



# The Great Transition

What do we need to do and what role does the accountancy profession have?



**ICAEW Climate Essay Competition 2023**

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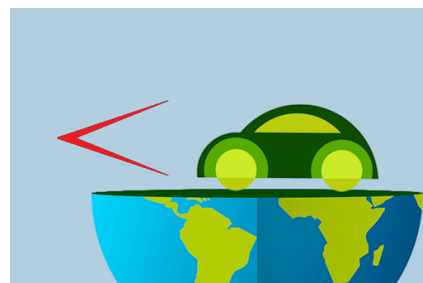
# The Great Transition

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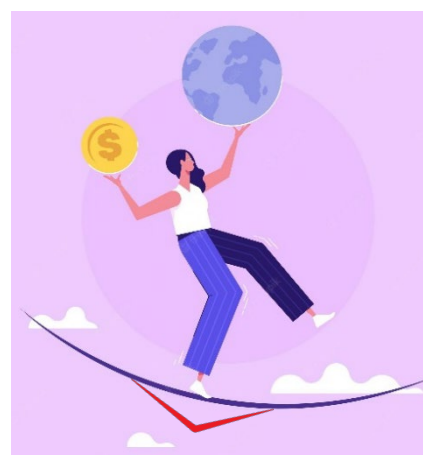
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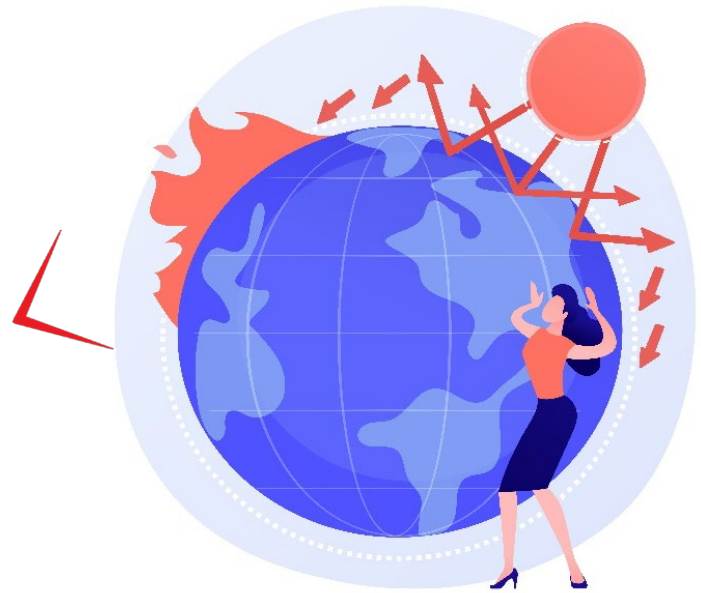
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# Facing the heat of a climate emergency



**C**limate change first emerged as a central focus of global scientific discourse in the mid-20<sup>th</sup> century. The physicist Gilbert Plass sounded the alarm in 1956 about human activities impacting the earth's climate.<sup>1</sup> Today, the scientific consensus is clear – human activities are rapidly accelerating a change in the earth's climate, with potentially catastrophic consequences.<sup>2</sup>

## Climate change bringing about a climate emergency

Climate change refers to the increase in the concentration of greenhouse gas emissions (GHG) in the atmosphere as a result of anthropogenic activities. Burning fossil fuels such as natural gas, oil and coal for energy, deforestation and agricultural methods are the leading causes of climate change. Conducting these activities releases vast amounts of greenhouse gas emissions such as carbon dioxide (CO<sub>2</sub>) into the ozone layer in the atmosphere, and subsequently traps heat and causes the planet to increase in temperature. This process is referred to as global warming.

The impact of human-induced climate change is visible. In the United States, weather-related disasters cost an estimated \$165 billion last year alone.<sup>3</sup> In the latest iteration of The World Economic Forum's 2023 Global Risks

Report, six of the top ten long-term risks were all environmental: failure on climate change mitigation and adaptation, extreme weather, biodiversity loss, human environmental damage and natural resource crises.<sup>4</sup>

## A ripple effect beyond the climate

The impact of climate change is not just limited to changes in weather patterns and natural disasters, but has far reaching consequences for biodiversity and broader social and economic affairs.

There are also strong interdependencies between climate change, biodiversity loss and society. For example, climate change can delay the vernalization of plants or hasten the migration of animal species, which causes vast and often unsustainable impacts on the sustenance of ecosystems and biodiversity.<sup>5</sup> On the other hand, biodiversity loss weakens ecosystems natural tendencies to regulate greenhouse gas emissions and store carbon, increasing the susceptibility of these ecosystems to climate change.

Tackling the climate emergency requires an appreciation of the interdependencies between biodiversity loss, social and economic lenses of society.

## Only a 'Great Transition' will suffice

The overwhelming consensus from scientists and politicians worldwide is

that imminent, coordinated and transformative change is required to address the complex challenges that the climate emergency brings.

Slowly, politicians have started to respond to the climate emergency. Since 1995, governments from around the globe have convened on an annual basis as part of the Intergovernmental Panel on Climate Change (IPCC) to discuss the climate emergency. A number of key milestones have been reached. For example, at COP21 meeting in 2015, 191 parties have signed up to the Paris Agreement, a legally-binding international treaty to limit a rise in global temperatures to 2°C this century and to pursue efforts to keep it under 1.5°C.

However, the scale and extent of the climate emergency facing policymakers, businesses and stakeholders is multifaceted and unprecedented. These actors will not only need to limit global warming to under 1.5°C, but will also be charged with challenge of solving the energy trilemma: achieving sustainability, cost efficiency and energy security.

## "The scale and extent of the climate emergency ... is unprecedented"

<sup>1</sup> PLASS, G.N. (1956), The Carbon Dioxide Theory of Climatic Change. *Tellus*, 8: 140-154. <https://doi.org/10.1111/j.2153-3490.1956.tb01206.x>

<sup>2</sup> Cook, J., Oreskes, N., Doran, P. T., Anderegg, W. R., Verheggen, B., Maibach, E. W., ... & Rice, K. (2016). Consensus on consensus: a synthesis of consensus estimates on human-caused global warming. *Environmental research letters*, 11(4), 048002.

<sup>3</sup> NBC News, Extreme weather caused \$165 billion in damage last year, NOAA says (2023) <<https://www.nbcnews.com/science/environment/extreme-weather-caused-165-billion-damages-last-year-noaa-says-rcna64290>> [accessed 10 February 2023].

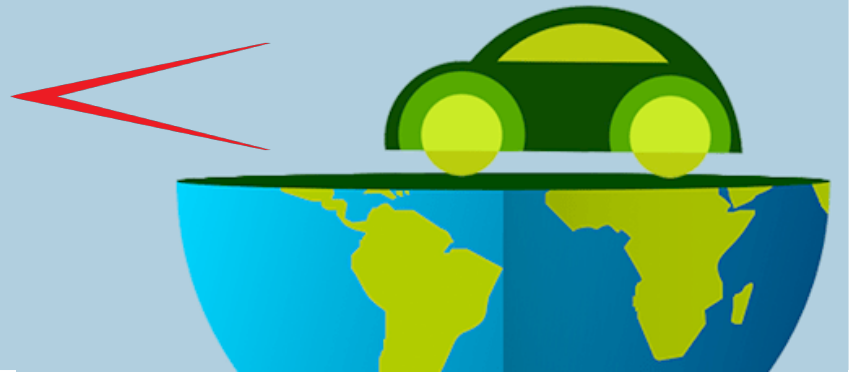
<sup>4</sup> World Economic Forum, Global Risks Report 2023 (2023) <[https://www3.weforum.org/docs/WEF\\_Global\\_Risks\\_Report\\_2023.pdf](https://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf)> [accessed 13 February 2023].

<sup>5</sup> Seebacher, F., Post, E. Climate change impacts on animal migration. *Clim Chang Responses* 2, 5 (2015). <https://doi.org/10.1186/s40665-015-0013-9>



# The road to Net Zero

Driving the Great Transition to a Sustainable Future



**T**he transition to a Net Zero future requires the concerted efforts of government, policymakers, businesses, and society to operate in a synchronised manner to achieve a common goal. Each of these actors has a unique and equal role to play in delivering this critical objective. Government and policymakers will set the framework to drive change from the top-down, society will demand change from the bottom-up and businesses will use resources to allocate capital to innovate and comply to regulation.

## The role of government in reaching Net Zero

### Setting the stage for Net Zero

Governments need to provide an overarching policy and regulatory framework that aligns all actors, provide certainty to businesses to make long-term investment decisions and cultivate an environment that supports innovation and investment to address the challenges associated with Net Zero. An overarching policy framework should also address market failure arising from market participants whilst ensuring that 'levelling up' regional or vulnerable groups remains a key priority. Governments will be charged with the following:

1. **Set the overarching policy ambition** to Net Zero with legally binding targets aligned

with the latest Climate Change Objectives.

2. **Outline sector-specific decarbonisation strategies** towards decarbonisation, providing lead and lag indicators of progress, supplemented by differentiated policy instruments such as a cost recovery mechanism, incentives and infrastructure.
3. **Pursue policies which promote a circular economy** to maximise resource efficiency and resilience, climate change mitigation and promote economic and social benefits.
4. **Set up a system of governance** which monitors, tracks progress and evaluates the implementation of Net Zero.

### Incentivize and fund low-carbon and abatement technologies

The heterogeneous demographics, sectors, regions and socio-economic contexts of the decarbonisation challenge means there is no 'one size fits all' solution. Governments will need to deploy a matrix of low-carbon technologies that address these contextual constraints (see appendix 1).

To support the deployment of these technologies, governments must ensure that there is sufficient provision of funding and incentives to accelerate the

research, development and investment in low-carbon technologies, energy efficiency measures and integrated infrastructure to provide baseline support.

For example, governments can fund trials and demonstrations for abatement technologies, such as carbon-capture and storage. This can reduce barriers to deployment, notably, unfavourable scale economics, uncertainty in market demand and bankability of projects and technology operating at a low commercial readiness index. Governments should look to bridge the 'bankability' gap, by internalising these costs due to the potential for high social benefits until the technology is at maturity to be deployed at scale.

### Make polluters pay by putting a price on carbon

Climate change is often understood as the greatest market failure possible in the 21<sup>st</sup> century because the cost of negative externalities for future generations is not reflected in the market price.

Economists argue that in order to correct this market failure, the cost of the damage

must be internalised on all economic transactions.

One way of achieving this is through the implementation of market-based mechanisms such as carbon pricing, carbon taxes and emissions trading systems which penalises high greenhouse gas emitters and incentivise entities to channel investment towards climate solutions (see Appendix 2).

### **Cooperate internationally with other governments to share best practice.**

Whilst there is overwhelming international consensus from government to reach Net Zero, the disparate social, economic and political problems facing individual nations has led to divergent senses of priority to reach Net Zero between countries with often conflicting Net Zero policies and trajectories. This can be seen in the recent 2022 Global Risks Report by the World Economic Forum, where “Climate action failure” ranks 23<sup>rd</sup> as a short-term risk in China but 2<sup>nd</sup> in the United States – two of the largest emitters of carbon dioxide in the world. Governments will need to cooperate to align objectives, policies and funding, in particular to facilitate the transition to Net Zero for emerging markets to plug the finance gap. Collaboration with development finance institutions, philanthropic organisations and private markets will be crucial to plugging the climate finance gap.

### **Education, education, education**

For the transition to Net Zero to move from strategy to implementation successfully, businesses and stakeholders will need to have an understanding of the overarching need for Net Zero and understand what practical steps they can take to effectively contribute to the climate agenda. Governments will need to set the case for transitioning to Net Zero through an integrated communication strategy to enable society to make broader social and economic adjustments to changes.

For example, in the UK, the Boiler Upgrade Scheme (BUS), a policy framework to transition residential households to low-carbon heating has lagged behind government targets of 6000,000 heat pumps per year by 2028. A recent study of consumers found that 80% of people have little to no awareness of heat pumps and nearly 2/3rds are unaware of the need to change heating technology to reach Net Zero. A clear communication strategy is essential to

educate stakeholders on the matrix of solutions which are likely to be available in their area for residential heating and the extent of the compatibility with the current appliances. This will allow consumers to change consumption patterns.

### **The role of business in reaching Net Zero**

The business risk is clear – the climate emergency lends itself to reputational, regulatory, physical and transition risk. The impact of climate change can be both immediate and long-term, for example, the negative externalities arising from heavy flooding leading to temporary business closures and increased operating costs or, at worse, severe disruption to both the supply chain and distribution channels. This can threaten the valuation, operational resilience and viability of business. Businesses are heavily interdependent on the environment and must transform their role from one which solely prioritises profits to one with a fiduciary responsibility to consider all the social benefits and costs from business activity. Regulators, consumers and investors all demand businesses move to Net Zero – failure to do so is a business risk.

### **Anticipate, set and align Net Zero targets to and embed these into corporate strategy**

Businesses need to take action now to remain competitive and compliant with Net Zero regulation. Setting targets allows businesses to focus attention on their carbon footprint and make necessary changes to reduce GHG emissions. Publicly disclosing the commitment to responsible business and sustainability will ensure businesses can be held to account from stakeholders and the government.

Target setting needs to be reviewed on a periodic basis and businesses must realise that decarbonization is a journey not a destination – the goal posts are constantly moving.

### **“Businesses must realise that decarbonization is a journey not a destination – the goal posts are constantly moving”**

Businesses must ensure that they have a control mechanism to track, identify and close progress gaps against targets whilst taking ‘least regret’ adaptive strategies to

mitigate the physical risk from climate change.

### **Innovating for impact, greening for growth**

Net Zero will require innovative approaches to solving legacy problems, particularly for businesses to abate and reduce GHG emissions. Many abatement technologies have a high cost of capital and require high upfront capital expenditure to ensure the technologies are to be ready for commercial deployment. By deploying capital to finance and invest in certain technologies, businesses can catalyse research and development efforts in the transition to Net Zero, particularly in the hard to decarbonise and energy intensive sectors.

But action need not be limited to the energy sector. All businesses can explore procuring green energy through contractual agreements such as a Power Purchase Agreements (PPA).

### **Value Chain Unity for Net Zero Victory**

For businesses to meet their own business and regulatory decarbonisation targets, they must work with partners across their entire value chain. This is especially important as the majority of emissions from a business are in fact Scope 3 emissions (indirect emissions emanating from the supply chain).

Businesses need to mandate all actors in their value chain to produce relevant, timely information on their operations and their strategy, verifying if this is broadly in line with the remit for their business. This can take many forms, for example, asking suppliers to supply relevant data in a dashboard on PowerBI, such as disaggregated emissions and intensity metrics.

Additionally, sensitivity analysis should be performed on companies’ key products to assess how changes in market conditions, either driven by the end user, or from unfavourable supply chain disruption would impact the emissions produced. Business will then need to decide whether to amend their product or service offering or look to change value chain providers to those who are lower-carbon in scope.

### **Pursuing purposeful partnerships**

Businesses should look to forge partnerships with various stakeholders, government and non-government organisations to share best practice and learnings, manage risk effectively and

widen their understanding of the real economy and consumer demands. One new way of achieving this is for businesses to form community 'shadow' boards which report into the executive board on business activity from a stakeholder perspective. The members of community boards could be involved in inputting into policy and regulation, testing new service models and products and addressing community concerns relating to business action on climate change.

### **The role of stakeholders / society in reaching Net Zero**

Stakeholders such as scientists, communities and shareholders have a vital role to play in the transition to Net Zero through their ability to stimulate demand for green products and services and their broader influence to hold businesses and government to account for embedding and implementing sustainable practice.

### **Cultivating demand for sustainable practices and products**

Stakeholders can exert pressure on businesses to change their business model by switching to and driving up demand for low-carbon products and services.

Stakeholders have a choice on how to allocate capital towards companies and can advocate for transparency of reporting. There are various ways stakeholders can do this, if stakeholders are shareholders in the company, they can use the Annual General Meeting for publicly listed companies to question management on sustainability performance, drawing the attention of other shareholders to these matters. Shareholders also have the ability to table resolutions to advocate for a specific change for in a company. Shareholders can also use their ability to vote on these resolutions, signalling to management the need to change.

### **Speaking up for our planet**

All stakeholders have a responsibility in advocating for a transition to Net Zero, regardless of the interest held in the company. For example, stakeholders, through the use of grass-roots campaigning such as protests or lobbying pathways have the ability to advocate for government to implement change and set new climate policies, new efficiency targets, advocating for funding to support research institutions in

abatement or green technologies (see Appendix 6).

**“The heterogeneous demographics, sectors, regions and socio-economic contexts of the decarbonisation challenge means there is no 'one size fits all' solution”**



Green accounting:

## The renewed focus for the accounting profession



**T**he accounting and bookkeeping profession emerged in the late 1400s as a way 'to give the trader without delay information as to his assets and liabilities.'<sup>6</sup> The profession has subsequently evolved, to provide trust, credibility, transparency and confidence to the real economy and act in the public interest which naturally extends itself to the climate and environmental stewardship. As the nexus between government, business and society, the profession is in a state of flux: to use over a century's worth of experience in reporting, measuring and assuring governments, capital markets and society as a whole to assist in solving some of the challenges of the climate emergency.

### Greening the reporting standards

Accounting standard setters, such as the International Accounting Standards Board (IASB) have traditionally focused attention on providing accountants with standards and guidance for the preparation of financial statements. In the Great Transition to Net Zero, there is growing recognition of need to report on both financial and non-financial information.<sup>78</sup> By setting standards which

require businesses to present climate-related information, users of financial and non-financial information will benefit from increased transparency around climate risks which in turn should drive the efficient allocation of capital towards low-carbon goods and services.

To date, serious effort has been made by the accounting profession to drive forward greener reporting standards. In 2021, The International Sustainability Standards Board (ISSB) was launched at COP26 in Glasgow by the International Financial Reporting Standards (IFRS) Foundation to develop global sustainability standards and tackle the myriad of sustainability reporting standards amid growing pressure for increased climate reporting from investors, stakeholders and shareholders.

The interoperability between non-financial related disclosures across different jurisdictions will be critical to combatting climate change. The fragmentation of different regulatory regimes across jurisdictions will need to be managed to ensure transparency, consistency and comparability of non-financial information. The accounting

standard setters will need to quickly align sustainability reporting requirements such as the EFRAG as they are released to more aggressive reporting standards, aiming to quantify and measure the social impact and opportunity costs of company's climate choices (see Appendix 2).

### Upskilling professionals key to unlocking the potential

The climate landscape is rapidly evolving with new regulation, best practice and thought leadership being produced on a daily basis which directly impacting how businesses respond to the climate emergency. Accountants have a duty to maintain professional competence and due care when acting in a fiduciary capacity with clients. Accountants must seize opportunities to pursue continuous professional development to understand how to conform to and implement best practice, laws and regulations and maintain and understanding of the wider social impact of such regulation.

Professional bodies in particular will need to develop and embed new,

<sup>6</sup> Brown, R. (1968) A History of Accounting and Accountants (London: Frank Cass). pp. 111-112

<sup>7</sup> EFRAG, ANNUAL REVIEW 2021 THOUGHT LEADERSHIP, TRANSPARENCY AND PUBLIC ACCOUNTABILITY (2021)

<[https://www.efrag.org/Assets/Download?assetUrl=/sites/webpublishing/SiteAssets/EFRAG+Annual+Review+2021\\_final.pdf](https://www.efrag.org/Assets/Download?assetUrl=/sites/webpublishing/SiteAssets/EFRAG+Annual+Review+2021_final.pdf)> [accessed 10 February 2023].

<sup>8</sup> World Economic Forum, Get the reporting right and sustainability will follow (2022) <<https://www.weforum.org/agenda/2022/06/sustainability-reporting-why-important/>> [accessed 10 February 2023].



practical, synoptic examinable material about climate-related affairs such as carbon accounting and climate assurance procedures into the qualification syllabus. Whilst many accounting bodies have integrated wider sustainability content into the accounting qualifications, this often appears as non-examinable additional material rather than being core to the specification and does not provide practitioners with a practical toolkit to assess climate-related risks and opportunities.

Professional bodies should also be providing regular, timely updates to both qualified accountants and students on the latest climate-related regulatory developments. This could be achieved through a monthly or quarterly climate accounting bulletin. The provision of this material will ensure that all members, whether in practice or industry are aware of the latest climate developments. Professional bodies could forge partnerships with Generative AI companies, such as ChatGPT, to enable accountants in practice or industry to gain on-demand answers to technical accounting queries relating to the release of recent accounting standards. This could be implemented alongside the current technical accounting helpline.

### **“Professional bodies could forge partnerships with Generative AI companies, such as ChatGPT, to enable accountants in practice or industry to gain on-demand answers to technical accounting queries relating to the release of recent accounting standards”**

Professional bodies should also look to introduce a mandatory cross-member qualification, with ongoing continuing-professional development obligations, for practitioners whose role falls into the provision of climate-related assurance. The nature of the qualification could mirror the Insolvency Examination Board's (JIEB) exams for providing insolvency services. The expertise required to provide assurance to shareholders, who may have a limited understanding of materiality and nature of climate disclosures is becoming more

specialist. ICAEW has recently released a sustainability certificate which can provide the foundation for this certificate, but the final output needs to be akin to a licence to operate rather than an optional self-contained e-learning programme

#### **Leading on whole systems thinking**

The accountancy profession is made up of a series of actors, such as regulators, professional bodies, practitioners and service providers. These actors are inherently intertwined with society, the natural environment, government, businesses and the real economy, with a single change in one element enough to impact the accountancy profession's ability to function in the same way. To meet legally binding targets of Net Zero by 2050, the accountancy profession cannot have a siloed response to the climate crisis and must have a clear understanding of the entirety of the 'whole system' with its complex behaviours, interactions and interdependencies. This requires the accountancy profession to coordinate and cooperate between different bodies, governments and businesses to represent the interests of members whilst coordinating a joint solution that respects the public interests of other stakeholders to maximise the chances of a mutually beneficial outcome.

For example, the accountancy profession should convene different interrelated business functions and professional bodies such as The Chartered Governance Institute UK & Ireland, CFA Institute and Institute of Risk Management (IRM) to manage areas of accounting policy or approaches to the climate emergency which have previously been managed separately. These bodies need to align thinking on climate emergency and wider sustainability issues in their publications, qualifications and material produced – acting as 'one voice' whilst acknowledging differing tangible perspectives to value creation.

#### **Sustainability as a service**

Climate related events or activities pose significant direct and indirect threats to an audited entities' operations, ability to comply with laws and regulation and ability to attract capital. In the Great Transition, and in accordance with the

current International Standards on Auditing (ISA), the auditor's responsibility relating to an audit is the 'obtain reasonable assurance about whether the financial statements of an entity, as a whole, are free from material misstatement and report on whether the financial statements are prepared, in all material respects, in accordance with the financial reporting framework'. The auditor also has a responsibility to read both financial and non-financial information in the annual report and to 'identify whether it is materially inconsistent with the financial statements or the auditor's knowledge obtained in the audit.'<sup>9</sup>

The 2022 FRC *Climate Thematic* highlighted a divergent approach from sampled firms in the central risk assessment stage of an audit with firms differing in frequency and methodology. The nature of climate risk is changing on a day-today basis compared to the often annual approach that firms use. To successfully transition to Net Zero, auditors should pair Data Analytics software with Machine learning algorithms to analyse large volumes of unstructured data such as local weather reports and GHG emissions and identify correlations that may provide an early indication of climate-related risks on company operations. Auditors could then apply Geographical Information Systems (GIS) software to map the audited entity's location against the structured data across different locations to identify not just the overall risk at an organisational level, but to pinpoint on an asset or office location level what is most at risk. By using technology, this can be achieved on a more frequent basis, with large volumes of data and avoid 'boilerplate templates' which the FRC alludes to.

Auditors have a crucial role to play in the assessment of transition risk, the cost associated with assets transitioning to a Net Zero economy, in particular asset stranding. Asset stranding could occur due to regulatory, economic or physical climate-related changes. This is particularly pertinent to the energy sector with billions being earmarked for asset stranding. For example, regulatory changes in the future may lead to reduced demand or supply of oil and gas, leading to a reduction in the estimated

<sup>9</sup> Financial Reporting Council, INTERNATIONAL STANDARD ON AUDITING (UK) 240 (REVISED MAY 2021) The Auditor's Responsibilities Relating to Fraud in an Audit of Financial Statements (2022) <[https://www.frc.org.uk/getattachment/e48499f2-b69b-4f45-8bef-762583eab1cd/ISA-\(UK\)-240-Final.pdf](https://www.frc.org.uk/getattachment/e48499f2-b69b-4f45-8bef-762583eab1cd/ISA-(UK)-240-Final.pdf)> [accessed 10 February 2023].

useful life of the asset or reduction in the cash generating ability of assets in the future. This can lead to significant impairment charges on financial statements, causing write-downs to assets or increased liabilities. Auditors need to effectively act as third-party verifiers of asset values, ensuring that they use their professional judgement to determine whether climate risk has been sufficiently accounted for. Auditors could use technology to produce scenario analysis by modelling the impact of different regulatory, economic or technology scenarios which will result in a different accounting treatment that may provide a more 'true and fair and complete' view of the organisation assets. If auditors have concerns about the conservative nature of assumptions companies use but are unable to verify data through the use of a specialist, they should not be relying on management representations, but including climate-related asset stranding risk in the Key Audit Matters (KAM) section of annual reports.

#### **Climate partner to organisations**

At an organisational level, the role that accountants will play within businesses will be multi-dimensional. IFAC describes accountants as 'creators of value at the strategic level, providers of value at an operational level, keepers of value and reporters of value at the reporting level'<sup>10</sup> in sustainable business. In the climate emergency however, accountants will need to create value at every level not merely perform to job functions. The concept of value creation should not just merely exist at leadership or management level – but be intertwined across the business. Accountants should look to be climate business partners and play a role in integrated sustainability reporting and climate change related issues cross-functionally, sitting within each department and become central to the planning process across all departments.

Accountants should work with each department to ensure everyone is aware of the opportunities and risks posed by climate change, the quantifiable impact this poses on the individual cost or investment centre and how this will impact current and future operational decisions.

**“The concept of value creation should not just merely exist at leadership or management level but be intertwined across the business..... Accountants should look to be climate business partners”**

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<sup>10</sup> IFAC, COMPETENT AND VERSATILE How Professional Accountants in Business Drive Sustainable Organizational Success (2011) < <https://www.ifac.org/system/files/publications/files/Competent-and-Versatile-full-length.pdf> > [accessed 7 February 2023].

# The Triple Bottom Line:

## Balancing Environmental, Social, and Corporate Governance Factors in the Transition to Net Zero



**T**he climate emergency is not just about the environment. The environment has many crossovers with social and governance factors. The physical impact on the environment from human-induced climate change has large social implications, for example. Environmental issues are being increasingly addressed at a corporate level – which intercedes with governance. Poor governance and failure to address climate change also has social implications. It is therefore important for government, business and society to be thinking about sustainability issues as a whole rather than the bucketed silos of E, S and G.

The framework of the 17 UN Sustainable Development Goals captures the significant overlap and interdependencies between all the E, S and G factors covering everything from natural capital to equality and will need to be considered by all actors of real economy to ensure

the transition to Net Zero is pursued in the least disorderly manner whilst maximising equitability and sustainability

### Accounting for Equality, Diversity and Inclusion

The impact of negative externalities from climate emergency may be disproportionately borne on marginalised groups such as low-socioeconomic communities and ethnic minorities. These groups are often displaced in regions more vulnerable to climate-degradation such as famine, severe flooding and tropical storms whilst often being geographically immobile and lacking the political and economic capital to deal with these impacts.

The business case for embedding diversity is strong – value creation is linked to equality, diversity and inclusion practices leading to financial outperformance, employee satisfaction

and increased innovation.<sup>11</sup> Despite this, only 50% of respondents from sampled organisations in a KPMG survey believed that their company sufficiently incorporated Equality, Diversity and Inclusion into their corporate action on climate change.<sup>12</sup>

Businesses will need to ensure they have a mechanism for engaging and effectively capturing diverse perspectives. For example, companies can promote diverse perspective with the introduction of ‘shadow boards’ to foster a culture of climate responsibility in organisations, provide a forum to gather young and diverse members who can offer a-typical perspectives compared to traditional boards and sub-committees. Businesses can also undertake regular pulse surveys to gain insight on areas to advance EDI in the company and select a range of Key Performance Indicators (KPI) to show advancement in these areas.

<sup>11</sup> McKinsey, Diversity wins: How inclusion matters (2020) <<https://www.mckinsey.com/featured-insights/diversity-and-inclusion/diversity-wins-how-inclusion-matters>> [accessed 26 February 2023].

<sup>12</sup> KPMG, Leaders 2050: Diversity for Net Zero Report (2022) <<https://assets.kpmg.com/content/dam/kpmg/uk/pdf/2022/10/diversity-net-zero-report.pdf>> [accessed 27 February 2023].

It is important for organisations to consider taking an intersectional approach to address systematic inequalities and understand how different forms of oppression intersect to develop the most effective policies which are inclusive and effective rather than thinking about normal and diverse buckets.



Governments and policymakers also have a role to play in setting standards on inclusive hiring, advancing research into EDI and challenging businesses EDI processes.

#### **A 'just' transition is just as important as a 'quick' transition**

A disorderly transition brings transition risk. The overarching policy framework that plans the transition in geographies, markets and sectors must be multilateral and systematic whilst also protecting vulnerable customers.

For example, policymakers will need to consider how they manage the small number of residential customers bearing both decommissioning and operating costs for connecting to a stranded asset, as this may further disenfranchise vulnerable communities on the journey to Net Zero. This could result in the irreversible concentrated withdrawal of factors of production: land, labour, capital and entrepreneurship, within a specific area. This may lead to the risks of the economic costs of transitioning far outweighing the benefit to do so for some communities.

#### **Shareholder primacy yielding diminishing stakeholder dividends**

Policymakers must ensure that new legislation does not have the unintended consequence of creating shareholder intransigence on the merits of transitioning to a low-carbon economy.

Shareholder primacy stipulates that maximising shareholder value, often via increasing short-term profits, is the primary objective of organisations. This is at odds with the transition to Net Zero,

which requires high, upfront investment and patient capital expenditure often with initial negative return on investment to yield long-term sustainable business change. Shareholder primacy is a threat to the Great Transition.

Addressing shareholder primacy requires policymakers and governance officials to unpick and reform legacy approaches to corporate governance such as the Annual General meeting, Companies Act 2006 and proxy voting.

Reforming the AGM, in particular for Public Interest Entities, to de-emphasise the short-term interest of shareholders and include wider stakeholders such as customers, community members and boards and employees will allow their interests be better represented. This can mean allowing these stakeholders to have an advisory vote, give them the legal right to have their voices heard at an AGM or in writing to shareholders or have a succession of smaller roundtables to incorporate their views.

Regulation of proxy voting should also be on the agenda. A small group of shareholders should not exert undue influence on sustainability matters such as influence voting outcomes at a AGM.

Lastly, clarification the legal responsibilities of directors in UK Companies Act s172, in particular, to balance the needs of all stakeholders, explicitly drawing out the need for companies to prioritise sustainability over short-term profits or implementing suggestions from the Better Business Act campaign which creates the need for companies to consider the needs of stakeholders as part of their corporate purpose.

**'A disorderly transition brings transition risk. The overarching policy framework that plans the transition in geographies, markets and sectors must be multilateral, systematic whilst also protecting vulnerable customers.'**



# The key takeaways from the climate emergency

## THE IMPACT OF CLIMATE CHANGE IS CLEAR



Biodiversity loss



Hotter temperatures



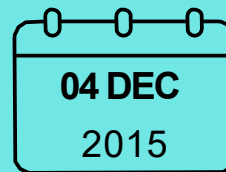
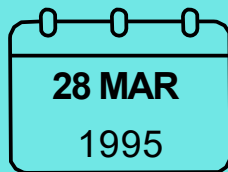
Increased drought



Increased flooding

## POLICYMAKERS HAVE BEGUN TO TAKE ACTION

The Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC) held the first annual event in Berlin.



The Task Force on Climate-Related Financial Disclosures (TCFD) was created in 2015 by the Financial Stability Board (FSB) to develop consistent climate-related financial risk

## GOVERNMENTS, BUSINESS AND SOCIETY ALL HAVE A ROLE TO PLAY IN THE TRANSITION TO NET ZERO



Government and policymakers will set the framework to drive change from the top-down.



Businesses will use resources to allocate capital to innovate and comply to regulation.



Society will demand change from the bottom-up.

## THE FUTURE OF ACCOUNTING WILL PLAY A CENTRAL ROLE IN CLIMATE AND SUSTAINABILITY



Sustainability as a service



Upskilling professionals



Business partnering

## GOVERNMENT, BUSINESS AND STAKEHOLDERS MUST BALANCING THE 'E', 'S' AND 'G'



Accounting for a just transition and Equality, Diversity and Inclusion

Corporate governance reform



# Appendix 1:

## Technology types per group

Group of technologies	Examples of technology
Renewable technologies	Onshore and offshore wind, hydroelectric, solar power, bioenergy
Flexible technologies – system balancing and storage	Smart grid, batteries, fuel cells, flexibility, demand optimisation, load balancing, curtailment of electricity
Circular economy / Systematic efficiency	(Waste) recycling, responsible consumption, behavioural change, food waste prevention and valorisation, reuse
Buildings / residential heat technologies	Air source heat pumps, water source heat pumps, heat networks
Industrial cluster technologies	Waste heat (networks), steel and cement
Hydrogen	Blue hydrogen (steam methane reformation and CCUS), green hydrogen (electrolysis)
Green / sustainable fuels	Bio-feedstock, waste, fuel ethers, e-fuels, ammonia*
Nature-based solutions	Mangroves, coral reef, peatland, drainage basins
Carbon, capture, utilisation and storage (CCUS)	Point-source capture, Direct-air capture
Climate-smart agriculture	Agroforestry, crop rotation and polyculture, Precision farming

# Appendix 2:

## Comparison of global sustainability standards

	Globally recognised standards		
	ISSB	EFRAG	SEC
Requirement for footnote disclosure in financial statements	No	No	Yes
Industry standards	Yes	In development	No
Materiality	Assessed based on impact on Enterprise value	'Double Materiality' – financial materiality and impact materiality	1% threshold applied for financial statement footnote disclosure
Time horizon	Short-term, medium term and long-term are not defined	Yes, varies – in general requirements short term = 1 year whereas in transition risks short-term is 5 years	Short-term, medium term and long-term are not defined
Resilience and scenario analysis	Scenario analysis or alternative means required. Needs to be consistent with latest agreement on climate change	Scenario analysis required. Needs to be consistent with Paris Climate change agreement of limiting to 1.5 °C	No scenario analysis required
Scope 1 and 2?	Yes	Yes	Yes
Scope 3?	Yes	Yes	Yes, smaller companies exempt
Intensity metrics	Scope 1 and Scope 2 per unit of physical or economic output	Total emissions per unit of turnover	Scop 1 and Scope 2 per unit of total revenue and per unit of output
Level of assurance	Varies depending on legal framework	Limited assurance	Limited assurance

## Appendix 3:



### Case study 1 – carbon pricing

# European Union Emissions Trading Scheme



The EU Emissions Trading Scheme (ETS) is a cap-and-trade scheme.

Under the scheme, entities involved in the generation of heat and power, industrial sectors and aviation buy and receive emission allowances which can be traded should there be unused emissions at the end of the year.

The cap sets the limit on the amount of greenhouse gases which can be emitted from entities and is subject to review on an annual basis.

To date, the EU ETS since 2005 has resulted in emissions being cut by 42.8% in the regulated sectors.

#### Key learnings:

- Market-based mechanisms like a cap-and-trade system can accelerate action from regulated parties to reduce greenhouse gas emissions.
- Setting the annual limit for GHG emissions requires balancing the need to get to Net Zero quickly but provide business with certainty and time to transition from fossil-fuel based businesses.
- Schemes such as the EU ETS should complement other market-based incentives to accelerate change. For example, grants to be awarded to private sector organisations to invest in low-carbon technologies.



## Appendix 4:



# Case Study 2 - Incentivising investment in low-carbon technologies

## UK Infrastructure Bank



The UK Infrastructure Bank is a UK development finance institution founded in June 2021 and is owned by the UK Government. The bank has two main objectives:

- "To help tackle climate change, particularly meeting the government's net zero emissions target by 2050."
- "To support regional and local economic growth through better connectedness, opportunities for new jobs and higher levels of productivity."<sup>14</sup>

The bank was initially given capital of £12bn with a further £10bn of government guarantees. This consists of:

- Equity - £5bn from Treasury
- Debt - £7bn which can be drawn from private markets or the government owned Debt Management Office
- Guarantees - £10bn

### Key learnings:

- State-owned development finance institutions have flexible capital mandates to direct finance towards technologies.
- Arms-length bodies can act as the nexus between the public and private sector by providing sufficient operational independence from the shareholder.

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<sup>13</sup> HM Treasury and UK Infrastructure Bank, UK Infrastructure Bank Framework Document (2021) <[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/994437/UK\\_Infrastructure\\_Bank\\_Framework\\_Document.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/994437/UK_Infrastructure_Bank_Framework_Document.pdf)> [accessed 27 February 2023].

# Appendix 5:



## Case study - Equality, Diversity and Inclusion

### KPMG Leaders 2050



Leaders 2050 is a professional network led by KPMG UK. The network convenes all sectors and is designed to act as a forum for future leaders to advocate and share interest in Net Zero and sustainability.

#### Key learnings:

1. Identifying and engaging with the next generation of future leaders is critical to tackling the evolving Climate emergency
2. Building industry networks with young leaders across all of society can convene a diverse range of perspectives to ensure that diversity and inclusion is embedded into the Transition to Net Zero.



## Appendix 6:



### Case study 4 – shareholder activism

## Client Earth and Shell

**ClientEarth**



- The environmental law charity, ClientEarth announced on March 15, 2022, that they would commence legal action against the Board of Directors of Shell for failing to implement a Paris Agreement compliant goal.
- ClientEarth's proprietary analysis of Shell's strategy forecast Shell exceeding their announced commitments to the Paris Climate Change Agreement considerably, leading to an increase in emissions by 2030.
- This is the first 'derivative action' taken against a board of directors for failing to meet climate ambition.

#### Key learnings:

- Stakeholder activism is on the rise and companies can be exposed to liability risk for failing to take action to plug the 'implementation gap' to reach Net Zero by stated targets.
- The board of directors is particularly exposed under UK Companies Act s172 and 174.

## Appendix 7:



# Case study 5 - Embedding climate risk and decarbonisation into corporate strategy

## KPMG and Apollo Global Management



APOLLO

Apollo Global Management is a global alternatives asset manager with \$523 billion dollars of assets under management. Apollo Global Management commissioned the services of KPMG's Climate Risk and Decarbonisation Strategy team to conduct a maturity assessment of baseline emissions, define climate ambition and develop a roadmap for implementing a decarbonisation strategy across all of their portfolio.

### Key learnings:

- Businesses can explore partnerships with consultancies that have climate expertise to further identify and conduct due diligence on climate-related risks and opportunities across the company, portfolio and value chain.
- Business should not only consider aligning to the latest sustainability reporting, but should benchmark activity against other portfolio companies and investor consensus.
- Business partnering across an organisation is important to build up the evidence base and 'buy-in' across company for the transition to Net Zero.