Citi GPS

Sustainable Tipping Points

The 'Net Zero' Club: When Sustainability Meets Margins & Supply Chains

What would happen if instead of being viewed as a cost, sustainability was viewed as a positive for corporate pricing and margins? The recent creation of the 'net zero' club could be the catalyst to making that happen.

With an increasing number of corporate, city, sovereign, and supranational targets based on being 'net zero' by a certain date, the drive to follow up these targets with tangible strategies and business plans is growing. Even more impressive, the drive for Scope 3 net zero targets — referring not only to direct emissions, but indirect emissions not just used by the organization but also resulting from activities of the organization — is increasing.

To achieve a Scope 3 net zero target, *all* of the elements of a supply chain and distribution network need to also be net zero on a Scope 3 basis. In practice, a company with a Scope 3 net zero target is (all things being equal) more likely to use suppliers or counterparts with similar targets, who will effectively help them reach their targets, rather than creating a 'gap' which might have to be filled by carbon offsets. A net zero club of suppliers and counterparties with similar targets is starting to coalesce and members in the club could see increased market share and expanded margins.

We've attempted to put some order and structure to the vast number of net zero targets out there in the market using work compiled by the Science Based Target Initiative (SBTi). In doing so, we get a picture of which industries are showing the greatest level of ambition in aggregate, as well as the extent of leadership being shown by the largest companies in that industry.

As companies transition towards net zero targets, financial innovation will be enormously important to help customers finance these transitions.

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Introduction

As focus on climate change and emissions continues to grow, we as individuals and as a society are taking an ever greater interest in what part the companies whose services and products we buy are playing in the battle against climate change. Mindful of this, as well as avoiding risks of taxation, litigation, stranded assets, and retaining access to capital, companies are transitioning their business models towards lower or net zero emissions models, leading to the rise of the 'net zero' target as the ultimate expression of a desire not to contribute in any way to climate change.

However, not all net zero targets are created equal, and the toughest and most comprehensive of these, the 'Scope 3' net zero target, requires a company to effectively achieve net zero across all elements of its supply or distribution chains, including those which it does not directly control. What this means in practice is that a company with a net zero target will require its suppliers to be net zero, or it may have to purchase offsets to bridge that gap — at a cost. Consequently, that supply chain contract might therefore be renegotiated to a different price to reflect that cost, or indeed the company may move to a different supplier that is net zero, thereby avoiding that incremental cost.

Our 'Tipping Points' report on the Net Zero Club, which we summarize in the note below, analyzes which industries are demonstrating broad ambitions for net zero and which are not, and within each, which companies are demonstrating leadership, and where a lack of leadership highlights an enormous opportunity for the largest players to step up, with all of the brand potential that implies. In each case, we analyze which companies have issued detailed net zero targets, and which have set broader net zero 'commitments', highlighting the opportunity for greater granularity still to be developed. Alongside all of this exists an enormous opportunity for the financials sector both to advise on these transitions, and to provide innovative financial instruments which will finance and facilitate these transitions. These include green, social, and sustainability bonds, as well as KPI-linked bonds (key performance indicator-linked bonds) which have the ability to demonstrate commitment to the markets via an explicit linkage with the net zero targets.

For too long many have viewed sustainability as a cost that is 'indulged' at the expense of margins. The importance of the net zero club and its potential impact on supply chains is that it represents a tangible example of a sustainability-related issue directly impacting pricing and margins — sustainability meets finance in the most fundamental sense. While very early days, the rise of the so-called 'net zero club', where businesses with similar targets start to coalesce around these shared net zero ambitions, highlights the potential for these businesses to actually grow, take market share, and expand margins as they service each other. By the same token, for companies with limited or no ambition to be 'shut out' of strategic discussions, to suffer margin and volume contraction, and ultimately to be pushed out of these supply chains — not to mention have their cost of capital gradually increase, to the point where it may ultimately be shut off completely. Understanding these dynamics will be a critical part of identifying the winners and losers of our sustainable future, both in terms of industries, and the players within.

Understanding Net Zero: What Is Net Zero?

The concept of 'net zero' has arisen from (1) the drive to reduce the net amount of the world's emissions to zero by 2050 and (2) an increasing number of corporate, city, sovereign, and supranational targets based around net zero by a certain date, or getting a certain percentage towards net zero by a particular time.

What Exactly Does 'Net Zero' Mean?

First of all, the distinction between zero emissions (i.e., absolute zero) and 'net zero' is an obvious but important one. The 'net' element implies that an entity could still be producing significant quantities of CO_2, so long as these were in some way offset, be it via other activities (e.g., reforestation) or potentially via the purchase of carbon offsets — a subject explained and discuss at length in our report Tipping Points: Carbon Offsets – Ready, Offset, Go. As we highlight in that report, not all offsets are created equal, some being significantly more robust than others, with still others having questionable 'additionality'.

Furthermore, there is a significant difference in the ambition, and dare we say quality, of 'net zero' targets. Some mean exactly what they say — with a strategy and business plan to take an organization to net zero (or preferably absolute zero) emissions by a certain date, with a detailed plan of how this is to be achieved, a trajectory to do so, and published milestones along the way with progress being independently audited and reported on. For others, 'net zero' can consist of merely an aspiration, albeit a worthy one, with no business plan to get there, no trajectory, and in some cases, with the technology allowing a certain industry to reach it yet to be invented (or at best existing, but prohibitively expensive). To be clear, we are not being disparaging about these aspirational targets — far from it. Indeed it could be argued that for a business to aspire to this, without the technology yet existing in a commercially viable format, is actually braver than for the business where it exists and is just marginally more expensive, requiring only a tweaking of the business model.

This highlights another important point —we should not view all net zero targets as equal in their complexity. For a predominantly coal-fired utility to reach net zero will require a root and branch rethink of its business model, and a potentially complete rotation/turnover of its operating infrastructure and assets. Conversely, for a media company, it could just mean purchasing its electricity (and heat, etc.) from renewable sources, as well as examining emissions related to product sourcing, distribution, etc. if applicable. All are equally worthy, but some are significantly more complex, fundamental, and expensive. By the same token, to move our coal-fired utility to net zero will clearly have a greater systemic benefit than for our media company, and hence we should recognize the greater benefit that comes from that greater cost and complexity or transformation.

Which brings us to perhaps the greatest area of contention and misunderstanding about net zero targets — the so-called 'Scopes', as described below:

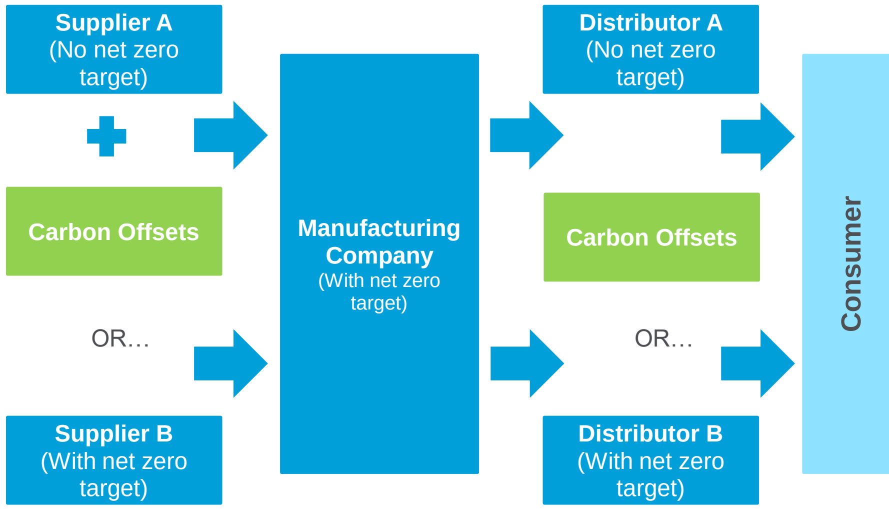
- **Scope 1: Refers to all direct emissions** from the activities of an organization or under their control. This includes fuel combustion on site such as gas boilers and fleet vehicles.
- **Scope 2: Refers to indirect emissions** from electricity and heat purchased and used by the organization. Emissions are created during the production of this energy and eventually used by the organization.
- **Scope 3 – Refers to all other indirect emissions** resulting from the activities of the organization and occurring from sources they do not own or control. These are usually the largest share of a company's carbon footprint, covering emissions associated with business travel, waste management, upstream and downstream transportation of their goods and services, etc. For some companies, such as oil companies, it will also entail emissions resulting from the *usage* of their end product, e.g., emissions resulting from using gasoline manufactured by the company to fuel a car, as well as the emissions resulting from making the concrete which they may use in drilling operations. Most importantly, these emissions are outside of the company's direct control. They are also the hardest to quantify, not least as there are usually multiple suppliers and distributors involved. Moreover, accuracy tends to suffer as there are an increasing number of assumptions regarding, for example, how much of a supplier's emissions actually relate to the product that a company is using or consuming.

Why Does the Net Zero Club Matter?

The reason the net zero club is important is that the increasing proliferation of net zero targets is effectively creating a 'club' of net zero businesses, which we will refer to as the 'net zero club', although this widely referred to concept is not to be confused with the business of the same name.

Effectively, what this means, is that any business which commits to being net zero — at least on Scope 1, 2, and 3 basis — must therefore ensure *all* of the elements of its supply chain and distribution network (and in some cases incorporating the usage of the end product) are net zero. Without that assurance, the company cannot claim to be net zero on a Scope 3 basis. What this means in practice is that if a supplier to a net zero company isn't intending to reach net zero itself, the company in question must either switch to a new supplier that is, or else purchase offsets to negate the emissions of that supplier. This entails a cost and the company is, of course, unlikely to be willing to bear that financial burden entirely itself. Hence if it chooses to remain with the existing supplier, it may ask the existing supplier for a discount to cover the additional expense of offsets. To summarize, suppliers that are not targeting net zero in supply chains where their customers are, are running an increased risk of price reductions, and at the extreme, a loss of volume or market share.

Figure 1. Presence/Absence of Complementary Net Zero Targets is an Increasingly Important Factor in Choice and Cost of Suppliers and Distributors



Source: Citi Global Insights

The reason this is ***so*** significant is that it is one of the first real world business examples of emissions (and sustainability) directly impacting margins and pricing strategies within companies. Conversely, to the example we used above, a net zero supplier might conceivably be able to charge its customers slightly *more* for its 'net zero' product, given that if the cost of reaching net zero is spread across all its customers it is unlikely to be as expensive as one customer having to go out and offset just the emissions from the production of the element of its supply chain which it has bought.

Accordingly, what we are beginning to see (in its early stages, but with rapidly building momentum) is the creation of a net zero club, populated by companies that are essentially seeing each other as part of a common solution. Conversely, companies *outside* of that club are likely to be seen by those in the club as 'part of the problem', or at least creating them a headache by not pulling their weight towards their customers' goals. Customers are, of course, more likely to gravitate to companies (be they suppliers or distributors) that are helping them meet their goals, rather than creating an additional financial burden. Over time, and in particular if more widespread carbon pricing comes into play, this will inevitably have an impact on margins, and at the extreme, the viability or sustainability of individual businesses.

Indeed we are now seeing real world examples where large multinationals are 'scoring' suppliers on their sustainability credentials, and effectively imposing financial penalties on those that are not in line with their targets, via changes to supply chain finance terms.

This means that examining the robustness and completeness of a 'net zero target', and how far it goes in terms of Scope 1, 2, and 3, is clearly a legitimate question for investors — and indeed why a company doesn't have one as a target (and the associated risk) is likely to become an increasingly asked, and important, question.

The Net Zero Club: Cost or Opportunity?

Given the likely increasing significance and proliferation of net zero targets, understanding who is part of the solution, and who might be seen as 'problematic' in a supply chain, is clearly of paramount importance for corporates, as well as investors. This is not just limited to individual companies — it is important, of course, for certain industries overall (particularly if they are carbon-intensive and showing little willingness to adapt), and as we have seen it is also likely to become an increasingly important issue at a national and international level for policymakers.

Our intention with the analysis conducted in our report is to try to bring some form of order and structure to the vast number, and wildly different ambitions, of 'net zero' targets out there in the market, such that we could see which industries were showing the greatest level of ambition in aggregate, the extent of leadership being shown by the largest companies, and whether the longer tail of companies is following suit (or indeed vice versa). From this, we are able to build a picture of the industries that might be viewed as lagging on progress or ambition — although as before, we absolutely recognize that for some industries this is a much more challenging goal. Moreover, activities such as a bank financing a corporate transition 'from brown to green' might not fit with a net zero target, but are arguably more progressive than blanket bans on investment, which may move brown industries into the hands of faster (more expensive) and less scrupulous money, which could lead to less systemic progress overall. We make no judgements here — the data is what it is, and must be considered in the light of these and other important considerations. As before, it is simply intended to advance the analysis and further the debate.

Data Sources

There are several different 'clubs' targeting net zero for their members. However, for our analysis, we build on the work compiled by the more comprehensive Science Based Targets Initiative (SBTi)[1], a collaboration between the Carbon Disclosure Project (CDP), the United Nations Global Compact (UNGC), the World Resources Institute (WRI), and the World Wide Fund for Nature (WWF), as well as being one of the We Mean Business Coalition commitments.

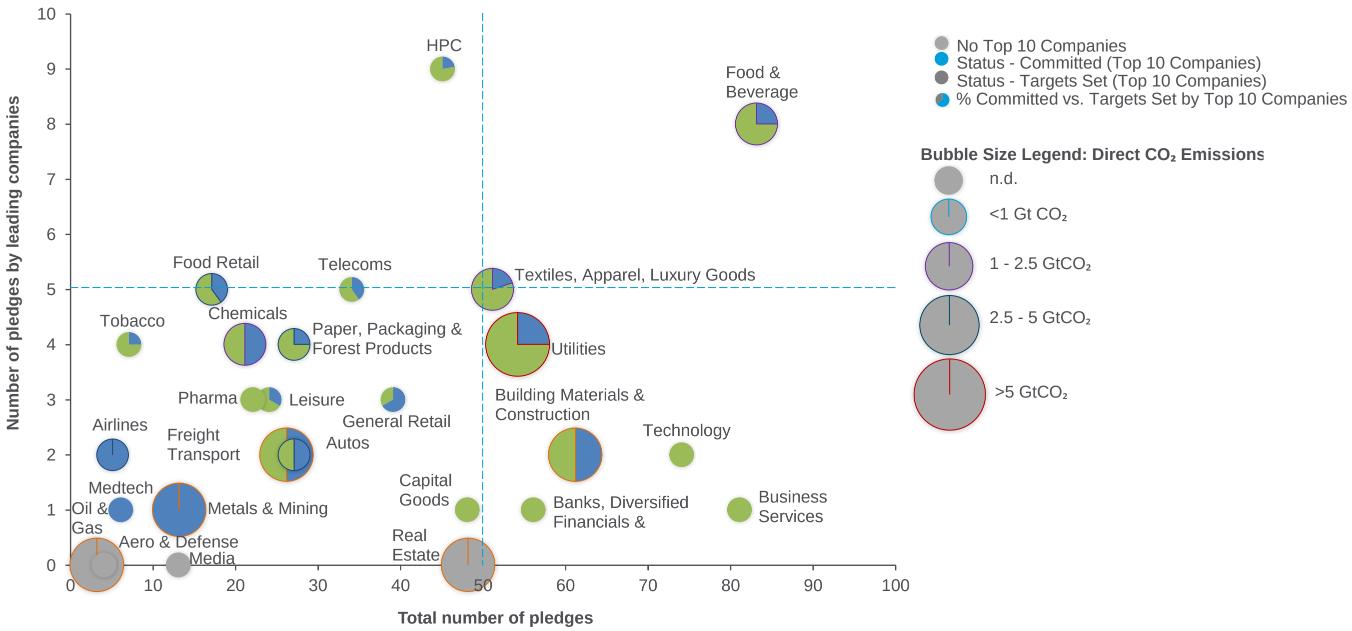
We have taken this data, combined it with market capitalization data as a simple proxy for 'size', and supplemented the SBTi data with our own analysis from company websites and other sources. We then mapped the SBTi data across 50 industries looking at the total number of pledges, as well as the number of commitments by 'top 10' companies, and whether these pledges were 'commitments' to net zero or whether they actually entailed detailed targets with trajectories, milestones, and strategies. We enhanced the data by checking for companies with commitments that had for some reason not been captured by the SBTi data. To provide further granularity to the data, we allocated direct CO_2 emissions to each sector in an attempt to highlight those carbon-intensive industries where net zero targets are likely to be significantly more challenging. Here, the absence of targets may not necessarily signal a lack of ambition; indeed, often quite the contrary, as this may entail a fundamental shift in the activities of the industry.

[1] https://sciencebasedtargets.org/ The company dataset was downloaded on 30 June 2020 and used for the analysis.

Pledges and Industry Leadership

Figure 2 shows the total number of pledges in an industry along the X axis, suggesting industries further to the right have more widespread commitments amongst companies. The Y axis shows the number of commitments by 'top 10' companies in an attempt to demonstrate the industries in which there is leadership being shown by the largest players.

Figure 2. Positioning of Carbon Intensive Industries



Source: Citi Global Insights, Science Based Targets Initiative, FT

We have divided the chart into quadrants, the simplistic positioning messages being as follows:

- Industries in the top right quadrant are showing widespread adoption of net zero ambitions, with strong leadership also being shown by the largest companies in those industries.
- The (well-populated) lower left quadrant shows industries where perhaps there are less widespread targets overall, as well as amongst the leading companies.
- The top left quadrant shows industries where there is strong leadership being shown by the largest companies, but where the 'tail' has yet to follow, implying there is significant scope for the rest of the industry to demonstrate ambition.
- Perhaps most interesting is the lower right quadrant, which implies there is significant ambition shown by the industry, but that this is perhaps not being reflected widely amongst the largest companies. This implies there is a significant opportunity for the largest companies in this space to step up, seize the initiative, and demonstrate leadership in their climate ambition, with all the implied potentially positive brand connotations.

We highlight a few notable takeaways, including implications of how this data might be interpreted and used, below. We would of course caveat this data again, not least regarding issues related to the 'concentration' of industries — clearly where an industry is dominated by a small number of very large players, this could distort the data, as it equally could in the case of a highly fragmented industry. As before however, the data is what it is — and our intention is only to further knowledge and debate of this important topic.

The Food & Beverage and Household, Personal & Leisure goods (HPC) industries stand out for the widespread range of ambition shown in the industry, alongside similarly strong levels of leadership being shown by the largest companies. Notably, a large proportion of the pledges by top 10 companies entail detailed targets rather than broader commitments, which may yet lack granularity, and hence might be deemed (simplistically) less ambitious or comprehensive. Furthermore, as the 'red border' shows for food and beverages, this is a carbon intensive industry, and hence commitments here are not easy. Clear implications are that, perhaps unsurprisingly, consumer-facing industries are showing widespread adoption and leadership in terms of net zero targets, given the impact this can have on brand perception and consumer attitudes. It also highlights the risk of being one of the few standout companies that are *not* adopting net zero targets within an industry.

The positioning of the Utilities bubble demonstrates the enormous progress the sector has made in greening its energy mix, showing broad pledges and leadership, with detailed net zero targets, especially considering it is one of the most carbon heavy sectors. Given where the sector started (e.g., coal and fossil fuel heavy), and that for some this will have entailed an almost complete rotation of assets, this sector is perhaps one of the greatest success stories in terms of its massive transformation over recent years.

Elsewhere, industries such as Building & Construction, Technology, Business Services, and Capital Goods show relatively broad commitment, but highlight the potentially huge opportunity for some of the larger companies to step up and show leadership within their industries.

Which brings us to the industries placed in the lower left quadrant on Figure 2. The key point here is to recognize that for many of these industries, carbon is such a fundamental element of 'what they do', that as discussed, making progress here is significantly more difficult. Autos is nevertheless making rapid progress in its transformation as a sector, though the data suggests there is scope for more full commitments to net zero and for more leadership from some of the largest companies. In a sector which, as we discussed in our Energy Darwinism 3 Citi GPS report, is likely to be a key area of focus going forward in the climate debate, the opportunity to demonstrate leadership here is a large one.

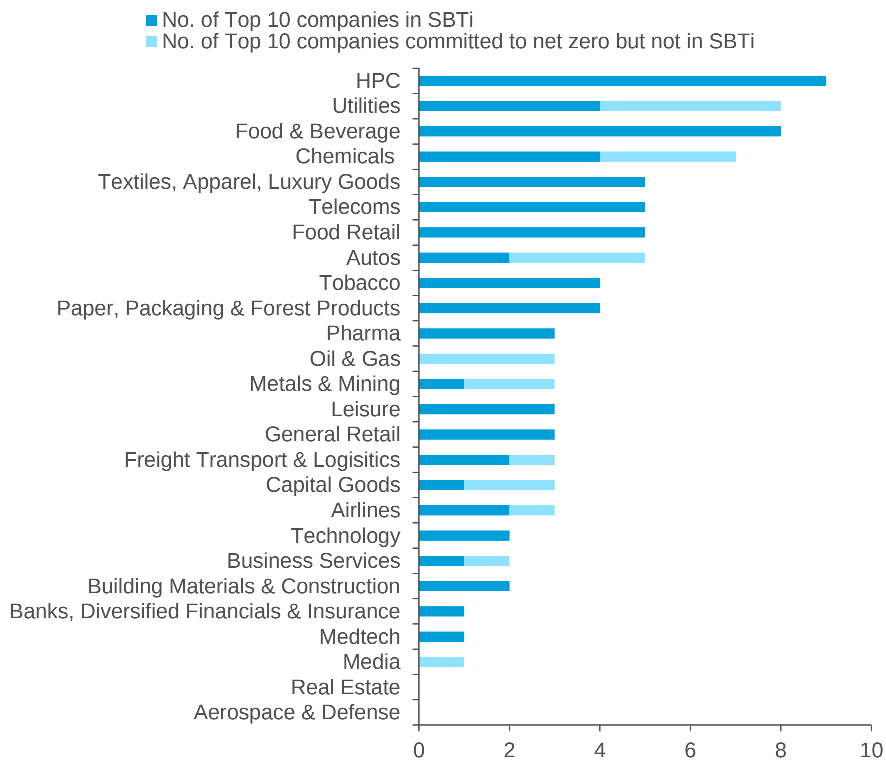
Elsewhere in this quadrant, we stress the point that some companies, notably several Oil & Gas majors, have made enormous progress in targets looking to reduce Scope 3 emissions by colossal amounts and to transition with their customers — but given the binary nature of the 'net zero' criteria used in the analysis here, they do not feature as a net zero target or commitment, or indeed fall outside the top 10 globally by market capitalization. Nevertheless, it highlights the challenges facing the industry. Airlines is in a similar predicament, as while electric planes are being developed, their commercial deployment is still some way off. Hence the ambition being shown by some is admirable, though detailed targets are understandably lacking, especially for an industry facing other challenges currently.

Metals & Mining, in particular Steel with its metallurgical coal issue, also faces fundamental challenges, but is beginning to step up, not least via the opportunities presented by hydrogen. Real Estate also faces fundamental challenges. While new buildings can be built to the most challenging LEED certifications and can be circular and zero emissions, the issue is with existing stock, much of which can't simply be pulled down and rebuilt.

Perhaps more disappointing here is the inclusion of Medtech, and in particular Media — neither of which sectors one would deem to be particularly challenging from a carbon perspective (certainly not in comparison to Coal, Autos, Utilities, Metals & Mining, etc.), where not only are there limited industry commitments, but also a lack of leadership being shown by many large companies. This surely represents another huge opportunity for large consumer-facing brands to step up and show leadership.

We should also issue another caveat on the data. While not all companies in the SBTi database have explicitly announced a commitment to net zero (and many more have not yet issued detailed targets), other companies outside of the SBTi have issued 'net zero' targets, which would not meet the criteria of the SBTi. Once again, it may well be the case that these targets, though not technically net zero, may entail a much greater level of ambition, as well as systemic benefit, than for a genuine net zero target from a non-carbon-intensive industry which *is* included in the SBTi. The following chart offers a brief snapshot into the further data granularity included in the full Tipping Points report.

Figure 3. Commitments to SBTi and Net Zero by Top 10 Companies



Source: Citi Global Insights, Science Based Targets Initiative, FT, Company websites

Once again, it is many of the carbon intensive industries, such as Utilities, Chemicals, Autos, Oil & Gas, Metals & Mining, and Capital Goods that fare better in terms of commitments from leading companies than is initially suggested by the SBTi data. Indeed, as before, we should recognize there are some companies within the SBTi that have not set targets, while some of these larger companies outside of the SBTi (captured here) have actually set more challenging targets. Hence not being part of the SBTi should not necessarily be viewed as a 'negative' thing.

Which finally brings us to Banks, Diversified Financials & Insurance, which is notable by its absence from the previous charts. Clearly the impact that a bank or an asset manager can have by addressing its Scope 1 and Scope 2 emissions is (while still important), very small in comparison to the impact of its Scope 3 emissions in terms of the businesses which it finances or lends to. The debate continues to rage for financials as to whether it is better to simply divest or cease to fund carbon heavy assets, versus remaining invested/lending to, and engaging with corporates (or indeed sovereigns) to bring about transition and change. Our own view is that the latter is absolutely the right approach, and while recognizing the positivity and intent of the former, our team believes the second is the only pragmatic approach. To summarize the debate, withdrawing capital can often bring about less systemically-optimal solutions in industries that still have a 'need' to exist as alternatives may not yet exist, whereas providing transition finance can bring about greater systemic benefits, at the same time as potentially providing greater financial returns for investors as well as allowing them to demonstrate additionality.

While there is still much more the finance industry can do, the messages being sent about the future withdrawal of capital are sending important signals about both the availability and likely cost of capital to so-called 'brown' industries. The first financial institutions have started talking about net zero on a Scope 3 basis, and it seems likely to us that over time more will follow, with increasingly granular plans. As before, this is not just good for the planet and society, but it is also good business — if the economy is going to transition in this way, which in our view it should and will, then sustainable businesses with net zero targets are the ones which are going to survive, and conversely carbon-heavy industries raise the risk of exposure to stranded assets, alongside significant reputational risk, with all that that entails for business models. By providing the advice and financing to enable those customers to transition their business models and activities to more sustainable ones, the financial industry can be an important and valuable ally along the transition pathway, as well as provide systemic benefits, and transition to a net zero industry on a Scope 3 basis in its own right.

Financial innovation will be enormously important in helping those customers to finance their transition. Green, social, and sustainable bonds represent an important element, and will continue to grow in size and significance. KPI-linked bonds (the topic of a previous 'Tipping Points' report) can also play an important part in this transition, signaling the genuine intent of a company (or indeed a sovereign) to transition, or to pay a financial penalty in the form of a higher coupon — quite literally, 'putting their money where their mouth is'. Similarly, sustainability-linked loans or sustainable supply chain finance, or indeed any transaction where the cost of capital is tied to the achievement (or otherwise) of a company's KPI targets, will also help to drive this transition.

Conclusions

As the focus on climate change and emissions continues to grow, we as individuals and as a society are taking an ever greater interest in what part the companies whose services and products we buy are playing in the battle against climate change — be it a positive role, or indeed a negative one.

Mindful of this and of the need to build a sustainable business model for the longer term with reduced risk of taxation, litigation or stranded assets, companies are transitioning their business models towards lower or net zero emissions models to be a part of the solution, rather than the problem. This has led to the rise of the 'net zero' target as the ultimate expression of a desire not to contribute in any way to climate change.

However, not all net zero targets are created equal and the toughest and most comprehensive of these — the 'Scope 3' net zero target — requires a company to instigate change across elements of its supply or distribution chains, including those which it does not directly control.

In practice, this means a company with a Scope 3 net zero target is (all things being equal) more likely to use suppliers or counterparts with similar targets who will effectively help them reach their targets, rather than creating a 'gap' which might have to be filled by carbon offsets. These offsets cost money, and hence the quid pro quo for retaining that supplier may be a demand for a reduction in the price of a supply contract. While very early days, the rise of the so-called 'net zero club', where businesses with similar targets start to coalesce around these net zero ambitions, provides potential for these businesses to actually grow, take market share, and expand margins as they service each other. By the same token, there is potential for companies with limited or no ambition to be 'shut out' of strategic discussions, to suffer margin and volume contraction, and ultimately to be shut out of these supply chains — not to mention have their cost of capital gradually increase, to the point where it may ultimately be shut off completely.

While risks and opportunities exist for corporates, an equally enormous opportunity exists for the financial community to provide innovative financial instruments to finance the transition, such as green, sustainability or social bonds, sustainable supply chain finance, sustainability-linked loans, or indeed KPI-linked bonds, which could showcase that transition via the inclusion of metrics and milestones. Opportunities that demonstrate societal purpose and provide systemic benefits, all while generating growth and producing a financial return, should be seized.

Sustainability and the worlds of business and finance have often existed in parallel, but struggled to translate, and in particular to quantify, sustainability issues into financial ones. For too long we have seen sustainability and finance as separate entities with sustainability seen as a cost that is 'indulged' at the expense of margins. Indeed, well-intentioned sustainability-related schemes promoting the reporting of so-called 'non-financial' metrics do little to help dispel this myth by their choice of language. What is so exciting about the net zero club and its potential impact on supply chains is that it represents a tangible example of a sustainability-related issue directly impacting pricing and margins — sustainability meets finance in the most fundamental sense. As consumer sentiment and societal attitudes continue to shift, we should expect this to become the norm rather than the exception, with finance and sustainability walking hand in hand in the same direction, and gradually becoming indistinguishable from one another.

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