €640 million in 2013 to €1.7 billion in 2017

Renewable Energy

11% share of final energy consumption from renewables in Ireland (2018)

Net-zero objective for carbon neutrality in Europe by 2050

$13.5 trillion value of economic activity unlocked by implementing the Paris Agreement globally by 2030

Electric Cars

950,000 2030 electric vehicles target

0 new non-zero emissions sales post-2030

17% decrease in the sale of diesel cars from 2018 to 2019

Opportunities in the global supply chain

In addition to considering the business to customer angle of increased revenue streams, there are new and evolving business to business opportunities, particularly in providing goods and services to multi-national companies who are increasingly scrutinising the sustainability impact of their supply chain as they come under increasing pressure to provide low carbon, climate friendly solutions.

There is an enormous opportunity for Irish businesses to establish their sustainable credentials and shift to low carbon business models in order to win new business from the global markets. In addition to multinational companies' procurement policies, when large governing authorities trust corporates, they are more likely to provide them with licences, approvals and access to markets which, in turn, present new opportunities for growth.

The evidence below shows that green procurement is not only a license to operate, it also presents an opportunity to create sticking power within a supply chain.

73%

of the **Climate Disclosure Project Supply Chain** program members expect to deselect suppliers based on environmental performance

300 *companies*

Origin Green has over 300 companies with independently verified and annually monitored sustainability plans. These members represent 90% of total Irish food and drink exports

Kingspan

Kingspan launched an ambitious 10-year strategy to reduce its carbon emissions by 2030. Kingspan has 12 targets across 4 key areas – energy, carbon, circularity and water.

In introducing this plan, Gene Murtagh, CEO of Kingspan cited climate change as "the single most important issue facing the world today and our most urgent priority. At Kingspan, we are committed to driving a more sustainable approach to our business in response to these issues. Energy conservation has always been at the core of our products, and how we run our business."

Smurfit Kappa

Sustainable sourcing is an integral part of Smurfit Kappa's sustainability strategy, which goes beyond regulatory requirements.

The sustainable sourcing programme is built on seven pillars: quality, hygiene and safety, business continuity, manufacturing, continual improvement, service and technical support, and environment and sustainable development, with a strong focus on raw materials.

Smurfit invest in a tailored risk mapping process for their supply chain, which shows that 90% of their strategic and important suppliers of key materials, goods and services carry moderate to low supply chain risk.

Cost reduction benefits from a sustainable business model

Incorporating ESG into a corporate strategy can create cost saving opportunities within a business across a range of areas including raw material costs, waste and recycling costs, energy and utility costs, and borrowing costs amongst others.

Raw materials

Sustainable legislation aimed at promoting the circular economy will increase over the coming years as Ireland seeks to meet EU targets in areas such as the reduction in single use plastic.

Ireland must increase its plastic packaging recycling by up to 80 per cent by 2030 if it is to meet strict new EU targets, according to the recycling body Repak.

Businesses that have the capacity to increase their resource efficiency and integrate circular economy activities into their business model have the potential to reduce costs on purchases of raw materials, increase their recycling, and ultimately reduce their waste disposal costs.

Energy

Energy use is one of the most important aspects of the decarbonisation agenda. Whilst a lot of attention focuses on the transition from procuring green power over brown power, investing in the energy efficiency of a business should be the first step to reducing energy costs.

Over the medium term, transitioning from brown to green power is expected to prove the most economic form of energy procurement as carbon taxes become an ever growing cost to businesses.

In Budget 2020, the Irish government announced its plans to introduce a ratcheted increase to the carbon price. From a starting point of €20 a tonne in 2019, this is set to gradually rise to €80 a tonne by 2030. Optimising the energy efficiency of a business and the procurement of green power will mitigate and reduce this new cost.

Carbon taxes are expected to accelerate the rate at which businesses reduce their carbon use, and increase the uptake of businesses procuring green power. We expect businesses procuring renewable forms of energy through corporate PPAs to become a common feature of the energy landscape over the coming decade.

Lower borrowing costs

As Business Case 3 of this report sets out, it is increasingly common for sources of funding to be available only for investments where strong ESG credentials are demonstrable.

Companies that can access a broader range of capital providers will ultimately have lower borrowing costs.

For example, BNP Paribas is the lead bank providing Danone's $2 billion syndicated credit facility. The terms of this loan allow for lower borrowing costs if Danone increases its positive environmental impact by meeting ESG criteria. These terms allow Danone to avail of significant savings.

National Policy Update

Ireland Policy Level Update

Although Ireland is likely to fall short of the EU's 2020 climate change targets, the Government has set out an ambitious set of proposed initiatives to 2030 titled 'Climate Action Plan 2019' ("CAP 2019"). Included in the plan are:

Enhanced renewable electricity targets: CAP 2019 sets out the ambition for 70% of all electricity to come from renewables (equivalent to 3.5GW of offshore wind, 8.2GW of onshore wind and 1.5GW of solar PV) by 2030, which is significant given that there were only c.3.7GW of installed wind capacity at the end of 2018 and negligible amounts of solar.

Clean transport: Electric vehicles are the most significant aspect of the transport strategy, with a target of 950,000 EVs by 2030 and measures to deliver supporting infrastructure. This has been further strengthened with a draft piece of legislation published in Jan 2020 which would ban the sale of all fossil fuel cars by 2030.

Buildings: Much of CAP 2019 relates to the planned improvement of building efficiency, particularly new buildings which will be required to meet Nearly Zero Energy standards and will be prohibited from using gas or oil boilers with heat-pumps being the favoured alternative. A major retrofit programme is also planned to bring 500,000 buildings to B2 BER standard.

Industry: The measures to reduce emissions from industry in CAP 2019 (in addition to building efficiency) include a strategy for waste heat recovery and more widespread use of CHP.

Fiscal and public policy: CAP 2019 proposes to implement a carbon price that increases to €80 per tonne by 2030. Additionally, all government investments will be evaluated against a carbon price of €100 per tonne by 2030, rising to €265 by 2050 which will have the effect of driving public spending towards the least carbon intensive options.

Agriculture: CAP 2019 has relatively few measures for agriculture – where there is clearly an attempt to strike a balance between sectoral decarbonisation and damaging the cost competitiveness of a key national sector.

CAP 2019 is unprecedented in its ambition to give effect to a transformative environmental policy but this is consistent with the degree of action required to achieve a net zero economy by 2050.

Northern Ireland Policy Level Update

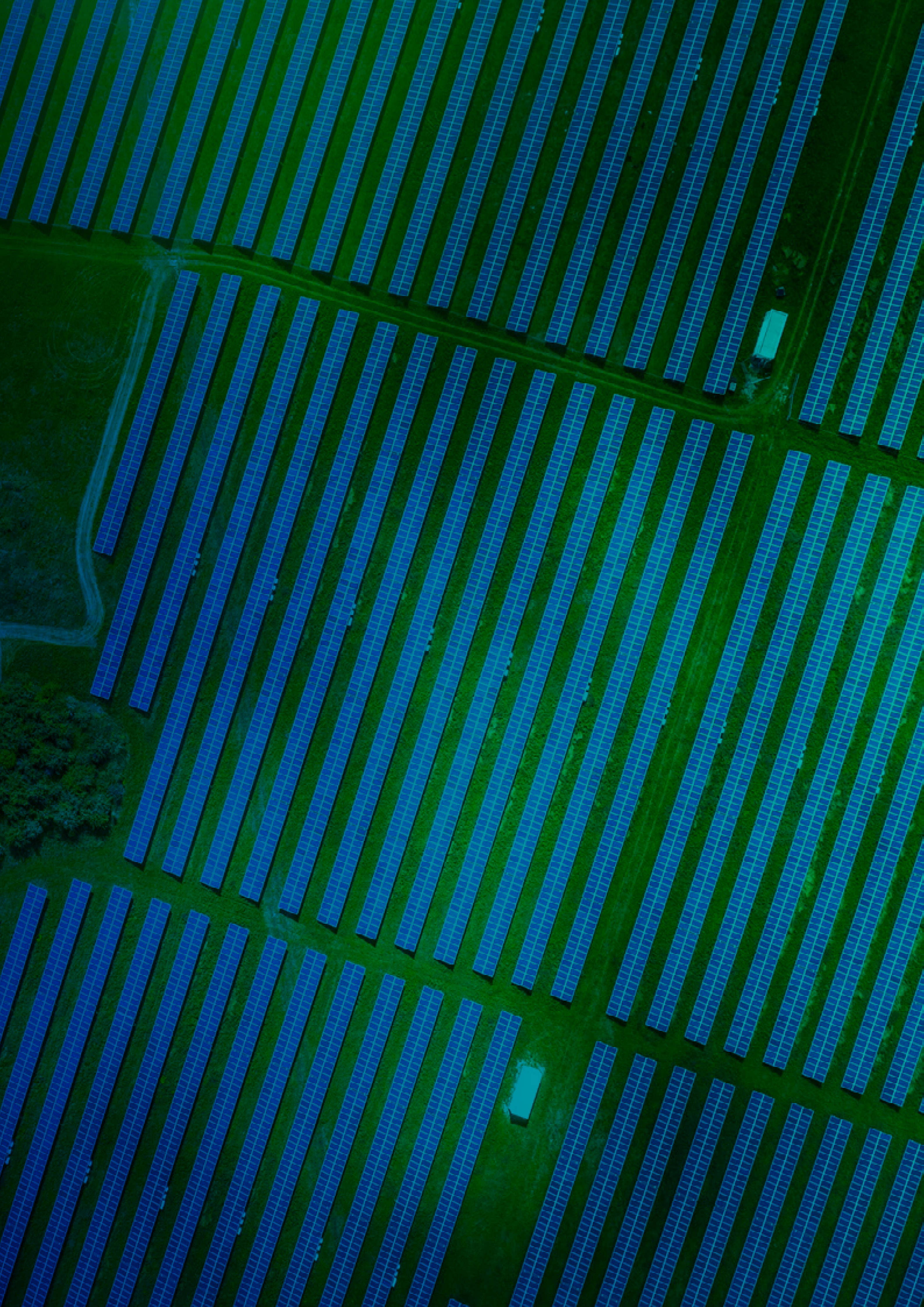
GHG emission reduction policy in Northern Ireland did not advance during the three years that devolved government was suspended and is likely to be an area of focus during the term of the new NI devolved administration. The UK's Committee on Climate Change recently reviewed Northern Ireland's emissions and highlighted the following:

Agricultural Emissions: Northern Ireland has a much higher proportion of emissions from agriculture than the rest of the UK

Residential Heating: The gas network is much less prevalent in Northern Ireland than the rest of the UK and there are opportunities to reduce emissions through retrofit and the use of heat pumps as an alternative to oil boilers or resistive electrical heating.

Electrified Transport: The compact geographical nature of Northern Ireland presents significant opportunities for electrification of transport, provided that this infrastructure is mirrored in Ireland and the rest of the UK to facilitate longer journeys.

Land Use: Northern Ireland has 40% less forest cover than the rest of the UK and emissions from degraded peatlands could be adding 9% to total emissions; addressing these issues presents an important opportunity to reduce GHG.



The ESG agenda is releasing multiple new sources of finance

With global green and sustainable debt volumes set to hit close to $500 billion in 2019, more than double that of two years ago, according to BNEF and Bloomberg, the seemingly unrelenting demand for ESG-themed finance looks set to continue as we enter the new decade.

Increasingly, institutional investors are recognising the potential for ESG factors to affect the valuation and financial performance of the companies they invest in (see MSCI figure in business case 1). At the same time, consumer demand for responsible investments is surging, especially from the younger generation. A 2017 FactSet study of high net worth investors says that 90% of millennials want to direct their allocations to responsible investments in the next five years

Where previously investing in green or ESG areas was seen as niche and too risky, it has now become mainstream and as such presents a huge opportunity for investors to diversify and support long term value creation. Much of the upcoming sustainable finance regulation from the EU is prompting investors to support the move to a low/no carbon economy (see EU TEG on sustainable finance) and to climate proof their portfolios from likely impacts of climate change in the future (TCFD).

Evidence to support this statement from the company perspective:

Companies are also subject to an increasing set of non-financial reporting requirements relating to ESG factors. Combined with the swathe of new regulations (mentioned below) and coupled with increasing investor demands, these new rules could have a profound impact on companies' ability to raise capital within the EU and beyond.

EU Technical Expert Group ("TEG") on Sustainable Finance

The European Commission set up a TEG to assist it in developing the following in line, with the Commission's legislative proposals of May 2018 include:

- An EU classification system (EU Taxonomy) to determine whether an economic activity is environmentally sustainable. In December 2019, a common understanding was reached and the deal is now subject to approval.
- An EU Green Bond Standard. An initial report was launched in 2019, with further work on the accreditation of external verifiers underway.
- Methodologies for EU climate benchmarks and disclosures for benchmarks, for which a Handbook was released in 2019.
- Guidance to improve corporate disclosure of climate-related information, for which reporting guidelines were published in 2019.

Corporate extra-financial reporting

Extra-financial reporting is a rapidly growing trend but it is beset by a lack of overall consistency, quality and legitimacy.

European Union working groups, the recent Cambourg Report and the FRC are making fast progress to align the expectations of investors and rating agencies with the provision of relevant and credible data from corporates. The trajectory here is for further disclosure on non-financial information against reporting standards.

Ireland for Finance Strategy

'Ireland for Finance – The strategy for the development of Ireland's international financial services sector to 2025' sets out ambitions to support sustainable finance including:

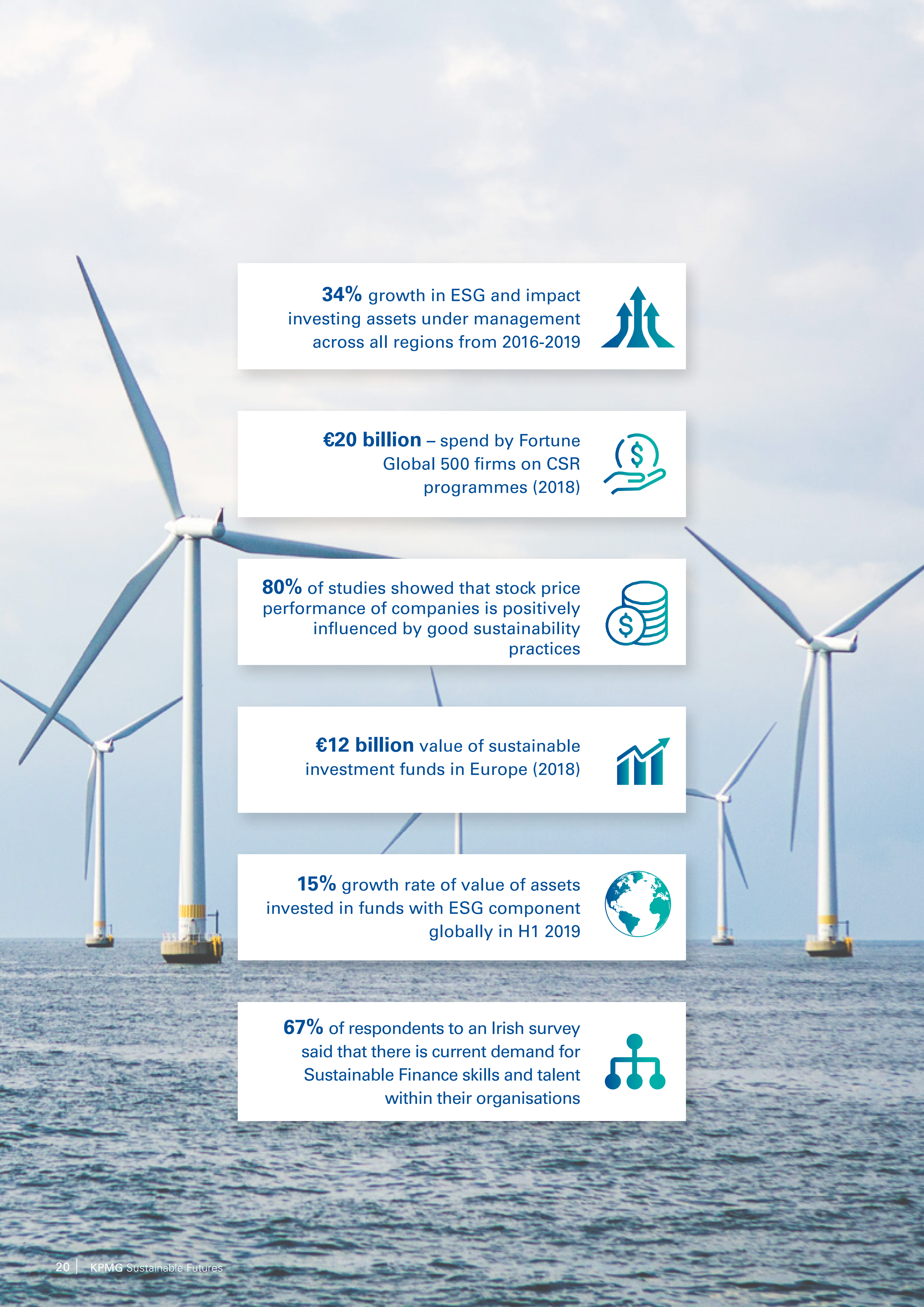
- Develop a national blueprint to guide Irish sustainable finance activities.
- Engage at EU level on sustainable finance proposals.
- Undertake a feasibility study into the development of a Sustainable Finance Innovation programme.
- Deliver training programmes supported by Sustainability Skillnet.
- Undertake a deep sector analysis of future sustainable finance skills and talent requirements.
- Promote Ireland as a location for sustainable finance.
- International collaboration to mobilise global financial centres in support of the sustainability agenda.

Task Force on Climate-related Financial Disclosures ("TCFD")

The TCFD develops voluntary climate-related financial risk disclosures for companies. It recently published a second Status Report on climate-related financial disclosures with some key findings below:

- Disclosure of climate-related financial information has increased since 2016, but is still insufficient for investors.
- More clarity is needed on the potential financial impact of climate-related issues on companies.
- Of companies using scenario analysis, the majority do not disclose information on the resilience of their strategies.
- Mainstreaming climate-related issues requires the involvement of multiple functions.

The Task Force will continue to promote and monitor adoption of its recommendations and will prepare another status report for the Financial Stability Board in September 2020.



34% growth in ESG and impact investing assets under management across all regions from 2016-2019

€20 billion – spend by Fortune Global 500 firms on CSR programmes (2018)

80% of studies showed that stock price performance of companies is positively influenced by good sustainability practices

€12 billion value of sustainable investment funds in Europe (2018)

15% growth rate of value of assets invested in funds with ESG component globally in H1 2019

67% of respondents to an Irish survey said that there is current demand for Sustainable Finance skills and talent within their organisations

Green Bonds

$200 billon value of green bonds issued in 2019, 40% accounted for by European issuers

$1 trillion – estimated value of green bond market by 2030

€4 billion - total demand for Ireland's first corporate green bond auction, with strong interest from European institutional investors

€3 billion – raised through the sales of Irelands' first ever Irish Sovereign Green Bond

0.23% - interest rate on €2 billion worth of green bond issued by NTMA in October 2019

Ireland

1st in 2019 Ireland became the first country to divest fossil fuels from its national investment fund

€500 million - borrowed by the ESB to finance electric vehicle charging points and renewable energy

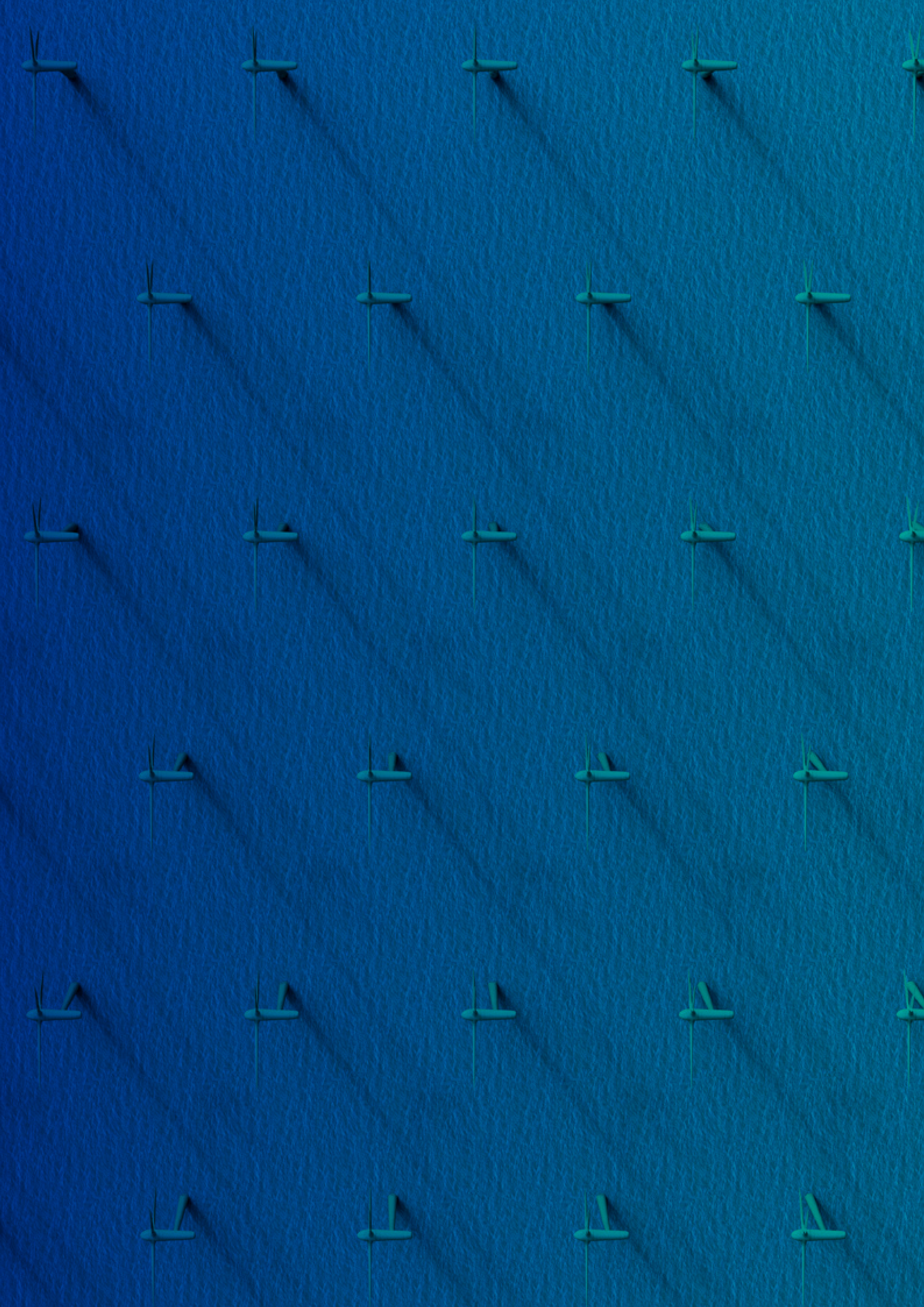
March 2018 marked as significant milestone for Irish listed companies as Euronext acquires the Irish Stock Exchange allowing deeper and broader access to international capital

Responsible Investing

67% of investment managers in Ireland identified that they produced an annual ESG report

Increase in popularity of sustainability linked loans for companies including: Italian insurance company Assicurazioni General and Spanish electricity network Red Eléctrica De España

$82 trillion value of funds managed by firms signatory to the UN Principle for Responsible Investing (PRI)

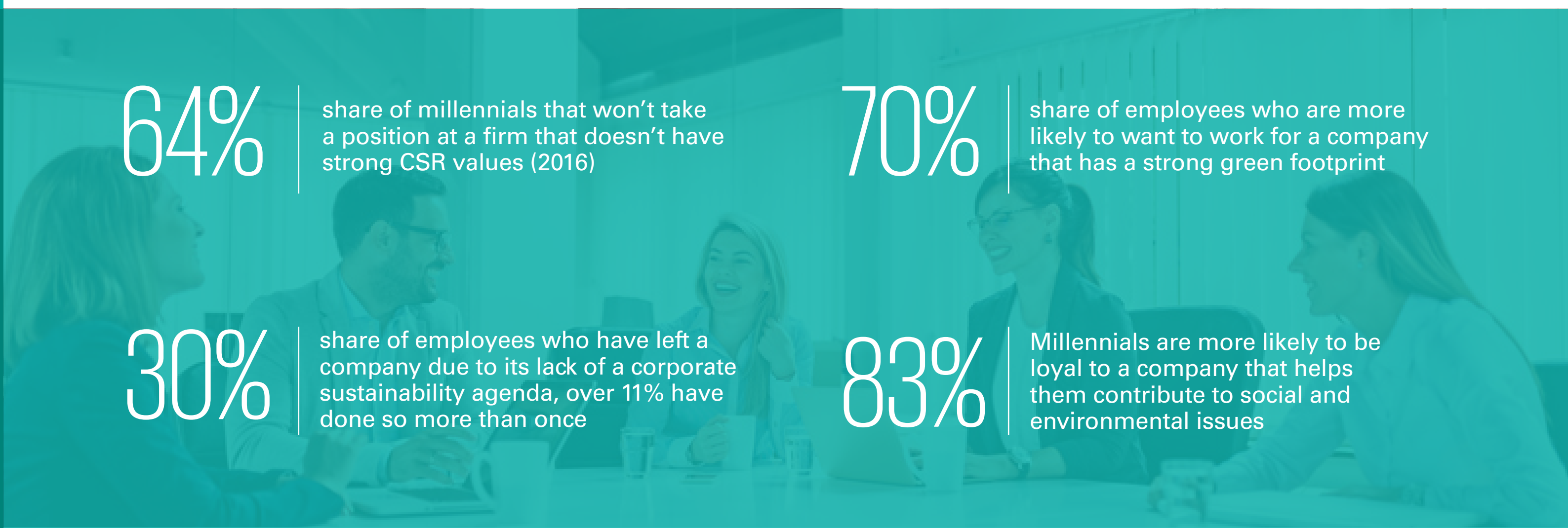


Companies with strong esg Principles attract and retain talent

Today's talent market is more competitive than ever, and climate change and sustainability has become a key decision factor for graduates and experienced hires.

If businesses are to be successful in the future, attracting, motivating and retaining top talent is critical. Incorporating ESG into the business strategy and establishing a clear sense of purpose will help in this regard. The graduate population entering the workforce today have more options, are more flexible and more mobile than ever before. Employees are increasingly looking for more than just financial returns in the workplace and are more likely to join an employer that they identify as having a positive impact in the world.

It has been found that employee satisfaction positively correlates to shareholder returns. Employees motivation levels are likely to be higher where they believe they are working with an organisation that has a greater sense of purpose. More motivated employees will result in greater levels of staff retention, which positively impacts the productivity of the workforce and the overall business.



64% share of millennials that won't take a position at a firm that doesn't have strong CSR values (2016)

70% share of employees who are more likely to want to work for a company that has a strong green footprint

30% share of employees who have left a company due to its lack of a corporate sustainability agenda, over 11% have done so more than once

83% Millennials are more likely to be loyal to a company that helps them contribute to social and environmental issues

Patagonia

Patagonia have a very low 4% turnover rate, where as the retail and consumer product sector average is more than triple that at 13 %. One of the reasons behind this is that they have a strong record of heavy environmental philanthropy and investment. For example 550 employees were actively involved in grant-making and advocacy, and deciding which environmental organisations to support in 2018.

Closing remarks

The emerging climate targets at EU and national level and the suite of policy measures that will give effect to these, as well as private investor and consumer behaviour mean that the next decade will see major changes in the business environment. Despite the uncertainty that such seismic shifts will bring, the leaders of all organisations can respond positively by fully integrating sustainability into their core business planning. There is not a one-size-fits-all approach that can be applied and the nuances of each organisation mean that the optimal approach is different in each case. Nonetheless, some common themes emerge which should be the starting point for anyone responsible for strategic planning.

Businesses that plan on a longer term horizon have historically outperformed those that do not, and we believe that the drivers of this superior performance will equally apply to the next decade.

Climate change is not all about cost and risk; opportunities are emerging in the shape of new markets, higher margins and increased market share.

Policy-makers are not the only stakeholder group driving change and investors are increasingly aware of the impact of their allocation decisions. Organisations that embrace ESG principles are considered to be lower-risk, furthermore a growing pool of capital is accessible only to those who meet strict criteria. The businesses that stand to gain are those that not only adopt ESG principles but communicate their actions in the clearest and most transparent fashion.

Employee engagement is increasingly dependent upon adopting best-in-class sustainability practices. The most visible impacts are highly publicised work stoppages but the most pervasive impact for businesses will be the talented individuals who leave quietly or never join because an organisation does not live up to their values. Employees are, by definition, on the inside and will not be diverted by greenwash or activities intended to appear sustainable and so present the greatest case for true integration of sustainability.

Overview of Sustainable Futures

KPMG Sustainable Futures is a dedicated cross-functional team of experts who help corporates and public sector clients plan and execute programmes addressing Environmental, Social and Governance (ESG) topics, decarbonisation and long-term value creation. The team brings together a wide range of disciplines including sustainability practitioners, economists, engineers, corporate strategists, accountants and financiers to help clients navigate the complex and fast-evolving climate change and sustainability agenda.

At KPMG, we believe that organisations that rise to these challenges and show leadership will be rewarded by their stakeholders and gain access to new opportunities. Those businesses that fail to act may put their margins and even business models at risk. Whether your organisation is just beginning its sustainability journey, reporting on its progress or financing new initiatives, we have the knowledge and the people to support you.

How we can help

01 Strategy, Risk & Governance
Our team of sustainability experts and strategists assist companies in identifying, developing, embedding and reporting on their sustainability strategies to create and protect long term value.

02 Decarbonisation
We work with organisations to map and reduce emissions across their operations.

03 Sustainable Finance
As the leading corporate finance adviser in Ireland, we have now expanded our services to integrate ESG into M&A strategies, financing options, due diligence and through discussions in relation to the energy transition agenda.

04 Reporting & Assurance
Alongside our audit practice our sustainability experts provide services to clients at all stages of their reporting journey. From regulatory disclosures to non-financial disclosures and indices alignment. We also provide external assurance over non-financial disclosures.

05 Circular Economy
Experience in circularity strategy and implementation prioritising opportunities, assessing the business case for individual initiatives and sourcing potential partners.

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