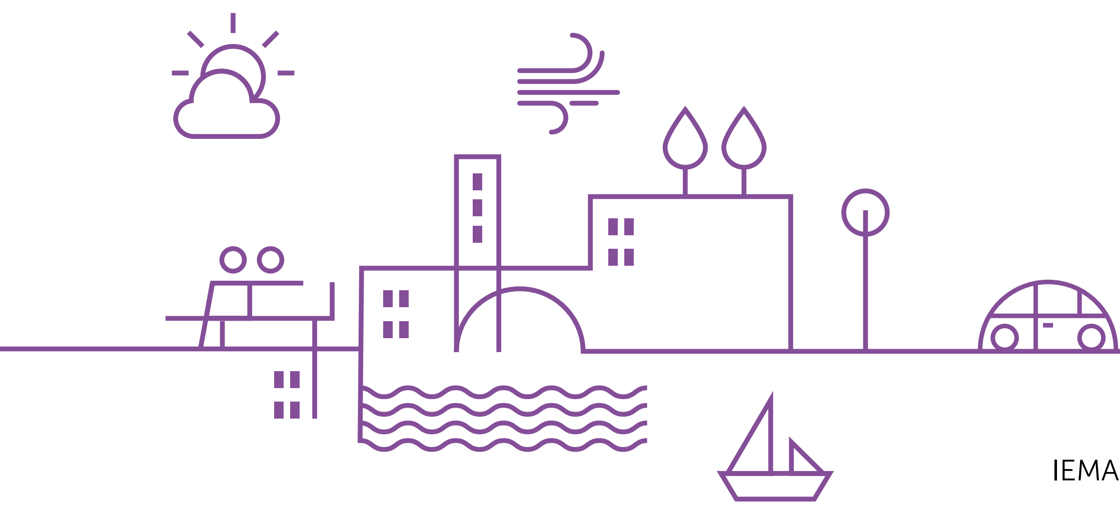
IEMA Transforming the world to sustainability

IEMA Guide on Sustainable Finance

Clarifying the landscape of sustainable finance



IEMA Fellows Working Group
on Sustainable Finance

IEMA Guide on Sustainable Finance

This document provides a simple introduction to sustainable finance, and what is being done at present, and by whom. It also highlights where IEMA and our members fit in and looks to stimulate discussion about how IEMA can play an active part in transforming finance to be truly sustainable.

IEMA Fellows Working Group on Sustainable Finance

"Sustainability is the theme of our time – and the financial system has a key role to play in delivering that set of ambitions. Sustainability means making economic prosperity long lasting, more socially inclusive and less dependent on exploitation of finite resources and the natural environment."

Christian Thimann, Chairman of the EU High-Level Expert Group on Sustainable Finance, 2018

Foreword

The world is changing rapidly. Climate change, population growth, threats to nature, resource concerns, and global development pressure, have created the 'perfect storm' of issues, which is heavily impacting the operation of business and has led key stakeholders in the financial and related professional services industry to act.

With a shifting global political and regulatory landscape that seeks to enhance risk management and boost the progress of green finance, these financial stakeholders, be they investors or beneficiaries, are increasingly looking to support innovative business models that resolve the sustainability challenge.

But time is not on our side. With a narrowing window for ensuring the balance between economic, social and environmental conditions, this industry cannot afford to make mistakes. This presents a golden opportunity for environmental and sustainability professionals to step up and collaborate with the financial sector and related professional services industry to ensure sustainability competence and skills are embedded in their everyday operations.

This guide by the IEMA Fellows includes background information on financial markets and products, investment approaches, as well as who the key players and the regulators are and seeks to paint a better picture of the landscape of sustainable finance. In clarifying the landscape, it also highlights the catalyst role that environmental and sustainability professionals can play in supporting this global transition to sustainable finance.

We hope that you find the guide useful.

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Executive Summary

The finance sector and related professional services contributed £176 billion to the UK economy in 2015 (nearly 11% of the UK's total economic output) and it employs nearly 2.3m people, 700,000 of which are employed in the banking and insurance sectors alone.

The activities of this sector and the related professional services industry influence all other sectors through the requirements that are attached to receiving financial services and products in their many forms. These activities can either support unsustainable practices or they can be directed towards products and services that have a positive environmental and social impact. Achieving this latter approach is the overall goal of sustainable finance and sustainability and environment practitioners have a key role to play.

This guide explains the purpose and key function of a range of financial products and services, including how they differ in their consideration of environmental and social factors. It highlights some key developments that are driving the transition to green finance. These include:

- Enhanced risk management Businesses are actively working to incorporate transparency and disclosure of non-financial risks and performance into their operations. Reputational, financial and transition risks are key factors incentivising business to act. Alongside this, regulators are making it clear that businesses need to move away from a voluntary approach to risk management;
- Uniformity through standards and labels – From the UK to the international levelthere is increasing support for standards to accelerate the growth of green finance. With evidence already demonstrating that standards contribute £8.2 billion to the UK economy, this push by standards bodies for consistent terminology and clear product labelling will be a key enabler in managing risk and making sustainable finance mainstream;
- Increased investment in sustainable and disruptive business models - The quickening pace of sustainability adoption also means that there are new and disruptive business models seeking investment.

There are numerous opportunities for environment and sustainability professionals to influence and support the transition to green finance. For example, some important insights include:

- Choosing a particular type of financing, be it equity or debt financing, will impact the ability of investors to influence Environmental, Social and Governance (ESG) factors - In an equity finance scenario, the investors (or shareholders) can specify ESG management and reporting requirements. On the other hand, in a debt finance scenario, the loan agreement will be the key document within which the lender may specify ESG requirements.
- Pricing carbon and other externalities properly may unlock further engagement opportunities for IEMA and its members - incorporating natural and social capital accounting into decision making may help to identify current or future opportunities and risks across other dimensions of sustainability relevant to green finance objectives.
- Associated industries like pension funds, mortgages and insurance, in their capacity as institutional investors and risk managers, have great capacity to address global sustainability issues – Examples of local green mortgage schemes, such as in Wales, explain how it is now becoming possible for borrowers to take out a bigger mortgage when buying greener properties for the first time.
- By clarifying the duties of investors such as pension funds, insurance companies and asset managers, there is great scope to encourage stronger focus on sustainability issues over the long term - Active campaigning for enhanced fiduciary duties of investors is helping to promote consideration and incorporation of ESG issues including climate change.

- **From responsible investment to philanthropic investment, numerous tools are now available to integrate ESG benchmarking in investment decisions** – To support investors in deciding which screening techniques to use and best impact the ESG performance of their investment portfolio, a series of ESG rating tools are available to help design different investment strategies that promote entrepreneurial solutions to societal challenges;

- **There is a strong need for financial institutions to ask clients and beneficiaries about their sustainability preferences and ethical values** – The final report by the EU High-Level Expert Group on Sustainable Finance (HLEG) supports the fact that developing a fuller sense of clients' needs in the context of sustainable development will help financial institutions to strengthen their business models as the transition to sustainable finance intensifies.

In the face of a growing demand for sustainability competence and skills to be embedded in everyday operations, IEMA members will have several options to further engage with financial services. This could be:

- Providing specialist support and due diligence services (e.g. risk and liability management associated with an asset);

- Becoming ESG specialists in green investment operations or by supporting green banking/insurance initiatives;

- Advising on the value of corporate impact assessment and reporting requirements, and the operational benefits of compliance management systems, to accompany the expanding internal corporate sustainability programmes for financial service organisations.

Conversely, as finance professionals themselves will be required to broaden their understanding of sustainability, their engagement with IEMA, its Skills Map and network of members will provide the institute with the opportunity to increasingly partner with the finance sector and wider stakeholders to enable finance and investment to become truly sustainable.

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Part 1: Introduction to sustainable finance

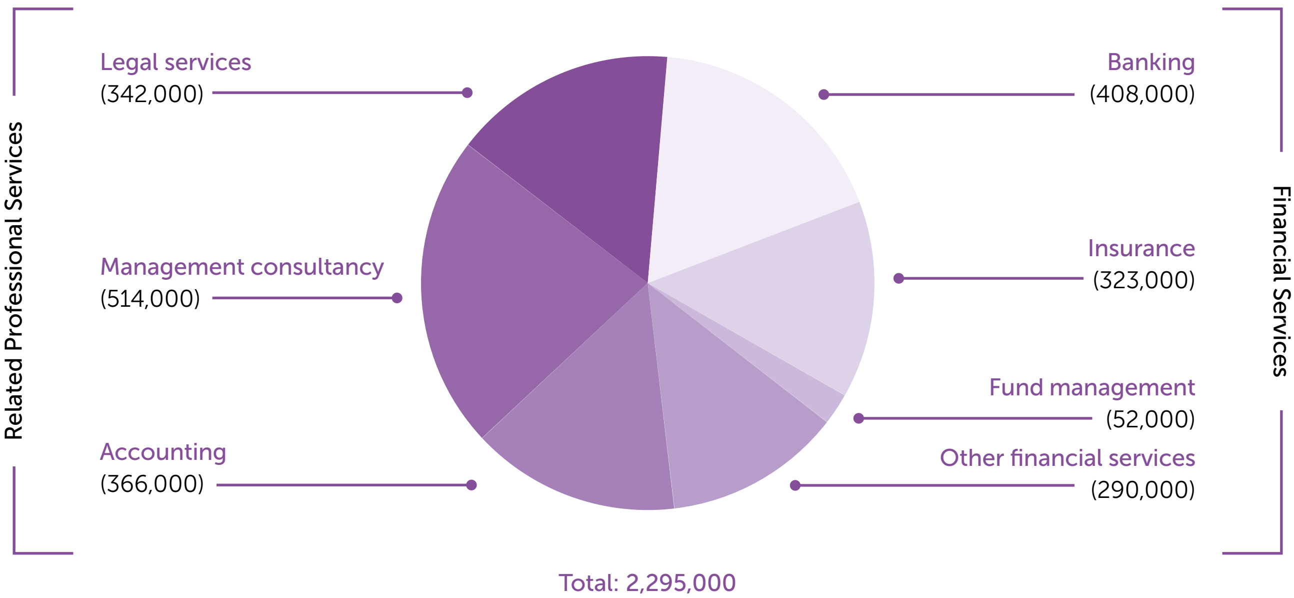
The finance sector and related professional services incorporates banks, development finance institutions equity investors, insurers, legal services, pension funds, investment managers, investment consultants, management consultancies and accounting services. Employing over 2.2 million people in the UK alone (7% of the workforce), a recent report by TheCityUK confirms that this sector contributed £176 billion to the national economy in 2015.[1] As Europe's leading financial centre, it goes without saying that the activities of this sector and the related professional services industry influence all other sectors through the requirements that are attached to receiving financial services and products in their many forms.

According to TheCityUK, there are over 700,000 people employed in banking and insurance alone. The diagram below showcases the range of different stakeholders engaged in this field

Employment by sector in UK financial and related professional services, 2016

Source: TheCityUK, Key Facts About UK-Based Financial and Related Professional Services – April 2018.

TheCityUK calculations are based on data from Nomis and the Northern Ireland Business Register and Employment Survey.



Output of the sector is 11% of the total UK economy, meaning that productivity levels are above the average for the national economy and this scale presents an incredible opportunity to bring about transformative change, and accelerate the transition towards sustainability.

There is no one common definition of 'sustainable finance' (similarly to sustainability generally), but rather individual organisations, be they banks or other financial institutions, have scoped their own definitions. For the purposes of this document we have opted to use the definition set out by the EU High-Level Expert Group on Sustainable Finance[2], which finds that sustainable finance is about two imperatives:

"The first imperative is to improve the contribution of finance to sustainable and inclusive growth as well as the mitigation of climate change. The second is to strengthen financial stability by incorporating environmental, social and governance (ESG) factors into investment decision-making. Both imperatives are pressing, given the rising climate-related risks and degradation in the environment and other sustainability areas."

Sustainable finance needs to be operated on a global level across the whole sector to achieve the UN Sustainable Development Goals (SDGs) and the Paris Agreement on Climate Change, by mandating that those who provide finance and those who require it, take due account of environmental and social considerations (risks and opportunities associated with the activities). These two major international agreements signal the worldwide commitment to achieving a sustainable, low carbon future. Recent reports have estimated that between 2015 and 2030 an investment of some $90 trillion will be made in infrastructure alone in the world's urban, land use and energy systems[3]. As this period of investment looks to determine the future of the world's climate systems, the way we invest and how we manage these changes will shape future patterns of growth and it is therefore crucial that we engage more actively in the management of these investments.

In 2006, Lord Stern, then Second Permanent Secretary at the UK Treasury, released a landmark report on the impact of climate change, warning that the cost of inaction would be far greater for future generations than the costs of actions taken today. More recently, in 2015 Mark Carney, the Governor of the Bank of England and Chairman of the Financial Sustainability Board, warned that climate change was a "tragedy of the horizon" that "will threaten financial resilience and longer-term prosperity"[4]. Recent figures reported by the Economist, explain that from the public-sector perspective the expected value of a future with 6°C of warming represents present value losses worth $43 trillion; 30% of the entire stock of manageable assets[5]. Therefore, the longer we delay action, the more significant are the cumulative impacts, and the greater the mitigation and adaptation costs will be.

To meet these objectives, business as usual and traditional sources of finance will simply not be enough. We need to increase and reorient capital market investments towards long-term sustainable investments.

But why should individual businesses, be they a bank or even a manufacturer, agree to invest in sustainable development and become more sustainable themselves, in line with the SDGs and the Paris Agreement on Climate Change?

In June 2017, the Task Force on Climate-related Financial Disclosures (TCFD), a multi-stakeholder group appointed by the Financial Stability Board and constituted of 32 members from a broad range of economic sectors and financial markets, issued a final report that encouraged greater transparency and disclosure of non-financial risks and performance. The TCFD identified that of all the risks that impact on business, one of the most significant, and perhaps most misunderstood, risks that organisations face today relates to climate change. Together with financial risks we have therefore identified the following risks as key factors to incentivise business to act:

1. Reputational risks: responding to pressures from NGOs and consumers. NGOs like ShareAction[6] and pension funds are exerting pressure on organisations to pull out of controversial investment deals with social and environmental repercussions[7];
2. Financial risks and stranded assets: Reaching a goal of limiting climate change to less than two degrees of warming would require us to keep a large proportion of existing fossil fuel reserves in the ground. A 2015 report in Nature[8], stated that an estimated third of oil reserves, half of gas reserves and more than 80% of known coal reserves should remain unused to meet global temperature targets under the Paris Agreement. The value of 'stranded assets' is possibly not fully reflected in the value of companies that extract, distribute, or rely heavily on fossil fuels, which could result in a sudden drop if this risk were priced in. New regulations (e.g. carbon pricing), a change in demand (e.g. higher demand for renewable energy because of lower energy costs) or even legal action (punitive fees and contingent liabilities based on noncompliance with environmental laws (see Thames Water's recent fine of £20.3m for a sewage leak in the Thames[9]) could lead to these assets becoming stranded[10]. It should also be noted that other companies that use fossil fuels as inputs for production, or are otherwise energy or carbon-intensive, could also be affected by new climate legislation, technological advances, or a shift in demand;
3. Transition risks (regulatory and legal risks): Transitioning to a low carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change.

Clean tech investment opportunities and the growth upside

These risks are not the only factors to influence business to act. The ever-quickening pace of sustainability adoption is driving new and disruptive business models seeking investment. Although the adoption times of new technologies are shortening, the long-term drivers of demand growth for sustainable energy, resources, water and food are as strong as ever. Institutional capital flows are now accelerating into sustainability, and the 2015 Paris Agreement has provided additional impetus[11]. Innovation is taking existing technologies such as electric batteries and artificial intelligence (AI) and using them to build the foundations of the new sustainable transport industry that will become electrified and autonomous. These changes will represent more disruption in the next 10 years than they have in the previous 100 years and present a potential for economic growth that is open to be exploited.

Drivers of sustainable finance

In addition to the SDGs themselves, several drivers have also emerged over the last few years to encourage sustainable finance initiatives. The majority of these drivers have been the environmental policies and procedures set out by national and international development banks (e.g. World Bank/International Finance Corporation, European Bank for Reconstruction and Development - EBRD, etc.) and in more recent years the expanding group of 'Equator Banks[12]' which apply the IFC project requirements and performance standards[13] that define their clients' responsibilities for managing their environmental and social risks.

At the global level, action platforms like the UN Global Compact's Financial Innovation for the SDGs[14] are bringing together multi-disciplinary groups of finance practitioners and experts to develop innovative private financial instruments that have the potential to direct private finance towards critical sustainability solutions. Furthermore, with over 200 members and a diverse signatory base from very small investor to the largest pension funds and fund managers in the world, the UN-supported Principles for Responsible Investment (PRI) is another initiative that is helping to set higher standards for members to incorporate environmental, social and governance (ESG) issues into their investment and ownership decisions[15].

Following the publication of the TCFD report, the EU High-Level Group on Sustainable Finance (HLEG) released a report in January 2018 to advise the European Commission (EC) on how to 'steer the flow of capital towards sustainable investments. The report provided cross-cutting and sector-specific recommendations, several of which were incorporated into the Action Plan on Sustainable Finance adopted by the EC in March 2018[16]. Work on delivery of the Action Plan is being taken forward by the EU Technical Expert Group (TEG) on Sustainable Finance[17].

The 2018 Status Report of the TCFD, released in September 2018, confirms that a growing number of organisations are actively implementing the recommendations of the TCFD. The report notes that the number of firms supporting the TCFD recommendations has grown to over 500, with market capitalisations of over $7.9 trillion, and including financial firms responsible for assets of nearly $100 trillion. This compares with 100 firms when the recommendations were launched in June 2017. This is encouraging, given the very limited amount of time companies had between the release of the Task Force's 2017 report and the start of their internal processes to prepare their 2017 disclosures[18].

In the UK, the Green Finance Taskforce (GFT)[19] published a document in March 2018 highlighting the need for private sector investment to realise the ambitions of the government's Clean Growth Strategy and Industrial Strategy. With London already a world-leading hub for green finance, backed by deep and liquid capital markets, and a strong reputation for innovation, the Taskforce has continued to emphasise the role of standards and labels in building a trusted green finance sector[20]. This follows the government's announcement to develop the world's first green financial management standards with the British Standards Institution[21]. The report has consequently stressed the considerable amount of opportunities for UK-based investors to invest in the global green economy.

One of the UK Government's responses to the GFT's recommendations was to announce in June 2018 that it would, together with the City of London Corporation, fund a new Green Finance Institute to champion sustainable finance in the UK and abroad[22].

Supporting this momentum, several institutions including the Prince of Wales Accounting for Sustainability project and Aviva have issued a recommendation paper calling on all actors in the financial system to move as one on sustainability issues. Among its recommendations, the report calls on key stakeholders within the sector to act and develop codes of conduct (e.g. IEMA's Code of Professional Conduct[23]) and qualifications to provide the necessary culture, tools and knowledge for professionals to act in support of sustainability[24]. This recommendation helps to underscore the role that IEMA as a professional body could play in helping to bridge the sustainability skills gap across all parts of the investment chain. We shall expand on this point in the section entitled "How does this relate to IEMA members in practice?".

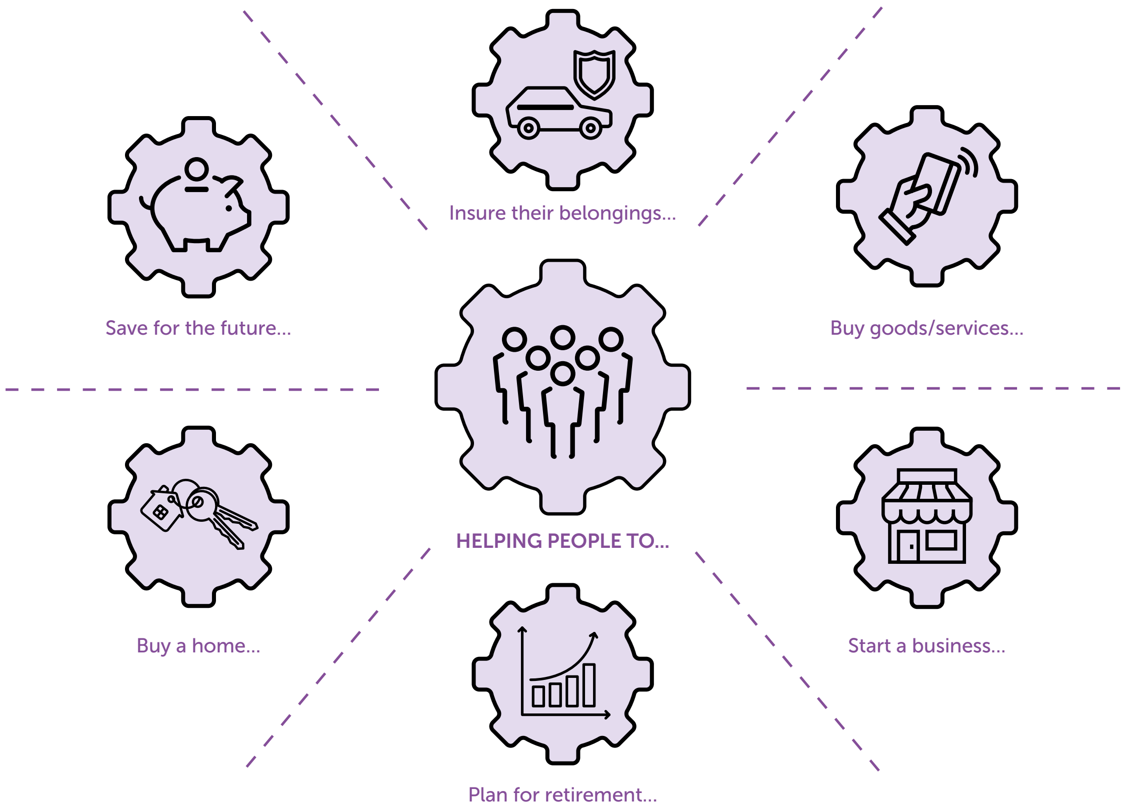
The **Bank of England's Prudential Regulation Authority** (see Glossary), the official body which regulates financial firms in the UK, also released a consultation paper in October 2018 calling on the country's financial services entities to take a more forward-looking and strategic approach to the management of financial risks from climate change. In setting out its guidance for the consultation, the Bank of England has explained that it expects banks, insurers and building societies to "identify, measure, monitor, manage and report on their exposure" to climate change risks[25]. Although a voluntary initiative, these announcements signal the intention by TCFD to move away from the voluntary approach to an expectation of at least the biggest financial players (banks and insurers) becoming actively engaged in the risk management process.

Interrelationship between the financial and related professional services

Having provided an overview of the finance sector and related professional services, the diagram below seeks to further paint the interconnectedness and the variety of professionals and organisations that are engaged in this field. Although a mere illustration, the diagram emphasises the point that both traditional and new sectors have a role to play in this field. Traditional sectors such as life and health insurance companies protect people against future uncertainty, helping to reduce the impacts of ill health, while less traditional organisations such as fintech businesses have the potential to increase the funding opportunities for innovative SMEs in the low carbon sector, that as we have noted above may not always meet the investment criteria of the traditional banking sector.

Role of Financial and Related Professional Services

Source: K Mathias, July 2018. 'An Engine for Growth – The Role of Financial and Related Professional Services in Society', The City UK, London



Part 2: Understanding financial markets, financial products and approaches

The financial markets are a complex series of products which facilitate the transfer and allocation of funds effectively and efficiently around the globe. Understanding them is important to best integrate sustainable thinking into the financial system itself. Sustainable financing corresponds to an investment approach that considers environmental and social factors when making financial decisions, for example in investment portfolio selection and management. Different organisations currently set their own criteria to determine if environmental and social factors have been addressed in a robust enough way to comply with their own standards. For example, a green bond issued from one bank, may have very different environmental and social criteria to that of another bank's green bond. Therefore, to gain better control of the financing opportunities for sustainability, it is important to first understand the main differences between the various types of financial markets, their products and approaches to financing.

Any marketplace where Buyers and Sellers participate in the trade of assets such as **equities (stocks), bonds, currencies, and derivatives** (see Glossary for definition of these terms), are called Financial Markets. They may be a physical location like NYSE, LSE, NASDAQ, etc. They can be found in nearly every country in the world.

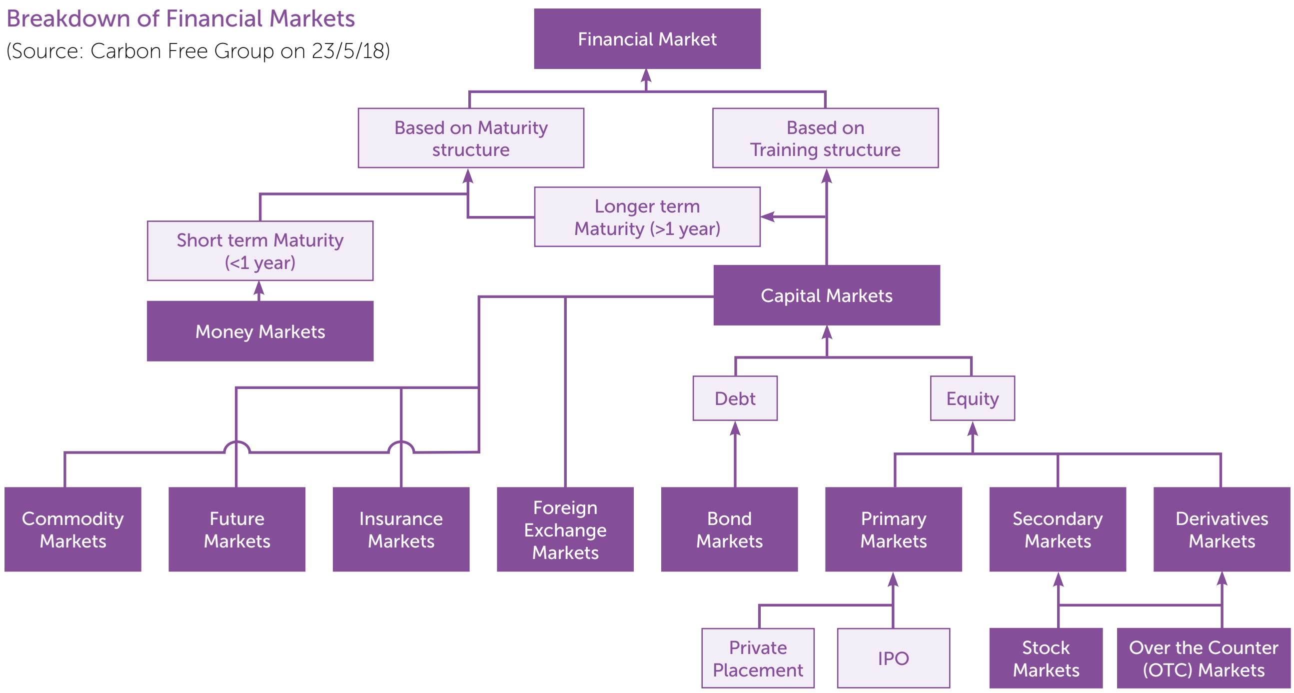
The purpose of financial markets is to:

- Facilitate the transfer of savings from Savers to Investors
- Provide pricing information in the market
- Provide liquidity to financial assets
- Save time, money and efforts of both buyers and sellers of assets

Transactions in Financial markets are of two forms:

1. Securities (stocks, bonds, etc – see Glossary) and
2. Commodities (precious metals, agricultural products, etc – see Glossary)

Breakdown of Financial Markets
(Source: Carbon Free Group on 23/5/18)



1. Types of financial markets:

Financial markets have a global presence and may take many different forms. Some are very small, while others like the London Stock Exchange trade trillions of pounds daily. A financial market is a broad term describing any marketplace where buyers and sellers participate in the trade of assets such as equities or bonds e.g. stock markets and bond markets.

Capital markets and money markets

Capital and money markets represent the main types of financial markets.

A) Capital market consists of primary market [Initial Public Offerings] and secondary market [Stock exchanges]

Primary market: When a company issues stock or bonds for the first time (for example a company's Initial Public Offering or IPO), and sells those securities directly to investors, that transaction occurs on the primary market.

Secondary market: A financial instrument that trades in the secondary markets corresponds to any security that trade on an exchange and can be bought or sold by anyone in the general population is referred to as publicly traded securities.

B) Money markets are for trading short term debt instruments. This includes treasury bills, commercial paper, call money, certificates of deposit and commercial bills.

Here are some examples of the variety of markets that fall under each category:

Name of market	Definition	Capital market (CM) or money market (MM)?
Bond Market	Also called a debt, credit or fixed-income market (see Glossary). It is a security that investor loans money for a defined period at a pre-established rate of interest. It provides financing through issuance of bonds to enable the subsequent trading. These are issued by corporations, municipalities, states and federal governments.	MM
Commodity Market	A physical or virtual market place for buying, selling or trading raw or primary products. These are divided into hard commodities [natural resources that must be mined or extracted i.e. gold, rubber and soil] and soft commodities [agricultural products, livestock].	CM
Credit Market	A market place for the exchange of debt securities and short-term commercial paper. Companies and government can raise funds by allowing investors to purchase these debt securities.	MM
Derivatives Market	A financial market that trades securities that derive its value from its underlying asset. e.g.- **forward contracts, future options, swaps and contracts-for-difference** (see Glossary). The underlying asset can be virtually anything including climate events. Overall, they tend to be interest rates, commodities, debt and equity.	CM

Name of market	Definition	Capital market (CM) or money market (MM)?
Equity Market	A stock market in which shares are issued and traded either through exchanges or over-the-counter markets. It is also known as an equity market.	CM
Forex (Foreign Exchange) Market	A financial market where currencies are traded. It is the most **liquid** (see Glossary) market in the world.	CM
Interbank Market	It is the financial system and trading of currencies among banks and financial institutions excluding retail investors and smaller trading parties. These are traded by banks on behalf of customers.	MM
Money Market	Money market trades highly liquid and short-term maturities which are borrowing and lending in less than one year. This includes **certificates of deposit, treasury bills, promissory notes, commercial papers, banker's acceptance,** etc. (see Glossary)	MM
Over-the-Counter (OTC) market	A type of secondary market where exchanging of public stocks are not listed on NASDAQ, NYSE, ASE, etc.	CM
Spot/Cash Market	A market place for the immediate settlement of transactions involving commodities and securities. Prices are settled in cash on the spot at the current price market.	CM
Stock Market	Is a market where you buy and sell shares in publicly traded companies.	CM

Public markets and private markets

A. **Public markets:** They consist of companies (and other assets) that are publicly traded; Public finance is the study of how investment and financing decisions are made in a large public company. The term public is most commonly used to describe a company's shares or any other type of financial instrument that trades in the secondary markets. In other words, any securities that trade on an exchange and can be bought or sold by anyone in the general population are referred to as publicly traded securities. Financial regulation is much tighter for public companies.

B. **Private markets:** They comprise of companies which (in most cases) are owned by the company's founders, management or a group of private investors. The company either 1) does not have a share structure through which it raises capital or 2) the company shares are being held and traded without using an exchange. Value is not established by a market but simply established at a point in time. Private companies can transition to public companies via an Initial Public Offering (IPO), and equally companies that were once traded publicly, can be taken private again through leveraged buyouts.

IEMA Fellows Working on Sustainable Finance - Member Profile:

Greg Chant-Hall, Commercial Director, Carbon Free Group

"Very early in my career it became clear to me that decision making capability becomes greater, the closer and more aligned you are to finance." says Greg "That is why it's so important for sustainability professionals to understand finance, and ultimately why we are writing this guide".

Greg's career path spans lending and risk at HSBC and project finance at Skanska. He is now Commercial Director of the Carbon Free Group CIC which is focused on developing zero-carbon buildings, that are sold for the same price as traditional buildings and have no energy bills.

Over the next 12-18 months we will see Carbon Free Group issue a green bond, to help scale these developments and provide attractive commercial returns to a wider stakeholder group.

www.carbonfreegroup.com

Asset classes: equity, fixed-income and alternatives

A. Equity: In terms of investment strategies, equities are one of the principal asset classes. They represent a stock or any other security representing an ownership interest. The other two asset classes are fixed-income (bonds) and cash/cash-equivalents. These are used in asset allocation planning to structure a desired risk and return profile for an **investor's portfolio** (see Glossary for definition of all these terms).

B. A fixed income security: An investment that provides a return in the form of fixed periodic payments and the eventual return of principal at maturity (e.g. such as a bond). Unlike a variable-income security, where payments change based on some underlying measure such as short-term interest rates, the payments of a fixed-income security are known in advance.

C. Alternatives: An alternative investment is an asset that is not one of the conventional investment types, such as stocks, bonds and cash. Most alternative investment assets are held by institutional investors or accredited, high-net-worth individuals because of the complex natures and limited regulations of the investments (e.g. private equity, hedge funds, managed futures, real estate, commodities and derivatives contracts).

2. Debt and equity finance - the two major sources of financing

Definitions

- Equity financing is money sourced internally within the business. The capital (or money) is raised by selling shares of the company to public, institutional investors, or financial institutions. The people who buy shares are referred to as shareholders of the company because they have received ownership interest in the company.
- Debt financing is money provided by an external lender, such as a bank, building society or credit union. It involves borrowing funds from creditors with the stipulation of repaying the borrowed funds plus interest at a specified future time. Debt financing may be secured or unsecured.
  - Secured debt has collateral (an asset which the lender can attach to satisfy the loan in case of default by the borrower).
  - Conversely, unsecured debt does not have collateral and places the lender in a less secure position relative to repayment in case of default.

Choosing the best source of financing: the ability of investors to influence ESG Factors

- In an equity finance scenario, investors (i.e. shareholders) are exposed to risks affecting the asset they have financed: if the asset overperforms, they will have improved returns (through dividends and increased asset value), but if the asset is delayed or underperforms, their investment will lose value. However, the trade-off for this investment risk is that through this type of financing option, the investor (alongside other shareholders depending on their respective percentage equity stakes) can also dictate how the asset funds are managed – this includes the ability to specify ESG management and reporting requirements.

- In a debt finance scenario, investors (i.e. lenders) are only interested in downside risk (the security's potential to suffer a decline in value if the market conditions change), because they cannot benefit from upside risk (The extent to which the value of a security may increase beyond forecast level): they do not benefit from overperformance but need to ensure that in an underperformance scenario the borrower can continue to make repayments (much like a domestic mortgage) and that in the event of a default there are sufficient assets to repay the loan. The way in which the funds are managed are codified in the loan agreement. This means that the borrower is required to comply with a series of investment principles as laid out within covenants in the loan agreement – as such, lenders' ESG requirements must be incorporated into covenants. The EP, which traditionally have applied to project finance, have recently been slightly broadened to include Project Finance Advisory Services, Project-Related Corporate Loans and Bridge Loans. They set a minimum standard for due diligence and monitoring to support responsible decision making by lenders in both developed and developing countries. Since the launch of the Equator Principles[26] (EP) in 2003, lenders have increasingly applied the EP as a framework for managing ESG.

UNDP SDG Impact Finance (UNSIF) has created a tool entitled Impact Management for Everyone. The tool sets out the various pathways open to all organisations, be they from the public or private sector, to guide decision making on impact investment within financial markets (those investments made into companies, organisations, and funds with the intention to generate social and environmental impact alongside a financial return).

Showcased below as a case study, it should therefore help members better understand the process of impact management and decision making within finance.

UNDP Case Study – Impact Management for Everyone

UNDP SDG Impact Finance (UNSIF) is an initiative that aims to bring the private sector and public sector together through impact investment that yields competitive financial, social and environmental returns.

To highlight the diversity of approaches to impact management as used in the industry, UNSIF decided to develop a spectrum for creating assisted workflow tools in this space.

As can be seen from the graphics below, the spectrum is arranged from less intense methodological approaches on the left, to more intense on the right.

The spectrum aims to demystify the process of impact management. It follows the Demming Quality Management cycle (a continuous quality improvement model consisting out of a logical sequence of four repetitive steps for continuous improvement and learning: Plan, Do, Study (Check) and Act – steps we encounter in internationally recognised management system standards such as ISO14001:2015).

The key is that the variation in impact management relates to the different pathways adopted (e.g. intensity). It seeks to categorise discrete pathways based upon the methodological intensity that can be observed by an analyst doing desktop research. There is no hierarchy to the system, which means that the more intense methodologies are not better than the less intense ones.

Practitioners need to choose the pathway that suits their needs and is appropriate based upon the capital they have (as an asset owner), or that they have assigned to their fund manager.

More intense methodologies (further to the right) tend to cost more, as they are more customised and highly context sensitive. However, this means that the risk of unintended consequences or negative outcomes is lower (as impact risk is being managed more intensively).

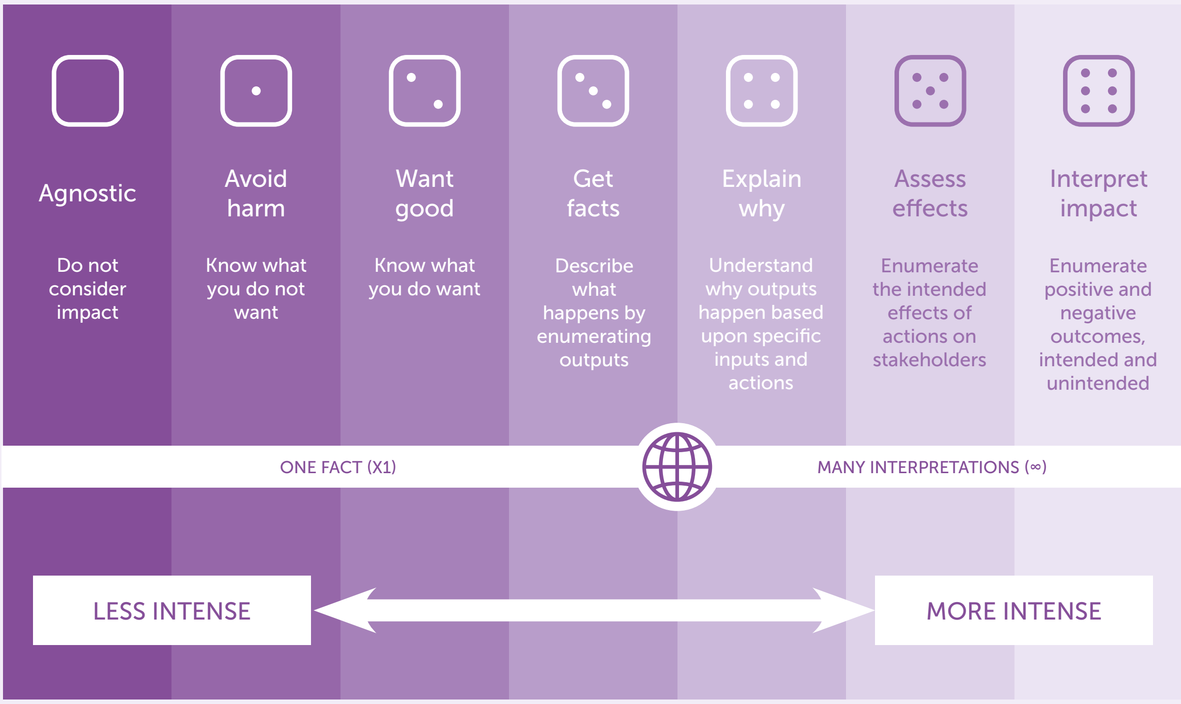
The pathways that are more to the left are more standardised, prescriptive and lend themselves to regulated and more structured markets that need this type of prescriptive rigour. However, the risk of unintended consequences or negative outcomes is higher because of the lighted touch approach to impact management.

UNDP Case Study – Impact Management for Everyone (Continued)

Graphic 1 Impact Management for Everyone (part 1)

Discrete pathways for the impact management journey

Select pathway that suits your definitional framework and mandate for impact management methodology



Design of the pathways was informed by UNSIF undertaking a pilot project to segment market activity (enterprises, investments, funds and portfolios). The delineation is based upon the practicalities of discretely and unambiguously codifying attributes that are objective and independently observable.

UNDP Case Study – Impact Management for Everyone (Continued)

Graphic 2: Impact management for everyone (part 2)
(Source: These graphics were developed in 2018 by Karl H Richter for UNDP SDG Impact Finance)

DEMING Quality Management cycle	UNDP Programmes & Projects	Private Investment/ OTC Transactions	Public Securities / Capital Markets	Listed Corporations	Public Policy Design & Implementation	Common journey for impact management
PLAN	Road Map	Introduction, Sourcing and Screening	Submit IPO Application to Exchange	Voluntary pledges or legislative/ regulated obligations	Problem Identification	**1 Clarify intentions**
	Country Analysis	Due Diligence		Select label/ reporting regime/ regulatory domicile	Policy Formulation	**2 Select approach**
	Strategic Planning	Potential Investment Analysis and Valuation		Define Targets & Select Strategies	Policy Adoption & implementation	**3 Set targets**
DO	Implementation	Investment Decision, Term Sheet, and Capital Deployment	Review Application	Measure, Collect & Validate Data	Policy Evaluation	**4 Do assessment**
CHECK	Evaluation	Post-investment Monitoring, Evaluation	Vetting/Due Diligence for Admission	Analyse & Evaluate Data		**5 Analyse data**
ACT	Closure		Develop indices and tracking benchmarks	Reporting to markets and authorities	Report & disclose results	**6 Report findings**
		Value Building & Exit/ Refinance	Exchange traded products for retail/ institutional investors	Action by exec./ Consumers/ Shareholders/ Markets	Evidence-based policy design/ redesign	**7 Take action**

The role of banks in supporting sustainable outcomes

Over the course of time, the level of risk in green finance products has reduced as they have become more mainstream with the support of financial de-risking instruments, such as loan guarantees, which are offered by development banks and help transfer risk from the private to the public sector. It should be noted though that, despite needing these instruments more, there are still several barriers preventing a faster rate of adoption. The barriers include accounting rules that require the full loan amount guaranteed to be retained on the balance sheet (which locks in capital that could otherwise be given out in loans), the fact that adding these guarantees to the finance mix leads to longer processing times (as they are more complex) and the ongoing lack of in-house knowledge and human resources (which calls for an increase in skills provision)[27].

Despite these hurdles, most of the banks have returned to the green investment market and now also offer debt finance. Barclays bank is a good example of this, having decided late last year to develop a suite of products aimed at boosting investment in green projects, with Green Trade Loans[28] focused on tackling funding challenges related specifically to trade and working capital financing. However, it should be noted that providing green, niche products, is not where banks can make the biggest difference, it is particularly important that they change the mainstream side of the business. As we noted at the start of this guide, governments are increasingly paying attention to the need for regulatory change to help move the needle beyond organisations and markets simply implementing voluntary measures to address sustainable finance. Indeed, as we will explore below, regulators are increasingly reviewing policies and looking to embed sustainability into the regulatory framework with the support of new taxonomies, enhanced fiduciary duties and risk management practices that focus on enhancing long-term sustainable investments[29].

One of the biggest deciding points for investors considering debt or equity finance, resides in how much the they wish to risk running it as a debt finance project off their balance sheet (if the investor is a large company then the investment may not have much of an impact on their balance sheet). For example, investing in fossil fuels is potentially leaving investors at risk in the future, as more stringent climate change policies reduce the value of these assets[30] which therefore may need to be written down – "stranded assets".

In its report setting out the key actions to deliver a global sustainable financial system[31], A4S recommends that a price needs to be fixed on externalities (see Glossary) such as carbon to accelerate the ability of the market to price risk properly and thereby integrate it into decision making. One way that A4S suggests doing this is by developing natural and social capital accounting models and seek to incorporate them into decision making. This would help to identify and respond to other externalities within the value chain which might present current or future opportunities and risks across other dimensions of sustainability. The opportunity for individuals within the finance sector to engage, collaborate and learn from IEMA's Environment and Sustainability Professionals, with practical experience of these accounting models, presents yet another golden opportunity for IEMA to help scale up action towards sustainable finance.

Indeed, as shareholders and consumers begin to appreciate the potential future risk of investment in high carbon emission assets then access to capital for green projects will become easier. Integrating such long term thinking into investment decisions while also embedding a sustainability strategy in operations, will become key to reducing the exposure of such assets to risk (e.g. climate risk).

The role of insurance companies in supporting sustainable outcomes

The capacity of the insurance industry to address global sustainability issues – as risk managers, risk carriers and institutional investors – is underestimated. It is always crucial for insurers to generate income from both their insurance and investment operations. Therefore, prudent and disciplined risk management, underwriting and investment management are key processes to sustain profitability and long-term value creation. ESG factors are relevant to both the insurance and investment operations of insurance companies. Furthermore, they also have very significant supply chain operations (in settling claims) and can play a key role in supporting adaptation and resilience activities. Therefore, the global, long-term and systemic risks posed by many ESG factors can undermine the solvency of an insurance company and the long-term economic health of the insurance industry, including entities financed by insurance capital[32].

IEMA Fellows Working on Sustainable Finance - Member Profile:

Jonathan Garrett, Head of Environment, Health & Safety, Prudential Services Limited

Jonathan joined Prudential's Corporate Property Team in September 2016 as the Head of Environment, Health and Safety.

This was a route into the financial services industry following a career path through a variety of manufacturing, construction and consulting roles. Corporate Property is responsible for the Group's environmental policy, corporate commitments such as RE 100 and reporting the global environmental performance of its operational portfolio.

Prudential is a health insurer and both an Asset Owner and an Asset Manager.

Since the creation of the TCFD, Jonathan's focus has been to broaden the company's understanding of its material environment beyond property and travel to include investments and the risks and opportunities presented by the transition to a low carbon economy.

Working in a total new sector, decentralised operating model and attitude to risk has been quite a journey. With Assets under Management of over £650 billion, the scale of the opportunity to achieve more sustainable outcomes is enormous.

www.prudential.co.uk

The role of bonds (including green bonds) in supporting sustainable outcomes:

Bonds may be used to raise finance for a specific activity. They are a special type of debt financing because the debt instrument is issued by the company. Bonds are different from other debt financing instruments because the company specifies the interest rate and when the company will pay back the principal (maturity date). Also, the company does not have to make any payments on the principal (and may not make any interest payments) until the specified maturity date. The price paid for the bond at the time it is issued is called its face value. All types of financing can have a 'green' or 'sustainability' filter applied, by introducing requirements for how the finance is used.

Green bonds are also a key tool for national governments to raise capital to implement infrastructure plans in line with national climate targets, as governments move to achieve the targets they set themselves under the Paris Agreement and the SDGs. A sovereign green bond can provide a strong signal of the country's commitment to a low-carbon economy, help bring down the cost of capital for green projects by attracting new investors and mobilise private capital towards sustainable development. In a recent report, Climate Bonds found 2017 to be the year of the Sovereign Green bond with Poland, France, Fiji and Nigeria issuing inaugural green bonds[33].

The green bond market, which took off in 2013, was created to fund projects that have positive environmental and/or climate benefits. The majority of the green bonds issued are green "use of proceeds" or asset-linked bonds. Proceeds from these bonds are earmarked for green projects but are backed by the issuer's entire balance sheet. There have also been green "use of proceeds" revenue bonds, green project bonds and green securitised bonds[34].

It should be noted that although the total issuance for green bonds reached USD155.5 billion for 2017[35] and global issuances for 2018 are projected to reach between $250 and $300 billion[36], this is still a drop in the ocean in comparison to the wider fixed income market which currently stands at $100 trillion, with the bond market in the United States equating to roughly $40 trillion[37].

For this reason, the International Organization for Standardization (ISO), an independent, non-governmental international organization with a membership of 162 national standards bodies, is working to create the first international green bond standard to help rectify the lack of uniformity of eligibility rules and definitions of "green" within the green bonds market. The ISO 14030 standard, entitled Green bonds – Environmental performance of nominated projects and assets, will seek help to support a broader issuance of green bonds, particularly as they currently make up less than half a percent of the global bonds market[38].

Within Europe a similar push is being made by the Commission, having convened a Technical Expert Group (TEG) on Sustainable Finance to assist on the implementation of their Action Plan on Financing Sustainable Growth. The TEG which met for the first time in July 2018, sees a clear taxonomy as another ramp up mechanism to help scale both the green bond market and other green finance instruments. As part of its priorities it will seek to develop an EU taxonomy to shifting capital allocations to green investment and green infrastructure. To assist with a rapid yet robust roll out of an EU sustainable finance taxonomy in time for its final report in 2020, the TEG will be leveraging existing labelling schemes and the work that has been done so far on taxonomies[39].

Recognising the important role played by standards, IEMA and our members are strong supporters of efforts to develop consistent terminology, definitions and clear product labelling backed by standards and verification - a key ingredient for enable this global shift towards sustainable finance[40]. As a professional body, IEMA aligns itself with efforts underway at national and international levels to develop clear labels for products, with the aim of delivering globally consistent standards, by regularly working with BSI and ISO and encouraging the engagement of its members in this process where possible.

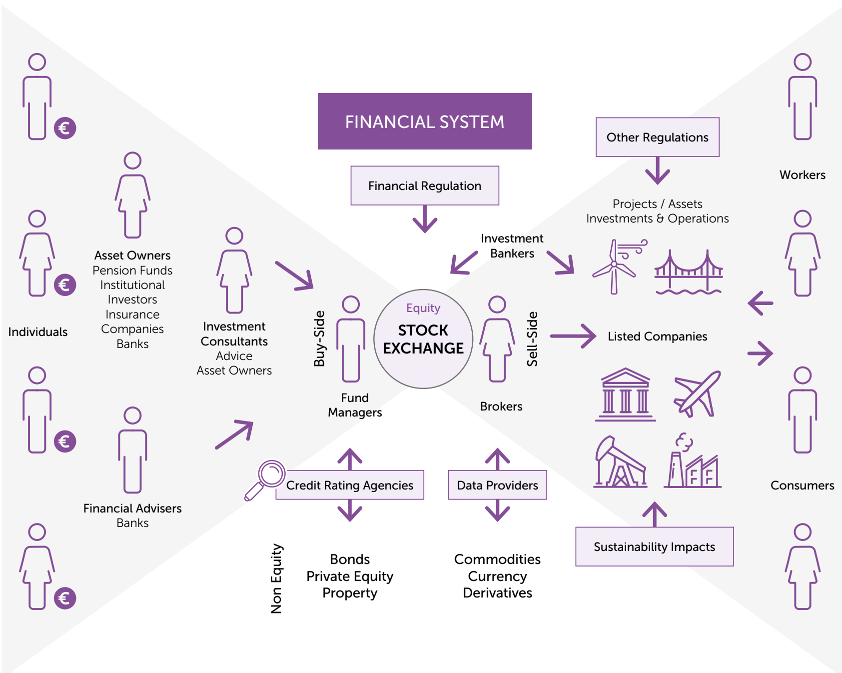
The role of mortgages (inc green mortgages) in supporting sustainable outcomes:

There is no universal definition of green mortgages, but they usually refer to mortgages on energy efficient homes. The UK Government's Clean Growth Strategy[41], includes plans to develop "green mortgage products" that "take account of the lower lending risk associated with more efficient properties and the reduced outgoings for customers living in more efficient homes". However, the UK Government also recently led a call for evidence on building a market for energy efficiency. In the call, they ask for more research on green mortgages as one component of an overall strategy to encourage energy efficiency. However, the Grantham Institute for Climate Change and the Environment finds that more research is needed to determine whether green mortgage products do have a lower lending risk,[42]. Within the private sector, Barclays bank was one of the first financial institutions to offer a green mortgage product, offering borrowers a discount on the loan's interest rate on new-builds rated in the top two energy bands, A and B. Despite the scepticism of the Grantham Institute, devolved governments e.g. Wales are pushing ahead from June 2018 with help-to-buy loans that will consider the energy rating of new-build homes worth up to £300,000. The pioneering scheme which seeks to encourage energy efficiency, will make it possible for borrowers to take out a bigger mortgage when buying greener properties for the first time. The scheme considers the energy rating of new-build homes worth up to £300,000 thereby encouraging the construction of energy efficient homes[43].

How the financial sector delivers sustainable finance

Source: from Aviva Investors, European Political Strategy Centre – European Commission

This diagram has been reproduced with the permission of Aviva Investors and the European Political Strategy Centre and further illustrates the role played by key actors in the financial system in delivering sustainable outcomes through the products they invest in.



Part 3: Approaches to investment

There are numerous terms used for the various approaches to financial investment and these often overlap. Below is listed a selection of the most common terms.

1. Traditional investment is where the investor is solely interested in their profit potential, irrelevant of their impact on society at large. Risks such as climate change may still be considered, but only where these may directly impact on profitability over the life of the investment.
2. Responsible investment is the inclusion of environmental, social and governance (ESG) factors in the investment strategy to enhance the decision-making process and improve return and/or reduce risk. ESG investors aim to balance the financial return with the environmental and social impacts and produce optimal results with the money that is invested. Within ESG investing there are three key approaches:

a. Negative Screening is where the investor excludes companies that are involved with certain activities, for example alcohol, tobacco, arms and pornography companies or companies that operate in oppressive regimes. The return on capital does still matter for companies that promote responsible investment.

a. Positive screening / engagement is where the investor tries to include companies that are implementing best practice (often best 20% in their class) on environmental and social issues, and that have good governance in place.

a. Impact investing is defined by the Global Impact Investing Network as investments made into companies, organisations, and funds with the intention to generate social and environmental impact alongside a financial return. The main objective here is to accomplish the sustainability goals of the companies in which the client invests. The investor may still seek to generate an investment return, but this is unconditionally subordinate to the social/environmental aspect of the investment.

3. Philanthropic investment is where the investor gives no thought to the financial rate of return that is earned, if any, and the investment aims purely to delivery on social or environmental objectives

   Many investors use a combination of negative screening and positive screening/engagement, which increases the fund managers' scope to invest and improve their portfolio companies' ESG and financial performance during their holding period.

As investors increasingly consider ESG factors when selecting and managing investments they can now rely upon several ESG rating tools to promote/enable easy integration of ESG benchmarking in investment decisions. Examples of such rating tools have been developed by organisations like Vigeo Eiris[44] and MSCI[45], since these are valuable tools in promoting/enabling easy integration of ESG benchmarking in investment decisions.

The Bridges Fund Management Spectrum of Capital – understanding the differences between investors seeking to create positive change

The Bridges Fund Management Spectrum of Capital is a thesis that was set out by the Bridges Fund Management (BFM) company in 2015 which looks to set out the broad range of risk/return strategies that exist within sustainable and impact investing and how it relates to capital markets.

It takes the view that these categories fit into a broader spectrum of capital, ranging from traditional investment on the one hand to philanthropy on the other – and that along this spectrum there are a number of different strategies for investors to adopt, depending on their desired risk, return and impact profile.

The Spectrum seeks to showcase the broad types of 'responsible investors', ranging from those who 'negatively screen' for ESG risks, to those who actively work to mitigate them during ownership. The Spectrum is seen as a tool for "designing different investment strategies to promote entrepreneurial solutions to societal challenges". As the dotted lines along the spectrum reflect, these categories are not mutually exclusive; often they are interdependent, with many investors or businesses operating between or across categories.

Source: The Bridges Fund Management Spectrum of Capital

	Financial-only	Responsible	Sustainable	Impact			Impact-only
Focus:	Limited or no regard for environmental, social or governance (ESG) practices	Mitigate risky ESG practices in order to protect value	Adopt progressive ESG practices that may enhance value	Address societal challenges that generate competitive financial returns for investors	Address societal challenges where returns are as yet unproven	Address societal challenges that require a below-market financial return for investors	Address societal challenges that cannot generate a financial return for investors
Examples:		PE firm integrating ESG risks into investment analysis Ethicallyscreened investment fund	"Best-in-class" SRI fund Long-only public equity fund using deep integration of ESG to create additional value	Publicly-listed fund dedicated to renewable energy projects (e.g. a wind farm) Microfinance structured debt fund (e.g. loans to microfinance banks)	Social Impact Bonds / Development Impact Bonds	Fund providing quasi equity or unsecured debt to social enterprises or charities	

IEMA Fellows Working on Sustainable Finance - Member Profile:

Adam Black, Head of ESG & Sustainability, Coller Capital

Adam has been an ESG specialist for over 25 years (10 years in private equity) with experience in most aspects of ESG implementation and management in over 50 countries, including as a trainer and coach delivering sessions, and in ESG incident investigation and crisis management.

"When private equity is engaged as active owners (particularly for those firms with a majority control position) they can affect real change in organisations. I've seen it happen. I've worked with underlying portfolio companies and seen them turned around and also made more socially responsible and environmentally sustainable under private equity ownership - when firms choose to do so".

As a member of Coller Capital's Investment Team, Adam has responsibility for integrating ESG within all investment decision-making and management processes, working across all funds with underlying managers and fund-of-fund managers.

Adam is active with Invest Europe, the British Venture Capital Association (BVCA), Hong Kong VCA and with the UN-supported Principles for Responsible Investment.

"IEMA members that are in a position to influence the finance sector must do what they can (be it as consultants or advisers or in house). The ability of the finance sector to make a positive impact is clear, but only when under proper advice and direction. This reinforces the important role of environmental and sustainability professionals in ensuring that the right decisions are taken".

www.collercapital.com

Project investment stages in summary

Below are listed some key project investment stages where the consideration of environmental, social and governance factors can greatly influence the sustainable outcomes of the overall investment.

Initial investment

Initial investment is the amount required to start a business or a project. It is also called initial investment outlay or simply initial outlay. Initial investment equals the amount needed for capital expenditures, such as machinery, tools, shipment and installation, etc.; plus, any increase in working capital, minus any after tax cash flows from disposal of any old assets.

Asset management

Asset management is the direction of a client's cash and securities by a financial services company, usually an investment bank. The institution offers investment services along with a wide range of traditional and alternative product offerings that might not be available to the average investor.

Part 4: Who are the main players?

Banks and development finance institutions

International development banks such as the World Bank Group, the Asian Development Bank, the European Bank for Reconstruction and Development (EBRD) and the EU's European Investment Bank, have been the leaders in developing environmental and social policies. These policies set out conditions which must be met by the clients (companies as well as governments and government agencies) when applying for loans. This project conditionality paved the way for a wider use of environmental and social project evaluation criteria by commercial banks, which are generally using the IFC policies and procedures[46]. Applying environmental and social conditions is now common practise in development projects and has helped to include such criteria in general financial decision making (e.g. provision of loans; investment decisions by companies).

IEMA Fellows Working on Sustainable Finance - Member Profile:

Adrian Barnes, Green Investment Ratings Manager, Green Investment Group (GIG)

"The finance sector can seem impenetrable and unintelligible to many environmental professionals, but that's just because it has developed its own language and jargon to give shorthand terms to concepts that, once explained, are actually fairly intuitive. This guide aims to demystify finance to help the environmental sector make its vital contribution to the transition to a greener economy."

Adrian joined GIG – then the UK Green Investment Bank – in 2013, from a background in environmental consultancy. Since then he has helped develop GIG's approach to evaluating the green impact of investments and projects and establishing industry best practice standards for green impact disclosure. He now also contributes to emerging ISO standards on green finance, and on harmonisation of greenhouse gas assessment between International Financial Institutions.

www.greeninvestmentgroup.com

Pension funds

Most corporate pension funds delegate the implementation of their Socially Responsible Investment (SRI) Policy to their fund managers or manage the SRI policy in-house. However, as highlighted in the GFT's report, the Department for Work and Pensions has noted that some pension fund trustees have misconceptions about their fiduciary duty in consideration and incorporation of ESG issues including climate change and pay insufficient attention to these issues.

Given the commercial objectives to give strong returns, Investment funds are generally constrained by short term thinking. They have Environmental Health and Safety risk management policies in place, but they do not act as sustainable investors unless they can justify financial return. The GFT's report therefore calls on the Government to clarify fiduciary duties and implement several supporting recommendations on investment processes and disclosures, in revising investment regulations to make it clear that sustainable investment is the only form that can be profitable in the long-term.

Organisations like the United Nations-supported Principles for Responsible Investment (PRI) initiative, are actively working to support this change by highlighting the policy changes that are required to enhance the fiduciary duty of investors. Please see below for more information on one of their key projects in this space.

PRI and Fiduciary Duty in the 21st Century

Fiduciary Duty in the 21st century was launched in 2015 by the PRI, in partnership with UNEP FI and The Generation Foundation as a three-year project and contributes an extensive evidence base to end the debate on whether fiduciary duty is a legitimate barrier to the integration of environmental, social and governance issues in investment practice and decision-making.

It has worked with investors and governments to publish a Global statement on investors' obligations and duties, roadmaps in more than ten countries on the policy changes required and research into Investor obligations and duties in six Asian markets.

To find out more please visit https://www.fiduciaryduty21.org/

By incorporating ESG into investment decisions, corporate pension funds can bring about positive change for sustainable development, through several key benefits that include:

1. Improved returns -short, medium and longer-term financial returns from responsible investments is a benefit to the business as it secures the pension fund pot and provides further assurance to employees that their pensions are safe;
2. Employee engagement -employees gain increased security with the integration of longer-term risks and feel connected to a firm that is conscious about the impact it has on society;
3. Demonstrating industry leading practice and having a purpose - by understanding where the pension fund benchmarks against industry standards, the pension fund can leverage its position against the best practice framework and thus differentiate itself from the competition[47];
4. Lower regulatory risks and legal risks - the introduction of legislation such as the EU Non-Financial Reporting Directive has required 6,000 companies to report ESG information annually, making more data available to potential investors and simplifying sustainable finance transactions.

The largest pension providers still appear to be pushing communications and engagement with members on these topics ahead of actual responsible investment, as reported in a recent survey report by ShareAction entitled "The Engagement Deficit – Ranking Auto-Enrolment Pension Providers on Responsible Investment and Member Communications and Engagement". Indeed, out of the 11 organisations surveyed, 9 ranked higher on communications and engagement than on responsible investment. Nest came first a result of their very strong performance across the responsible investment themes (with a score of 63 out of 125 on communication but 197 out of 227 over responsible investment practices). Aegon UK on the other hand came last with a score of 64 out of 125 on communication and 26 out of 227 over responsible investment practices.

In light of reports by the Organisation for Economic Co-operation and Development (OECD)[48] that the average disposable income of the richest 10% of the population is now around nine and a half times that of the poorest across the 36 countries of the OECD (including the UK), up from seven times 25 years ago[49], the issue of income inequality is beginning to pressure pension funds and other financial sector players into action. This July, members of the World Business Council for Sustainable Development (WBCSD)[50], supported by leading organisations in the sustainability space including the International Integrated Reporting Council, The Natural Capital Coalition, Social Value International, and The Roundtable on Product Social Metrics, finalised the public consultation on the draft Social & Human Capital Protocol. The document is designed to help companies identify, measure and value the importance of people and communities. Noting that the gap between rich and poor is at its highest level in 30 years, the report provides recommendations for business to consider paying a living wage as a minimum and set targets for pay ratios so that income inequality does not continue to increase[51]. With financial organisations such as Santander, Alliance Trust and JP Morgan having contributed to the draft, key players in the sectors are starting to recognise the important role of social value in sustainable finance.

Asset management companies (AMCs)

An asset management company (AMC) is a company that invests its clients' pooled funds into securities that match declared financial objectives[52]. PwC confirms that as at 2015 global assets under management totalled $79 trillion, and now estimates that by 2020 $102 trillion will be under management[53]. The rise is total amount of investable assets is due to a variety of reasons including increasing financialisation across major economies and ageing of OECD market populations. As growing numbers of AMCs join the ranks of the 200 signatories of the PRI, including AMC China the first Chinese asset manager[54], we start to note a trend of sustainable funds monitoring real-world sustainability measures. All signatories seek to integrate long-term investment value drivers, including ESG, into investment practices. To further underscore the uptake in SRI practices, a 2016 report released by Morgan Stanley's Institute for Sustainable Investing and Bloomberg L.P confirmed that out of 402 asset management professionals surveyed, 65% confirmed that they practiced sustainable investing[55]. Out of the 35% of professionals that confirmed they didn't practice sustainable investing, 59% confirmed that they intended to launch a sustainable investing plan within the next 12 months.

Taskforces/working groups seeking to promote sustainable finance

Scope	Name	Aim	Date created
Global	United Nations Environment Programme – Finance Initiative[56]	Partnership between United Nations Environment and the global financial sector created in the wake of the 1992 Earth Summit with a mission to promote sustainable finance. More than 200 financial institutions, including banks, insurers, and investors, work with UN Environment to understand today's environmental, social and governance challenges, why they matter to finance, and how to actively participate in addressing them.	May 1992
Global	(United Nations-supported) Principles for Responsible Investment (PRI)	It works to understand the investment implications of environmental, social and governance factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions.	Jan 2005
Global	The ClimateWise Principles	Support a growing global network of leading insurance industry organisations to better communicate disclose and respond to the risks and opportunities associated with the climate-risk protection gap. This is the growing divide between total economic and insured losses attributed to climate change.	2007
Global	UNEP FI Principles for Sustainable Insurance	Serve as a global framework for the insurance industry to address environmental, social and governance risks and opportunities. The principles aim to help better understand, prevent and reduce environmental, social and governance risks, and better manage opportunities to provide quality and reliable risk protection.	June 2012

Scope	Name	Aim	Date created
UK/ Global	Green Finance Initiative	Provide public and market leadership on green finance Advocate for specific regulatory and policy proposals that might enhance the green finance sector worldwide Promote London and the UK as a leading global centre for the provision of green financial and professional services	Jan 2016
EU	EU Technical Expert Group on Sustainable Finance[57] (established following recommendations of EU High-Level Expert Group on Sustainable Finance[58])	Establishing a clear and detailed EU classification system – or taxonomy – for sustainable activities Establishing EU labels for green financial products, which will help investors to easily identify products that comply with green or low-carbon criteria Introducing measures to clarify asset managers' and institutional investors' duties regarding sustainability Strengthening the transparency of companies on their environmental, social and governance (ESG) policies. Introducing a 'green supporting factor' in the EU prudential rules for banks and insurance companies. This means incorporating climate risks into banks' risk management policies and supporting financial institutions that contribute to funding sustainable projects	March 2018
UK/ Global	Green Finance Institute[59] (set up following recommendation of the Green Finance Taskforce[60]	To enable London to retain its status as a leader in green finance.	Announced in June 2018

Part 5: Asset owners and beneficiaries
- their role in the transition to a more sustainable financial system

In the context of investment or fund management, asset owners can include holding companies like Berkshire Hathaway that own shares in other companies but sell shares in their own company to the end consumer. In other cases, the asset owner can be the investor himself/herself. This is most likely the case for pension funds and other brokerage accounts.

The beneficiaries will be those who are eligible to receive distributions from a fund, trust, will or life insurance policy .

In its last report, the EU High-Level Expert Group on Sustainable Finance (HLEG) provided significant insight on the range of internal and external reasons as to why asset owners do not effectively implement their responsible investment commitments or take full account of ESG issues in their investment beliefs, governance and mandates. The HLEG cited common internal challenges such as board and trustee scepticism about the investment value of responsible investment, skills gaps in relation to ESG analysis and decision-making, concerns about the costs of developing the necessary processes, systems and skills, and a narrow interpretation of investment objectives.

A thread that runs through the report is the need for financial institutions to ask clients and beneficiaries about their sustainability preferences and ethical values. The group believes that developing a fuller sense of clients' needs in the context of sustainable development will help financial institutions to strengthen their business models as the transition to sustainable finance intensifies. It will also re-establish trust in the financial sector and its ability to direct capital towards the real long-term needs of the economy and its citizens.

The HLEG believes that the mismatch in time horizons is deeply embedded in today's financial system. Asset owners are seen to focus excessively on short-term price performance, particularly on listed equity and bond markets. On the other hand, the long-term horizon of end-beneficiaries (such as pension funds, household savers and sovereign wealth funds) is generally not reflected by financial intermediaries (these intermediaries can be commercial banks, investment banks, mutual funds and pension funds). The reason for this is due to principal-agent issues and misaligned performance metrics and incentives, including the lack of informed consent by beneficiaries.

The need to clarify investment duties

By clarifying the duties of investors such as pension funds, insurance companies and asset managers, the HLEG believes we can encourage a greater focus on sustainability issues over the long term.

Two key components for a meaningful investor duty requirement are regulatory supervision and adequate forward-looking disclosure from issuers. This can be achieved by aligning investment horizons with those of investors' clients and beneficiaries.

Clarified duties would encompass key investment activities, including investment strategy, risk management, asset allocation, governance and stewardship. Making it clear that sustainability factors must be incorporated in these activities can ensure that the clarified duty is effective.

The HLEG recommends[61] that investor duties should reflect the following principles:

- Asset owners and investment intermediaries shall examine the materiality of risks and value drivers, including ESG factors, consistent with the timeframe of the obligation to the client or beneficiary/member.
- Asset owners and investment intermediaries shall disclose their investment approach to clients and/or beneficiaries in a clear and understandable manner, including how preferences are incorporated into the scheme's investment strategy and the potential risks and benefits of doing so.

The clarified and enhanced investor duties would thereby require that all participants in the investment chain pro-actively seek to understand the sustainability interests and preferences of their clients, members or beneficiaries (as applicable).

Part 6: Opportunities for IEMA members

Finance impacts on every industrial sector. Understanding financial requirements, dynamics and mechanisms will help IEMA members to influence more sustainable decision-making.

IEMA's members work many sectors and have a part to play in the myriad of industrial sectors, and the finance industry itself, in addition to academia to connect research and development of relevance to a sustainable economy. This includes Policy, Procedure, Projects and Products.

Whichever sector your work in, finance, and sustainable finance are applicable, either as a borrower or lender or investor.

There are in fact numerous routes open to IEMA members to enable them to further engage with financial services and support the drive towards green finance.

In the above sections, the following opportunities are discussed:

There are numerous opportunities for environment and sustainability professionals to influence and support the transition to green finance. For example, some important insights include:

- **Choosing a particular type of financing, be it equity or debt financing, will impact the ability of investors to influence Environmental, Social and Governance (ESG) factors** - In an equity finance scenario, the investors (or shareholders) can specify ESG management and reporting requirements. On the other hand, in a debt finance scenario, the loan agreement will be the key document within which the lender may specify ESG requirements.
- **Pricing carbon and other externalities properly may unlock further engagement opportunities for IEMA and its members** - incorporating natural and social capital accounting into decision making may help to identify current or future opportunities and risks across other dimensions of sustainability relevant to green finance objectives.
- **Associated industries like pension funds, mortgages and insurance, in their capacity as institutional investors and risk managers, have great capacity to address global sustainability issues** – Examples of local green mortgage schemes, such as in Wales, explain how it is now becoming possible for borrowers to take out a bigger mortgage when buying greener properties for the first time.
- **By clarifying the duties of investors such as pension funds, insurance companies and asset managers, there is great scope to encourage stronger focus on sustainability issues over the long term** - Active campaigning for enhanced fiduciary duties of investors is helping to promote consideration and incorporation of ESG issues including climate change.
- **From responsible investment to philanthropic investment, numerous tools are now available to integrate ESG benchmarking in investment decisions** – To support investors in deciding which screening techniques to use and best impact the ESG performance of their investment portfolio, a series of ESG rating tools are available to help design different investment strategies that promote entrepreneurial solutions to societal challenges;

- **There is a strong need for financial institutions to ask clients and beneficiaries about their sustainability preferences and ethical values** – The final report by the EU High-Level Expert Group on Sustainable Finance (HLEG) supports the fact that developing a fuller sense of clients' needs in the context of sustainable development will help financial institutions to strengthen their business models as the transition to sustainable finance intensifies.

Some further examples of where IEMA members could make a difference are as follows:

- **Members can provide specialist support and due diligence services** across a range of sectors from venture capital to property investment, typically involving assessment of risks and liabilities associated with an asset, which are often undertaken by independent consultants.
- **They can also support financial services products by helping to integrate sustainability aspects**. They could play a role as ESG specialists in green investment operations or by supporting green banking/insurance initiatives.
- **Thirdly as part of developing internal corporate sustainability programmes for financial service organisations, IEMA members can advise on the value of corporate impact assessment and reporting requirements,** in addition to the operational benefits of maintaining internal ISO 14001 compliance management systems.

Although there might be overlap between this different type of engagement, going forward we should increasingly see greater demand for sustainability competence and skills embedded in everyday operations. For example, the TCFD envisages that its approach and recommendations will be integrated into existing risk management programmes.

With time, financial services sustainability requirements (e.g. for TCFD) will feed into many organisations requiring them to build up internal sustainability expertise. We should see individuals, such as IEMA members outside of this sector, engaging directly with financial services. This might be to ensure that the organisations managing their own personal investments and bank accounts do so while embedding sustainability principles at the heart of each operation on their behalf.

IEMA practitioners will be involved in product development, risk functions, business planning. Using the IEMA Skills Map as a starting point, IEMA now can provide members with a better understanding of key financial sector terminology and concepts and work with members on their journey towards sustainability as they increasingly collaborate with organisations in this field and seek to ensure that finance is making a demonstrable contribution to the transition to a more sustainable economy.

In the same respect, many finance professionals will have the traditional financial training, but they may lack understanding of the social and environmental sector. Through their collaboration with environment and sustainability practitioners, these professionals stand to gain the sustainability skills necessary to make better choices and operate more effectively in a sector where sustainability will rapidly become mainstream.

As an ultimate goal, IEMA and its members can be the catalyst so that 'sustainable finance' loses the 'sustainability' badge as, through enhanced skills and improved understanding of ESG risk and opportunity, all finance and investment will become inherently sustainable for it to be considered viable.

If you wish to further engage with IEMA on sustainable finance or any of the topics set out in this guide by the IEMA Fellows Working Group on Sustainable Finance, then please contact Marc Jourdan, IEMA Policy & Engagement at m.jourdan@iema.net.

Glossary

Asset allocation: It is an investment strategy that aims to balance risk and reward by apportioning a portfolio's assets according to an individual's goals, risk tolerance and investment horizon. The three main asset classes - equities, fixed-income, and cash and equivalents - have different levels of risk and return, so each will behave differently over time.

Asset Classes: An asset class is a group of securities that exhibits similar characteristics, behaves similarly in the marketplace and is subject to the same laws and regulations. The three main asset classes are equities, or stocks; fixed income, or bonds; and cash equivalents, or money market instruments. Some investment professionals add real estate, commodities, and increasingly, cryptocurrencies such as Bitcoin, to the asset class mix.

Banker's acceptance: A banker's acceptance (BA) is a short-term debt instrument issued by a company that is guaranteed by a commercial bank. Banker's acceptances are issued as part of a commercial transaction. These instruments are similar to T-bills, are frequently used in money market funds and are traded at a discount from face value on the secondary market, which can be an advantage because the banker's acceptance does not need to be held until it matures.

Bonds: A bond is a fixed income investment in which an investor loans money to an entity (typically corporate or governmental) which borrows the funds for a defined period at a variable or fixed interest rate. Bonds are used by companies, municipalities, states and sovereign governments to raise money and finance a variety of projects and activities.

Cash and cash equivalents: They refer to the line item on the balance sheet that reports the value of a company's assets that are cash or can be converted into cash immediately. These include bank accounts, marketable securities, commercial paper, Treasury bills and short-term government bonds with a maturity date of three months or less. Marketable securities and money market holdings are considered cash equivalents because they are liquid and not subject to material fluctuations in value.

Certificates of deposit: A certificate of deposit (CD) is a savings certificate with a fixed maturity date, specified fixed interest rate and can be issued in any denomination aside from minimum investment requirements. A CD restricts access to the funds until the maturity date of the investment. CDs are generally issued by commercial banks.

Commercial paper: Commercial paper is an unsecured, short-term debt instrument issued by a corporation, typically for the financing of accounts receivable and inventories, and meeting short-term liabilities. Maturities on commercial paper rarely range longer than 270 days. Commercial paper is usually issued at a discount from face value and reflects prevailing market interest rates.

Commodities: A commodity is a basic good used in commerce that is interchangeable with other commodities of the same type. Commodities are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers. When they are traded on an exchange, commodities must also meet specified minimum standards, also known as a basis grade.

Contracts-for-Differences: A contract for differences (CFD) is an arrangement made in a futures contract whereby differences in settlement are made through cash payments, rather than by the delivery of physical goods or securities. This is generally an easier method of settlement, because both losses and gains are paid in cash. CFDs provide investors with the all the benefits and risks of owning a security without actually owning it.

Currencies: Currency is a generally accepted form of money, including coins and paper notes, which is issued by a government and circulated within an economy. Used as a medium of exchange for goods and services, currency is the basis for trade.

Debt market (or Credit market): A market that is involved in the trading of debt instruments such as government and corporate bonds, as well as has an involvement with the trading of packaged loan products that are sold to investors.

Derivatives: A derivative is a financial security with a value that is reliant upon or derived from an underlying asset or group of assets. The derivative itself is a contract between two or more parties based upon the asset or assets. Its price is determined by fluctuations in the underlying asset. The most common underlying assets include stocks, bonds, commodities, currencies, interest rates and market indexes.

Equities: Equities are shares in a company that are owned by people who have a right to vote at the company's meetings and to receive part of the company's profits after the holders of preference shares have been paid.

Financial market: The financial market is a broad term describing any marketplace where trading of securities including equities, bonds, currencies and derivatives occur. Some financial markets are small with little activity, while some financial markets like the New York Stock Exchange (NYSE) trade trillions of dollars of securities daily.

Fixed income (bonds): Fixed income is a type of investment whose return is usually fixed or predictable and is paid at a regular frequency like annually, semi-annually, quarterly or monthly. Along with equities, fixed income forms an important part of the investment market and is used for raising capital by the companies and governments. Compared to the uncertain returns from equities, commodities and other investment classes, the predictable and regular returns from fixed-income investments can be used to efficiently diversify one's portfolio.

Fixed income market: The market for the trading of securities paying a guaranteed yield. Examples of fixed-income securities include bonds and preferred stock. The fixed-income market is lower risk and lower return than the variable income market.

Forward contracts: A forward contract is a customised contract between two parties to buy or sell an asset at a specified price on a future date. A forward contract can be used for hedging or speculation, although its non-standardised nature makes it particularly apt for hedging. Unlike standard futures contracts, a forward contract can be customised to any commodity, amount and delivery date. A forward contract settlement can occur on a cash or delivery basis. Forward contracts do not trade on a centralized exchange and are therefore regarded as over-the-counter (OTC) instruments.

Futures Option Contracts: An option on a futures contract gives the holder the right, but not the obligation, to buy or sell a specific futures contract at a specific price on or before the option's expiration date.

Investment portfolio: Pool of different investments by which an investor bets to make a profit (or income) while aiming to preserve the invested (principal) amount. These investments are chosen generally based on different risk-reward combinations: from ‘low risk, low yield’ (gilt edged) to ‘high risk, high yield’ (junk bonds) ones; or different types of income streams: steady but fixed, or variable but with a potential for growth.

Liquid(ity): Easy convertibility into cash. A liquid asset or security can be easily bought or sold with little or no impact on price. Liquid assets include money market instruments and government bonds. In context of securities, they will be easily traded or converted to cash.

Promissory notes: A promissory note is a financial instrument that contains a written promise by one party (the note’s issuer or maker) to pay another party (the note’s payee) a definite sum of money, either on demand or at a specified future date. A promissory note typically contains all the terms pertaining to the indebtedness, such as the principal amount, interest rate, maturity date, date and place of issuance, and issuer’s signature.

Prudential Regulation Authority (PRA): PRA is a part of the Bank of England and responsible for the prudential regulation and supervision of banks, building societies, credit unions, insurers and major investment firms. It sets standards and supervises financial institutions at the level of the individual firm. In total the PRA regulates approximately 1,700 financial firms.

Risk profile: A risk profile is an evaluation of an individual’s willingness and ability to take risks. It can also refer to the threats to which an organisation is exposed. A risk profile is important for determining a proper investment asset allocation for a portfolio. Organisations use a risk profile as a way to mitigate potential risks and threats.

Risk return trade-off: The risk-return trade-off states that the potential return rises with an increase in risk. Using this principle, individuals associate low levels of uncertainty with low potential returns, and high levels of uncertainty or risk with high potential returns. According to the risk-return trade-off, invested money can render higher profits only if the investor will accept a higher possibility of losses.

Securities: Securities are investments traded on a secondary market. The most well-known examples include stocks and bonds. Securities allow you to own the underlying asset without taking possession. For this reason, securities are readily traded. That means they’re liquid. They are easy to price, and so are excellent indicators of the underlying value of the assets.

Swaps: A swap is a derivative contract through which two parties exchange financial instruments. These instruments can be almost anything, but most swaps involve cash flows based on a notional principal amount that both parties agree to. Usually, the principal does not change hands. Each cash flow comprises one leg of the swap. One cash flow is generally fixed while the other is variable, which is based on a benchmark interest rate, floating currency exchange rate, or index price.

Treasury bills: A Treasury bill (T-Bill) is a short-term debt obligation backed by the Treasury Department of the U.S. government with a maturity of less than one year, sold in denominations of $1,000 up to a maximum purchase of $5 million on non-competitive bids. T-bills have various maturities and are issued at a discount from par.

Signpost to further key tools and guidance

- Accounting4Sustainability (A4S) - Financing our Future Report - Report written by and for all actors of the investment community, setting out actions to deliver a global sustainable financial system. It includes examples of current commitments made, and further recommendations to action. challenges, informs and supports leaders from business and policy to deliver change towards sustainability. https://www.accountingforsustainability.org/en/knowledge-hub/reports/financing-our-future.html

- Cambridge Institute for Sustainability Leadership – Centre for Sustainable Finance - Challenges, informs and supports leaders from business and policy to deliver change towards sustainability. https://www.cisl.cam.ac.uk/research/centre-for-sustainable-finance

- Climatefinancelandscape.org - Climate Policy Initiative (CPI) produces the most comprehensive inventory of climate change investment available. Great source of data & infographics to improve the understanding of climate finance flows at the global, national, and local levels. http://www.climatefinancelandscape.org/

- CRD (Corporate Reporting Dialogue) - Aligning existing climate-related disclosure recommendations with the TCFD. CDP are primary members alongside GRI, IIRC and SASB. http://corporatereportingdialogue.com/

- Global Impact Investor Network - NGO dedicated to increasing the scale and effectiveness of impact investing around the world. Useful case studies provide illustration of impactful projects. https://thegiin.org/case-studies/

- Global Reporting Initiative (GRI) - Independent international organization that has pioneered sustainability reporting since 1997. Important source of tools and guidance notes. https://www.globalreporting.org/information/sustainability-reporting/Pages/default.aspx

- Green Investment Group's Green Investment Handbook - http://greeninvestmentgroup.com/green-impact/green-investment-handbook/

- Integrated Reporting Council - Global coalition of regulators, investors, companies, standard setters, the accounting profession and NGOs. The coalition is promoting communication about value creation as the next step in the evolution of corporate reporting. http://integratedreporting.org/the-iirc-2/

- UK Government/City of London Green Finance Taskforce - creating a set of recommendations to the UK Government, positioning the UK/London as a leader in green finance, with TCFD adoption incorporated as a route to mandating climate-related financial disclosures. http://greenfinanceinitiative.org/workstreams/green-finance-taskforce/

- UK-China - China-UK pilot project of financial institution environmental disclosure - ICBC (Industrial and Commercial Bank of China) is leading and TCFD is widely discussed. They want to develop methodology on measuring 'lending' and also would like to connect with international peers to learn more details from their practice. In terms of indicators, the metrics will be more than climate, with water, air and solid pollution. http://www.china.org.cn/business/2018-03/27/content_50754412.htm

- UNEP FI – banking sector TCFD pilot project - 1st report by 16 the world's leading banks with UNEP FI and management consultancies Oliver Wyman and Mercer to pilot scenario-based assessments of transition-related risks and opportunities which focuses on asset level lending. http://www.unepfi.org/publications/banking-publications/extending-our-horizons/

- UN Principles for Responsible Investment (PRI) - Supported by the UN, the PRI is the world's leading proponent of responsible investment. It works to understand the investment implications of environmental, social and governance (ESG) factors and to support its international network of investor signatories in incorporating these factors into their investment and ownership decisions. Good source of guidance for both asset owners and investors. https://www.unpri.org/pri/about-the-pri

- UN Environment GreenInvest Platform - launched in 2017 as part of Germany's G20 Presidency, the Federal Ministry for Economic Cooperation and Development is advancing the 'GreenInvest' dialogue platform in order to engage developing countries in the mainstreaming and mobilisation of green finance. http://unepinquiry.org/highlights/greeninvest-platform/

- Sustainable Stock Exchanges Initiative - released a set of recommendations for regional and global stock exchanges at the One Planet Summit in December 2017. Promoting the TCFD to listed companies and showcasing how stock exchanges can grow green finance. http://www.sseinitiative.org/wp-content/uploads/2017/11/SSE-Green-Finance-Guidance-.pdf

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IEMA Transforming the world to sustainability

About IEMA

We are the worldwide alliance of environment and sustainability professionals. We believe there's a practical way to a bright future for everyone, and that our profession has a critical role to play.

Ours is an independent network of more than 15,000 people in over 100 countries, working together to make our businesses and organisations future-proof.

Belonging gives us each the knowledge, connections, recognition, support and opportunities we need to lead collective change, with IEMA's global sustainability standards as our benchmark.

By mobilising our expertise we will continue to challenge norms, influence governments, drive new kinds of enterprise, inspire communities and show how to achieve measurable change on a global scale. This is how we will realise our bold vision: transforming the world to sustainability.

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