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# Deep sector analysis of future Sustainable Finance skills and talent requirements in Ireland

NOVEMBER 2019



# About the Authors

## About Sustainable Finance Skillnet

Skillnet Ireland is a business support agency of the Government of Ireland. Their mandate is to advance the competitiveness, productivity and innovation of Irish businesses through enterprise-led workforce development.

They believe that maintaining a highly skilled workforce is essential to our national competitiveness. Their business is to ensure that your business has the skills it needs to thrive.

The Sustainable Finance Skillnet (formerly the Sustainability Skillnet) works to upskill those employed within both the financial services sector and corporate Ireland to be leaders in the area of sustainable finance and where Environmental, Social and Governance ("ESG") skills are an imperative. The network addresses both the technical and non-technical skills needs of members.

In support of the Irish Government's Ireland for Finance strategy and the Climate Action Plan (Actions 10 & 11), the vision of the Sustainable Finance Skillnet is to establish Ireland as a world-class sustainable finance knowledge centre and facilitate the flow of information and best practice towards investment, competitiveness and employment underpinning future IFS competitiveness and in support of national decarbonisation efforts.

## About Deloitte

Deloitte Ireland LLP ("Deloitte") conducted industry research, surveys, interviews and analysis to write this report. Deloitte subject matter experts provided critical insights, ideas and feedback to inform its content.

Deloitte is the leading global provider of audit and assurance, consulting, financial advisory, risk advisory, tax, and related services. With more than 150 years of hard work and commitment to making a real difference, our organisation has grown in scale and diversity—approximately 286,000 people in 150 countries and territories, providing these services—yet our shared culture remains the same.

## About Deloitte Ireland

At Deloitte, we make an impact that matters for our clients, our people, our profession, and in the wider society by delivering the solutions and insights they need to address their most complex business challenges.

In Ireland, Deloitte has nearly 3,000 people providing audit, tax, consulting, and corporate finance services to public and private clients spanning multiple industries.

Our people have the leadership capabilities, experience and insight to collaborate with clients so they can move forward with confidence.

## About Deloitte Sustainability Services

Deloitte is a leading company providing sustainability services with 700+ specialists located in 50+ countries in the Deloitte global network. We advise organizations to integrate sustainable development into their business models in order to create long term shared value for stakeholders.

Sustainable Finance is one of the key strategic pillars of our sustainability services practice together with Circular Economy and Climate. We advise asset owners (pension funds, insurance companies, etc.), asset managers (private equity, fixed income, infrastructure, etc.) as well as banks on their ESG integration strategies and implementation plans.

Deloitte created the *"Responsible Investment Lab"* in order to track market trends and regulation evolutions. The Lab works closely with all stakeholders of the ecosystem (academics, NGOs, regulator, asset managers, rating agencies, etc.). It publishes position papers, barometers, guides and trends analysis. The Lab also supports research projects, currently focused on portfolio climate stress-testing. Deloitte is a member of the Global Impact Investing Network ("GIIN"), the European association for Responsible Investment ("Eurosif") as well as national initiatives such as *Finance for Tomorrow* which is an organisation dedicated to sustainable and green finance in Paris.



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# Executive summary

# Executive Summary

## The battle for advancing Sustainable Finance must be waged on the education and training front

This report was commissioned by the Sustainable Finance Skillnet and Sustainable Nation Ireland Limited (*"Sustainable Nation"*). This report was fully funded and supported by Skillnet Ireland as part of its Innovation and Future Skills research series.

The purpose of the report is to set out our findings from a review of the future Sustainable Finance skills and talent requirements, and conduct a gap analysis between current state and future state skills and talent requirements across the financial services sector in Ireland. The report also sets out recommendations and a high level action plan on how to address the identified gaps.

This report contributes to *'Ireland for Finance – the strategy for the development of Ireland's international financial services sector to 2025'* (*"Ireland for Finance"*) launched by the Government in April 2019 and is in line with the trend of leading financial centres around the world seeking to boost Sustainable Finance. The vision expressed in Ireland for Finance is for Ireland to be a top-tier location of choice for specialist international financial services and to protect its future competitiveness. The strategy recognises the central role skilled people will play in enabling growth across all sectors



in international financial services, including adapting to new and changing skill needs.

For the purposes of this report, the financial services sector is defined as banking, insurance, asset management and fund services (*"Financial Services Sector"* or *"Sector"*) and sustainable finance means any form of financial service integrating ESG criteria into business or investment decisions, for the lasting benefit of investors and society at large (it is an inclusive term making no distinction between the concepts of ESG investing, sustainable investing, and responsible investing) (*"Sustainable Finance"*). This report considers the period 2019 – 2025.

A project Steering Group (*"Steering Group"*), was convened to provide support and direction to this strategic skills review<sup>1</sup>. The Steering Group identified a list of Sustainable Finance skills and talent requirements, which it believes the Financial Services Sector will fully require by 2025. The list was reviewed and supplemented by Deloitte (*"Future Skills and Talent Requirements List"*) and is appended to this report (Appendix II). In assessing future skills and talent requirements, the report has taken into account the Steering Group's Future Skills and Talent Requirements List.

The report findings, recommendations and high level action plan have been informed by the results of a survey, open from 19 August to 2 September 2019. The survey was circulated to a select group of organisations from the Financial Services Sector (with representation from banking, insurance, asset management and fund services) (the *"Respondents"*). 15 Respondents submitted their responses, which provided data pertaining to the current and future Sustainable Finance talent and skills requirements across the Financial Services Sector in Ireland.

The survey was supported by a suite of interviews with representative organisations (chosen by Sustainable Nation and the Sustainable Finance Skillnet) (*"Representative Organisations"* or *"Interviewees"*) held from 20 August to 29 August 2019. These

1. In 2019 Sustainable Finance Skillnet established a Sustainable Finance Skills Steering Group, made up of appropriate members of Financial Services representative bodies and Sustainable Finance subject matter experts, tasked with overseeing a deep sector analysis of future Sustainable Finance skills and talent requirements.

interviews provided an opportunity to discuss and debate the survey responses and yielded additional insight into the challenges to, and the trends and influences on, the skills and talent needs of the Financial Services Sector.

This report captures the key messages from the survey, interviews and meetings with the Steering Group and presents the survey findings and trends.

We would like to acknowledge the significant contribution of the organisations who formed the Steering Group for this work: AIB Group plc, Bank of Ireland, Banking & Payments Federation Ireland, BNP Paribas, Davy Stockbrokers, ELS Europe, Financial Services Ireland Ibec, Insurance Ireland, Irish Funds and Irish Life Investment Managers. Their expertise and industry insight was instrumental to the successful completion of this skills analysis. We would also like to thank all those who participated in interviews and responded to surveys to support this work.



## Ireland can build on its position to drive Sustainable Finance

As a value proposition, the ability of the Financial Services Sector to address ESG concerns material to it, has a significant impact on its long-term sustainability. In order for Ireland's Financial Services Sector to maintain and grow its expertise and reputation for highly rated international financial services, the Sector must strengthen its capacity for innovation, boost Sustainable Finance skills and talent and develop best practice in Sustainable Finance. There needs to be smooth interaction between developing Ireland's Financial Services Sector as a leading Sustainable Finance hub and supporting education at all levels. The link between finance and the real economy and the way ESG considerations integrate with banking, insurance and investment activities and business models needs to become an integral part of education and training.

Based on our survey and interviews, we highlight the following key findings:

## Key findings

**100%** say stakeholder expectations for Sustainable Finance have grown since 2015

**100%** say stakeholder expectations for Sustainable Finance will grow over the next number of years to 2025

Fuelled by big data and Artificial Intelligence ("AI"), **skills and talent in data management and measurement** are seeing more demand than in other disciplines

The **'most important' drivers of investment** in Sustainable Finance skills and talent in 2019 and in 2025 are:

- Improved long-term returns
- Brand image and reputation
- Decreased investment risk and/or underwriting risk
- Regulatory/disclosure demands
- External stakeholder requirement (e.g., clients, government, society at large)

There is a greater level of overall Sustainable Finance awareness and perception in the asset management sub-sector. Sustainable Finance is emerging as a key topic for banking, insurance and fund services

Training in **baseline knowledge** (What is sustainability, Sustainable Finance? Why does it matter?) is highlighted as the **main skills priority in the short term**

**67%** of Respondents said that there is **current demand for Sustainable Finance skills and talent** within their organisations, however, **supply is inadequate and upskilling is required**

**60%** of Respondents indicated that training and skills will be given a higher priority if regulation is implemented

**67%** say they expect more from **new graduates** today as compared to graduates in 2015

Sustainable Finance is not a short-term trend, but rather a permanent shift from 'niche' to **'mainstream'**

**20%** of Respondents said that a Sustainable Finance strategy is **central** to almost everything their organisation does

**67%** say they expect **experienced hires** for Sustainable Finance will be required within their organisations



**87%** say they expect that **existing employees** will be upskilled with respect to Sustainable Finance Investment within their organisations

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**60%** say that their organisations need new hires to have third level qualifications that have Sustainable Finance and ESG considerations **embedded into their degree or master courses**

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Sustainable Finance is **not just about product**, rather it is the **new focus in finance** that will fundamentally change the Financial Services Sector

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**33%** of Respondents said that the Financial Services Sector's acceleration could be achieved through the **delivery of training programmes through Sustainable Finance Skillnet**

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**33%** say if the current (2019) level of Sustainable Finance skills and talent applied in 2025, it would have a **significant negative impact on their organisations**




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The **main challenges** limiting the development of Sustainable Finance skills and talent in Ireland are **competing internal priorities** and **lack of available talent**

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**27%** of Respondents said that the Financial Services Sector's acceleration could be achieved through the integration of sustainability and ESG modules into all existing third level finance, business degrees and professional financial qualifications

## Themes and potential talent and skills gaps

Theme / gap	Description
 <p><b>Differences between various sectors</b></p>	<p>Skills and talent in the four sub-sectors (banking, insurance, asset management and fund services) of the Financial Services Sector are at different levels of maturity. For instance, our findings indicate that front office staff in the asset management sector are more advanced in Sustainable Finance than middle and back office staff. Furthermore, our findings indicate that the asset management sector is more advanced in Sustainable Finance than the other sub sectors.</p> <p>Interviewees from the banking and insurance sectors noted variances in the role of Sustainable Finance strategies across their various banking and insurance business lines.</p>
 <p><b>Four key business drivers of the shift to Sustainable Finance - regulation is the accelerator</b></p>	<p><i>Client:</i> The Financial Services Sector is facing increasing awareness of, and demand for, Sustainable Finance solutions.</p> <p><i>Commercial:</i> Incorporating ESG considerations into the investment research, portfolio construction and stewardship process can enhance long-term risk-adjusted returns.</p> <p><i>Risk:</i> Companies that manage risks and opportunities related to the ESG considerations are better equipped because they expose their businesses to fewer risks, and hence are more attractive to investors.</p> <p><i>Regulatory:</i> It is expected that the EU Action Plan (March 2018) and its proposed reforms will greatly accelerate Sustainable Finance reporting, transparency and disclosure in the Financial Services Sector. The key objectives of this new plan are built on three main pillars:</p> <ul style="list-style-type: none"> <li>• Reorient capital flows toward a sustainable investment;</li> <li>• Mainstream sustainability into risk management; and</li> <li>• Foster transparency and long-termism.</li> </ul>
 <p><b>Data and measurement skills and talent</b></p>	<p>Sustainable Finance is not about developing an entirely new set of skills and competencies. Rather it is about a specialised skillset that blends existing finance skills with risk, data management and ESG competencies.</p>

Theme / gap	Description
 <p><b>Fintech and innovation</b></p>	<p>If advancements are to be made in the Irish Financial Services Sector, it is imperative that the fintech and innovation ecosystem develops in tandem with the mainstreaming of Sustainable Finance and the regulatory agenda. This ecosystem will be a key stakeholder that can positively impact the evolution of Sustainable Finance in the Sector - for example with respect to ESG data analytics and interpretation. Technology and innovation is one of the four pillars around which the Ireland for Finance 2025 strategy is structured. This pillar is focused on providing a collaborative approach to addressing emerging challenges and opportunities in technological developments.</p>
 <p><b>Second and third lines of defence</b></p>	<p>Given the expected regulatory imperative, it is a natural progression that further skills and talent will be required in second and third line oversight roles to ensure that upstream regulation is monitored and that there is appropriate challenge and 'audit' processes also put in place.</p>
 <p><b>Sustainable Finance Skillnet has a role to play and further embedding is required in third level and professional education</b></p>	<p>Sustainability must be integrated into the curricula of schools, universities and all professional financial qualifications. Recognising that implementing Sustainable Finance into educational and professional training curricula will take time, Sustainable Finance Skillnet is best placed to provide the primary training solution to existing finance professionals in the short term. In the medium to long term, Sustainable Finance Skillnet should continue to play an important role in the supply of training programmes to financial professionals across all financial and economic sectors.</p>

The key recommendations and high level action plan propose 10 recommendations under the following three headings:

1. Programmes to be provided by Sustainable Finance Skillnet
2. Programmes to be provided by second and third level institutions and education and training to be provided by professional bodies
3. Guidance to assist the financial service providers to evaluate '*own needs*' for Sustainable Finance

Recommendations	No.	Title	Impact	Effort	Time
<b>Programmes to be provided by Sustainable Finance Skillnet</b>	1	Sustainability Skillnet to be refocused exclusively on Sustainable Finance activities and renamed Sustainable Finance Skillnet	High	Simple	Immediate/ Complete
	2	Consideration of an ESG fitness assessment	High	Complex	2-3 years
	3	Create a cohort of training facilitators	High	Average	1 year
	4	A proposed structure for programme delivery	High	Average	1-3 years
	5	Public relations strategy	Medium	Average	1-2 years
<b>Programmes to be provided by education and training providers</b>	6	Ensure fintech and regtech providers are appraised of ESG considerations and trained appropriately	High	Average	1 year
	7	Embed Sustainable Finance into all relevant curricula of second and third level programmes	High	Complex	1-10 years
	8	Integrate Sustainable Finance into professional education and continuous professional development	High	Complex	1-5 years
<b>Guidance to assist the financial service providers to evaluate 'own needs'</b>	9	Annual survey and review of Sustainable Finance skills and talent	Medium	Low	Annual
	10	A proposed guideline to assist financial service providers evaluate their ' <i>own needs</i> ' for Sustainable Finance	High	Complex	1-10 years



# Introduction

# Introduction

## Sustainable Finance transitioning from niche to 'business-as-usual'

Sustainability is the theme of our time – and the financial system has a key role to play in delivering the set of sustainability ambitions. The new international consensus is that making profits is compatible with the sustainable growth of the world's economies, an inclusive society and the protection of our ecosystem.<sup>2</sup>

In April 2018, 16 of the world's leading financial centres, including Dublin, agreed a shared strategy for accelerating Sustainable Finance at the inaugural meeting of the international network of Financial Centres for Sustainability ("FC4S").<sup>3</sup> While the FC4S's stated objective is to "*exchange experience and take common action on shared priorities to accelerate the expansion of green and sustainable finance*", financial centres are nevertheless clearly in competition to attract and generate business in their cities. Competition applies to Sustainable Finance, as it does to all areas of financial practice, with Sustainable Finance becoming material for the competitiveness and success of financial centres.

Ireland has a long history of expertise and reputation for highly rated international financial services with many leading businesses already offering innovative Sustainable Finance products. Ireland's financial system is robust, sophisticated and integrated both vertically and internationally. The combination of these strengths leads to an ideal platform to develop and promote Sustainable Finance as a core competence of the Irish financial marketplace.

To capitalise on the opportunity to develop a leading global hub for Sustainable Finance in Ireland, the Irish Financial Services Sector needs to strengthen its capacity for innovation, boost skills and talent and develop best practice in Sustainable Finance. There needs to be smooth interaction between developing Sustainable Finance skills and competencies in Ireland and supporting

education at all levels. The link between finance and the real economy and the way ESG considerations integrate with banking, insurance and investment activities and business models needs to become an integral part of education and training.

## What is Sustainable Finance?

There are many definitions for the term Sustainable Finance.

For the purposes of this report, Sustainable Finance means any form of financial service integrating ESG criteria into business or investment decisions, for the lasting benefit of investors and society at large (it is an inclusive term making no distinction between the concepts of ESG investing, sustainable investing and responsible investing).

## Global Momentum

Harnessing the financial system is essential to making a successful transition to a low-carbon, inclusive and sustainable model of development, which regenerates natural capital. The momentum in favour of Sustainable Finance is clearly accelerating:

1. Investors are moving to adopt sustainability considerations across their entire portfolios, from ESG-focused funds and products to impact investing, with stocks of sustainable companies significantly outperforming their less sustainable counterparts over the long-term, both in terms of stock market and accounting performance<sup>4</sup>;
2. Leading financial institutions are recognising that sustainable development is key to their future success, as exemplified by the green bond market, with over USD 167 billion ("bn") now outstanding;
3. Banking institutions have started to introduce interest rate benefits for prospective borrowers seeking a mortgage on A-rated homes, those looking to upgrade the energy rating of their property and businesses planning on implementing energy-saving initiatives;

2. Luxembourg Sustainable Finance Roadmap - A journey towards a Sustainable Finance system', UNEP Finance Initiative, October 2018

3. (FC4S) brought together 16 member centres - Astana, Casablanca, Dublin, Frankfurt, Geneva, Hong Kong, Liechtenstein, London, Luxembourg, Milan, Paris, Shanghai, Shenzhen, Stockholm, Toronto and Zurich – as well as a wide range of observers and partner organisations, Milan, 13 April 2018.

4. The Impact of a Corporate Culture of Sustainability in Corporate Behaviour and Performance - authored by Robert G. Eccles, Professor of Management Practice at Harvard Business School; Ioannis Ioannou, Assistant Professor of Strategic and International Management at London Business School; and George Serafeim, Assistant Professor of Business Administration at Harvard Business School.

4. Governments are developing national Sustainable Finance roadmaps;
5. Financial policymakers and regulators are acting to drive the reallocation of capital, improve risk management, enhance transparency and incorporate environmental risks into market supervision and clarify responsibilities of financial institutions; and
6. Demand for Sustainable Finance is increasing. Demand for responsible treatment of employees, customers and other stakeholders is also growing, as is indignation about poorly-managed companies. The investor voice is directly influencing the European regulatory agenda and Sustainable Finance has now moved onto the global regulatory agenda too.

### Global Macrotrends

The story of ESG investing has its origins in January 2004 when former UN Secretary General Kofi Annan wrote to over 50 CEOs of major financial institutions, inviting them to participate in a joint initiative under the auspices of the UN Global Compact and with the support of the International Finance Corporation (“IFC”) and the Swiss Government. The goal of the initiative was to find ways to integrate ESG into capital markets. A year later this initiative produced a report entitled “*Who Cares Wins*”. The report made the case that embedding ESG considerations in capital markets makes good business sense and leads to more sustainable markets and better outcomes for societies. At the same time the United Nations Environment Programme Finance Initiative (“UNEP/FI”)<sup>5</sup> produced the so-called “*Freshfield Report*” which showed that ESG issues are relevant for financial valuation. These two reports formed the backbone for the launch of the Principles for Responsible Investment (“PRI”) at the New York Stock Exchange in 2006 and the launch of the Sustainable Stock Exchange Initiative (“SSEI”) the following year.

Today, the PRI is thriving with over 2,372 members representing

over USD 86.3 trillion (“trn”) assets under management.<sup>6</sup> PRI’s role is to advance the integration of ESG into analysis and decision-making through thought leadership and the creation of tools, guidance and engagement. The SSEI, supported by the Geneva-based United Nations Conference on Trade and Development (“UNCTAD”), has grown over the years with many exchanges now mandating ESG disclosure for listed companies or providing guidance on how to report on ESG issues.

The launch of the Principles for Sustainable Insurance in 2012 and the Principles of Responsible Banking in 2019, providing frameworks for the global insurance and banking industries to address ESG risks and opportunities, mark further pivotal steps in the evolution to build a sustainable global economy. Over 120 organisations worldwide have adopted the Principles for Sustainable Insurance, including insurers representing more than 25% of world premium volume and USD 14 trn in assets under management.<sup>7</sup> 136 banks from 49 countries, representing over USD 47 trn in assets have adopted the Principles of Responsible Banking.<sup>8</sup>



6. <https://www.unpri.org/pri/about-the-pri>

7. <https://www.unepfi.org/psi/vision-purpose/>

8. <https://www.unepfi.org/banking/bankingprinciples/>

5. The United Nations Environment Programme Finance Initiative is a global partnership established between the United Nations Environment Program and the financial sector. It was created in 1992

## A Change in Political Climate

Though ESG investing has been gathering momentum since 2004, three landmark international agreements marked a milestone for the world and the global economy: the adoption of the Addis Ababa Action Agenda by heads of state and government in July 2015 followed by the signing by world leaders of the UN Sustainable Development Goals (“SDGs”) in September 2015 and the Paris Climate Agreement later that year. **Finance lies at the heart of these three key international policy achievements.**

- Financing for Development:** The outcome document of the Financing for Development conference (Addis Ababa Action Agenda) focused on steps to increase domestic and international resource mobilisation for developing countries, including private capital. One of its conclusions was to “*strengthen regulatory frameworks to better align private sector incentives with public goals, including incentivising the private sector to adopt sustainable practices, and foster long-term quality investment*” both from domestic and international institutions.
- The UN’s Sustainable Development Goals:** The SDGs are an ambitious set of 17 broad global targets – ranging from eradicating poverty, hunger and gender inequality to reversing biodiversity loss, protecting oceans and halting climate change that UN signatories have agreed to reach by 2030. With annual financial requirements estimated at USD 5 - 7 trn per year, they call for a concerted response from public as well as private sector financial sources. For the financial system, the SDGs set out a high-level roadmap for generating ‘*shared value*’ – shifting capital away from damaging ‘*business as usual*’ trends and towards an end to poverty, increased prosperity with social inclusion and environmental regeneration.<sup>9</sup> Estimates suggest that USD 5-7 trn a year is needed to implement the SDGs globally.<sup>10</sup> In 2018, Deloitte estimated that €50 bn of financing (€20 bn exchequer funding and €30 bn private financing) is required to deliver the sustainable infrastructure investment set out in the Government’s National Development Plan 2018-2027 as part of the overall strategy to meet Ireland’s 2030 decarbonisation targets.<sup>11</sup>
- Paris Climate Agreement:** The Paris Agreement agreed to “*making financial flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development*”.<sup>12</sup> The Paris Agreement means aligning capital with the long-term goal of



9. Global Compact (2015). The SDG Industry Matrix for Financial Services [https://www.unglobalcompact.org/docs/issues\\_doc/development/SDGMatrix\\_FinancialSvcs.pdf](https://www.unglobalcompact.org/docs/issues_doc/development/SDGMatrix_FinancialSvcs.pdf)

10. UNCTAD (2014). World Investment Report 2014: Investing in the SDGs <http://unctad.org/en/pages/PublicationWebflyer.aspx?publicationid=937>

11. 'Private Sector Financing for Sustainable Infrastructure, Meeting Ireland's 2030 Decarbonisation Objectives', May, 2018, Deloitte

12. NFFCC (2015). The Paris Agreement, Article 2c



keeping global warming “well below 2 degrees Celsius (“°C”) above pre-industrial levels”, with the aspiration to “limit temperature increase to 1.5°C”. It also gave a higher profile to financing adaptation and resilience to growing climate shocks.

### International Policy Initiatives

Internationally, the most ambitious programme is the EU Action Plan for Financing Sustainable Growth (European Commission 2018). In 2016, the European Commission set up the High-Level Expert Group on Sustainable Finance (“HLEG”) to map out options for community-wide action. This laid the foundations for a comprehensive action plan on Sustainable Finance proposed by the Commission. The Action Plan aims to help member states meet targeted cuts to greenhouse gas emissions of 40 Percent (“%”) to 2030, which require an estimated investment of EUR 180 million (“m”) (USD 216 m) per year, much of which the European Commission hopes will come from the private sector.<sup>13</sup> The Action Plan aims to raise the industry bar on Sustainable Finance by facilitating the emergence of a more mature and transparent marketplace. Its key objectives are set out below:

- Establishing a common taxonomy to help redirect capital flows toward sustainable investments;
- Mainstreaming sustainability into risk management by clarifying investor fiduciary duties as well as capital requirements for environmental and climate risks; and
- Taking action to enhance sustainability governance as well as corporate disclosure of non-financial information.

At intergovernmental level, the Group of Seven (“G7”) has been throwing its weight behind a growing movement to turn the power of the global financial system to Sustainable Finance and sustainable development by making ESG considerations a core aspect of banking, investment, and insurance. Under Italy’s leadership, the June 2017 G7 communiqué acknowledged

“that scaling up sustainable finance is fundamental to achieving sustainability and climate goals”. The G7 nations, who hold the bulk of the world’s financial assets, work extensively on Sustainable Finance and growth themes, engaging all major financial sector players. This included a recognition of the importance of small and medium enterprises and encouraging public-private partnerships to support infrastructure renewal.

The larger Group of Twenty (“G20”), has also established a ‘Green Finance Study Group’, bringing together finance ministries and central banks to work out how to scale up private capital flows to sustainable investments. Its 2016 synthesis report acknowledged the positive momentum, but also recognised that many challenges remained. These constraints can be summarised as the 3Ds:

- **Definitions:** There is concern about a lack of clarity about key definitions and principles related to Sustainable Finance that could make it difficult both to measure the size of the challenge and open up risks to market integrity.
- **Data:** There is still poor disclosure of material sustainability considerations both by companies and by financial institutions, matched by fragmented incorporation into financial analysis.
- **Development of financial markets:** A range of market failures (notably environmental externalities and short-term time horizons) means that there may be insufficient demand for green financial services as well as an inadequate pipeline of green assets, resulting in undeveloped financial markets.

### Key Business Drivers Accelerating the Shift to Sustainable Finance

The information gleaned from the survey, interviews and research underpinning this report provide an insight into the key business drivers accelerating the shift to Sustainable Finance observed by the Financial Services Sector in Ireland. They are:

13. [https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance\\_en](https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance_en)

- **Client:** The Financial Services Sector is facing increasing awareness of, and demand for, Sustainable Finance solutions. The Sector needs to adopt a generational perspective, with long-term commitment and the ability to adapt its services and financial products to the varying needs of sustainable projects and to the demand of the sustainability-savvy millennials (born 1980 -1994) (“Millennials”) and generation z (born 1995 – 2015) (“Generation Z”).
- **Commercial:** Today, it is more clear than ever, that ESG considerations have direct financial impact.<sup>14</sup> A recent study finds that companies that manage sustainability risks and opportunities will tend to have stronger cash flows, lower borrowing costs and higher valuations.<sup>15</sup> Another study suggests firms with strong track records on key sustainability metrics have significantly outperformed those with poor report cards. Thus, incorporating these considerations into the investment research, portfolio construction and stewardship process can enhance long-term risk-adjusted returns.<sup>16</sup>
- **Regulation:** Sustainable Finance has become a regulatory imperative. In addition to the major regulatory changes to the financial system proposed in the EU Action Plan for Financing Sustainable Growth, the European Commission is working to clarify how asset managers, insurance companies, and investment or insurance advisors should integrate sustainability risks and other sustainability considerations in the areas of organisational requirements, operating conditions, risk management and target market assessment.
- **Risk:** Unlike the more tangible operational risks that affect an organisation’s performance, ESG issues were long considered a modest if not minor financial risk exposure. Consequently, little was done to assess the loss potential. According to ESG experts,

companies that manage risks and opportunities related to the ESG considerations are better equipped because they expose their businesses to fewer risks, and are hence more attractive to investors.<sup>17</sup> Larry Fink, CEO of BlackRock, the world’s largest asset management firm, was one of the first business leaders to acknowledge these changes, writing in his annual letter to investors in 2017 that a company’s ability to manage ESG matters was directly related to its sustainable long-term growth.

### The Competitiveness of Financial Centres

In order for the Irish Financial Services Sector to scale up its Sustainable Finance offerings and compete with other financial centres worldwide, it is essential that there is investment in education and training to respond to the requirements of Sustainable Finance. Ireland must develop an ambitious, coherent, consistent and transparent Sustainable Finance strategy, reflecting the distinctive features and added value of Ireland, and invest in boosting skills and talent and developing best practice in Sustainable Finance. Building a strong Sustainable Finance market will enable Ireland to develop the products, skills and innovations that are increasingly needed to deliver a sustainable financial sector, promote growth and employment, and meet stakeholder needs. It will also provide the platform for exports of Sustainable Finance services to the numerous governments and investors around the world seeking to mobilise public and private capital and expertise to deliver local, national and international goals for climate action and sustainable development.

A key message from our survey is that the challenge of finding staff with the right Sustainable Finance skills is high. 67% of Respondents said that there is current demand for Sustainable Finance skills and talent within their organisations, however, supply is inadequate and upskilling is required.

The general consensus amongst Respondents and Interviewees is that sustainability must be integrated into the curricula of schools, universities and all professional financial qualifications. All financial

14. “Going Mainstream – The Future of ESG Investing”, 2018 Newsweek

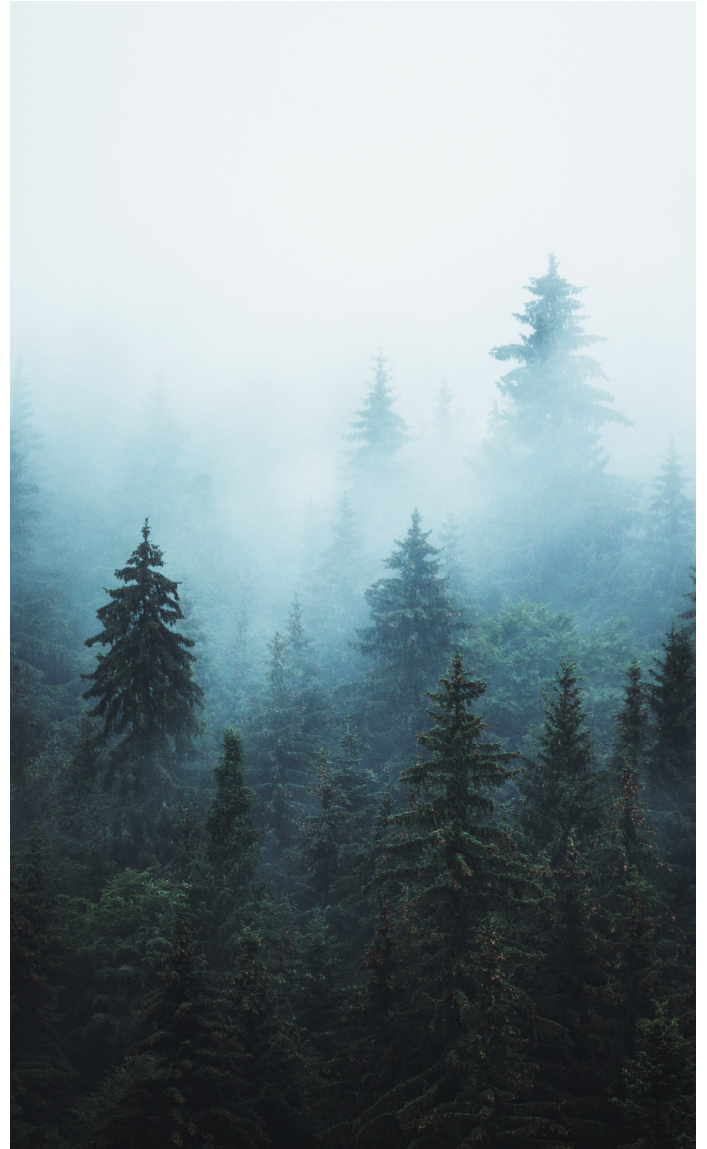
15. Foundations of ESG Investing: How ESG Affects Equity Valuation, Risk, and Performance’, July 2019, Guido Giese, Linda-ElingLee, Dimitris Melas, Zoltán Nagy, and Laura Nishikawa

16. 2015 Harvard Business School study Corporate Sustainability: First Evidence on Materiality

17. Sasja Beslik, Head of Sustainable Finance, and Cecilia Fryklöf, ESG Expert, Nordea Markets 2018

professionals in the value chain—from product development and management to asset servicing, administration and auditing—also need ongoing training on what Sustainable Finance is and how it adds value for society.

Recognising that implementing Sustainable Finance into educational and professional training curricula will take time, Respondents and Interviewees said the Sustainable Finance Skillnet is best placed to provide the primary training solution to existing finance professionals in the short term. In the medium to long term, Respondents and Interviewees believe Sustainable Finance Skillnet will evolve and continue to play an important role in the supply of training programmes to financial professionals across all financial and economic sectors.



# Summary of survey and interview findings

Current and future skills and talent for Sustainable Finance and Responsible Investment

# Awareness and perception of Sustainable Finance

## 100% of Respondents said that their stakeholders<sup>18</sup> expectations for Sustainable Finance have grown since 2015.

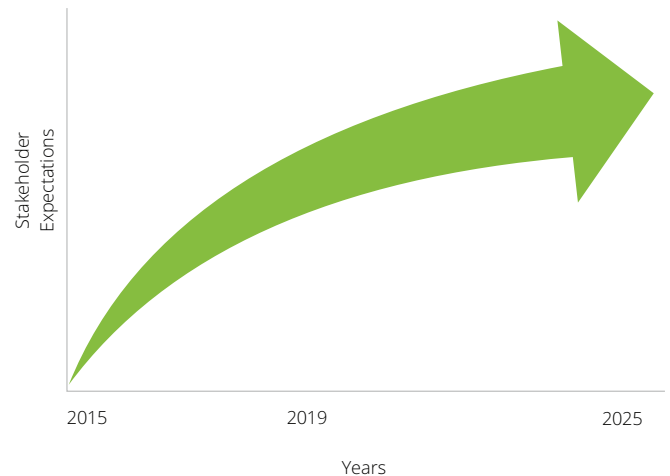
This trend reflects the increased effort to transition to the low-carbon and sustainable economy, spurred by the Addis Ababa Action Agenda, the Paris Agreement and the adoption of the SDGs.

100% of Respondents said that their stakeholders' expectations for Sustainable Finance will grow over the next number of years to 2025. Respondents and Interviewees believe this growth will be driven by:

- Implementation of EU legislation for regulation on (i) the establishment of a framework to facilitate sustainable investment; (ii) disclosures relating to sustainable investments and sustainability risks; and (iii) benchmarking;
- Acceleration of the development of sustainable financing (i.e., credit and lending facilities, as well as advisory services and access to capital markets); and
- Growth in sustainable business solutions such as green bonds (the market will also see development of other asset classes such as sustainability bonds, blue bonds etc.).

**Based on the interviews and research, skills and talent in the four sub-sectors (banking, insurance, asset management and fund services) of the Financial Services Sector are at different levels of maturity.** For instance, our findings indicate that front office staff in the asset management sector are more advanced than middle and back office. The asset management sector appears to be more advanced than the other sub sectors.

**Our research indicates that there is a greater level of overall Sustainable Finance awareness and perception in the asset management activities of the Financial Services Sector.** This finding reflects the global trend of ESG investing and ESG integration becoming more vital and mainstream to the business and operations of asset managers and asset owners.



**Figure 1: Stakeholders' expectations for Sustainable Finance**

Asset managers are increasingly making sustainable investment decisions that reflect their own corporate values and those of their investors, whilst seeking to deliver competitive returns. Many of the largest asset managers have dedicated sustainability policies and guidelines for their own investments and business activities, and are also balancing requests from their investors to increase sustainable investments and limit investments in industries including tobacco and fossil fuels. It should also be noted that, the majority of the members of the Irish Association of Investment Managers ("IAIM") are UN PRI signatories.

Notable information gathered from the survey and during the interviews in connection with awareness and perception include:

- Interviewees from the banking and insurance sub-sectors noted their organisations investment management divisions have a higher level of awareness and perception of Sustainable Finance

<sup>18</sup>. Sasja Beslik, Head of Sustainable Finance, and Cecilia Fryklöf, ESG Expert, Nordea Markets 2018



as compared to other divisions, for example retail. Furthermore it was noted that Sustainable Finance is an emerging topic in such divisions.

- It was noted during the Interviews that in the other sub sectors (excluding the asset management sector), the concept of

Sustainable Finance is a hot topic for discussion and has led to many 'Sustainability' working groups being established at firm level and industry level. However, some of these groups are at the early stages of their Sustainable Finance journey.

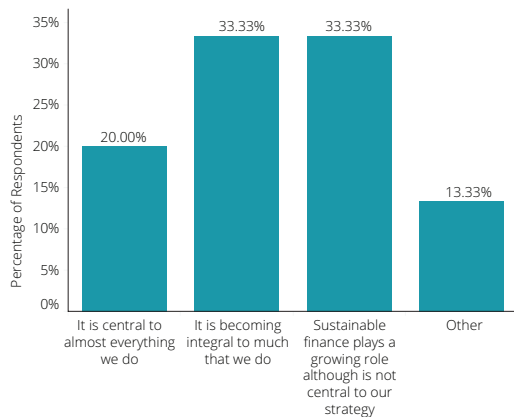


# Overall market awareness and current perception

## Sustainable Finance is not just a product, rather it is the new focus in finance that will fundamentally change the Financial Services Sector

In our survey, we asked Respondents about the role of a Sustainable Finance strategy in their organisation.

- 20% of Respondents said that a Sustainable Finance strategy is central to almost everything their organisation does (Figure 2);
- 33% of Respondents said that a Sustainable Finance strategy is becoming integral to almost everything their organisation does (Figure 2);
- 33% of Respondents said that a Sustainable Finance strategy plays a growing role although it is not central to their strategy (Figure 2); and
- 13% of Respondents specified 'Other' (Figure 2).



**Figure 2:** Sustainable Finance strategy - periphery or core?

Notable information gathered from the survey and during the interviews in connection with Sustainable Finance strategy include:

- Some Respondents and Interviewees said that while Sustainable Finance and assessing business and/or investment decisions for ESG risks are core to Group strategy, less consideration is given to these matters at subsidiary level.
- Interviewees from the asset management sector said that Sustainable Finance strategies are prevalent in front office functions (front office functions exist to generate revenue, key players of the line up typically consist of traders, brokers, asset managers, researchers, and sales and structuring professionals). By comparison, these Interviewees said that Sustainable Finance strategies are only emerging in the functions of the middle office (usually consists of risk management, research and compliance departments, as well as some elements of technology) and back office (fund and other administration).
- Interviewees from the banking and insurance sectors said that the role of Sustainable Finance strategies differ across their organisation's various lines of business as follows:
  - Retail division: Sustainable Finance strategies are relatively new and developing. As the regulatory regime changes and the market adapts, banks and insurance organisations expect new and increasing demand from their customers for Sustainable Finance products with interest rate/premium benefits.
  - Asset management and investment divisions: Sustainable Finance strategies are more advanced than in the retail divisions, and play a proactive role in shaping business activities.
- A number of Respondents and Interviewees expressed the strong view that Sustainable Finance is not just about product, rather it is the new focus in finance that will fundamentally change the Financial Services Sector.
- Furthermore, a number of Respondents and Interviewees highlighted the need for sustainability to move from being the job of 'sustainability teams' to being embedded into all of a business's investment and operational activities, governance, aspirations and stakeholder alliances – from 'add on' to 'built in'.



# Current and future Sustainable Finance skills and talent requirements

## The regulatory agenda will act as an 'accelerator' for ESG finance skills

In our survey, we asked Respondents to rank a set of options that would best describe how regulation would impact their organisation in relation to Sustainable Finance training and skills requirements. **60% of Respondents indicated that training and skills will be given a higher priority if regulation is implemented (Figure 3).**

There was broad agreement among the Interviewees that the right kind of regulation could boost Sustainable Finance and help improve the way ESG considerations are embedded into the Financial Services Sector (and thus its impact), particularly as regards setting reporting and disclosure standards.

There was also broad agreement among the Interviewees that once regulation is in place, it will further impact reporting, transparency and disclosure standards for the Financial Services Sector.

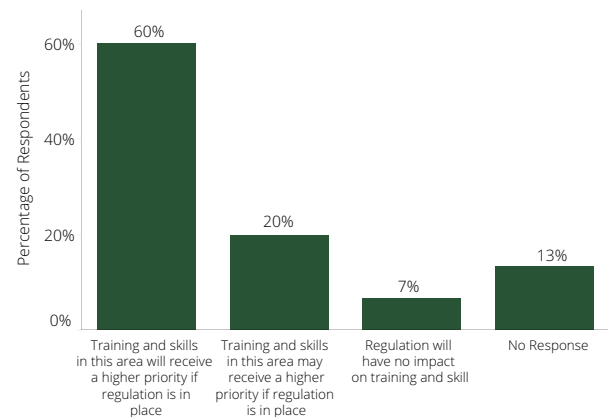
**Respondents ranked regulation and disclosure demands as a key driver of investment in Sustainable Finance skills and talent in 2019 and to an even greater extent in 2025 (Figures 4 and 5).**

Some of the Interviewees said that upskilling of existing employees in middle office roles, particularly in compliance and risk functions, across the Financial Services Sector, will be required to ensure the Financial Services Sector has the knowledge, skills and capabilities to respond to the Sustainable Finance regulatory challenges facing the Sector.

Furthermore, Interviewees said that once investments are subject to appraisal against regulatory standards, the ESG criteria will be measurable and subject to financial reporting and compliance checks. Therefore upskilling of existing employees in back office roles will also be needed to meet new demands.

In addition, upskilling will be required by other financial service participants. For example, trustees of a pension scheme who act

separately from the employer will also require a robust baseline understanding of ESG considerations.



**Figure 3:** The impact of regulation on Respondents' organisations in relation to training and skills in Sustainable Finance

# Current Sustainable Finance skills and talent requirements

## Key market drivers in 2019 will remain the same in 2025, however will intensify

In our survey, we asked Respondents, based on their experience of their organisation, to rank each of the following drivers behind the investment in Sustainable Finance skills and talent in 2019 on a scale of 1-10, where 1 is 'most important' and 10 is 'least important':

- A. Improved long-term returns
- B. Brand image and reputation
- C. Decreased investment risk and/or underwriting risk
- D. Regulatory/disclosure demands

- E. External stakeholder requirement (e.g., clients, government, society at large)

- F. Attraction/retention of talent
- G. Altruistic values/ Corporate Social Responsibility
- H. Board pressure
- I. Activist pressure
- J. Core business objectives

Respondents indicated that the drivers specified in A, B, C, D, E and J above are the key drivers of investment in Sustainable Finance skills and talent in 2019 (Figure 4).

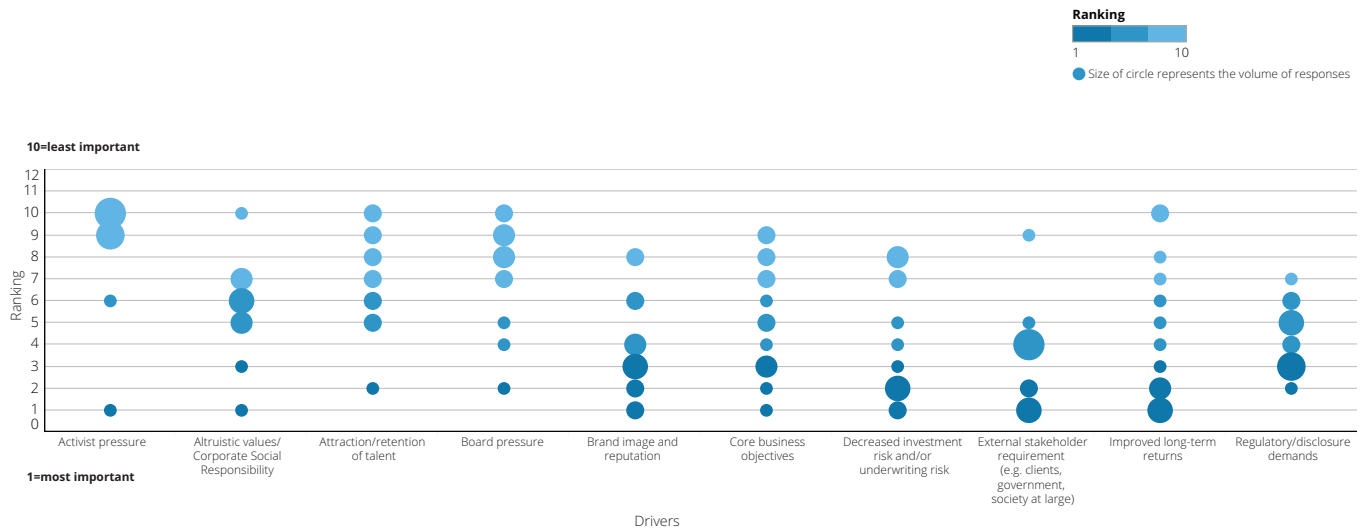


Figure 4: Drivers behind the investment in Sustainable Finance skills and talent in 2019

# Future Sustainable Finance skills and talent requirements

## Key market drivers in 2019 will remain the same in 2025, however these drivers will intensify

In our survey, we asked Respondents, based on their experience of their organisation, to rank the importance of each of the following drivers behind the investment in the future need for Sustainable Finance skills and talent in 2025 on a scale of 1-10, where 1 is 'most important' and 10 is 'least important':

- A. Improved long-term returns
- B. Brand image and reputation
- C. Decreased investment risk and/or underwriting risk
- D. Regulatory/disclosure demands

- E. External stakeholder requirement (e.g. clients, government, society at large)
- F. Attraction/retention of talent
- G. Altruistic values/ Corporate Social Responsibility
- H. Board pressure
- I. Activist pressure
- J. Core business objectives

Respondents indicated that they anticipate the drivers specified in A, B, C, D, E and J above will be the key drivers of investment in Sustainable Finance skills and talent in 2025 (Figure 5). This is consistent with 2019's findings, however these drivers intensify in terms of 'most important' in 2025.

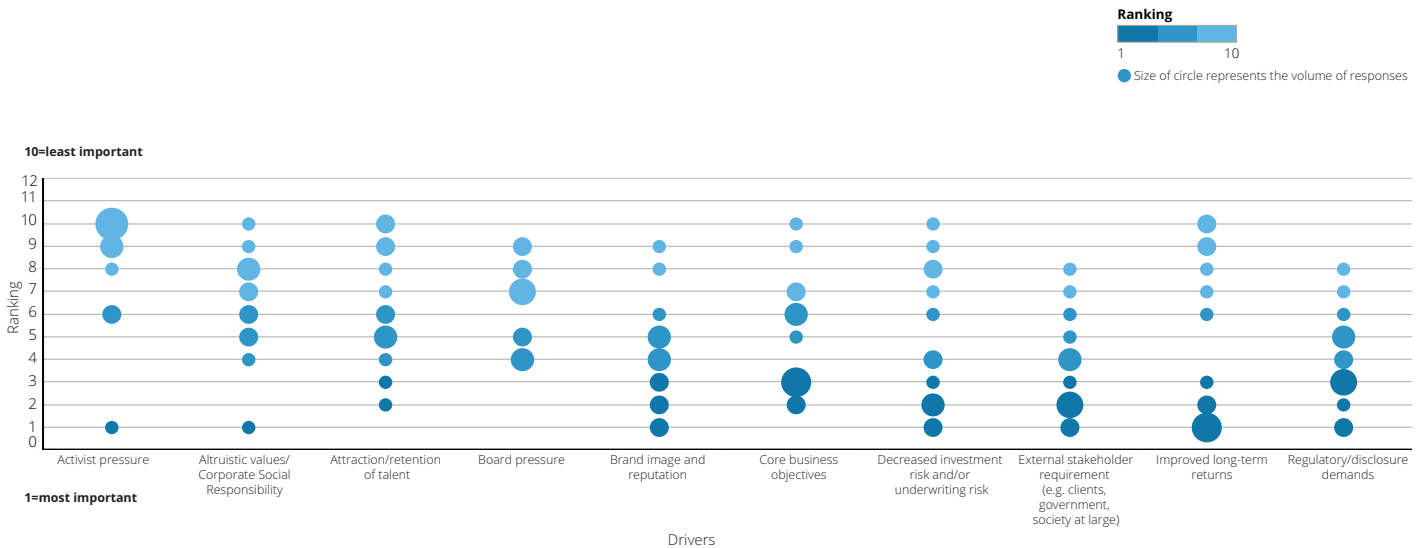


Figure 5: Anticipated drivers behind the investment in the future need for Sustainable Finance skills and talent in 2025

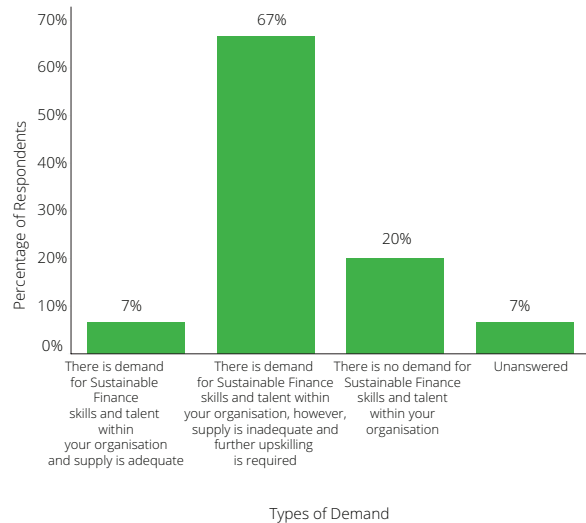
# Current and future Sustainable Finance skills and talent requirements

## There is current demand for Sustainable Finance skills and talent, however supply is inadequate

67% of Respondents said that there is current demand for Sustainable Finance skills and talent within their organisations, however, supply is inadequate and upskilling is required (Figure 6).

One Respondent said that its organisation has already initiated Sustainable Finance training across its business in order to be ahead of the legislation when it comes into effect. This Respondent said a key challenge for its organisation is understanding what training courses are available in the market to facilitate the upskilling of existing staff rather than acquiring new talent.

This highlights that more marketing is required by existing Sustainable Finance educational providers to build awareness.



**Figure 6:** What is the level of demand for Sustainable Finance skills and talent?

# Current and future Sustainable Finance skills and talent requirements

## The findings indicate that baseline training is required as a main priority in the short term

In our survey, we asked Respondents to rank the demand within their organisation for the following Sustainable Finance skills, on a scale of 1-9, where 1 is 'high demand' and 9 is 'low demand':

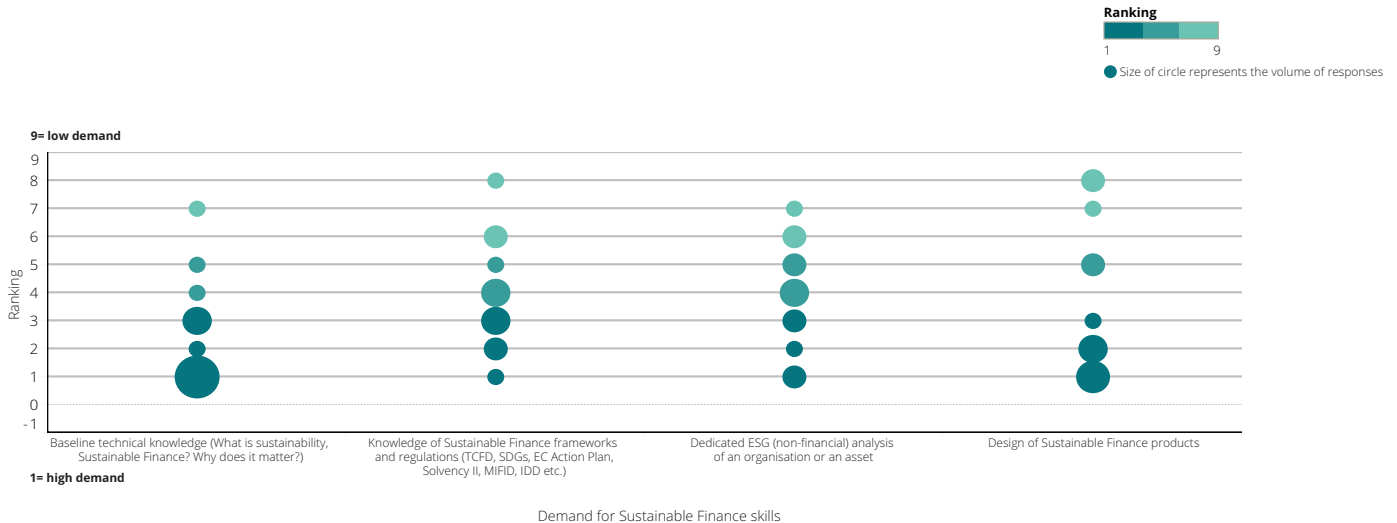
- A. Baseline technical knowledge (What is sustainability, Sustainable Finance? Why does it matter?)
- B. Knowledge of Sustainable Finance frameworks and regulations (TCFD, SDGs, EC Action Plan, Solvency II, MIFID, IDD etc.)
- C. Dedicated ESG (non-financial) analysis of an organisation or an asset
- D. Integrated financial and non-financial analysis (intangibles valuation, cash flow analysis of sustainable projects / portfolios, data analysis etc.)

## E. Design of Sustainable Finance products

- F. Data science applications to ESG investing
- G. Reporting and disclosure to support increased transparency
- H. Internal governance/oversight roles
- I. Other

Respondents specified that demand for Sustainable Finance skills in their organisations is concentrated on the areas set out in items A, B, C, D and E above (Figure 7).

**In our discussions with Respondents and Interviewees, baseline training was highlighted as the main skills priority in the short term.** One Respondent said that baseline technical knowledge should include a baseline understanding of frameworks and regulation.



**Figure 7:** The top 4 Sustainable Finance skills and talent in demand within Respondent's organisations

# Current and future Sustainable Finance skills and talent requirements

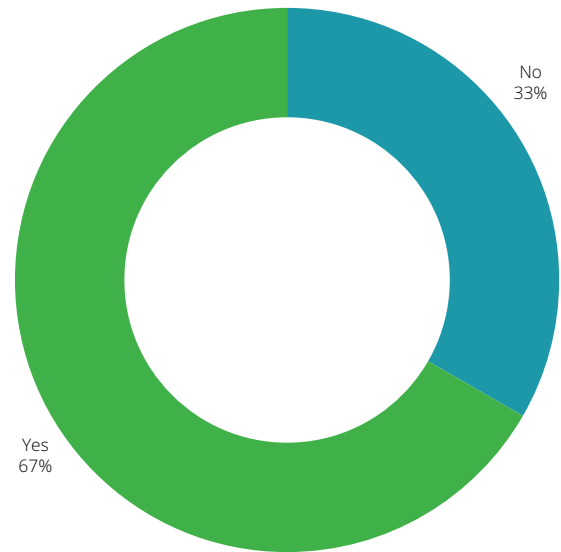
## More than two thirds of Respondents are currently impacted by skills shortages

More than two thirds of Respondents said their organisations are affected to some degree by Sustainable Finance skills shortages (Figure 8).

Notable information gathered during the interviews in connection with Sustainable Finance skills shortages include:

- Fuelled by incorporating ESG into financial decision making , skills and talent in data management and measurement, with a particular focus on big data and Artificial Intelligence (“AI”) are increasing in demand.
- One of the main messages from the Respondents and Interviewees is that Sustainable Finance is not about developing an entirely new set of skills and competencies. Rather it is about a specialised skillset that blends existing finance skills with risk, data management and ESG competencies. For example an analyst pricing a stock that has ESG considerations embedded into its pricing will use traditional finance pricing skills, together with a robust knowledge of ESG considerations and knowledge of how ESG data is collated, interpreted and applied in a consistent manner.
- Financial professionals need to have deep knowledge of the industries they are investing in to make sure they can determine what is material to the investment from an ESG perspective as well as from a financial risk-return perspective. Materiality varies by industry. The Sustainability Accounting Standards Board (“SASB”)<sup>19</sup> has identified the material ESG issues for all 77 industries in its classification system. For example, material issues for companies in food retail and distribution include greenhouse gas emissions, energy management, access and affordability, fair labour practices, and fair marketing and advertising. For internet and media services the list includes

energy management, water and wastewater management, data security and customer privacy, diversity and inclusion and competitive behaviour.



**Figure 8:** Organisation is affected to some degree by shortages with respect to Sustainable Finance skills and talent

<sup>19</sup> The Sustainability Accounting Standards Board was founded in 2011 to develop and disseminate sustainability accounting standards of publicly traded US companies

# Current and future Sustainable Finance skills and talent requirements

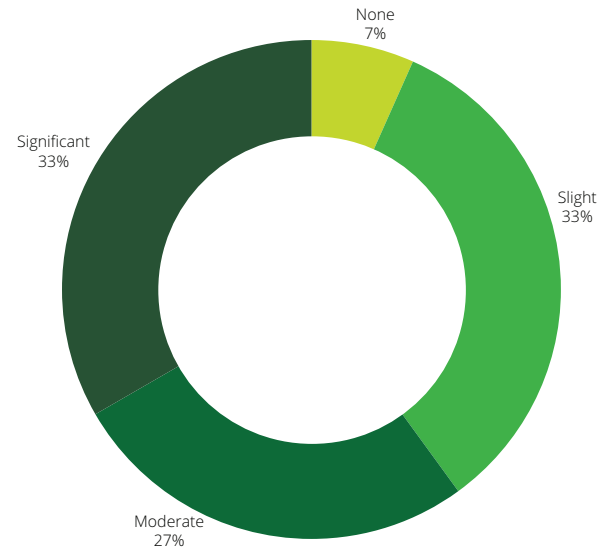
## 33% of Respondents said it would have a significant impact on their organisations if the current (2019) level of Sustainable Finance skills and talent applied in 2025

In our survey, we asked Respondents to what extent would their organisation be impacted in 2025 if the current (2019) level of Sustainable Finance and skills and talent applied?

- 33% of Respondents said it would have a significant impact on their organisations (Figure 9);
- 27% of Respondents said it would have a moderate impact on their organisations (Figure 9);
- 33% of Respondents said it would have a slight impact on their organisations (Figure 9); and
- 7% of Respondents said it would not impact on their organisations (Figure 9).

These findings suggest that a shortfall in Sustainable Finance skills may have a material impact on the Financial Services Sector in the future. Any material impact could affect Ireland's ability to compete as a leading financial centre and the Sector's contribution to Ireland's future economy.

Some Interviewees expect to see growth in Sustainable Finance skills and talent in the short to medium term based on their organisation's own endeavours to boost internal training in this regard. They also expect upstream regulation to play a key part in accelerating this growth.



**Figure 9:** Impact in 2025 if the current (2019) level of Sustainable Finance skills and talent applied



# Current and future Sustainable Finance skills and talent requirements

## The main challenges relate to competing internal priorities and lack of available talent in Ireland

In our survey, we asked Respondents to rank what their organisation perceives as the main challenges limiting the development of Sustainable Finance skills and talent in Ireland, on a scale of 1-6, where 1 is 'highly challenging' and 6 is 'not challenging' from the list of challenge items specified below:

- A. Inadequate training budgets
- B. Competing internal priorities**
- C. Limited management support
- D. Lack of coordination

## E. Lack of available talent in Ireland

## F. Other

Respondents indicated that the concentration of challenges in their organisations is focused on the areas set out in items B, E and F above (Figure 10).

In terms of other challenges that came through during the Interviews, it was noted that there are a number of unknowns with respect to Sustainable Finance. For example; the manner and timing regulation will be implemented which will be a key driver for upskilling.

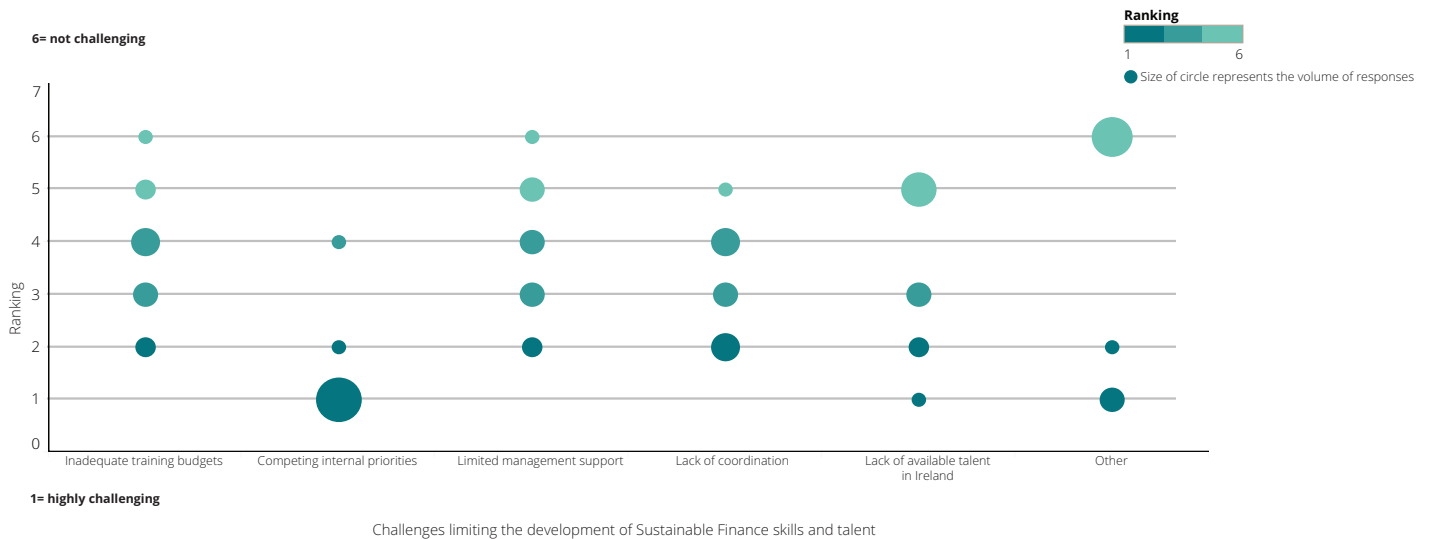


Figure 10: The main challenges limiting the development of Sustainable Finance skills and talent in Ireland

# Recruitment

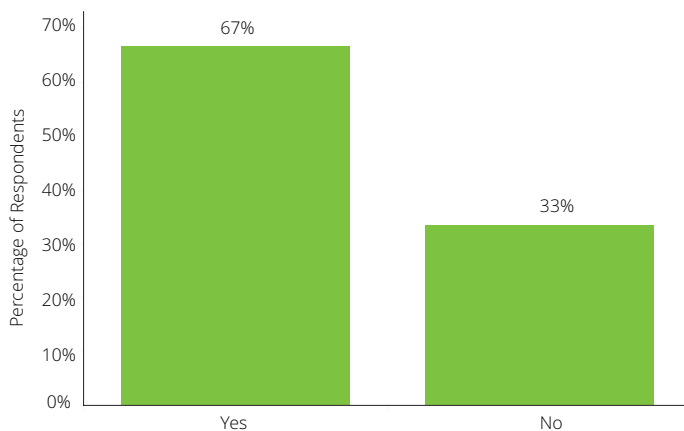
## The Financial Services Sector's expectations of new graduates today are higher than in 2015

Our research indicates that an overwhelming 67% of Respondents expect more from new graduates today as compared to graduates in 2015 in the context of Sustainable Finance skills requirements (Figure 11).

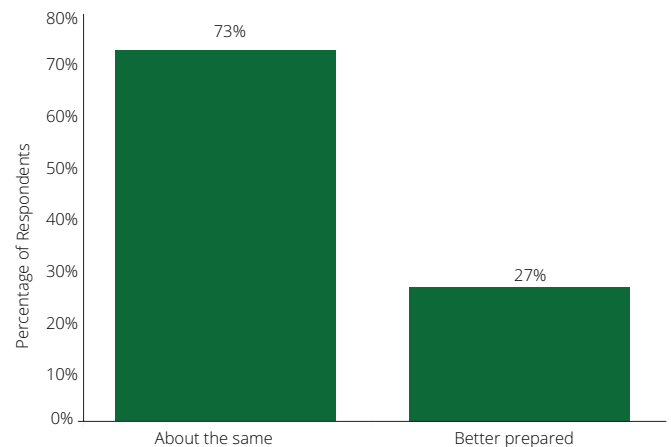
Notable information gathered from the survey in connection with recruitment and related matters include:

- Respondents from the asset management sector said that in 2015 their organisations had little to no expectation of Sustainable Finance skills from graduates. Their *'little to no'* expectation has shifted and today these organisations expect graduates to have a reasonable level of baseline knowledge of Sustainable Finance and an overall awareness and personal interest in sustainability issues. Indeed some interviewees anticipated that ESG considerations are likely to be aligned to many graduates actual values and motivations. This anticipation is mirrored by the rising influence of Millennials and Generation Z across all stakeholder groups.
- The sentiment among some Respondents is that given the substantial surge of awareness and concern about sustainability issues, particularly global warming and climate change threats and ongoing efforts to mitigate impactful behaviours, the Financial Services Sector expects new graduates to *"have their finger on the pulse"* in relation to some of the sustainability issues and the ability to think creatively and laterally and brainstorm new ideas.

Notwithstanding the shifts in expectations noted above, 73% of Respondents said that more than 70% of new graduates today have about the same level of preparedness in relation to Sustainable Finance skills, compared to 2015 levels (Figure 12).



**Figure 11:** Do Respondents expect more from new graduates today as compared to new graduates in 2015?



**Figure 12:** What is the level of preparedness of current graduates, compared to 2015 according to the Respondents?

# Recruitment

## A key recruitment requirement for Sustainable Finance professionals is previous Sustainable Finance experience above professional financial and non-financial qualifications

In our survey, we asked Respondents whether there is an expectation that experienced hires for Sustainable Finance will be required within their organisations.

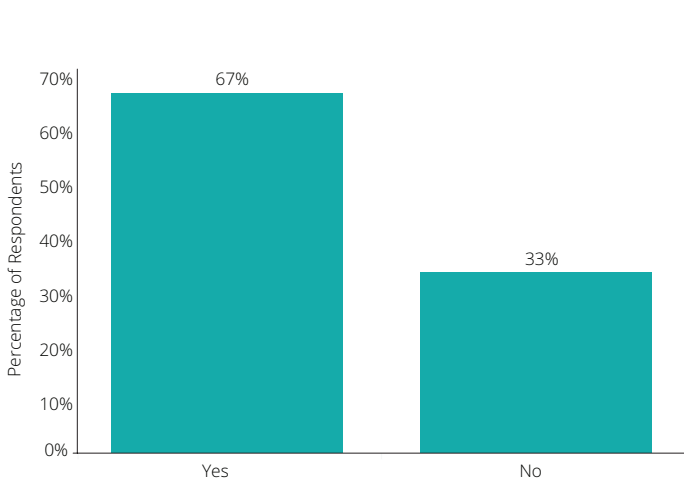
- 67% of Respondents answered 'Yes' (Figure 13)
- 33% of Respondents answered 'No' (Figure 13)

The majority of the Respondents that said "Yes" indicated that new hires would be required in the short to medium term.

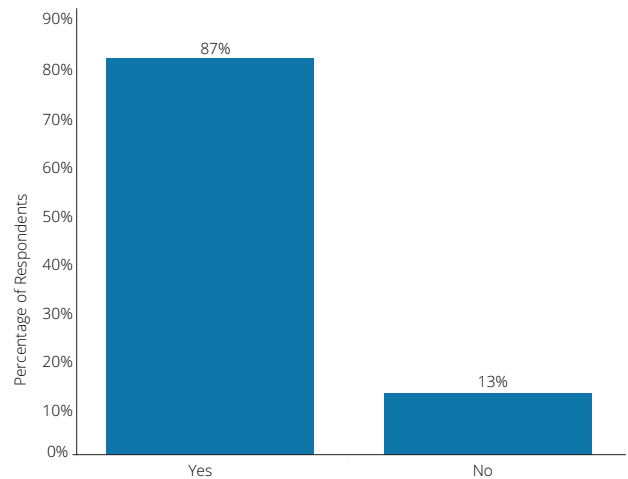
We asked Respondents whether there is an expectation that existing employees will be upskilled with respect to Sustainable Finance Investment within their organisations.

- 87% of Respondents answered 'Yes' (Figure 14)
- 13% of Respondents answered 'No' (Figure 14)

In our survey, Respondents specified that the key recruitment requirements for Sustainable Finance professionals is for such professionals to have previous Sustainable Finance experience above professional financial and non-financial qualifications.



**Figure 13:** Do Respondents expect that experienced hires for Sustainable Finance will be required within their organisations?



**Figure 14:** Do Respondents expect that existing employees will be upskilled with respect to Sustainable Finance within their organisation?

# Identification of “how” potential skills and talent gaps can be improved

## Product innovation, design and approval is the most important business area where Sustainable Finance skills are required

In our survey, we asked Respondents how they would prioritise the following business areas or functions where Sustainable Finance skills and talent are the most pressing in their organisations on a scale of 1-10, where 1 is ‘most important’ and 10 is ‘least important’.

- A. **Product innovation, design and approval**
- B. **Product development and implementation**
- C. **Product launch and marketing**
- D. Product launch review
- E. **Risk assessment and management (2nd Line)**
- F. Internal Audit (3rd Line)
- G. Human resources/talent acquisition/internal up-skilling
- H. Procurement

## I. Internal operations/building management

### J. Other

Respondents indicated that Sustainable Finance skills and talent requirements are most pressing in the business areas or functions set out in A, B, C, E and I above (in bold) (Figure 15).

During the interviews, there was strong feedback regarding innovation and fintech. If advancements are to be made in the Irish Financial Services Sector, it is imperative that the fintech and innovation ecosystem develop in tandem with the mainstreaming of Sustainable Finance and the regulatory agenda. This ecosystem will be a key stakeholder that can positively impact the evolution of Sustainable Finance in the Sector - for example with respect to ESG data analytics and interpretation. Some European regulatory institutions have started to explore Sustainable Finance in conjunction with innovation in acknowledgment of the potential role of fintech and innovation of Sustainable Finance tools.

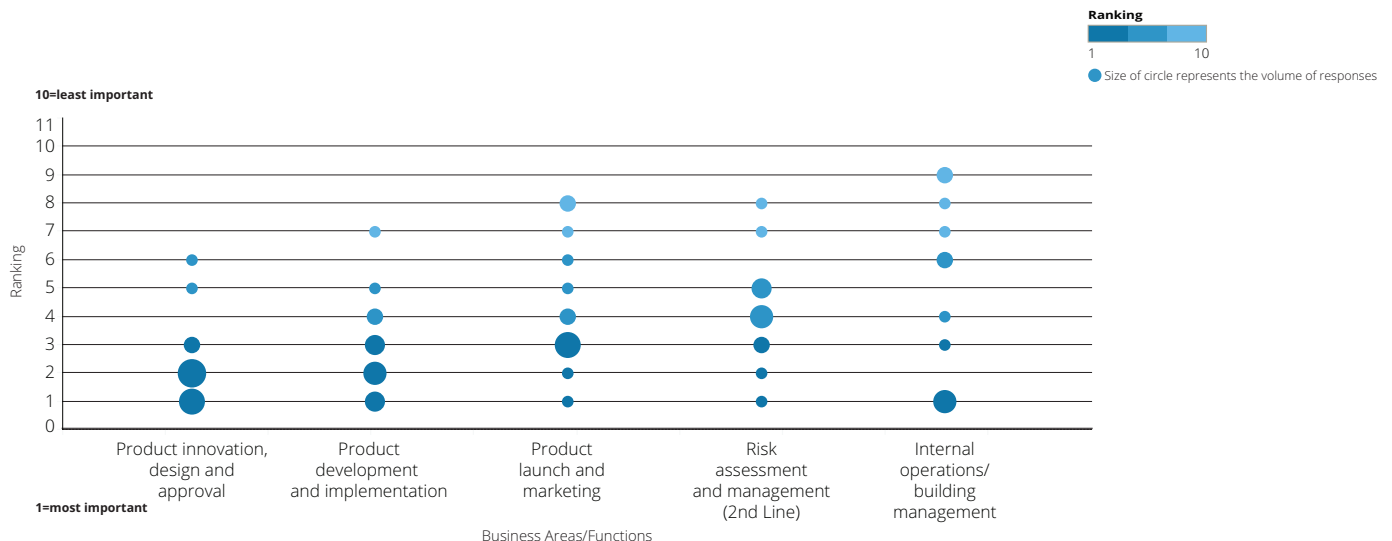


Figure 15: The top 5 business areas or functions where Sustainable Finance skills and talent are the most pressing

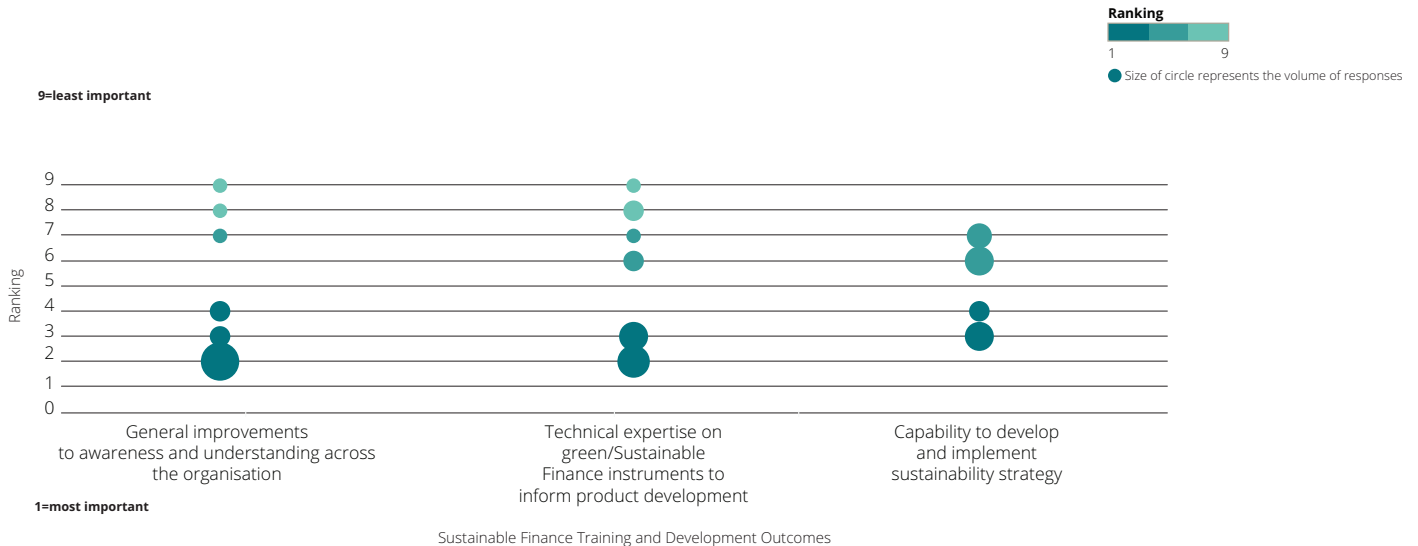
# Identification of “how” potential skills and talent gaps can be improved

## Sustainable Finance training and development can enable a business to become more successful by creating and adding value

In our survey, we asked Respondents to select from the list below what the most important outcomes of any Sustainable Finance training and development are for their organisations on a scale of 1-9, where 1 is 'most important' and 9 is 'least important':

- A. General improvements to awareness and understanding across the organisation**
- B. Technical expertise on green/Sustainable Finance instruments to inform product development**
- C. Certification/ qualification for career development
- D. Capability to support new market development
- E. Capability to undertake improved risk assessment and management
- F. Capability to respond to new client expectations
- G. Capability to develop and implement sustainability strategy**
- H. Capability to ensure regulatory compliance
- I. Other

Respondents indicated that the outcomes set out in A, B and G above (in bold) are the most important outcomes of any Sustainable Finance training and development (Figure 16).



**Figure 16:** The top three most important outcomes of any Sustainable Finance training and development

# Identification of “how” potential skills and talent gaps can be improved

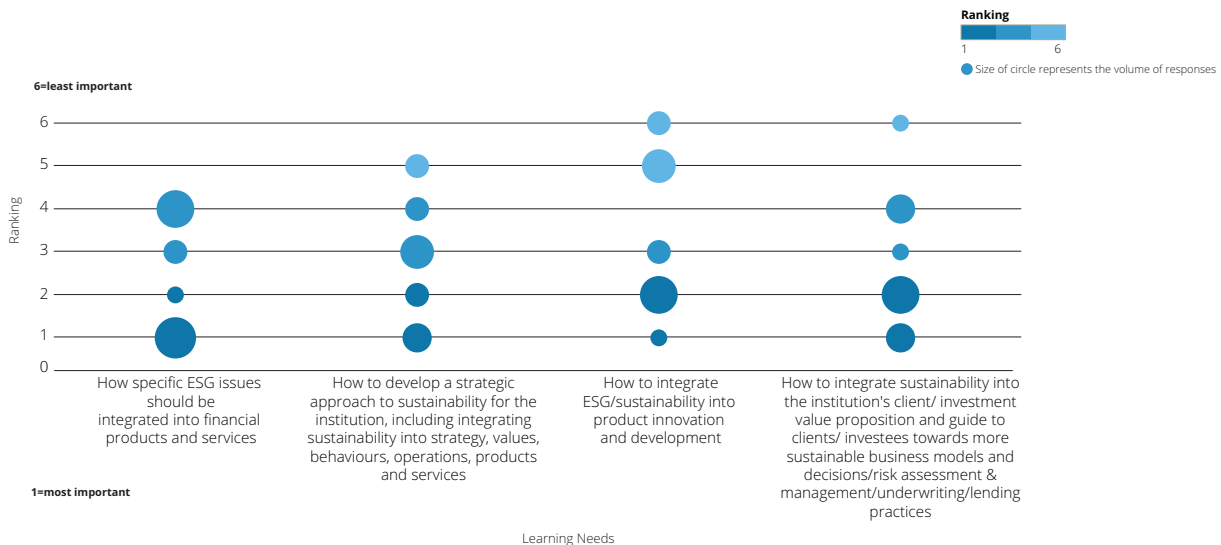
## Sustainable Finance and Responsible Investment is not just a product and must be embedded within an organisation's strategy

In our survey, we asked Respondents to rank the following learning needs to indicate which are the most important for their organisation, where 1 is 'most important' and 6 is 'least important':

- A. How specific ESG issues should be integrated into financial products and services
- B. How to develop a strategic approach to sustainability for the institution, including integrating sustainability into strategy, values, behaviours, operations, products and services
- C. How to integrate sustainability into institutional governance processes

- D. How to integrate sustainability into the organisations client/ investment value proposition and guide to clients/ investees towards more sustainable business models and decisions/risk assessment & management/underwriting/ lending practices
- E. How to integrate ESG/sustainability into product innovation and development
- F. How to design the data pipeline to support the development of Sustainable Finance processes

Respondents indicated that the learning needs set out in A, B, D and E above are the top four learning needs that are the most important for their organisations (Figure 17).



**Figure 17:** The top four learning needs which Respondents think are the most important for their organisations

# Identification of “how” potential skills and talent gaps can be improved

## We need to think about the knowledge required rather than the skills...in the future it will just be referred to as ‘Finance’

In our survey, we asked Respondents to specify how the Sector could accelerate the training of talent and skills acquisition in Sustainable Finance in Ireland choosing from a list of learning needs provided in the survey. Respondents were asked to select one learning need.

- **33% of Respondents said that the Financial Services Sector’s acceleration could be achieved through the delivery of training programmes through Sustainable Finance Skillnet (Figure 18).**
- **27% of Respondents said that the Financial Services Sector’s acceleration could be achieved through the integration of sustainability and ESG modules into all existing third level finance and business degrees (Figure 18).**

The general consensus amongst Respondents and Interviewees is that sustainability must be integrated into the curricula of schools, universities and all professional financial qualifications. All financial professionals in the value chain—from product development and management to asset servicing, administration and auditing—also need ongoing training on what Sustainable Finance is and how it adds value for society.

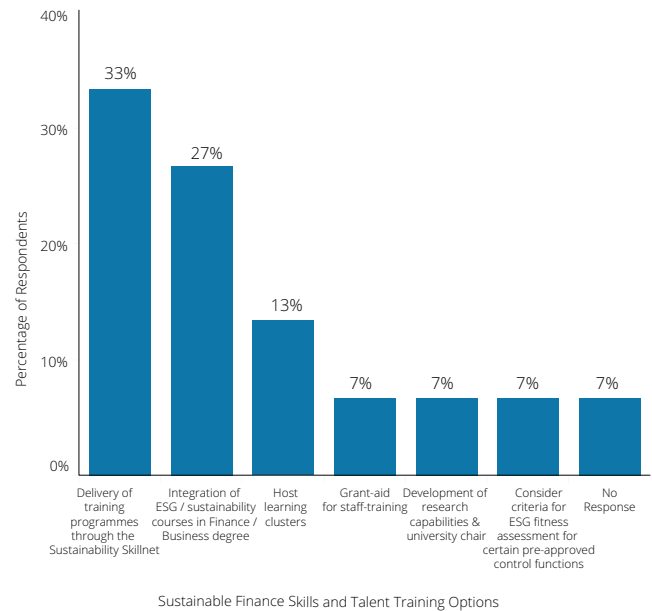
Recognising that implementing Sustainable Finance into educational and professional training curricula will take time, Respondents and Interviewees said Sustainable Finance Skillnet is best placed to provide the primary training solution to existing finance professionals in the short term. In the medium to long term, Respondents and Interviewees believe Sustainable Finance Skillnet will evolve and continue to play an important role in the supply of training programmes to financial professionals across all financial and economic sectors.

Some Respondents said they would have selected all seven learning needs (refer to Figure 18) if such a selection was an

available option. This implies that these Respondents believe all seven learning needs are important for their organisations.

Other notable comments include:

- Use of online and virtual classroom training for the basic upskilling and more detailed face to face training for specific upskill training;
- Relevant case studies and practical workshops on financial modelling; and
- Availability of a panel of experienced training practitioners working with Sustainable Finance Skillnet is desired.



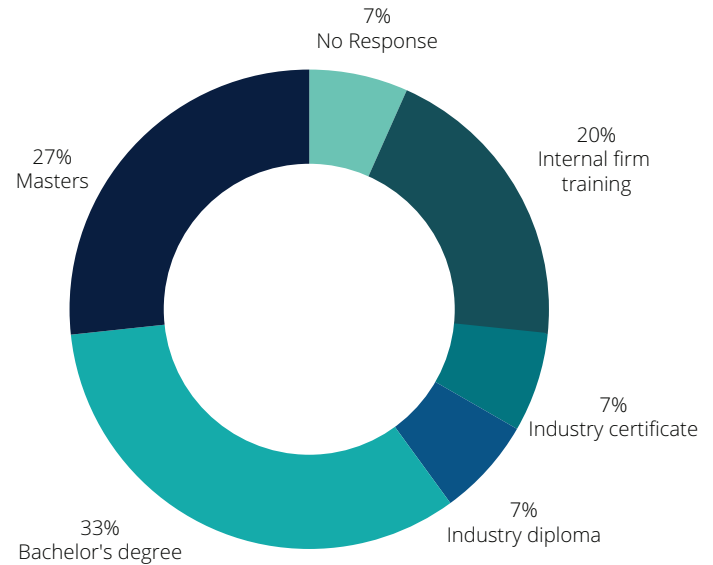
**Figure 18:** How the Financial Services Sector can accelerate the training of talent and skills acquisition in Sustainable Finance



# Identification of “how” potential skills and talent gaps can be improved

## In the medium to long term sustainability issues and Sustainable Finance need to be embedded in all business, economic and financial courses throughout second and third level institutions

As illustrated in Figure 19, 60% of the Respondents are of the view that their organisations need their new hires to have third level qualifications that have Sustainable Finance and ESG considerations embedded into their degree or master courses. This supports the view that in the medium to long term, sustainability issues and Sustainable Finance need to be embedded in all business, economic and financial courses throughout second and third level institutions to deliver the Sustainable Finance skills and talent needed by the Financial Services Sector.









**Figure 19:** What are the type of training needs/requirements for Sustainable Finance new hires?

# Themes and gap analysis

# Themes and potential talent and skills gaps

Based on survey answers and interviews

Theme / gap	Description
 <p><b>Differences between various sectors</b></p>	<p>Skills and talent in the four sub-sectors (banking, insurance, asset management and fund services) of the Financial Services Sector are at different levels of maturity. For instance, our findings indicate that front office staff in the asset management sector are more advanced in Sustainable Finance than middle and back office staff. Furthermore, our findings indicate that the asset management sector is more advanced in Sustainable Finance than the other sub sectors.</p> <p>Interviewees from the banking and insurance sectors noted variances in the role of Sustainable Finance strategies across their various banking and insurance business lines.</p>
 <p><b>Four key business drivers of the shift to Sustainable Finance - regulation is the accelerator</b></p>	<p><i>Client:</i> The Financial Services Sector is facing increasing awareness of, and demand for, Sustainable Finance solutions.</p> <p><i>Commercial:</i> Incorporating ESG considerations into the investment research, portfolio construction and stewardship process can enhance long-term risk-adjusted returns.</p> <p><i>Risk:</i> Companies that manage risks and opportunities related to the ESG considerations are better equipped because they expose their businesses to fewer risks, and hence are more attractive to investors.</p> <p><i>Regulatory:</i> It is expected that the EU Action Plan: (March 2018) and its proposed reforms will greatly accelerate Sustainable Finance reporting, transparency and disclosure in the Financial Services Sector. The key objectives of this new plan are built on three main pillars:</p> <ul style="list-style-type: none"> <li>• Reorient capital flows toward a sustainable investment;</li> <li>• Mainstream sustainability into risk management; and</li> <li>• Foster transparency and long-termism.</li> </ul>
 <p><b>Data and measurement skills and talent</b></p>	<p>Sustainable Finance is not about developing an entirely new set of skills and competencies. Rather its about a specialised skillset that blends existing finance skills with risk, data management and ESG competencies.</p>

Theme / gap	Description
 <p><b>Fintech and innovation</b></p>	<p>If advancements are to be made in the Irish Financial Services Sector, it is imperative that the fintech and innovation ecosystem develop in tandem with the mainstreaming of Sustainable Finance and the regulatory agenda. This ecosystem will be a key stakeholder that can positively impact the evolution of Sustainable Finance in the Sector - for example with respect to ESG data analytics and interpretation. Technology and innovation is one of the four pillars around which the Ireland for Finance 2025 strategy is structured. This pillar is focused on providing a collaborative approach to addressing emerging challenges and opportunities in technological developments.</p>
 <p><b>Second and third lines of defence</b></p>	<p>Given the expected regulatory imperative, it is a natural progression that further skills and talent will be required in second and third line oversight roles to ensure that upstream regulation is monitored and that there are appropriate challenge and 'audit' processes also put in place.</p>
 <p><b>Sustainable Finance Skillnet has a role to play and further embedding required in third level and professional education</b></p>	<p>Sustainability must be integrated into the curricula of schools, universities and all professional financial qualifications. Recognising that implementing Sustainable Finance into educational and professional training curricula will take time, Sustainable Finance Skillnet is best placed to provide the primary training solution to existing finance professionals in the short term. In the medium to long term, Sustainable Finance Skillnet should continue to play an important role in the supply of training programmes to financial professionals across all financial and economic sectors.</p>

# Proposed action plan

# Proposed action plan (summary)

## Recommendations and high level action plan to address areas for improvement

### Recommendations and a high level action plan

The key recommendations and high level action plan proposes 10 recommendations under the following three headings:

1. Programmes to be provided by Sustainable Finance Skillnet;
2. Programmes to be provided by second and third level institutions and education and training to be provided by professional bodies; and
3. Guidance to assist the financial service providers to evaluate '*own needs*' for Sustainable Finance.

Recommendations	No.	Title	Impact	Effort	Time
<b>Programmes to be provided by Sustainable Finance Skillnet</b>	1	Sustainability Skillnet to be refocused exclusively on sustainable finance activities and renamed Sustainable Finance Skillnet	High	Simple	Immediate/ Complete
	2	Consideration of an ESG fitness assessment	High	Complex	2-3 years
	3	Create a cohort of training facilitators	High	Average	1 year
	4	A proposed structure for programme delivery	High	Average	1-3 years
	5	Public relations strategy	Medium	Average	1-2 years
<b>Programmes to be provided by education and training providers</b>	6	Ensure fintech and regtech providers are appraised of ESG considerations and trained appropriately	High	Average	1 year
	7	Embed Sustainable Finance into all relevant curricula of second and third level programmes	High	Complex	1-10 years
	8	Integrate Sustainable Finance into professional education and continuous professional development	High	Complex	1-5 years
<b>Guidance to assist the financial service providers to evaluate 'own needs'</b>	9	Annual survey and review of Sustainable Finance skills and talent	Medium	Low	Annual
	10	A proposed guideline to assist financial service providers evaluate their ' <i>own needs</i> ' for Sustainable Finance	High	Complex	1-10 years

# Proposed action plan

## Programmes to be provided through Sustainable Finance Skillnet

### 1. Sustainable Finance Skillnet to be refocused exclusively on sustainable finance and rebranded ‘Sustainable Finance Skillnet’

Observation	Recommendation	Impact	Effort	Time
To ensure full sector engagement the Steering Group should undertake a strategic review to determine if there are any other strategic stakeholders that should be included in the governance model.	Based on the interviews with Representative Organisations, and now with an exclusive focus on Sustainable Finance in support of the Ireland for Finance strategy, the Steering Group composition should be revisited with mandate and terms of reference updated to ensure full sector engagement with the agenda, all relevant industry stakeholder bodies are included in the governance model and expertise from disciplines including finance, human capital (in the context of training and managing the impact of ESG issues on operations), regulatory (in the context of upstream regulation and risk management) and technology/data (in the context of it being a key driver of Sustainable Finance skills and talent requirements and an enabler of Sustainable Finance development).	High	Simple	Immediate

### 2. Consideration of an ESG fitness assessment

Observation	Recommendation	Impact	Effort	Time
Given the amount of regulation that shall come into operation, it is very likely that ESG will form part of fitness and probity and minimum competency requirements for certain key function holders and Board members.	In line with the Ireland for Finance strategy, ensuring Ireland is a top-tier location of choice for Sustainable Finance, the Steering Group should explore how best to incorporate ESG considerations across all regulatory considerations, including into fitness and probity and minimum competency requirements. Other jurisdictions are considering such an approach to these requirements. This would also facilitate professionals in gauging their level of knowledge in ESG pertinent to their seniority in a financial services organisation. The Steering Group could lead this initiative by bringing together all strategic partners, including relevant representative bodies, the regulator and regulatory experts to explore how best to realise the outcomes of this recommendation.	High	Complex	2-3 years



### 3. Create a cohort of facilitators

Observation	Recommendation	Impact	Effort	Time
It was noted that there is a lack of facilitators and trainers to cater for Sustainable Finance training across all levels of maturity, especially in relation to more complex skills such as financial modelling	Sector wide upskilling efforts require a significant acceleration. To this end, a cohort of national and international experts that can meet the training needs across all levels should be identified by the Sustainable Finance Skillnet with an expert community formed as a matter of urgency. Cutting across the different segments of a financial services sector eco-system, i.e. insurance, banking, etc. this will ensure delivery of regular best-in-class masterclasses on relevant topics underpinning Ireland for Finance Sustainable Finance strategic goals.	High	Average	1 year

### 4. Proposed structure of programme delivery

Observation	Recommendation	Impact	Effort	Time
<p>The structure and delivery of the Sustainable Finance Skillnet will need to take account of:</p> <ul style="list-style-type: none"> <li>• Data and measurement skills and knowledge</li> <li>• Oversight skills and knowledge given upstream regulation</li> <li>• Various levels of maturity in the Financial Services Sector</li> <li>• Other international best-in-class talent and skills programmes</li> </ul>	<p>In delivering a range of innovative workforce development programmes that meet the needs of businesses in regulation, knowledge of Sustainable Finance frameworks, integrated financial and non-financial data analytics and Sustainable Finance investment models, the training provided through the Sustainable Finance Skillnet should be structured to upskill practitioners looking to move into Sustainable Finance and/or as a refresher to existing finance practitioners.</p> <p>The Sustainable Finance Skillnet should aim to build out the best suite of programmes around the Steering Group's Future Skills and Talent Requirements List which focuses on the following three areas:</p> <ul style="list-style-type: none"> <li>• Baseline technical knowledge;</li> <li>• Knowledge of regulation and frameworks; and</li> <li>• Implementation and application.</li> </ul> <p>Particular focus should be directed at technology skills and talent, and second and third lines of defence skills and talent, to meet the needs of regulation.</p> <p>In devising such a programme, the Sustainable Finance Skillnet must be conscious of other jurisdiction talent and skills activities and where possible collaborate with other international financial centres to share best practice.</p>	High	Average	1-3 years

## 5. Sustainable Finance Skillnet public relations

Observation	Recommendation	Impact	Effort	Time
During several interviews it was noted that there was limited awareness of the Sustainable Finance Skillnet and its service offering among some Financial Services Sector participants.	<p>In order for skills and talent to be at the forefront of the Sustainable Finance agenda, it is imperative that the full breath of the Financial Services Sector is made aware of the Sustainable Finance Skillnet and its service offerings.</p> <p>With marketing and public relations playing a key role in raising awareness of Sustainable Finance in other jurisdictions, increasing the profile of the Sustainable Finance Skillnet by means of a dedicated marketing campaign in partnership with key sector representative bodies will also serve to increase awareness amongst Irish located Financial Service Sector firms of the importance of developing their own Sustainable Finance and responsible investment strategy and to address talent gaps in this regard.</p>	Medium	Average	1-2 years

### A series of talent requirements for the sector met by a range of different programmes

## 6. Ensure fintech and/or regtech providers are appraised of the ESG opportunity and educated appropriately

Observation	Recommendation	Impact	Effort	Time
Innovative fintech and/or regtech providers need to be educated on ESG.	<p>Ireland is a hub for innovation, fintech and regtech. It was clear during our interviews that in order for Ireland to become a Sustainable Finance hub, the talent and skills of the <i>'innovation community'</i> would need to be developed and/or enhanced to help cater for the rising demand.</p> <p>Ultimately, these providers will play a vital role from a data analytics, measurement and application perspective and it is imperative they are appraised of the ESG opportunity and educated and trained appropriately.</p> <p>Existing links and allegiances and new allegiances should be formed with a primary focus on education and cross pollination amongst both disciplines.</p>	High	Average	1 year

## 7. Embed ESG finance into existing 2nd and 3rd level education

Observation	Recommendation	Impact	Effort	Time
<p>Respondents say that they expect more from new graduates today as compared to graduates in 2015. Respondents say that graduates today are prepared for the financial market to the same extent as graduates in 2015, which suggests that there has been little to no development of curricula at second and third level education.</p>	<p>Sustainability issues and Sustainable Finance need to be embedded in all business, economic and financial courses throughout second and third level institutions to deliver the Sustainable Finance skills and talent needed by the Financial Services Sector.</p> <p>Second and third level education providers and the Department of Education must be engaged and a review of existing curricula must be undertaken to formulate a plan on integration.</p> <p>Ultimately, this will provide the long term pipeline of skills and talent that is required in the Irish market.</p>	High	Complex	1 – 10 years

## 8. Integrate into professional education and continuous professional development

Observation	Recommendation	Impact	Effort	Time
<p>Respondents noted that professional bodies should integrate ESG into their courses and Continuous Professional Development (“CPD”) requirements.</p>	<p>The Sustainable Finance Skillnet should form allegiances with relevant professional bodies, including but not limited to:</p> <ul style="list-style-type: none"> <li>• Chartered Accountants Ireland;</li> <li>• Institute of Banking;</li> <li>• Association of Compliance Officers Ireland; and</li> <li>• Taxation Ireland.</li> </ul> <p>This should be done to ensure that Sustainable Finance is incorporated into all professional courses and also to initiate discussions as to whether future Sustainable Finance Skillnet courses can be utilised for CPD requirements for members of respective industry bodies.</p>	High	Complex	1 – 5 years

## Guidance to assist the financial service providers to evaluate 'own needs'

### 9. Annual survey and review future talent and skills

Observation	Recommendation	Impact	Effort	Time
<p>Sustainable Finance is evolving.</p> <p>In order to manage the ongoing training and educational needs as Sustainable Finance grows, it is important that a review of skills and talent is performed on an annual basis.</p>	<p>As part of the Ireland for Finance Action Plan, the Sustainable Finance Skillnet should perform an annual review and survey to understand how Ireland is tracking towards future talent and skills.</p> <p>The survey should be distributed to a greater respondent population and target staff in roles across various levels within financial organisations and across different business functions.</p> <p>In addition, the future talent and skills listing should be reviewed and revised on an annual basis given any future developments from a regulatory perspective and measure progress of same.</p>	Medium	Low	Annual

**10. Guidance to assist the financial service providers to evaluate ‘own needs’**

Observation	Recommendation	Impact	Effort	Time
<p>Organisations are at the early stages of considering their ‘own needs’ from a financial services perspective.</p>	<p>In line with the Ireland for Finance strategy, a practical way for organisations to assess their ‘own’ Sustainable Finance skills and talent needs and where they are in terms of Sustainable Finance maturity is to carry out a top down assessment (i.e. starting with the Board and governance committees) and a bottom up assessment focusing on:</p> <ul style="list-style-type: none"> <li>• People;</li> <li>• Process; and</li> <li>• Technology.</li> </ul> <p>As an example, a maturity model as a framework could follow the following criteria</p> <ul style="list-style-type: none"> <li>• <b>Initial</b> - Ad-hoc skills and talent in Sustainable Finance</li> <li>• <b>Fragmented</b> - Defined differently in different organisations and/or at different levels</li> <li>• <b>Documented</b> - Common Sustainable Finance framework in place</li> <li>• <b>Integrated</b> - Co-ordinated Sustainable Finance across silos. Training in place. Enterprise wide monitoring, measuring and reporting</li> <li>• <b>Strategic</b> - Skills and talents are at a level that the Sustainable Finance discussion is embedded in strategic planning, capital allocation, product development. Linkage to performance measures and incentives</li> </ul> <p>The Sustainable Finance Skillnet can play a role in designing and piloting a model that supports companies through this assessment by means of training and coaching. Subject to this being successful, Skillnet Ireland can facilitate a strategic collaboration with the Sustainable Finance Skillnet and other sectors to design such a model for the wider economy.</p>	High	Complex	1- 10 years

# Conclusion

# Conclusion

Stakeholders' expectations for Sustainable Finance are ever increasing and it is clear that Sustainable Finance is making a permanent shift from niche to mainstream. This aligns with the greater global focus on sustainability by corporates where it is becoming central to organisations strategy and operations.

The Irish Financial Services Sector is already well positioned as a hub for European and international finance and has the opportunity to be a significant player in the growing Sustainable Finance market. The challenge identified in this report is the need for Sustainable Finance skills and capability.

While expertise is building in the market, a lot of additional investment in education and training is required to respond to the increasing demand for Sustainable Finance skills. Building a strong Sustainable Finance market will enable Ireland to develop the products, skills and innovations that are increasingly needed to deliver a sustainable financial sector, promote growth and employment, and meet stakeholder needs. It will also provide the platform for the export of Sustainable Finance services to the numerous governments and investors around the world seeking to mobilise public and private capital and expertise to deliver local, national and international goals for climate action and sustainable development.

With a significant market forecast, the main challenges limiting the development of Sustainable Finance skills and talent in Ireland are competing internal priorities and a lack of available talent. By supporting the industry to address these challenges, the outlook and opportunity for Ireland is significant.



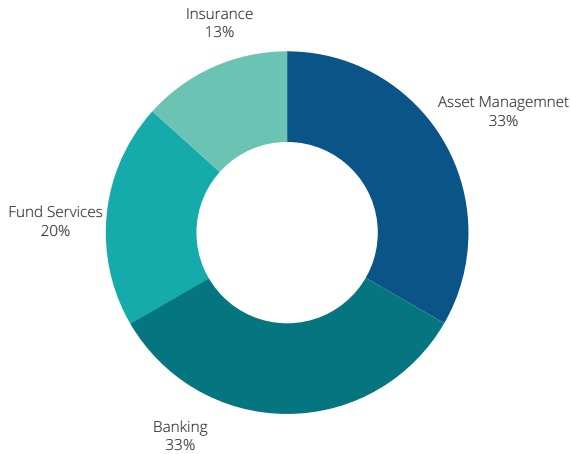
# Appendices



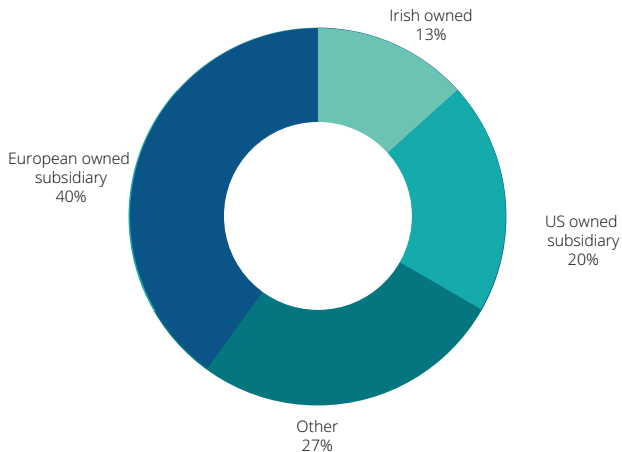
# Appendix I

## Profile of Respondents and Representative Organisations

### Respondent sub-sector



### Respondent ownership structure



### Representative Organisations

EC DG FISMA – European Commission Directorate-General for Financial Stability, Financial Services and Capital Markets Union

IAIM – Irish Association of Investment Managers

BPFI – Banking and Payments Federation of Ireland

Insurance Ireland

IAPF – Irish Association of Pension Funds

IF - Irish Funds

UN PRI - Principles for Responsible Investment

Central Bank of Ireland

SIF Ireland representatives – Sustainable and Responsible Investment Forum

Sustainable Finance Skillnet (formerly Sustainable Finance Skillnet)

UCD – University College Dublin

# Appendix II

## List of Sustainable Finance and Responsible Investment future skills and talent

Category	No.	Future Skills and Talents
Baseline Technical Knowledge	1	What is Sustainability and Sustainable Development? What are the Environmental, Social & Governance (ESG) factors of investment?
	2	What are key (most material) sustainability/ESG issues per sector and industry that an investor/bank should look at?
	3	How is the ESG performance of an asset/a company measured? What methodologies and data sources?
	4	What is Sustainable Finance? What are the existing developed markets (Green Bonds, SRI, etc.)? What is the structure of the ecosystem?
	5	Why does Sustainability matter for Financial Services companies?
	6	What impact do Financial Services have on ESG factors of businesses? How does Sustainable Finance impact businesses?
	7	For those that are new to the ESG agenda, an understanding as to what are the key drivers of the ESG agenda in terms of implementation and integration?
Sustainable Finance Regulation & Recommendations	8	Knowledge of UN Sustainable Development Goals
	9	Knowledge of TFCF recommendations and their benefits
	10	Knowledge of EC Action Plan for Financing Sustainable Growth and its aims
	11	Knowledge of the EC Action Plan taxonomy proposal of green activities and its simplifications
	12	Knowledge of the Network for Greening the Financial System
	13	Knowledge of the proposed EU Green Bond standard
	14	Knowledge of voluntary Green Bonds frameworks (GB principles and Climate Bond Initiative)
	15	Knowledge of the UN Sustainable Banking Principles
	16	Knowledge of the UN Principles for Responsible Investing (UN PRI)
	17	Knowledge of the UN Principles for Sustainable Insurance (UN PSI)
	18	Knowledge of UNEP-FI pilot work on climate risk in Banking and in Investment

Category	No.	Future Skills and Talents
Sustainable Finance Regulation & Recommendations	19	Knowledge of the 2°C Paris Climate agreement, associated climate scenario (IPCC, SSP, etc.) and implications
	20	Knowledge of the Equator Principles and IFC Performance Standards
	21	Knowledge of GRI / Integrated reporting frameworks and requirements
Implementation / Application	22	Implications and implementation of European Union ESG Regulations and Recommendations, including disclosures, facilitating sustainable investment and benchmarks
	23	ESG skill levels within core business functions, in addition to Compliance and CSR functions including Investment / Analytical Skills as relates to Investment Analysis (public and private equity); Credit Analysis (public and private debt); and Project Analysis (hard assets)
	24	Skill level to assimilate SDGs into business strategy
	25	How SDGs are measured and reported as part of business strategy
	26	Identification and management of climate-related risks on loan books
	27	Identification and management of climate-related risk at loan book level/portfolio level (Risk appetite, Stress-testing, etc.)
	28	Skills to assess proposed projects in terms of risk and return from an ESG risk perspective
	29	Cash flow analysis of sustainable investment and payback
	30	Understanding the benefits of new sustainable banking products from both a customer, business and wider stakeholder perspective
	31	Understanding the financial and sustainability of any green financial instruments, specifically Green Bond, Green Loan and Green fund
	32	Environmental and Social Risk Analysis (ESRA) in lending
	33	Product and Service development and innovation for Green Products and Services Financing
	34	Assessing the credit risks and opportunities from physical climate change
	35	Assessing the credit risks and opportunities from the low-carbon economic transition
	36	Scenario-based analysis of climate-related impacts

Category	No.	Future Skills and Talents
Implementation / Application	37	Integration of climate-related risks in equities/bonds
	38	Assessment of conflicts of interest and licence to operate concerns in current business model and environment
	39	Integration of climate-related risks in government bonds
	40	Identification and management of climate-related risk at portfolio level
	41	Approaches to Responsible Investment strategies (exclusion, engagement, screening, best-in-class, best-in-universe, thematic, etc.)
	42	Integration of ESG factors in fundamental investment analysis
	43	Understanding the impact of ESG factors on all asset classes – fixed income, property and infrastructure
	44	Investment performance measurement based on ESG criteria. How to measure risk and performance against UN Sustainability goals
	45	Identification of indicators (carbon footprint, 2°C alignment, controversies, etc.)
	46	Implications of Active Ownership – how voting and engagement can influence corporate behaviour
	47	Approaches to Active ownership (voting, pledge, bilateral meetings, etc.)
	48	Integration of ESG considerations in quantitative investment strategy
	49	Quality and availability of ESG data for specific asset class
	50	Ability to integrate Sustainable Finance Regulation and Recommendations (per above and any others deemed relevant) in the investment process and Sustainable Finance products
51	Decomposing existing data sets into Sustainable Finance actionable data sets including data design skills to retro-fit new taxonomy to existing activities/products/offerings; moving from conventional performance attribution (asset allocation/stock selection) to sustainability attribution (climate, carbon); and modelling around ex-ante risk measurement and cross-correlations of Sustainable Finance offerings with conventional ones	

Category	No.	Future Skills and Talents
<b>Implementation / Application</b>	52	Product innovation and design including: new ideas in terms of products; translating customer and policy makers' Sustainable Finance needs into product design; integrating Sustainable Finance attributes into the processes which deliver the product; selling and informing investors/users – reporting, disclosure and distribution dependencies to be successful
	53	Governance, Risk Management - what skills are absent in governance/oversight roles to enable them to oversee Sustainable Finance offerings?
	54	Consumer Rights – Understanding and protecting consumer rights with respect to Sustainable Finance
	55	Oversight activity - ability and skills to provide oversight and challenge both from a second line and third line perspective on financial products that meet sustainability criteria
	56	Skills to train and develop talent / organisations on sustainability principles and their application

# Appendix III

## Acronyms and definitions

Term / Acronym	Definition
<b>AIFMD</b>	Alternative Investment Fund Managers Directive
<b>AUM</b>	Assets Under Management
<b>BREXIT</b>	The withdrawal of the United Kingdom (UK) from the European Union (EU)
<b>CEO</b>	Chief Executive Officer
<b>CMU</b>	Capital Markets Union's initiative
<b>CRA</b>	Central Record Keeping Agency
<b>CSO</b>	Chief Sustainability Officer
<b>EBA</b>	Euro Banking Association
<b>EBF</b>	European Banking Federation
<b>EC</b>	European Commission
<b>EIB</b>	European Investment Bank
<b>ESG</b>	Environmental, Social and Governance
<b>ESMA</b>	European Securities and Markets Authority
<b>EU</b>	European Union
<b>FC4S</b>	Financial Centres for Sustainability
<b>G20</b>	The G20 (or Group of Twenty) is an international forum for the governments and central bank governors from 19 countries and the European Union (EU)
<b>G7</b>	The Group of Seven (G7) is an international intergovernmental economic organisation consisting of the seven largest International Monetary Fund described advanced economies in the world: Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States
<b>GFSG</b>	Green Finance Study Group
<b>HLEG</b>	High-Level Expert Group on Sustainable Finance
<b>IDD</b>	Insurance Distribution Directive

Term / Acronym	Definition
IFC	International Finance Corporation
IFS	International Financial Services
IOSCO	International Organisation of Securities Commissions
MIFID	Markets in Financial Instruments Directive
PRI	Principles for Responsible Investment
Responsible investment	Responsible investment is defined by the UN as an approach to investing that aims to incorporate ESG factors into investment decisions, to better manage risk and generate sustainable, long-term returns
SDG	Sustainable Development Goals
SME	Small and Medium Enterprises
Solvency II	Solvency II is a risk-based capital regime with respect to insurance firms
SSEI	Sustainable Stock Exchange Initiative
Sustainable finance	<p>Sustainable Finance is defined by the European Commission as <i>"the provision of finance to investments taking into account environmental, social and governance considerations"</i></p> <p>Sustainable Finance includes a strong green finance component that aims to support economic growth while</p> <ul style="list-style-type: none"> <li>• Reducing pressures on the environment;</li> <li>• Addressing green-house gas emissions and tackling pollution; and</li> <li>• Minimising waste and improving efficiency in the use of natural resources.</li> </ul> <p>It also encompasses increasing awareness of and transparency on:</p> <ul style="list-style-type: none"> <li>• The risks which may have an impact on the sustainability of the financial system; and</li> <li>• The need for financial and corporate actors to mitigate those risks through appropriate governance.</li> </ul>
TCFD	The Financial Stability Board Task Force on Climate-related Financial Disclosures
UCITS	Undertakings in Collective Investment in Transferable Securities
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNEP/FI	United Nations Environment Programme Finance Initiative



[www.sustainablenation.ie](http://www.sustainablenation.ie)

**Deloitte.**

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