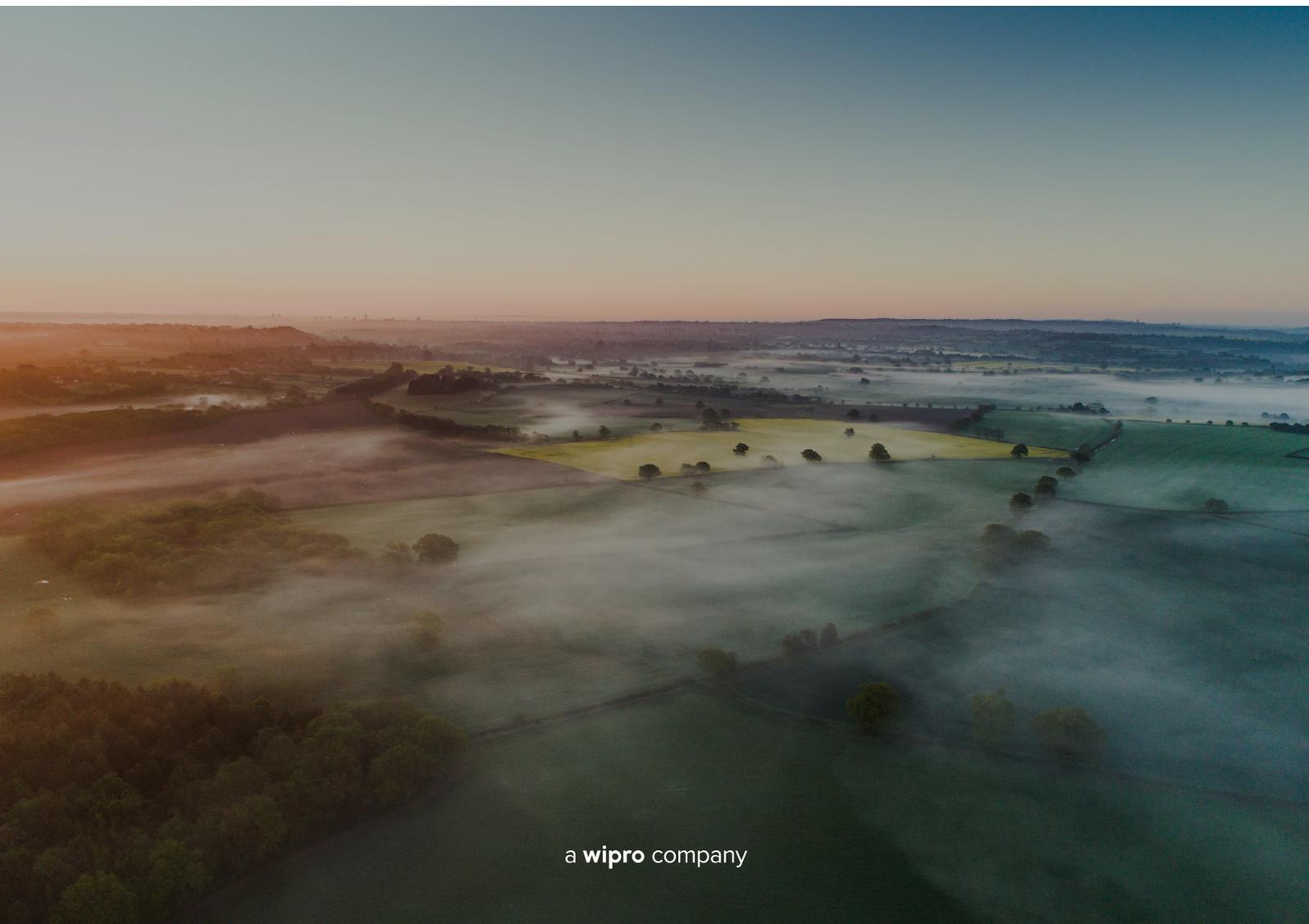


CAPCO

RAISING THE BAR ON CLIMATE

RESULTS FROM THE UK'S CLIMATE BIENNIAL EXPLORATORY SCENARIO (CBES)



1.0 EXECUTIVE SUMMARY

In June 2021, the Bank of England (BoE) launched the Climate Biennial Exploratory Scenario (CBES) with a view to testing the UK's largest banks and insurers and capturing the interactions between them to better understand understanding the risks presented by climate change across the UK financial system and the system's resilience to climate change.

As the BoE notes, the CBES employs three scenarios of early, late and no additional action to examine the two key areas of risk from climate change: the risks arising from the significant structural changes to the economy needed to achieve net zero emissions – 'transition risk' – and risks associated with higher global temperatures – 'physical risks'.

The analysis attempts to overlay potential paths, and critically not predictions, of climate change outcomes and from this understand and test the impact on the operating and commercial models of banks and insurers. A total of 19 leading UK banks and insurers took part in the most recent exploratory analysis, the results of which were published on May 24, 2022.

The latest projections made by banks and insurance companies suggested that overall, costs will be lowest (in most cases but with exceptions) when early action is taken to reduce greenhouse gas emissions (GHGs), ultimately limiting the impacts of climate change. However, the BoE highlighted that if climate change is not tackled appropriately, "climate risks could cause a persistent and material drag on their profitability", with an "annual drag on profits of around 10-15% on average". The costs associated with late action could subsequently fall to customers and businesses in the form of higher interest and premiums or ultimately, a complete withdrawal of financial support – especially in a scenario where no action is taken by respective banks and insurers

The CBES findings demonstrate that although firms have made good progress in assessing their climate risks, there are significant gaps that remain and challenges in closing them – mainly concerning data challenges, risk management and transition planning.

Firstly, CBES recommend that firms should continue investing in their climate risk assessment capabilities, enabling them to make appropriate and informed business decisions for the future. Secondly, it is suggested that firms need to focus on gaps in their climate data capability, specifically around obtaining appropriate data on corporate emissions across the value chain and scrutinising third party models – noting that early engagement with customers and third parties will help to alleviate the over-the-horizon challenges due to a lack of data insight. Finally, CBES state that it is also crucial to balance tackling climate change in an effective and timely manner.

An ensuing risk factor that stands out, following a sharp rearrangement of the portfolio, is the inability of financial services firms to support the carbon intensive sectors in their transition plans, which could subsequently cause a systemic risk and inadvertently impact the wider economy. Therefore, banks and insurers need to appropriately consider all the risk affected by climate change and not take what some observers might consider a myopic view or even ham-fisted approach to diversification. In general terms therefore investment into carbon intensive sectors should be strategically considered, planned and executed with a holistic mindset of the overall desired outcome over time. The approach should be a trending trajectory to reshape behaviours and outcomes away from carbon intensive practices – although, critically, it should not just be a stampede away from these areas nor a wholesale 'brown dumping' exercise.

2.0 CBES

2.1 BACKGROUND

In June 2021, the Bank of England launched the Climate Biennial Exploratory Scenario (“CBES”) exercise for the UK’s largest banks and insurers. This included a total of 19 leading UK banks and insurers (7 banks 5 life insurers, 6 general insurers and 10 Lloyd’s syndicates). The aim of the exercise was to understand the level of climate-related risk that financial institutions, as well as the wider financial system, are exposed to risk under different climate scenarios. It had three fundamental objectives.

1. To size the financial exposures of individual firms and the financial system, related to climate change
2. To understand the challenges of the business model and likely responses to these risks, as well as gauge responses and the implications for the provision of financial services.
3. To improve firms’ risk management and prompt a strategic view of the issue

The CBES exercise consisted of three scenarios exploring both transition and physical climate risks. It is important to note that these are not forecasts, but scenarios based on different future paths of climate policies, technological developments, and consumer behaviour. Each scenario was assumed to take place over a period of 30 years. There was much debate on the potential paths, their scope and what scenarios could be realistic, but ultimately, they are indicative of a range of possible future settings from positive (low-level climate change) to negative (significant negative outcomes as a result of climate change impact) outcomes and paint a landscape for consideration of where a firm sits within it.

The three scenarios are:

1. Early Action (EA) scenario: an orderly transition to net zero by 2050 and global temperature increase is limited to 1.8°C by the end of the scenario, falling to a 1.5°C net increase by the end of the century.
2. Late Action (LA) scenario: a less orderly transition with implementation to drive net zero delayed to 2031– however the increase in global temperatures is limited to 1.8.C.
3. No Additional Action (NAA) scenario: no transition to a net zero emission state is undertaken and the risk/adaptation focus is on the physical risks that materialise.

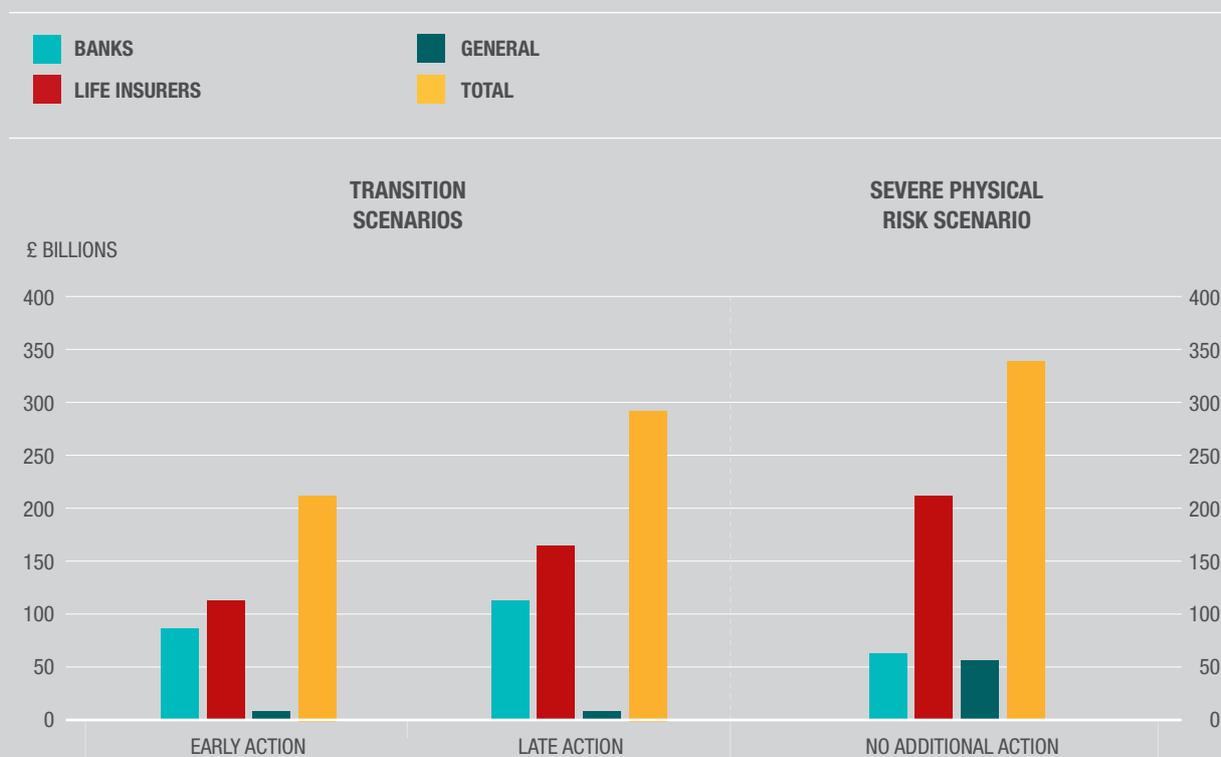
2.2 RESULTS

On May 24, 2022 the BoE published the results of the CBES exploratory analysis. Overall, the participating banks and insurers reported a general development of their climate risk management capabilities, with the BoE emphasising that “good progress” has been made in some aspects of climate risk management.

The findings emphasised that climate change will have a financial impact on bank and insurers and that early intervention could result in firms’ ability to minimise and absorb costs more easily. However, a delayed and ineffective response could mean that “over time climate risks will become a persistent drag on banks and insurers’ profitability” with potential for “an average drag on annual profits of around 10-15%”. By their analysis, an early and orderly response is found to reduce the financial impacts as well as systemic risks of climate change.

CHART 4.1: Climate-related losses are larger in the late action and no additional action scenarios

Additional cumulative climate losses over scenario (a) (b)



The BoE reports that banks and life insurers will be the most impacted by transition risks, while general insurers are more exposed to the physical risks, especially if no action is taken. In fact, under the NAA path, the total loss to UK banks and insurers is predicted to amount to £334 billion by 2050. This would in turn result in an increase of lending and risk transfer challenges to vulnerable sectors and communities, thereby causing a cyclical issue with more communities unable to access financial services, due to the increase in interest and premiums.

However, although the results demonstrate the need for early action, they also demonstrate that there are transition risks if firms withhold financial services to the carbon intensive sector, before enabling them to fulfil their net zero transition plans. Therefore, a balanced approach is required for divestment in the sector to prevent inadvertently impacting the economy, which could result in any counterproductive societal issues.

2.3 BANKS

Banks across the exercise report embedding climate risk within their risk framework and structures, which represents positive momentum. Banks were able to identify their areas of business most exposed to climate risk but quantifying these risks remained a challenge. From their assessments, banks were shown to be more exposed to transition risks than insurers, as their portfolios have significant exposure to carbon-intensive sectors.

Banks are aiming to reduce their lending to carbon intensive sectors as part of their net zero transition plans. However the CBES findings highlight that the rate at which banks reduce their financial services to these sectors could inadvertently worsen the issue, by limiting the ability of these organisations to perform their transition plans. Therefore, it is imperative that banks embed all aspects of the value chain when developing their climate risk strategy and transition plans, including the wider customer implications which would require more focused engagement.

Although banks assess climate risk under their wider risk management framework, it was noted that data quality and standardisation remained a challenge. The limited data availability in some non-traditional financial metrics, as well as capability gaps, resulted in climate risks only being partially measured. This limits the accuracy of information that is being disclosed and reported for appropriate business decisions.

2.4 INSURERS

Insurers, both life and general, also reported progress in embedding climate risk into their risk governance structures. Similar to banks, life insurers were more exposed to transition risks than general insurers, due to their assets being held in more carbon-intensive sectors. Life insurers across the exercise aim to invest more in carbon-light sectors but highlighted the challenge in authenticating a true 'climate friendly' assets, due to the widespread lack of robust and accurate green data. In addition, the exercise highlighted that high demand for green assets would likely cause prices to surge, thus making green investments less attractive or even unviable.

General insurers, in contrast, were more prone to physical risks and this is exacerbated under the 'no action' scenario. In fact, CBES results highlighted that under a 'no action' scenario, an

estimated 7% of UK households currently able to purchase insurance would become uninsured. This is predicted to be due to high both premiums and ultimately some properties becoming uninsurable, as the physical impact of climate change changes risk profiles, creating subsequent implications for mortgages and other banking services.

As with banks, the CBES exercise highlighted the data challenges facing life and general insurers. As Stefan Claus highlighted in his speech to the Association of British Insurers on the CBES results, "the two most common issues that insurers face in managing climate risks are the lack of comprehensive and high-quality data as well as use of third-party models". Specifically, insurers were struggling with poor data quality and availability on corporate emissions across value chains (also known as Scope 3 emissions) and geographical corporate asset location data. Concerning third party models, insurers were/are struggling to effectively understand and challenge their outputs, due in no minor part to the data-caused blind-spots in risk profiling.

Insurers need to expand on their capabilities, going beyond the current retrospective approach to natural catastrophe risk assessment, to include future climate change impacts in their risk profiling. Furthermore, appropriate third-party information needs to be embedded in the overall supply chain assessment. As such, insurers need to invest in data capabilities to enhance their product risk modelling as well as business and operations decision.

3.0 INDUSTRY OVERLAPS AND STRUCTURAL ISSUES WITHIN FINANCIAL SERVICES

The CBES results offer valuable learnings for the financial services sector as a whole. In reporting the different climate risk management approaches undertaken, the exercise served to demonstrate that firms have overall done well in implementing governance and stewardship structures that embed climate risk management in their overall risk governance practices. However, there remains structural issues that limit progress made, including data capture and climate risk modelling. In addition, transition planning is another issue banks and insurers must consider, due to the economic and climate-related risks that could have an impact on client relations.

3.1 DATA CAPABILITIES AND RISK MANAGEMENT

A clear challenge, highlighted by the CBES exercise, concerned data and the clear data gaps feeding into risk management frameworks. Although the BoE highlighted that firms are progressing well in some parts of their climate risk management as well as quantifying the financial risks, significant data gaps remain. These gaps present most prominently in understanding customers' and third-party suppliers' current emissions and transition plans – extending beyond just the firms' individual operations and portfolios.

To put this into context, complex operational chains, such as a general insurer outsourcing parts of the claims function to third-party suppliers, will need to be evaluated to understand the overall emissions. Customers and third-party suppliers may face challenges in meeting the standards required, depending on their maturity in this space. It is imperative that firms engage with clients and third parties regularly to understand and support the data gaps.

From another perspective the banks have the ongoing challenge, as do insurers to some extent, of client lifecycle management and the data that feed their KYC models. Given the shifting nature of economies, client business positions and regulatory climate risk drivers, maintaining an overall 'grip' on ESG reality within a loan book presents a real headache. Additionally, sector, geography and scale will all play a part in the availability and trustworthiness of data.

The loans data for a small farmstead business in County Longford, Ireland – with a few tractors and 200 sheep – will be materially different to a listed international agricultural business in Germany with a global footprint. The banks, however, will need data to capture both customer profiles. The large agricultural business will potentially have this data as part of wider initiatives and regulation, but the small farm in Ireland will have no imperative to collect such information. When, then, should materiality and scale feature in the mandate for data? Surely the multinational agricultural business is deemed more important?

The answer is no – not when considered across the overall weighting of loan and investment books and when all of the farms are added up in aggregation. The key factor here will be the centre of gravity and value importance to a bank's balance sheet and respective books of work. They quite simply will need to focus their data requirements where they do most business and have most impact. From a capital markets perspective, we will no doubt see corporate and ESG disclosures increase and the associated data rise with this disclosure – be it regulatory-driven or aspirational. For the unlisted entities however this enduring mismatch and asymmetry of ESG data will need to be resolved or leave the financial services firms exposed

For a bank that has a significant small to medium enterprise (SME) banking business, a real headache arises when it comes to the collection of CBES-relevant data for a multiplicity of SME customers, for whom there are no incentives to collect the data themselves. This client SME 'data blackhole' is unlikely to fix itself and leaves a real challenge for the bank who has significant exposure to these types of markets. Artificial Intelligence (AI) and Machine Learning (ML) may assist, but the pursuit of data on behalf of those who have no inclination to collect it for themselves will no doubt occupy banks and technology firms for some time to come.

Overall, firms will need to invest further in their data capabilities – whether through partnerships, M&A or formal joint ventures, or simply by purchasing focused ESG 'feeds' – if they are to accurately map and understand the climate risks within their

portfolios and operations, in addition to doing more to assess and drive ESG datasets originating from their clients. This will play a significant role in supporting appropriate business decision-making and reducing climate change risks. In the short term, however, attitudes and levels of sophistication will need to improve if the gap between the two data positions is to be closed.

3.2 RISK MODELLING CAPABILITIES

An additional challenge highlighted by the CBES exercise was the challenge faced by banks and insurers in quantifying the level of climate risk exposure. Previous approaches to quantifying risk came from leveraging historical performance, such as natural catastrophe modelling. In this case, insurers would look to assess the risk premium by analysing the frequency and severity of natural catastrophes in a specific area over a given time frame.

However, climate change is now drawing focus to a more progressive perspective, thus quantifying these risks requires a different approach. Notably, there are also limitations on the availability and quality of information on global value chains and standardised carbon emissions, adding complications to accurate risk modelling. Banks and insurers should look to enhance their risk modelling capabilities by leveraging technologies, but also communicating minimum criteria for all stakeholders in the value chain to adhere to. With these factors, firms can better enhance their risk modelling capabilities to provide a more accurate climate risk assessment.

3.3 TRANSITION PLANNING

The CBES exercise explores firms' different transition plans. Transitioning to net zero is a major challenge for firms and they had to consider the vulnerabilities that this may pose to their business. As mentioned above, the CBES exercise shows that banks and life insurers are more exposed to transition risks – however, an early and orderly transition to net zero carbon emissions will minimise the costs, minimise climate change impacts, reduce the systemic financial risk and provide positive outcomes for firms and households.

However, the CBES exercise also demonstrates that certain economic sectors will be impacted more heavily by the transition (e.g. mining and hydrocarbon fuel-based activities).

With firms planning to move from carbon-intensive sectors to carbon-light sectors, withholding financial services from these organisations will create considerable challenges in their ability to perform their own transition plans. This was raised by Prudential Regulation Authority CEO Sam Woods in a speech highlighting the need to consider early and orderly transition in a considered and balanced manner, allowing carbon intensive firms to roll out and implement their transition plans. Therefore, as firms focus on divestment and green financing, banks and insurers should also pick up this green duty of care by engaging with customers, appropriately supporting them in their transition plans to minimise the systemic financial risks.

The CBES results show that policymakers, regulators and financial services will need to engage with the wider economy to support in appropriate transitioning to net zero. Simply cutting wide and deep will only make the banks and insurers look 'green' for a short time – eventually they will run out of business to divest. The reality is that in order to achieve an orderly transition, meeting both financial services firms' metrics and regulatory pressures whilst also maintaining shareholder returns, companies will need to segue across and take customers on a 'green' journey with them. Stewardship and leadership will be vital.

4.0 IN SUMMARY

Climate change will have a material impact on the financial sector, and the CBES exercise reaffirms the need for the sector to address the associated risks. An early and effective response would result in lower costs and less impact to business profitability, as well as reducing the impact to the wider economy. While banks and insurers have made progress in respect of their climate risk management, expertise in modelling climate-related risks is still in its infancy. Firms need to continue investing in the climate change risk management capabilities – especially around the data gaps and risk management challenges. Engaging early with customers and third-party providers is key to tackling the relevant challenges.

In the current environment, where we are witnessing a cost-of-living crisis driven by supply side and input inflation (forecourt fuel price shocks, for example) against a background of geopolitical turmoil, it would be easy for firms to focus only on the short-term challenges impacting their business and forgo the long-term challenges that arise from climate change. However, as the CBES results highlight, delayed or no action will have a material impact on firms' profits, as well as wider macro implications from which it would be more difficult to recover.

It is therefore imperative that banks and insurers boards assess long-term shareholder value via the prism of 'over-the-horizon' thinking, while continuing to advance their climate risk initiatives and addressing the challenges highlighted by CBES to ensure appropriate disclosure and informed business decisions.

Firms should also consider expanding their capabilities by investing in new green technologies, developing green-friendly products, and supporting customers and third parties through their own transitions to support the target of attaining net zero.

Finally, climate change – although arguably the most crucial facet – remains a subset of the 'E' in ESG. The direction of travel of regulation and public expectations suggest the other topics under the ESG umbrella will only become more relevant. In pursuit of optimal efficiencies as they tackle the capability gaps in their climate risk assessments, firms should consider expanding their focus to encompass all elements of ESG, thereby strengthening their overall credentials

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ABOUT CAPCO

Capco, a Wipro company, is a global technology and management consultancy specializing in driving digital transformation in the financial services industry. With a growing client portfolio comprising of over 100 global organizations, Capco operates at the intersection of business and technology by combining innovative thinking with unrivalled industry knowledge to deliver end-to-end data-driven solutions and fast-track digital initiatives for banking and payments, capital markets, wealth and asset management, insurance, and the energy sector. Capco's cutting-edge ingenuity is brought to life through its Innovation Labs and award-winning Be Yourself At Work culture and diverse talent.

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