

This report has been developed by Sustainable Finance Ireland to inform the development of Ireland's Sustainable Finance Roadmap.

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# SKILLS REPORT

This report has been funded by:



Sustainable Finance Skillnet is co-funded by Skillnet Ireland and network companies. Skillnet Ireland is funded from the National Training Fund through the Department of Further and Higher Education, Research, Innovation and Science.



An Roinn Breisoideachais agus Ardoideachais,  
Taighde, Nuálaíochta agus Eolaíochta  
Department of Further and Higher Education,  
Research, Innovation and Science



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**IRELAND'S  
SUSTAINABLE FINANCE  
SKILLS GAP  
REPORT  
2021**

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## 1.0 EXECUTIVE SUMMARY

### 1.0 EXECUTIVE SUMMARY

The overall aim of this technical study is to inform the Sustainable Finance Roadmap development process by providing insight to the Working Groups (WGs) on the sustainable finance skills landscape in Ireland in 2021.

There is a clear global sustainable finance skills shortage, but less understanding of which skills are needed and who needs them.

In Europe almost 75% of respondents to a study undertaken by the United Nations-convened Financial Centres for Sustainability (UN FC4S) indicated their organisation would be affected by a skills shortage. In Ireland, this stands at 67%. Ireland is already established as a leader in sustainable finance skills development with the creation of the Sustainable Finance Skillnet (SFS) which delivered 1833 training days to over 1300 financial professionals in 2020. However, 67% is still a significantly high percentage. This indicates there is much more to do to provide the upskilling opportunities and capability to deliver on ambitious sustainable finance strategies and plans.

There is a current sustainable finance skills shortage, and the supply of sustainable finance courseware is an opportunity to address the skills shortage. Almost 50% of respondents to the UN FC4S survey stated there is demand for, but a lack of adequate supply of sustainable finance skills. There is a need to expand the availability of sustainable finance courseware and update continuously to ensure course content reflects most recent developments. As the sustainable finance environment rapidly evolves, this will require further investment into developing and running courses.

Presently and in the future, there will be a need for the financial services sector to anticipate regulatory changes that will materially affect their operations. Noting the recent mandating of TCFD requirements (a voluntary framework) in New Zealand and the UK to disclose financially material climate risks, the Irish financial services sector should prepare for the scenario that a similar situation may arise in the EU or domestically. Anticipating legislative changes could position Ireland well for a forward-looking outlook on ESG-related legislative introductions and/or amendments.

For many years there has been a movement from voluntary to mandatory standards and guidelines related to sustainability. This trajectory will continue in the near and longer term. This study found that the Sustainable Finance Disclosure Regulation (SFDR), Non-financial Reporting Directive (NFRD)/ Corporate Sustainability Reporting Directive (CSRD), EU Taxonomy and MiFID II were the most prominent regulatory drivers affecting the need to upskill financial sector employees. TCFD recommendations were found to be a subtle driver behind the need to upskill, but this finding could increase in importance as the movement from voluntary to mandatory gathers pace.

In addition to the regulatory drivers this study finds there is a need to create a baseline of sustainable finance education amongst financial services professionals. Traditional finance training is inadequate in its current form as it does not take into consideration broader ESG impacts and how this relates to financial impact.

Technical training of those sectors and roles that have the most capacity and influence to redirect funds towards sustainable finance activities is also needed. Certain sectors such as insurance have little to no training specific for the industry currently available. Further detailed research is needed to assess the breadth and depth of the level of integration of sustainable finance into key roles.

Key recommendations from this study include:

1. Increase the availability of technical training.

- Roll out and expand the reach of courses for the EU Taxonomy and related legislative drivers.
- Integrate Sustainable Finance modules into existing Undergraduate and Masters across Business, Economics, Finance, Consulting, Energy, and Engineering.
- Increase sustainable finance courses from professional development bodies. Some are already beginning this journey.
- There has been an increase of ESG-related courses being provided by professional bodies. If sustainable finance is really moving to the 'mainstream' then ESG needs to be integrated into mainstream qualifications.
- Unlike other 'mainstream' professional development providers, like those mentioned above, there is no apparent integration of ESG teachings in the curriculum relating to the insurance sector<sup>1</sup>. Therefore, there is an opportunity to integrate ESG into current available courses or standalone courses.
- With risk management a key driver and limited understanding on the relationship between climate risk and financial risk and how this can impact on an organisation's portfolio, it is suggested that climate risk management and scenario planning training is needed for all financial services sub-sectors.
- There is an opportunity to develop ESG financial product design courses e.g., green/social bonds, indices, ESG policies as none were identified.

2. Enable the right environment to share learning.

- Create incentives for practitioners to share learning. This could be approached in two ways:
  - Incentives to teach/lecture and input to the development of sustainable finance modules for academic courses and professional qualifications.
  - Set up of confidential peer learning opportunities for practitioners to learn from each other, sharing challenges and successes.
- The SFS has enabled Ireland to start to create a cohort of sustainable finance trainers. This creates supply side expertise that can be provided to a global market, making Ireland an attractive place for sustainable finance training and development.
- Develop a Professional Sustainable Finance Skills Charter group. This group would bring together financial, chartered, and professional bodies in Ireland to facilitate the mainstreaming of ESG into professional financial services qualifications and to further develop current standalone courses.
- Consider the setup of a Global Centre of Excellence for sustainable finance skills to promote the development of Irish based sustainable finance education. A part of this could include building a networking and collaboration hub and community of practice. This would support attracting investment into Ireland and build Ireland's reputation as a hub for best-in-class sustainable finance training.

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<sup>1</sup> This finding was confirmed through desktop research and outreach to the Insurance Institute of Ireland (April 2021).

### 3. Further research is required.

- Sustainable finance professionals are an emerging field of talent with diverse backgrounds, skills, expertise, and job roles. To leverage this a professional body could be created to support the sustainable finance as a career path. Further research is needed to assess the viability of creating an Institute of Sustainable Finance Professionals which could be the sustainable finance equivalent or a sub sector of the Institute for Corporate Responsibility and Sustainability professionals.
- Deeper dive study to understand the competency level of sustainable finance related skills in Ireland. This would involve building on this research to include identifying the impact of the most influential roles in financial services on sustainable finance. These roles can then be targeted with specific training.

## 2.0 INTRODUCTION

### 2.1 Background

Key to the *Ireland for Finance* Action Plan 2021 is the development of a Sustainable Finance Roadmap. The aim is for Ireland to be a leading global hub for sustainable finance by 2025. Part of this ambition is to create a Centre of Excellence for sustainable finance skills.

One of the key drivers for the Sustainable Finance Skillnet (SFS) is to support the implementation of the Government of Ireland's *Ireland for Finance* strategy, launched in 2019. The strategy has four pillars, one of which is talent; and three horizontal priorities, one of which is sustainable finance. Therefore, the development of best-in-class sustainable finance talent is key to the government's strategy and an opportunity for Ireland's financial centre.

In 2019 there were just under 44,000 people employed across the 6 main business areas within Ireland's international financial services industry with an ambition to grow to [50,000 by 2025](#).

### 2.2 Purpose and objectives

Building on the [2019 Skillnet report](#) which assessed sustainable finance skills in Ireland, this report was developed to provide insight on the current picture of sustainable finance skills in Ireland in 2021 through the below objectives:

- Identify sustainable finance training courses available to Irish Financial Services sector professionals;
- Identify key professions for sustainable finance impact across key areas of banking, insurance, investment and asset management and funds management;
- Identify the drivers (both general, and specific regulatory drivers) of, training gaps and focus areas for skills development;
- Make recommendations to enhance the availability of sustainable finance skills to the Irish Financial Services industry.

## 3.0 THE SUSTAINABLE FINANCE SKILLS GAP

### 3.1 Progress to date

The Sustainable Finance Skillnet (SFS) is one of 70 networks run through Skillnet Ireland, a business support agency of the Government of Ireland. With a mandate to advance the competitiveness, productivity, and innovation of Irish businesses through enterprise-led workforce development, Skillnet Ireland supports over 18,000 businesses and provides upskilling opportunities to over 70,000 trainees.

SFS works with training providers and subject matter experts to develop and conduct sustainable finance training on their behalf and supports companies directly, by providing matched funding for employees looking to undertake training.

Key Numbers for 2020	
Training Days Provided	1833
Total Trainees	1410
Level of Matched Funding	€98k+
Total Training Spend	€203k

Further Highlights for 2020	
190 signed up for one of the 4 UN PRI Academy online courses	
Partnered with CFA Ireland for the Irish launch of the CFA UK Certificate in ESG Investing	
Supported the development and rollout of a first-of-its-kind EU Taxonomy course (at capacity)	
Supported Climate Finance Week Ireland – 5000 attendees, 1.3 million people reached, over 5 million social media impressions	

Beyond SFS, academia and Irish based professional and industry associations have been developing their own courses. For example, UCD (University College Dublin) and the IoB (Institute of Bankers)

MSc Renewable Energy and Environmental Finance (UCD) – originally MSc Energy and Environmental Finance (September 2012)<sup>2</sup>:

- First of its kind master’s programme incorporating traditional finance modules as well as those specifically related to renewable energy and environmental finance;
- Nearly doubling in class size from 16 (2019-2020) to 30 (2020-2021);
- Taught by leading sustainable finance experts including members of the European Commission’s Technical Expert Group (EC TEG).

Responsible and Sustainable Finance (IoB)<sup>3</sup>:

- Introduction to, and an understanding of themes such as: response to climate change; the catalyst for sustainable finance and EU regulatory initiatives. Including but not limited to non-financial disclosures, green, social, and sustainable bonds;
- First Delivered in October 2020, offered 3 times yearly (trimester 1 – October to January, trimester 2 – February to May, trimester 3 – June to August);
- Class size ranges between 50-70.

<sup>2</sup>[https://www.smurfitschool.ie/programmes/masters/mscinrenewableenergyandenvironmentalfinance/?gclid=CjwKCAjwTJ2FBhAuEiwAiku19ovKjHQ7td2sP0UV96n\\_zxTzNpTNOVAldr7jkHPYPRnBuALka6JmrhoCWuIQAvD\\_BwE&gclidsrc=aw.ds](https://www.smurfitschool.ie/programmes/masters/mscinrenewableenergyandenvironmentalfinance/?gclid=CjwKCAjwTJ2FBhAuEiwAiku19ovKjHQ7td2sP0UV96n_zxTzNpTNOVAldr7jkHPYPRnBuALka6JmrhoCWuIQAvD_BwE&gclidsrc=aw.ds)

<sup>3</sup>[https://iob.ie/programme/sustainable-finance?gclid=CjwKCAjwTJ2FBhAuEiwAiku19p8bAdLXsCSOSHwPyW7xo6C23lxgNORwpPglNy9LbP51b27hCz\\_X2BoCNVkJQAvD\\_BwE](https://iob.ie/programme/sustainable-finance?gclid=CjwKCAjwTJ2FBhAuEiwAiku19p8bAdLXsCSOSHwPyW7xo6C23lxgNORwpPglNy9LbP51b27hCz_X2BoCNVkJQAvD_BwE)

### 3.2 Research methodology

We undertook desktop research which began with identifying the top 47 roles in financial services. Using the total number of 44,000 we approximated numbers employed in each role. Estimates for numbers employed in roles/areas were obtained through research and outreach to educational providers with Irish membership and or societies e.g., CFA Ireland. We were challenged with gaps and therefore adopted estimates or reasonable proxies. For example, if we consider there are approximately 400 large companies in Ireland, we estimated that each board has on average, eight to 10 members. Allowing that some members will be executive and some non-executive, this resulted in approximately 1000 - 2000 board members in Ireland. We also adopted a range estimation of numbers employed in the various roles. The ranges are up to 250, 251-500, 501-1000, 1001-2000, 2000+.

The drivers behind the need to upskill these roles on sustainable finance were taken from the 2019 and 2020 skills reports conducted by SFS and UN FC4S and updated by SFS. Examples of these drivers included regulatory, disclosure, stakeholder expectations, and risk management, as shown in *Figure 1*, further below.

As regulatory and disclosure demands were seen in both Irish and European cases as one of the most important drivers behind the need to invest in sustainable finance skills and talent, the mapping of more specific regulations was allocated to the affected roles. An example of this is the introduction of ESG considerations in the amended MiFID II legislation. This will affect asset managers as MiFID firms will be required to update their product origination and marketing / distribution strategies, to ensure that they take account of client sustainability preferences.

As domestic and EU regulation has caused a major shift in focus for the financial services sector to take account of ESG considerations, there are few roles in the sector that are not directly and/or indirectly affected in some way by this changing landscape.

Desktop research was also conducted to compile information on sustainable finance courses available in the market. We identified 50 different courses from a variety of providers across academia, industry, and professional associations (Appendix B) Having completed research on the roles and drivers, the courses were then allocated to the list of roles and the relevant drivers behind the need to upskill these roles.

### 3.3 What are the key issues driving the need for upskilling?

Key drivers for upskilling were identified in the 2019 report on Ireland skills gap and backed up by the UN FC4S research across Europe. The below graph represents the drivers behind investment in sustainable finance skills and talent in Ireland.

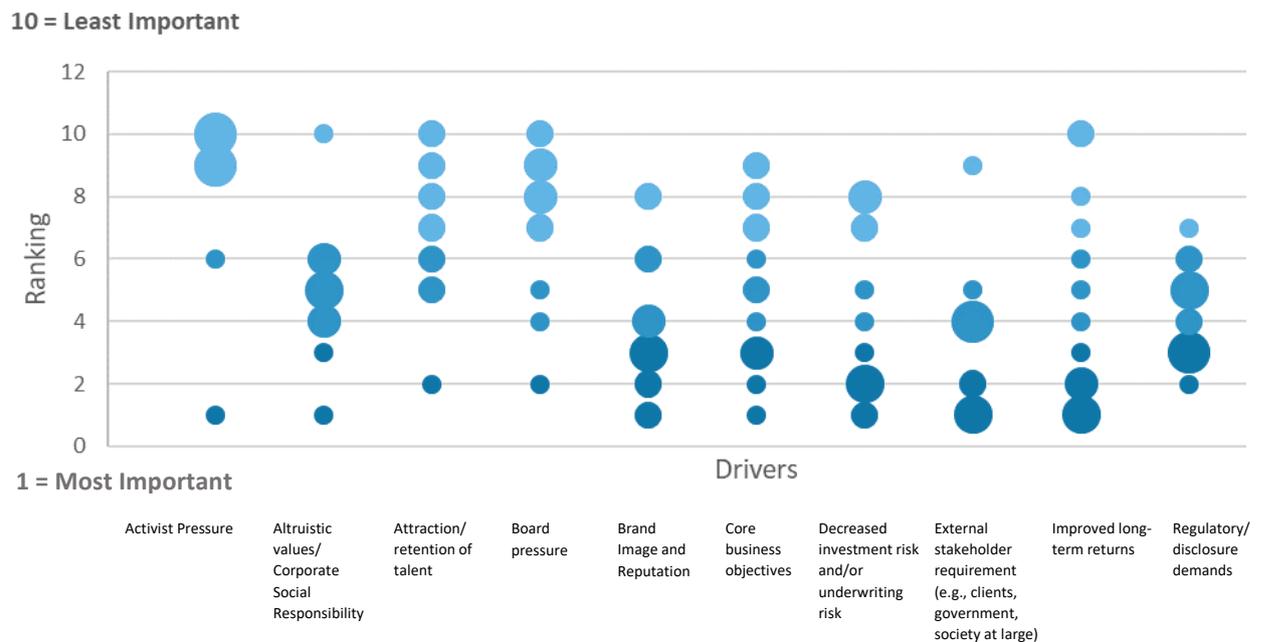


Figure 1 Sustainable Finance Skillnet Deep Dive Skills Report (2019)

As can be seen in *Figure 1*, the main drivers behind investment in sustainable finance upskilling in Ireland in 2019 were (in no order): 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), and core business objectives. These drivers are expected to remain the same in 2025 but it is anticipated that they will intensify.

As part of our research and analysis, we mapped financial sector roles to general drivers as per the below figure.

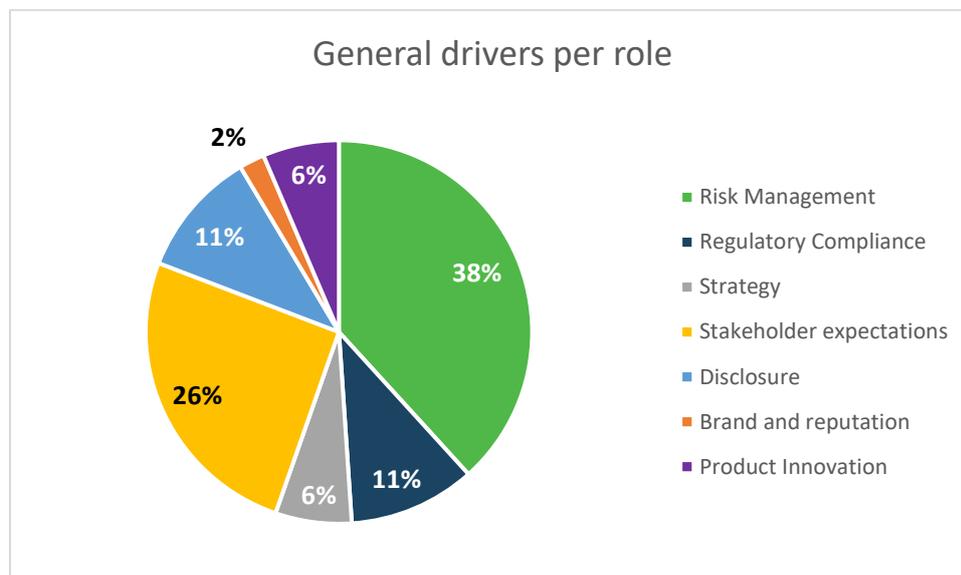


Figure 2

This graph shows the primary drivers of ESG adoption and integration into businesses across 47 key roles in the financial sector in Ireland. Risk management, regulatory compliance and disclosure represent 60% of the overall drivers. Stakeholder expectations stand at over a quarter as there are increasing expectations of client facing employees for example, to have knowledge of ESG impacts and how to minimise ESG related risks.

Such a focus on the risk management, disclosure and regulatory compliance could indicate that there is limited capacity and capability for considering the transformation agenda and innovation opportunities that sustainable finance presents. This could lead to a loss of competitiveness for Ireland. Ireland will not stand at the forefront of sustainable finance if our focus is backward looking as opposed to future proofing and innovating new ways to steer capital towards sustainable activities. More research needs to be undertaken to explore product innovation opportunities.

***'The consensus among interviewees is they expect the pace of demand for sustainable finance skills and talent to rapidly increase as the regulatory agenda is rolled out. The findings indicate that baseline technical knowledge and knowledge of Sustainable Finance frameworks and regulations is required as a main priority in the short term.'* UN FC4S**

Given the immediacy of regulatory drivers, we narrowed our focus to dive deeper into exploring which regulations are specifically driving the need for upskilling.

No stakeholder engagement was involved in the mapping of the specific regulatory drivers (Figure 3), or the knowledge required (Figure 4) behind the need to upskill certain roles. This method was solely undertaken by the authors of this report in their roles at Sustainable Finance Ireland. The mapping of these findings are open to WG interpretation and amending where deemed necessary.

Figure 3 (below) shows the single top regulatory driver for our estimated employee numbers in the financial services sector. Percentage figures represent our estimations of employees in the financial services sector mapped to this regulatory driver.

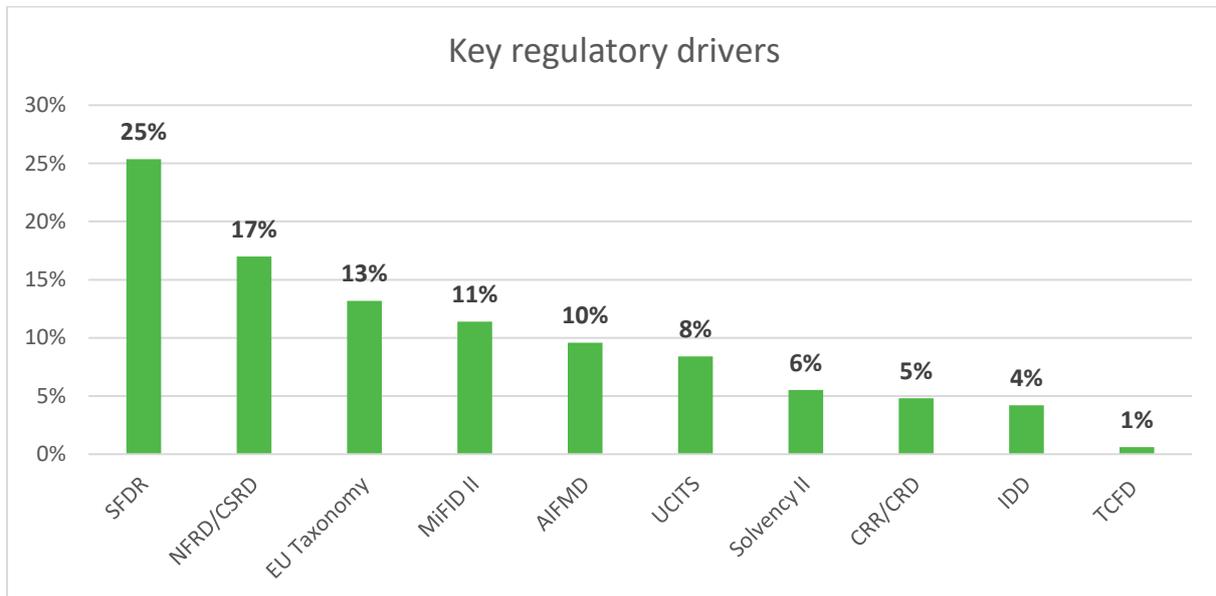


Figure 3

Disclosure regulation and asset management regulation are among the more common drivers for employee upskilling. Whilst the TCFD currently is low at 1% this is likely to shift dramatically in the future as the global dialogue on TCFD alignment and reporting intensifies. Requirements may also move from voluntary to mandatory. It is recommended that a focus on upskilling for TCFD adoption and implementation continues.

### 3.4 What skillsets do key roles require?

According to UN FC4S research, across Europe almost a third of sustainable finance capability is found within a dedicated team equipped with a budget and accountable for managing KPIs, with another third via a high-level executive who reports directly to the CEO and board. Whilst dedicated sustainable finance experts are required to drive the agenda forward at a strategic level, there is also a critical need for key roles to be upskilled so that sustainable finance can be integrated into the day-to-day of certain roles and become business as usual where necessary. By understanding which roles are most affected and what type of training they need to develop, we can work towards embedding the required skills into the right roles.

We know that there is a skills shortage, and we know the drivers for skills development but what skills are needed, who needs them, and what does the current landscape of available training options look like?

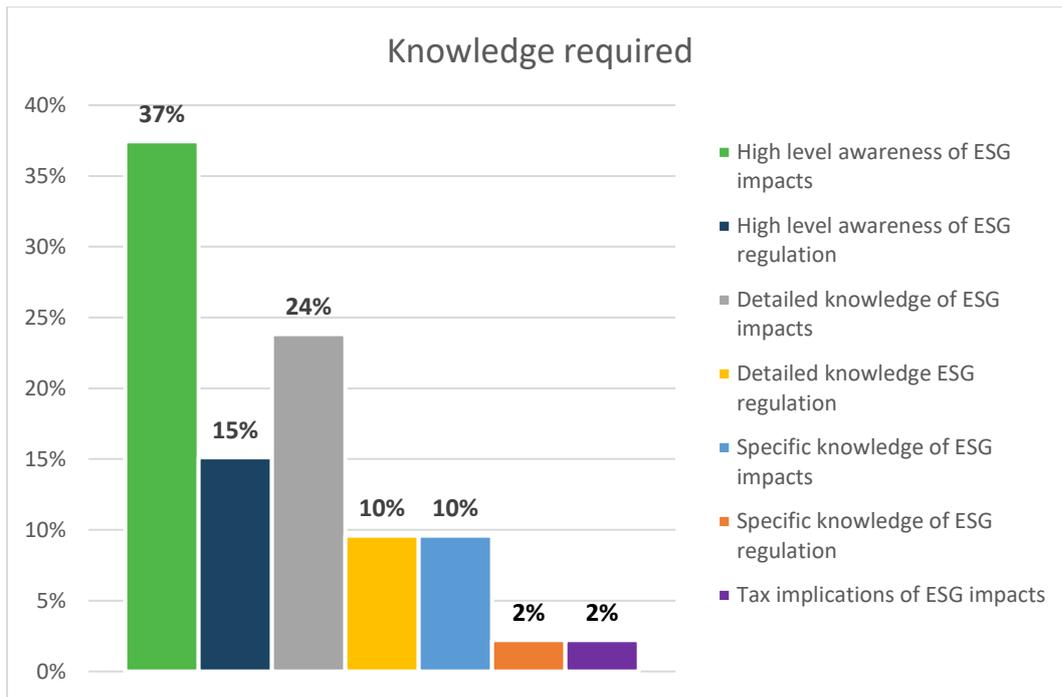


Figure 4

As part of our technical research, we grouped the estimated employee numbers based on their required knowledge and skills (Figure 4). Employees were mapped to one of the following categories:

- High level awareness of ESG impacts;
- High level awareness of ESG regulation;
- Detailed level awareness of ESG impacts;
- Detailed level awareness of ESG regulation;
- Specific level awareness of ESG impacts;
- Specific level awareness of ESG regulation;
- Tax implications of ESG impacts.

Roles falling under high-level awareness categories include C-suite members, for strategy and management purposes, and those employees who will need the broad view.

Detailed awareness categories include employees who will be dealing with ESG impacts or regulation on a regular basis. This includes fund/portfolio analysts and risk and compliance officers.

Specific level awareness refers to roles that require a detailed knowledge of ESG impacts or regulation in a specific area, such as a product analyst.

The tax implications of ESG impacts refers to roles that work in the tax area and will work with the impacts of ESG changes.

From the graph, most financial sector employees require a high-level awareness of ESG impacts (37%). A total of 52% of employees require a high-level awareness of ESG impacts or regulation. A lesser proportion require detailed ESG knowledge of impacts or regulation, totalling 34% of estimated employees in the financial services sector. However, these groupings will require more intense and focused development and upskilling opportunities. It may also be likely, in the medium-term (2-5

years), that knowledge required by employees will intensify to more detailed and/or specific knowledge on impacts and/or regulations.

We reviewed the upskilling requirements of different roles. The graph below indicates the single primary upskilling required by employees. The graph provides a further breakdown of *Figure 4* above. We acknowledge that employees may have multiple upskilling requirements. However, for the purposes of the below graph, only the primary upskilling was considered. As a result, “detailed knowledge of ESG regulation” scores low while “MiFID II” scores high.

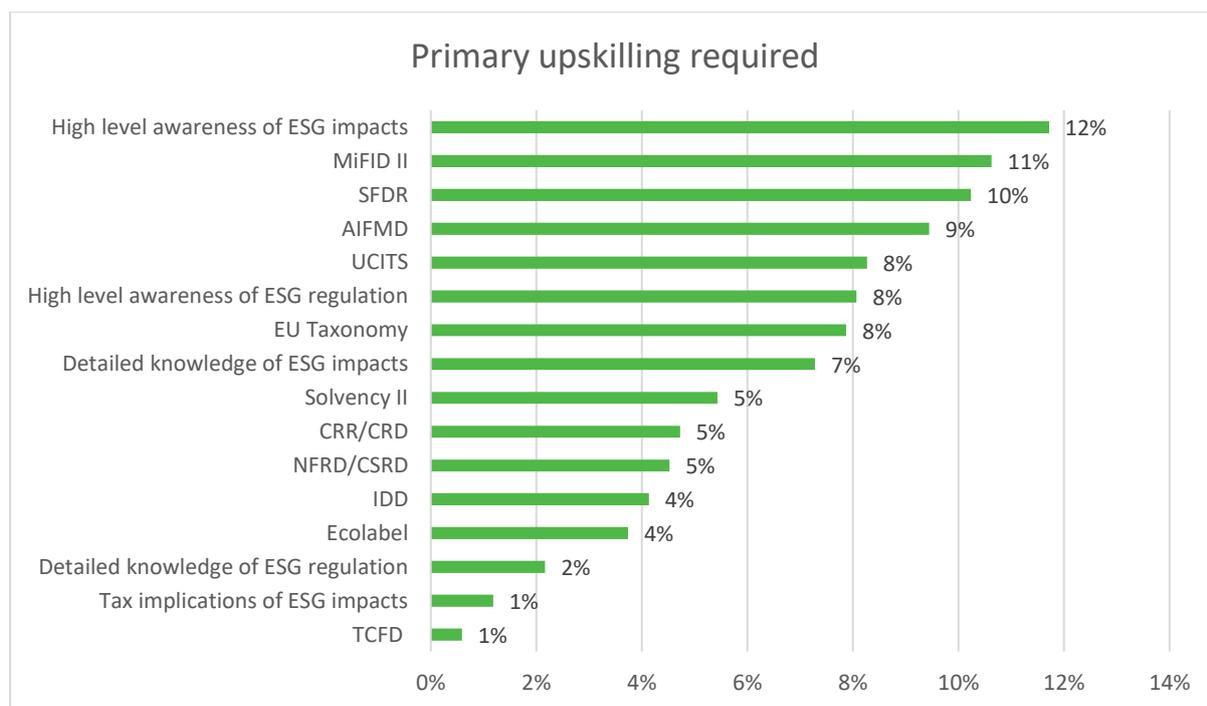


Figure 5

We see that a high-level overview of ESG related impacts (12%) is the most common primary upskilling required. This is in-line with previous findings suggesting that a baseline understanding of sustainable finance amongst all employees is required across the sector. Additionally, we see the disclosure requirements and guidance (SFDR, NFRD/CSRD and TCFD) combined equal 15%. We note again that TCFD is currently optional. This finding is again consistent with those found by SFS (2019) and UN FC4S (2020).

Note that SFDR and some other regulations and directives show different values in *Figure 3* and *Figure 5*. This is due to the broad upskilling categories, such as “High level awareness of ESG regulation” in *Figure 5*, are distributed proportionally among applicable regulations and directives in *Figure 3*. We see this again with “Detailed knowledge of ESG regulation” between *Figure 4* and *Figure 5*.

## 4.0 MAPPING ROLES TO DRIVERS, SKILLS AND QUALIFICATIONS

As detailed in the methodology (section 3.2) we identified 50 different courses from a variety of providers across academia, industry, and professional associations (Appendix B). Having completed research on the roles and drivers, the courses were then allocated to the list of roles and the relevant drivers behind the need to upskill these roles.

This process allowed for the identification of surpluses and shortages in sustainable finance courses for the mapped roles, given their allocated drivers.

The table below aggregates the research undertaken to:

1. Identify the key roles for sustainable finance impact;
2. Estimate the market numbers for each role;
3. Assign key drivers to the roles and upskilling required;
4. Identify the academic and professional qualifications and subsequent opportunity to embed sustainable finance;
5. Map current course availability and gaps.

Key:



Courses are available



No courses available



Course is partially available

## Mapping roles to drivers, skills, and qualifications

C-Suite and senior level roles						
	Key Roles and Descriptions	Market Numbers (approx.)	Key Drivers for Skills Development	Specific ESG Drivers	Academic/ Professional Qualification required	Available Course
1	Board member: ensure the company's prosperity by collectively directing the company's affairs, while meeting the appropriate interests of its shareholders and relevant stakeholders	1001-2000	Stakeholder expectations	High level awareness of ESG impacts and regulation	Regulated by CBI. Extensive experience and industry knowledge	
2	CEO/Chief Executive: responsible to lead overall direction of firm	251-500	Strategy	High level awareness of ESG impacts and regulation, EU Taxonomy, SFDR	Regulated by CBI. CFA, relevant accounting qualification (ACCA, CAI etc.). Extensive firm/industry experience	
3	COO: responsible for the day-to-day operations of a firm and for assisting the CEO in a variety of tasks	Up to 250	Risk management	High level awareness of ESG impacts, NFRD/CSRD, SFDR	Regulated by CBI. Relevant accounting qualification (ACCA, CAI etc.) CFA, FCA, etc. Extensive experience in firm/industry	

4	CIO: manage investment strategies and portfolios	251-500	Risk management	High level awareness of ESG impacts, EU Taxonomy, SFDR	Regulated by CBI. CFA, relevant accounting qualification (ACCA, CAI etc.). Extensive firm/industry experience	
5	CFO: top-level financial controller, handling everything relating to cash flow and financial planning	251-500	Risk management	High level awareness of ESG, SFDR, TCFD	Regulated by CBI. CFA, relevant accounting qualification (ACCA, CAI etc.) Extensive firm/industry experience	
6	CRO: responsible for identifying, analysing, and mitigating internal and external risks	251-500	Risk management	High level awareness of ESG regulation TCFD, NFRD/CSRD MiFID, IDD (sector dependent)	Regulated by CBI. Degree and extensive industry experience, CFA, GARP qualifications etc.	
7	CSO: head of firms' sustainability objectives. Responsible for direction of firm's sustainability credentials and performance	Up to 250	Strategy	Detailed knowledge of ESG regulation	Degree. Extensive industry/firm experience. Relevant Masters may be beneficial.	
8	Chief Administrative Officer (CAO): oversees a company's day-to-day operations, usually focus on finding ways to improve specific elements of a company's operations	Up to 250	Risk management	High level awareness of ESG impacts	Degree and background, extensive firm/industry experience.	

9	Company Secretary: responsibility to ensure that the company and its directors operate in line with relevant legal requirements	251-500	Regulatory compliance	High level awareness of ESG regulation	Degree and/or experience. Chartered Governance Institute	
10	Client Manager: between a company and its clients, develop account plans, and deliver proposals	251-500	Stakeholder expectations	High level awareness of ESG regulation MiFID II, IDD (sector dependent)	Regulated by CBI. Relevant degree (marketing, communications etc.) and/or experience	
11	Communications Manager: promotes a company's mission, products and/or services. identifying press opportunities and developing content to be disseminated via social media, websites, newsletters, press releases and any other distribution channels	251-500	Brand and reputation	High level awareness of ESG impacts. Disclosures: SFDR, NFRD/CSRD, TCFD	Relevant degree (marketing, communications etc.) and/or experience	
12	Client engagement executive: responsible for building a positive relationship with a client, assigning company resources to the client, billing and invoicing the client, managing the client expectations, and working with the sales team	501-1000	Product innovation	High level awareness of ESG regulation. MiFID II, IDD (sector dependent)	Regulated by CBI. Relevant degree (marketing, communications etc.) and/or experience	
13	Head of Depository Services: maintain appropriate control environment to ensure the firm fulfils its depository obligations.	251-500	Risk management	High level awareness of ESG impacts. SFDR, EU taxonomy	Relevant degree (maths, business, finance, similar) and/or experience	

14	Head of Legal/Compliance/Regulatory Affairs: ensures firm is legally/regulatory compliant	251-500	Regulatory compliance	Detailed knowledge of ESG regulation, EU Taxonomy and SFDR	Regulated by CBI. Degree, relevant experience and a relevant certification e.g., Certified Regulatory Compliance Manager (CRCM)	
15	Head of Client Asset Oversight (HCAO): PCF role that reports to the Board at least annually. Ensure the client asset management plan is produced. Report breaches to the CBI	Up to 250	Risk management	High level awareness of ESG regulation. MiFID II	Regulated by CBI. Degree and background, extensive firm/industry and regulatory experience.	
16	Head of Operational Due Diligence: assess operational risk of investment to firm. ensures adequate internal processes are met for investments.	251-500	Risk management	High level awareness of ESG impacts. MiFID II	Degree, extensive experience and accounting and/or investment qualifications, CFA etc.	
17	Head of Distribution: develop and maintain internal client management systems, as well as ensure timely and accurate delivery of customised reporting to clients. Market financial products	251-500	Product innovation	High level awareness of ESG impacts. SFDR, EU Taxonomy, EU Ecolabel, MiFID II	Relevant degree (marketing, communications etc.) and experience.	
18	Assurance Manager: verify the records available in the company's accounting record is as per accounting standard and principle, and it also confirms that accounting record is accurate or not.	251-500	Disclosure	High level awareness of ESG regulation. SFDR, NFRD/CSRD	Degree and experience. Relevant accounting qualification (ACCA, CAI etc.)	

19	Asset Manager: front office, maximising returns for relevant customer market	2000+	Stakeholder expectations	Specific knowledge of ESG impacts. MiFID II, SFDR, UCITS, AIFMD	Regulated by CBI. Degree, experience and professional qualification, CFA, relevant accounting qualification (ACCA, CAI etc.)	
20	Fund/Portfolio Manager: front office, maximising returns for relevant customer market	1001-2000	Stakeholder expectations	Detailed knowledge of ESG impacts. MiFID II, UCITS, AIFMD	Regulated by CBI. Degree, experience and professional qualification, CFA, relevant accounting qualification (ACCA, CPA, CAI etc.)	
21	Real Estate Portfolio Manager: maximising returns from real estate management	501-1000	Stakeholder expectations	High Level awareness of ESG impacts. AIFMD	Regulated by CBI. Degree, experience and professional qualification, CFA, relevant accounting qualification (ACCA, CAI etc.)	
22	Insurance risk manager: responsible for identifying the critical causes of accidents or losses, recommending, and implementing precautionary measures, and coming up with plans to minimize cost and damage in case a loss occurs, including the purchase of insurance.	501-1000	Risk management	High level awareness of ESG regulation. Solvency II, IDD, detailed knowledge of ESG risks	Degree, experience and professional qualification. Insurance Institute exams	

23	Financial Advisor: understand and advise clients on relevant investment opportunities based on their risk appetite and time horizon	501-1000	Stakeholder expectations	Detailed knowledge of ESG impacts. MiFID II, IDD (sector dependent)	Regulated by CBI. Degree, experience and professional qualification, CFA, relevant accounting qualification (ACCA, CAI etc.)	
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### Mid-Level Roles

	Key Roles and Descriptions	Market Numbers (approx.)	Key Drivers for Skills Development	Specific ESG Drivers	Academic/ Professional Qualification required	Available Course
24	Stockbroker: execute trades on clients' behalf	251-500	Stakeholder expectations	High level awareness of ESG impacts. UCITS, AIFMD, Ecolabel	Degree, experience and professional qualification, CFA etc. IOB Stockbroker	
25	Trader: buy and sell financial Products on behalf of investors and their own firm's capital	251-500	Stakeholder expectations	High level awareness of ESG impacts	Degree, experience and professional qualification, CFA, IIFT etc.	
26	Internal Auditor: reviews a company's financial statements, documents, data and processes.	1001-2000	Disclosure	Detailed knowledge of ESG regulation. SFDR, NFRD/CSRD	Governed by Institute of Internal Auditors. Relevant degree (maths, business, finance etc.) and/or relevant accounting qualification (ACCA, CAI etc.)	

27	Private Banker: provides financial advice for high net worth individuals	Up to 250	Stakeholder expectations	High level awareness of ESG impacts. SFDR, UCITS, AIFMD, EU Ecolabel	Regulated by CBI. Degree, experience and professional qualification, CFA, CFP etc.	
28	Mortgage advisor: Advise customers on relevant mortgages	251-500	Stakeholder expectations	High level awareness of ESG impacts	Regulated by CBI. Degree and professional qualifications QFA (IoB), Accredited product advisor (IoB), CFA etc.	
29	Trustees (pension): responsible for the proper management of all property and other assets owned by the trust for the benefit of a beneficiary.	251-500	Risk management	High level awareness of ESG impacts. IORP II	Regulated by CBI. Relevant degree and experience. Professional qualifications QFA (IoB) IIMP	
30	Compliance Officer: responsible for ensuring their organisation complies with government regulations — both domestic and global	251-500	Regulatory compliance	Detailed knowledge of ESG regulation	Regulated by CBI. Degree, relevant experience and a relevant certification e.g., Certified Regulatory Compliance Manager (CRCM)	
31	Risk Officer: Manage risks associated with clients' and or firm's investments as appropriate to client/firm.	501-1000	Risk management	Detailed knowledge of ESG regulation	Relevant degree (maths, economics /finance-related), experience and professional qualification, CFA, FRM	

32	Equity Risk Manager/Analyst: middle office, minimise equity risk appropriate to clients.	1001-2000	Risk management	Detailed knowledge of ESG regulation	Degree, relevant experience and professional qualification, CFA, FRM	
33	Underwriter: responsible for deciding whether to accept applications for insurance cover	501-1000	Risk management	Detailed knowledge of ESG regulation. Solvency II	Regulated by CBI. Degree, experience and professional qualification. Insurance Institute exams	
34	Credit Risk Manager: protect firm from credit losses, monitors expected and unexpected losses	1001-2000	Risk management	High level awareness of ESG impacts. CRR, CRD	Degree, experience and professional qualification, CFA, FRM	
35	Loan Officer: evaluate and authorize the approval of business, real estate, or credit loans and evaluate the financial status of a loan applicant	1001-2000	Risk management	High level awareness of ESG impacts	Degree, experience and professional qualification, CFA, FRM	
36	Actuary: analyses data and works with statistics, using mathematical skill to assess or predict the probability of an event happening and its financial consequences	1001-2000	Risk management	Detailed knowledge of ESG impacts. Solvency II	Governed by Society of Actuaries in Ireland. Relevant degree (maths/stats, actuary, economics etc.), professional qualifications Institute and Faculty of Actuaries (UK based of which many Irish students' avail)	

37	Fund Accountant: responsible for all aspects of day-to-day accounting for one or more assigned mutual funds and/or institutional funds.	Up to 250	Regulatory compliance	High level awareness of ESG regulation. SFDR	Relevant degree/ background. Professional accounting qualifications.	
38	Treasurer: protect firms' value from financial risk	1001-2000	Disclosure	High level awareness of ESG regulation. EU Taxonomy, SFDR	Relevant experience and accounting qualifications (ACCA, CAI etc.)	
39	Retail Bank Manager: manages local bank branches	501-1000	Stakeholder expectations	High level awareness of ESG impacts	Regulated by CBI. Relevant degree (maths, economics, finance etc.) and/or experience. Professional qualifications may not be necessary	
40	Financial Economist: conduct research, formulate plans to address economic problems related to the firm's investments or monetary and fiscal policy.	Up to 250	Disclosure	High level awareness of ESG impacts. EU Taxonomy	Relevant degree (maths/stats/economics-related) and necessary experience. Masters/PhD of benefit.	

## Junior/Entry/Analyst Roles

	<b>Key Roles and Descriptions</b>	<b>Market Numbers (approx.)</b>	<b>Key drivers for Skills Development</b>	<b>Specific ESG Drivers</b>	<b>Academic/ Professional Qualification required</b>	<b>Available Course</b>
41	Investment/Portfolio Analyst: front office, track investment/portfolio performance	1001-2000	Stakeholder expectations	Detailed knowledge of ESG impacts. UCITS, AIFMD, EU Ecolabel	Relevant degree (maths, economics, finance etc.), experience and working towards professional qualification, CFA, relevant accounting qualification (ACCA, CAI etc.)	
42	Policy/Regulatory Analyst/Advisor: research policies to assess risk and opportunities to firms' investment landscape. Advise on such policies where necessary.	Up to 250	Regulatory compliance	Detailed knowledge of ESG regulation	Relevant degree (maths/economics-related), and/or experience. Financial risk exams may be desirable but not necessary.	
43	Insurance Risk Analyst: assessing risks your clients may undergo and how to insure them properly. Collect and analyse data, such as past claims in the industry, competitor pricing, and various risk management strategies to help your company keep costs down.	501-1000	Risk management	Specific knowledge of ESG impacts. Solvency II.	Relevant degree (Actuary, quant finance etc.), experience and professional qualification. Insurance Institute exams, risk exams	

44	Strategy Analyst: responsible for identifying the needs of their firm and developing plans to determine the overall direction it should take to succeed.	Up to 250	Strategy	Detailed knowledge of ESG impacts. NFRD/CSRD	Relevant degree (maths/economics-related) and/or experience. Professional qualifications may not be necessary but beneficial.	
45	Tax Analyst: prepare, review, and file tax returns and tax forms and manage tax efficiencies.	501-1000	Disclosure	Tax implications of ESG impacts	Relevant degree (maths, business, finance similar), relevant accounting qualification (ACCA, CAI etc.)	
46	Product Analyst: help companies decide on which products and launch strategies are likely to result in long-term financial gain. Engage in market research, customer polling and help choose new products that fill a need and demand in the market.	501-1000	Product Innovation	Specific knowledge of ESG regulation. SFDR, EU Taxonomy, EU Ecolabel	Relevant degree (maths, economics, finance etc.), working toward relevant qualification, CFA etc.	

47	Quantitative Analyst: applies mathematical and statistical methods to financial and risk management problems. Develops and implements complex models used by firms to make financial and business decisions about issues such as investments, pricing and so on.	1001-2000	Risk management	Detailed knowledge of ESG impacts. EU Taxonomy, CRR, CRD	Relevant degree/masters (stats/finance etc.) working toward professional qualifications, CFA etc.	
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These lists are non-exhaustive. We fully acknowledge that there are additional roles and courses publicly and privately available. We have conducted our research to the best of our ability given resources and time frames.

## 5.0 IMPACTS, CHALLENGES AND OPPORTUNITIES

### 5.1 The potential impact on organisational performance

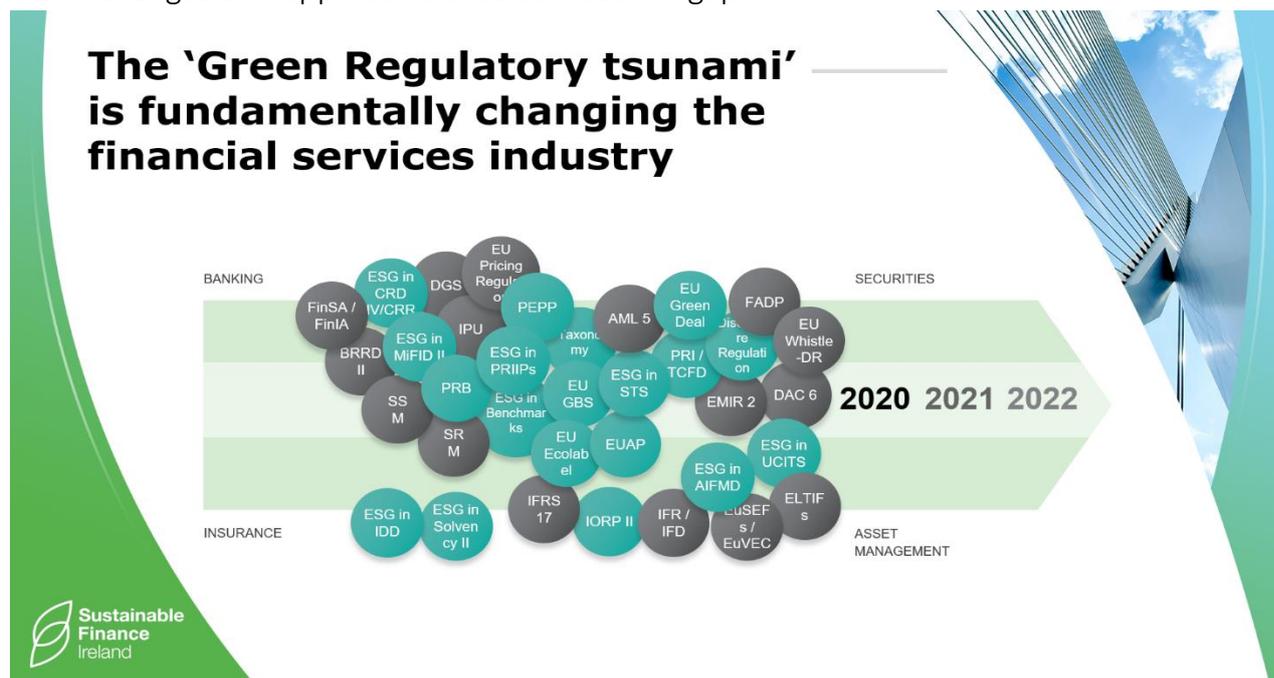
According to the UN FC4 S research, in Europe 75% of financial services organisations indicate that they are experiencing a skills gap in the field of sustainable finance. In Ireland, the result is 67%. We can partially attribute this to the SFS leading the way in Europe. However, despite this 8% improvement there is still significant shortage. Some of the reasons for this include:

- Demand is outstripping supply. 44% believe there is demand and adequate supply however almost 50% believe there is demand and inadequate supply. Courses are oversubscribed, for example the SFS first of its kind EU Taxonomy course in 2021 and, demand is being felt at all levels of organisations, from the graduates to the C-suite.
- Implementation of learning is unexplored. As sustainable finance is still considered a nascent field, on the ground implementation is evolving fast and opaque at best. Sharing lessons learned is not so common.
- Limited opportunities for capacity building and collaboration for example a 'train the trainer' approach. Whilst the UNEP FI including the PRB, PSI and PRI provide an excellent industry led approach to peer-to-peer learning there is a national opportunity to share knowledge gained and collaborate further. Likely that this is not occurring due to capacity and competitiveness.

The main challenge limiting the development of sustainable finance skills and talent in Ireland are competing internal priorities and lack of available talent (SFS, 2019). Taking a short-term view and not dedicating some priority to the development of skills has the potential to severely impact the organisational performance of financial services firms. According to UN FC4S research 79% of financial services firms in Europe said it would have a moderate if not a significant impact on their organisation if the current (2020) level of sustainable finance skills and talent remained the same in 2025. There are three key assumptions:

- 1. Negative impact on the bottom line.** The skills gap has the potential to negatively impact an organisation's performance in the short, medium, and long-term if the right skillsets are unavailable for the necessary requirements.
- 2. Lack of ability to the comply with the tsunami of regulatory demands.** Organisations are already feeling the pressure of mounting requirements and lack of capacity and capability to understand, manage and meet compliance standards. This could result in heavy fines.
- 3. The opportunity cost of lagging the market.** Those that are unprepared will miss potential opportunities to win in the market if they are scrambling to keep up with the competition. A reactive and compliance-based approach impacts the ability to innovate, develop and market new ESG related financial products and services.

## 5.2 Challenges and opportunities to address the gap.



Theme	Challenge	Opportunity
Facing the tsunami of regulation	The most in demand and high-profile skillset needed in 2021 is expertise to deliver on existing and impending SF frameworks and regulations including the EU Taxonomy, SFDR and ESG integration requirements in the likes of UCITS, AIFMD etc. No specific courses were found to upskill for the ESG inclusion across IDD, MiFID II, Solvency II, SFDR, NFRD/CSRD	FS organisations need to first understand what regulation affects them and by when, and further make plans for application and implementation. Opportunity exists to broaden the reach of the SFS EU Taxonomy course with updates and increase the number of participants and to build very specific courses for ESG amendments to key regulation such as IDD.
Limited availability of role specific courses	We identified 50 courses focused on sustainable finance to varying degrees as part of this research. We found mostly foundation and basic working level ESG knowledge related training and a lack of specific courses targeted at issues that affect a particular role	Targeted approach to understanding which roles present the greatest capacity for impact and ensuring those in those roles are equipped with the right training and knowledge.
Limited availability of level specific courses	The research indicated that courses are generally nonspecific to level or role. Little to no pre-qualifications are necessary and courses on sustainable finance are being taken up at all levels from graduate to CEO.	Further research is required to identify the most influential roles for sustainable finance and to map the thematic needs of each group for key areas such as regulation, climate risk, scenario analysis, and ESG analysis and integration.

Integration of SF modules	Industry expectations for graduates with sustainable finance skills embedded into academic learning are growing. In Europe, the study found that almost 83% indicated they expected sustainable finance to have already been integrated into business and economic curricula by 3rd level educational providers. Potential subject areas include but are not limited to: engineering, business, finance, accounting, actuary, consulting, economics, maths, marketing, change management, behavioural change, systems/design thinking.	There are four layers of opportunities: 1. Undergraduate 2. Masters 3. Professional qualification 4. Continuing Professional Development (CPD)
ESG risk management	There is a gap between the acknowledgement of climate risk as an issue to address and understanding of financially material impacts to the portfolio. With cases of mandatory TCFD reporting increasing we can expect further regulatory developments on climate risk disclosures and scenario planning requirements. There is currently low availability of climate risk specific courses. The TCFD host short web-based learning on the <a href="#">TCFD Hub</a> and the Global Association of Risk Professionals run a <a href="#">Sustainability and Climate Risk certificate</a> .	The SFS Road to COP26 TCFD campaign is gaining traction with a unique approach to learning combining classroom-based training and peer to peer support. Pending the success there is opportunity to roll out, further the training approach. There is also opportunity to develop a course specific to scenario planning.
Sector progress	The analysis of this research remains in line with the skills report from 2019 that the investment sector has made the most progress in terms of upskilling its workforce on sustainable investment practices. Banking has some sector specific training for example via the IoB. There are significant gaps for sustainable insurance and sustainable fund management.	Opportunity to develop sustainable insurance and sustainable funds specific courses.
Attraction and retention of talent	Through the development of this report anecdotal evidence was shared that the retention of talent is key. There is one case study of a sustainable finance trained graduate seeking work opportunities in the UK where the field is more mature. On the flipside there is also the chance to attract sustainable finance expertise to/back to Ireland from other countries.	Opportunity to demonstrate Ireland's sustainable finance field as a promising and exciting career path to new graduates and experienced hires from abroad.
Career path is undefined.	For more established careers the career pathway is more clearly mapped out with timelines, professional qualifications and experienced professional associations with cohorts and leadership to support career development through each stage. As a nascent field there are limited senior level executives with deep experience to demonstrate a pathway forward.	Opportunity to leverage the IoB learner's roadmap for the broader sustainable finance industry to articulate the career path forward.

## 6.0 RECOMMENDATIONS

***‘The Sustainable Finance skills shortages are likely to intensify over time and potentially have a negative effect on business performance and growth potential if there is no proper investment in quality education and skills.’ (UNFC4S, 2020)***

Future skills and talent are needed to support a growing market for sustainable finance across investing, banking, insurance and fund management. What was previously considered a niche field, is quickly transforming into a fundamental shift in the financial system, redirecting capital from unsustainable to sustainable economic activity. A systemic shift is underway and there is an immediate need to invest in talent so that the financial system can drive the transition to a 1.5-degree world.

Building on the findings of the UN FC4S baseline assessment and best practice case studies report (both reports also provided to the WGs) coupled with this technical assessment we formulated the below list of potential opportunities for Ireland to become the go-to location globally for sustainable finance skills.

We identified three key actions with specificity on ways to address each:

### **6.1 Increase the availability of technical training.**

- Roll out and expand the reach of the EU Taxonomy course and related legislative drivers.
- Integrate sustainable finance modules into existing Undergraduate and Masters across Business, Economics, Finance, Consulting, Energy, and Engineering.
- Increase sustainable finance courses from professional development bodies. Some are already beginning this journey for example:
  - The CFA UK Society rolled out their Certificate in ESG Investing in Q4 2020.
  - CPA Ireland are introducing sustainability reporting into their 2021 curriculum.
  - The Global Association of Risk Professionals has developed a Sustainability and Climate Risk (SCR®) Certificate, and many more professional bodies are providing ESG-related courses (Appendix B).
- There has been an increase of ESG-related courses being provided by professional bodies. If sustainable finance is really moving to the ‘mainstream’ then ESG needs to be integrated into mainstream qualifications. For example:
  - Integration of ESG into the CFA® Program curriculum i.e. within and/or across the CFA Level 1, 2, and 3 exams<sup>4</sup>.
  - Develop a Professional Sustainable Finance Skills Charter group. This group would bring together financial chartered and professional bodies based in Ireland to facilitate the mainstreaming of ESG into required professional financial services qualifications. Such a charter could be based on the UK based Green Finance Institute’s ‘Green Finance Education Charter’<sup>5</sup>.

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<sup>4</sup> The Top 5 CFA Global Charterholder roles are Portfolio Manager; Research Analyst; Chief Level Executive; Consultant; and Risk Manager.

<sup>5</sup> <https://www.greenfinanceinstitute.co.uk/green-finance-education-charter/>

- Unlike other ‘mainstream’ professional development providers, like those mentioned above, there is no apparent integration of ESG teachings in the curriculum relating to the insurance sector<sup>6</sup>. Therefore, there is an opportunity to integrate ESG into current available courses or standalone courses.
- With risk management a key driver and limited understanding on the relationship between climate risk and financial risk and how this can impact on an organisation’s portfolio, it is suggested that climate risk management and scenario planning training is needed. This can be developed specific to each sector of financial services.
- In Ireland there is an opportunity to develop ESG financial product design courses e.g., green/social bonds, indices, ESG policies as none were identified.

## **6.2 Enable the right environment to share learning.**

- Create incentives for practitioners to share learning. This could be approached in two ways:
  - Incentives to teach/lecture and input to the development of sustainable finance modules for academic courses and professional qualifications.
  - Set up of confidential peer learning opportunities for practitioners to learn from each other, sharing challenges and successes.
- The SFS has enabled Ireland to start to create a cohort of sustainable finance trainers. This creates supply side expertise that can be provided to a global market, making Ireland an attractive place for sustainable finance training and development. Ireland can then be marketed as a key destination globally on ESG skills.
- Develop a Professional Sustainable Finance Skills Charter group. This group would bring together financial, chartered and professional bodies in Ireland to facilitate the mainstreaming of ESG into professional financial services qualifications and to further develop current standalone courses.
- Setup a Global Centre of Excellence for sustainable finance skills to promote the development of Irish based sustainable finance education. This would support attracting investment into Ireland and build Ireland’s reputation as a hub for best-in-class sustainable finance training. A part of this could include building a networking and collaboration hub and community of practice based on the learning model of 70% ‘learning by doing’, 20% ‘mentoring’, and 10% ‘classroom’.

## **6.3 Further research is required.**

- As an emerging field of professionals with diverse backgrounds, skills, expertise, and job roles, undertake research to assess the viability of creating an Institute of Sustainable Finance Professionals. This could be the sustainable finance equivalent or a sub sector of the Institute for Corporate Responsibility and Sustainability professionals.
- Deeper dive study to understand the competency level of sustainable finance related skills in Ireland. This would include identifying the impact of the most influential roles in financial services with the ability to redirect funds to sustainable finance activities. These roles can then be targeted with specific training.

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<sup>6</sup> This finding was confirmed through desktop research and outreach to the Insurance Institute of Ireland (April 2021).

## 7.0 APPENDIX

### Appendix A: Regulation Descriptions

Regulation/Disclosure	Description
AIFMD	The Alternative Investment Fund Management Directive (AIFMD) Level 2 Regulation will introduce requirements to integrate sustainability risks and factors in compliance with existing rules in three key areas: organisational requirements; operational requirements; and risk management <sup>7</sup> .
CSRD	In April 2021, the EC published the Corporate Sustainability Reporting Directive (CSRD) which seeks to improve the flow, comparability and reliability of sustainability information. It extends the existing reporting requirements under the Non-Financial Reporting Directive (NFRD). Specifically, the CSRD extends the scope of companies that must report, requires the audit of reported information and introduces mandatory EU sustainability reporting standards.
EU Ecolabel	An EU Ecolabel for retail financial products is currently being developed by the EC. The Ecolabel will define the minimum environmental performance of this product group and will be based on the requirements of the EU Ecolabel Regulation 66/2010 with the objective of awarding the best environmentally performing financial products <sup>8</sup> .
EU Taxonomy	The EU Taxonomy, which will apply from December 31, 2021, is a common classification system establishing a list of environmentally sustainable economic activities across a wide range of industries. It mandates certain companies to report on and disclose the extent to which their business activities are aligned with the Taxonomy's definition of sustainable.
IDD	Designed to ensure a level playing field across all participants selling insurance products. Key changes to the Insurance Distribution Directive (IDD) integrates sustainability factors, risks and preferences into product oversight and governance requirements for insurance undertakings and insurance distributors and into the conduct of business rules and investment advice for insurance-based investment products (IBIPs) <sup>9</sup> .
IORP II	Sets out minimum harmonization rules for financial institutions which manage collective retirement schemes for employers to provide retirement benefits to their employees (the scheme members and beneficiaries) (Dechert). The Institutions for Occupational Retirement Provision (IORP II) details that EU Member States should require IORPs to explicitly disclose where such ESG factors are considered in investment decisions and how they form part of their risk management system <sup>10</sup> . (Dechert)

<sup>7</sup> "<https://www.arthurcox.com/knowledge/esg-for-fund-managers-integrating-sustainability-risks-and-factors-into-the-aifmd-and-ucits-frameworks/>

<sup>8</sup> <https://susproc.jrc.ec.europa.eu/product-bureau/product-groups/432/home>

<sup>9</sup> <https://www.algoodbody.com/insights-publications/esg-related-changes-to-the-solvency-ii-and-idd-frameworks>

<sup>10</sup> IOPR II Recital (58)

MiFID II	The Markets in Financial Instruments Directive (MiFID) governs the provision of investment services as of January 3, 2018. With proposed amendments in April 2021, MiFID II relates to the integration of sustainability into organisational requirements, as well as the integration of sustainability preferences into the suitability process. MiFID firms will be required to update their product origination and marketing / distribution strategies, to ensure that they take account of the sustainability preferences.
NFRD	In place since 2014, the Non-Financial Reporting Directive (NFRD) sets out rules on disclosure of non-financial, ESG and diversity information by large EU public-interest companies (PICs), being a company with more than 500 employees.
SFDR	The Sustainable Finance Disclosure Regulation (SFDR) and the EU Taxonomy (which supplements the SFDR) have enormous scope and application. The SFDR introduces obligations on investors and asset managers to disclose how they integrate ESG factors into their decision-making and risk processes.
Solvency II	Introduces obligations for (re)insurance undertakings to manage 'sustainability risks' and ensure sustainability factors are considered in risk assessment <sup>11</sup> .
TCFD	Set up in December 2015 by the Financial Stability Board (FSB). The Taskforce on Climate-related Financial Disclosures (TCFD) has developed voluntary, consistent climate-related financial disclosures. It essentially takes the perspective of an investor and asks the reporting entity to report on issues such as the physical and transition risks and opportunities it is facing. To do so, it uses a forward-looking scenario analysis.
UCITS	UCITS Organisation Directive will introduce requirements to integrate sustainability risks and factors in compliance with existing rules in three key areas: organisational requirements; operational requirements; and risk management <sup>12</sup> .

<sup>11</sup> <https://www.algoodbody.com/insights-publications/esg-related-changes-to-the-solvency-ii-and-idd-frameworks>

<sup>12</sup> <https://www.arthurcox.com/knowledge/esg-for-fund-managers-integrating-sustainability-risks-and-factors-into-the-aifmd-and-ucits-frameworks/>

## Appendix B: Researched Courses

<b>Course</b>	<b>Provider</b>	<b>Link</b>
An Introduction to Sustainability for Business	ACCA	<a href="https://www.accaglobal.com/gb/en/member/discover/events/global/e-learning/sustainability/intro-to-sustainability-for-bus.html">https://www.accaglobal.com/gb/en/member/discover/events/global/e-learning/sustainability/intro-to-sustainability-for-bus.html</a>
ACCA Qualification	ACCA	<a href="https://www.accaglobal.com/gb/en/technical-activities/sustainability.html">https://www.accaglobal.com/gb/en/technical-activities/sustainability.html</a>
ESG Investment - an Overview	BPP	<a href="https://www.bpp.com/courses/professional-development/environmental-social-governance-esg-investment-an-overview">https://www.bpp.com/courses/professional-development/environmental-social-governance-esg-investment-an-overview</a>
F&A exams	CAI	<a href="https://www.charteredaccountants.ie/News/getting-to-know-topic-area-4-sustainability-corporate-social-responsibility-and-integrating-reporting">https://www.charteredaccountants.ie/News/getting-to-know-topic-area-4-sustainability-corporate-social-responsibility-and-integrating-reporting</a>
Certificate in ESG Investing	CFA	<a href="https://www.cfainstitute.org/ireland/Pages/esg.aspx">https://www.cfainstitute.org/ireland/Pages/esg.aspx</a>
Professional Assessment, Sustainable and Responsible Investment	CISI	<a href="https://www.cisi.org/cisiweb2/cisi-website/study-with-us/professional-assessments/sustainable-and-responsible-investment-professional-assessment">https://www.cisi.org/cisiweb2/cisi-website/study-with-us/professional-assessments/sustainable-and-responsible-investment-professional-assessment</a>
Refresher module: ESG Investing, Ethical Sustainable Investment, Green Bonds and Asset backed securities, Impact Investing, and Responsible Investment the Taxonomy	CISI	<a href="https://www.cisi.org/cisiweb2/cisi-website/study-with-us/getting-started/professional-refresher">https://www.cisi.org/cisiweb2/cisi-website/study-with-us/getting-started/professional-refresher</a>
Green and Sustainable Finance Certificate	CISI & Chartered Bankers	<a href="https://www.cisi.org/cisiweb2/cisi-website/study-with-us/certificate-in-green-finance">https://www.cisi.org/cisiweb2/cisi-website/study-with-us/certificate-in-green-finance</a>
Green Bond Training	Climate Bonds Initiative	<a href="https://www.climatebonds.net/training/courses/green-bond-training">https://www.climatebonds.net/training/courses/green-bond-training</a>
CPA Ireland	CPA	<a href="https://www.cpaireland.ie/CPAIreland/media/Education-Training/Syllabus%202021/syllabusFeb21_1.pdf">https://www.cpaireland.ie/CPAIreland/media/Education-Training/Syllabus%202021/syllabusFeb21_1.pdf</a>

EFFAS Environmental Social and Governance Analyst (CESGA®) Online course & Certification	EFFAS Academy	<a href="https://effas-academy.com/product/cesga-online-course-certification/?gclid=Cj0KCQjw38-DBhDpARIsADJ3kjl6ubws4SMowJ_JJAudHPD_KmCT2SaFcLweq2LY8RVJcbPhQW_uo-kYaAIN3EALw_wcB#download-brochure-cesga">https://effas-academy.com/product/cesga-online-course-certification/?gclid=Cj0KCQjw38-DBhDpARIsADJ3kjl6ubws4SMowJ_JJAudHPD_KmCT2SaFcLweq2LY8RVJcbPhQW_uo-kYaAIN3EALw_wcB#download-brochure-cesga</a>
EU Taxonomy – Environmentally Sustainable Investments	ELS Europe and Frankfurt School of Finance & Management	<a href="https://sfskillnet.sustainablefinance.ie/training/eu-taxonomy-environmentally-sustainable-investments/">https://sfskillnet.sustainablefinance.ie/training/eu-taxonomy-environmentally-sustainable-investments/</a>
GRI Standards Certified Training	EY	<a href="https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27">https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27</a>
Sustainability Awareness Workshop	EY	<a href="https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27">https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27</a>
Stakeholder Engagement and Materiality Assessment	EY	<a href="https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=28">https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=28</a>
Sustainability Leadership Workshop	EY	<a href="https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27">https://eytrainingcenter.ey.com/Home/DownloadWidgetAttachment?WidgetID=27</a>
Certified Expert in Sustainable Finance	Frankfurt School of Finance and Management	<a href="https://execed.frankfurt-school.de/en/home/individuals/sustainable-development/expert-sustainable-finance">https://execed.frankfurt-school.de/en/home/individuals/sustainable-development/expert-sustainable-finance</a>
The Sustainability and Climate Risk Certificate (SCR)	GARP	<a href="https://www.garp.org/#!/scr">https://www.garp.org/#!/scr</a>
GRI Professional Certification	GRI Academy	<a href="https://www.griacademy.org/">GRI Academy (globalreporting.org)</a>
Introduction to Sustainability Reporting and the GRI Standards	GRI Academy	<a href="https://www.griacademy.org/">GRI Academy (globalreporting.org)</a>
Integrating the SDGs into Sustainability Reporting	GRI Academy	<a href="https://www.griacademy.org/">GRI Academy (globalreporting.org)</a>
Introduction to Sustainable Finance and Investments	Harvard University	<a href="https://online-learning.harvard.edu/course/introduction-sustainable-finance-and-investments?delta=0">https://online-learning.harvard.edu/course/introduction-sustainable-finance-and-investments?delta=0</a>
Responsible and Sustainable Finance	IOB	<a href="https://iob.ie/programme/sustainable-finance">https://iob.ie/programme/sustainable-finance</a>

GRI Standards Certified Training Course	KPMG India	<a href="https://home.kpmg/in/en/home/trainings/advisorytrainings/climatechange-sustainabilityservices.html">https://home.kpmg/in/en/home/trainings/advisorytrainings/climatechange-sustainabilityservices.html</a>
Products and Standards	Luxembourg Green Exchange	<a href="#">Luxembourg Green Exchange - Sustainable products and standards course   LGX Academy (bourse.lu)</a>
Fundamentals of Sustainable Finance	Luxembourg Green Exchange	<a href="#">Luxembourg Green Exchange - Fundamentals of Sustainable Finance's course   LGX Academy (bourse.lu)</a>
LPEA Training Academy	Luxembourg Private Equity and Venture Capital Association (LPEA)	<a href="#">PowerPoint Presentation (lpea.lu)</a>
MA in Ethics (Corporate Responsibility)	Offered jointly by Dublin City University and Mater Dei Institute of Education in partnership with the Association of Compliance Officers in Ireland (ACOI)	<a href="https://www.dcu.ie/courses/postgraduate/school-theology-philosophy-and-music/ma-ethics-corporate-responsibility">https://www.dcu.ie/courses/postgraduate/school-theology-philosophy-and-music/ma-ethics-corporate-responsibility</a>
Getting Started in Responsible Investment	PRI Academy	<a href="https://priacademy.org/products/getting-started-in-ri">https://priacademy.org/products/getting-started-in-ri</a>
Foundations in Responsible Investment	PRI Academy	<a href="https://priacademy.org/products/foundations-in-ri">https://priacademy.org/products/foundations-in-ri</a>
Advanced RI Analysis	PRI Academy	<a href="https://priacademy.org/products/advanced-ri-analysis">https://priacademy.org/products/advanced-ri-analysis</a>
Responsible Investment for Trustees	PRI Academy	<a href="https://priacademy.org/products/ri-for-trustees">https://priacademy.org/products/ri-for-trustees</a>
Fundamentals of Sustainability Accounting	SASB	<a href="https://fsa.sasb.org/">https://fsa.sasb.org/</a>
Introduction to the Natural Capital Project Approach	Stanford University	<a href="#">Introduction to the Natural Capital Project Approach   edX</a>
InVEST Carbon Storage and Sequestration Model (Virtual Workshops)	Stanford University	<a href="#">InVEST Virtual Workshops   Natural Capital Project (stanford.edu)</a>
Certified Sustainable Finance Analyst (Standard) (CSFA™)	Sustainable Finance Institute (SFI) & World Sustainable	<a href="https://sfini.org/csfa-standard">https://sfini.org/csfa-standard</a>

	Finance Association (WSFA)	
Certified Sustainable Finance Analyst (Advanced) (CSFA™)	Sustainable Finance Institute (SFI) & World Sustainable Finance Association (WSFA)	<a href="https://sfini.org/csfa-advanced">https://sfini.org/csfa-advanced</a>
Sustainability and ESG Reporting	susthub	<a href="https://susthub.ie/sustainability-esg-reporting/">https://susthub.ie/sustainability-esg-reporting/</a>
Introduction to climate-related disclosures - starting your climate journey	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
Understanding the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD)	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
Governance of climate-related risks and opportunities	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
An introduction to managing the financial risks from climate change	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
Embedding climate change into financial management – climate-related reporting for accountants	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
Corporate reporting of climate and environmental matters in the European Union	TCFD	<a href="https://learn.tcfhub.org/">https://learn.tcfhub.org/</a>
MiFID 2	The Knowledge Academy	<a href="https://www.theknowledgeacademy.com/ie/courses/markets-in-financial-instruments-directive/mifid-ii-professional/">https://www.theknowledgeacademy.com/ie/courses/markets-in-financial-instruments-directive/mifid-ii-professional/</a>
Introduction to Sustainable Finance	UN CC: e-learn	<a href="https://unccelearn.org/course/view.php?id=59&amp;page=overview">https://unccelearn.org/course/view.php?id=59&amp;page=overview</a>
Climate Change and the TCFD: Risks and Opportunities for the Banking Sector	UNEP FI & CAF	<a href="https://www.unepfi.org/training/training/climate-change-training/online-course/">https://www.unepfi.org/training/training/climate-change-training/online-course/</a>
UNEP FI Environmental and Social Risk Analysis (ESRA)	UNEP FI INCAE Business School's Ecobanking Project Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH	<a href="https://www.unepfi.org/training/training/esra/esra-online-course/">https://www.unepfi.org/training/training/esra/esra-online-course/</a>

Sustainable Finance	University of Cambridge Institute for Sustainability Leadership (CISL)	<a href="https://online-short-courses.cisl.cam.ac.uk/presentations/lp/university-of-cambridge-sustainable-finance-online-short-course/?ef_id=c:434321599395_d:c_n:g_ti:kwd-296622156187_p:k:%2Bgreen%20%2Bfinance%20%2Bcourse_m:b_a:101786900835&amp;gclid=Cj0KCQjw38-DBhDpARIsADJ3kjmrl8rzOSnwmY3gcSSf-_-uiMSOD2wAYB3uCMPiWcwjgpVhoXuXRWtpMaAsdsEALw_wcB&amp;gclsrc=aw.ds">https://online-short-courses.cisl.cam.ac.uk/presentations/lp/university-of-cambridge-sustainable-finance-online-short-course/?ef_id=c:434321599395_d:c_n:g_ti:kwd-296622156187_p:k:%2Bgreen%20%2Bfinance%20%2Bcourse_m:b_a:101786900835&amp;gclid=Cj0KCQjw38-DBhDpARIsADJ3kjmrl8rzOSnwmY3gcSSf-_-uiMSOD2wAYB3uCMPiWcwjgpVhoXuXRWtpMaAsdsEALw_wcB&amp;gclsrc=aw.ds</a>
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### Acronyms

AIFMD	Alternative Investment Fund Management Directive
CBI	Central Bank of Ireland
CSRD	Corporate Sustainability Reporting Directive
EC	European Commission
ESG	Environmental Social Governance
EU	European Union
FS	Financial Services
FSB	Financial Stability Board
IDD	Insurance Distribution Directive
MiFID	Markets in Financial Instruments Directive
NFRD	Non-financial Reporting Directive
NTMA	National Treasury Management Agency
PRB	Principles for Responsible Banking
PRI	Principles for Responsible Investment
SF	Sustainable Finance
SFDR	Sustainable Finance Disclosure Regulation
SFS	Sustainable Finance Skillnet
PCF	Pre-Approval Controlled Function
PSI	Principles for Sustainable Insurance
TCFD	Taskforce on Climate-related Financial Disclosure
TEG	Technical Expert Group
UCITS	Undertakings for the Collective Investment in Transferable Securities.
UNEP FI	United Nations Environment Programme Finance Initiative

### Professional Course Providers

ACCA	Association of Chartered Certified Accountants
CAI	Chartered Accountants Ireland
CFA	Chartered Financial Analyst
CFP	Certified Financial Planner

CRCM	Certified Regulatory Compliance Manager
FCA	Financial Conduct Authority
FRM	Financial Risk Manager
GARP	Global Association of Risk Professionals
IIFT	Institute of Investing and Financial Trading
IIMP	International Institute of Marketing Professionals
IoB	Institute of Bankers
QFA	Qualified Financial Advisor