



Universal Owner

Maximising Investor Impact
An Analysis of Climate Engagement
in the Utility Sector

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Executive Summary

- Investors are increasingly engaging with their portfolio companies to demand action on climate change. Yet we currently have little way of determining what the impact of investor engagements are, or which kinds of engagement tend to be most impactful. This report takes a first step towards filling this gap. We introduce a novel methodology to track, measure and score the impact of engagements. We then describe the results of a pilot study examining 115 engagements with 15 utility companies from 2015 to 2020, focusing on the question of which 'asks' have tended to have the most impact.
- We discover a stark variation in the impact of different engagement asks. Investors tend to have the most impact when they push companies to make material changes to their business models and reform their political lobbying. Yet these are not the typical asks of most of the world's leading institutional investors, which concentrate on climate risk and disclosure, which has produced few observable impacts. Despite many encouraging steps, the majority of investors are therefore far from maximising their impact. We call this the 'engagement gap'.
- Asks for net-zero targets have met with broad success. But this average conceals a wide variation in both the quality of the targets adopted and companies' steps to fulfil them. Utilities often adopt net-zero targets covering only Scope 1 emissions and can defer emissions reductions because they do not adopt accompanying mid-term targets. When they do adopt mid-term targets, they are often under-ambitious: setting them on a rate of decarbonisation short of what is necessary to reach their net-zero goal. Most of the utilities to have adopted net-zero targets have not yet taken tangible steps to realign their business model to meet them.
- We also found a stark inconsistency in the quality of scenario analyses. Southern's 2018 climate report failed to reckon with any of the key areas of risk identified by the TCFD. Origin's 2017 and 2019 analyses excluded its integrated natural gas business, Duke's 2017 and 2020 studies relied heavily on unproven technologies, AES's 2018 analysis failed to break down the trajectory the company would have to follow on the way to meeting a 2°C scenario in 2050, and Dominion's 2018 report neglected to address how the company intended to act on the results of its analysis.
- Asks for companies to audit and reform their political lobbying have had the highest impact, on average, of any ask we studied. In contrast, demands for companies to disclose their political lobbying spend had the lowest average impact. The key difference is that 'audit' asks require companies to adopt the Paris Agreement as a standard of action, publicly evaluate their lobbying against it, and correct any outstanding problems. It therefore often leads to material changes in lobbying, not just the disclosure of lobbying activities.

Preface

If the world is to avert catastrophic climate change, greenhouse gas emissions have to nearly halve from 2010 levels by 2030, before bottoming out at net zero by 2050¹. This will require a sustained and far-reaching social and economic transformation. Publicly listed companies are responsible for more than a fifth of the world's emissions². The financial system exercises ownership rights over these companies, giving investors the ability and responsibility to propel decarbonisation across their portfolios.

What exactly should investors do? In the primary market in which securities are created – stock offerings and bond sales – investors can affect firms' growth-trajectory through their capital allocation³. By investing in green companies that are capital-constrained, or what is known as 'impact investing', they can help change the market's composition. But in the secondary markets in which securities are exchanged, the stock market, there is little evidence to suggest that an investor's allocation of capital can impact companies' real-world activities. In these markets, investors can use the leverage that their equity gives them over the companies in their portfolio to demand decarbonisation. This is known as engagement and can take a variety of forms: dialogue, shareholder voting, even legal action. Many of the world's leading asset managers have begun to roll out serious policies on climate engagement, and the industry has coalesced around a common engagement platform, the Climate Action 100+ (CA100+).

Yet we lack an answer to one of the most pressing questions about engagement. How can we measure its impact upon companies? Without this knowledge, we have no real way of determining which kinds of engagement work, and what best practice for investors should look like. Asset owners are unable to make informed mandate decisions, and beneficiaries are blind to whether their money is making a real difference. Because of this obscurity around environmental impact, lawmakers in the European Union and the United States increasingly see the booming 'ESG' industry as a consumer protection issue. There is an acute legal need for investors to be able to verify the impact they claim for themselves.

This report takes an initial step towards addressing this knowledge gap. In the first half, we outline what engagement impact is and why it matters, and describe the first iteration of a novel methodology to measure investors' engagement impact. In the second half, we apply this methodology to the utility sector, studying what impact investors have had engaging with 15 of the world's largest utilities from 2015 to 2020. In total we analyse a database of 115 engagements, while drawing upon insights gleaned from interviews with over 20 leading utility engagers. We focus on the question of what the average impact of different engagements asks has been, to help establish how investors can have the most impact. This report is conceived of as a pilot study, a small-scale analysis designed to help us refine our methodology and plan for a larger study. While we are confident in our results, they are nevertheless provisional and need to be corroborated in future studies. Our hope is that by reporting our research at this early stage, we can help catalyse a wider conversation about engagement impact.

1: IEA, 2020, '[Achieving Net-Zero Emissions by 2050](#)', World Energy Outlook.

2: CDP, 2017, [Carbon Majors Report](#), p.10.

3: For a recent summary, see Julian F. Kölbels et al., 2020, [Can Sustainable Investing Save the World? Reviewing the Mechanisms of Investor Impact, Organization & Environment](#), 33(4), pp.554–574.

Part 1: Measuring Engagement Impact

1.1 Why engagement?

Investor engagement around climate change is rapidly accelerating. Stewardship codes are proliferating around the world, the CA100+ coalition now represents institutions with over US\$52 trillion assets under management, while LGIM, BNP Paribas, Allianz and other leading asset managers are adopting increasingly assertive engagement policies. In early 2021, BlackRock, the world's largest asset manager, vowed that it would engage across its portfolio asking for the publication of transition plans consistent with a 2°C world – a potentially momentous shift in financial power.

These developments not only reflect a growing consensus about the grave urgency of the climate crisis. Investors have redoubled their *engagement*, in particular, in light of three structural changes to the financial system: the concentration of equity, the rise of passive index funds, and that investors are gradually adopting the outlook of universal owners ⁴. As a consequence, investors now, more than ever, have both the ability and the interest to engage on climate.

Equity concentration. In the past the dispersion of shares across society deprived individual shareholders of the kind of leverage necessary to effectively engage with companies. But this is no more. Over the last twenty years public equity has become increasingly concentrated in the hands of asset managers. The 'Big Three' – BlackRock, Vanguard and State Street – now hold 20% of the average S&P 500 company ⁵. BlackRock alone has a 5% ownership stake in 2700 companies worldwide ⁶. 2019 marked a historic tipping point in which the assets of non-bank financial institutions overtook that of banks themselves ⁷, with asset managers now holding well over US\$100 trillion in assets ⁸.

Passive investing. This trend has advanced in lockstep with the rise of index funds. In contrast to active funds in which portfolio managers try to pick stocks to beat the market, index funds are designed to passively track the performance of market indexes. Their soaring popularity is largely due to their low management costs, diversification across the market, and reliable long-term returns. One conspicuous upshot of this development, however, is that by locking investors into indexes it denies them the ability to 'exit'. Unable to select, screen or divest their holdings, engagement is the main route to an effective 'ESG' policy left open in these funds.

Universal ownership. Both the growing concentration of market equity within asset managers and the prevalence of heavily diversified index funds means that investors are increasingly exposed to a representative slice of the entire market, making them 'universal owners'⁹. It is not in their interests for any one of the firms in their portfolio to externalise costs onto the rest of the market – because those costs will be borne by the rest of their portfolio. The idea of universal ownership is best thought of as an ideal-type, or a simplified model. The fee structure of asset managers, the law surrounding fiduciary duty and the

4: On these trends, see Benjamin Braun, forthcoming, '[Asset Manager Capitalism as a Corporate Governance Regime](#)', in J.S. Hacker et al., *American Political Economy: Politics, Markets, and Power*. Cambridge University Press: New York, USA.

5: Jan Fichtner & Eelke M. Heemskerk, 2020, '[The New Universal Owners: Index Funds, Patient Capital, and the Distinction Between Feeble and Forceful Stewardship](#)', *Economy and Society*, 49(4), p.510.

6: Ibid., p.503.

7: Adrienne Buller, 2020, '[Doing Well by Doing Good?](#)' *Examining the Rise of Environmental, Social, Governance (ESG) Investing*. Commonwealth, p.1.

8: Thinking Ahead Institute, October 2020, '[The World's Largest 500 Asset Managers](#)'.

9: For an overview, see Ellen Quigley, '[Universal Ownership in the Anthropocene](#)'. Unpublished.

fragmentation of agency along the investment chain complicate this picture. Yet asset managers are taking encouraging steps in this direction, and are increasingly acting to mitigate the systemic risks that climate change poses to the market.

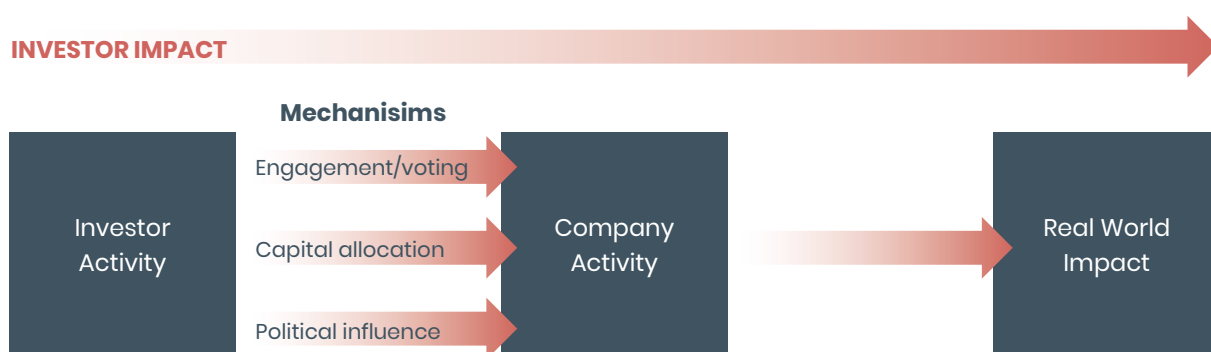
1.2 Why engagement impact?

Despite these converging trends, we still lack an answer to one of the most fundamental questions about engagement: how to track, measure and score its impact. Without this knowledge, we have no way of establishing which kinds of engagement are most effective. Investors are unable to create reliable indicators to monitor and improve their engagement. At the same time, beneficiaries, stakeholders and civil society lack the tools to hold investors to account on climate change.

What is impact?

It is often said that an investor's impact is the sum of the impact of its portfolio companies. On this view, if an investor owns 5% of a renewable energy company, it can claim credit for 5% of that company's real-world activities. The problem is that this fails to take account of additionality, or whether the addition of the investor's capital made any difference to the company's activities. What matters is not a company's exposure to emissions, but what it does to change those emissions.

It is partly for this reason that engagement is so imperative. In the secondary markets in which securities are exchanged, there is little evidence to suggest that, if an investor exits from a carbon-intensive company, this will do anything to curb those emissions. Investors can often achieve the most impact in these markets, then, by using the leverage which their holdings give them over carbon-intensive companies to demand change.



Does engagement have impact?

Sceptics occasionally protest that engagement has no impact at all. But it is easily shown that the demands of engagers are often acted upon by companies. An authoritative recent review of the academic literature concluded that the success rate for all kinds of engagement hovers somewhere between 18% and 60% ¹⁰. Ceres found that of the climate resolutions filed in 2019 that it logged, 39% of them were withdrawn by the investor ahead of AGM voting after the company agreed to act upon the issue ¹¹. There are many well-known success stories too, like when a coalition of investors came together in 2020 to successfully press BP to adopt a commitment to reaching net-zero emissions by 2050. It is implausible to suggest that all these successful efforts to shift company behaviour come to nil.

The truly relevant question is not whether engagement ever has impact, but *which* kinds of engagement have the most impact. Looking across successful engagements, which asks and strategies have tended to move companies furthest towards the Paris Agreement's objectives? Answering that question requires a way to evaluate engagement impact. Our own results present a mixed picture: engagement can be an effective way for investors to impact companies, but the majority of investors are far from maximising their impact. We call this difference the 'engagement gap' (discussed in Section 2.3)

Why do investors need to be able to prove impact?

Investors have many reasons to evaluate the impact of their engagements. Most simply, if investors cannot measure their engagement impact, they will struggle to judge how successful their efforts are and identify where they need to course-correct. Proving impact is therefore essential to achieving impact.

Investors also face growing legal and regulatory scrutiny around financial products marketed as environmentally impactful. Surveys suggest that the key goal of consumers seeking out sustainable investments is to help bring about changes in the real economy, i.e., to achieve verifiable impact ¹². Lawmakers are therefore increasingly viewing the rise of ESG investment as a consumer protection issue.

Do claims about environmental impact mislead, or can they be proven? The EU's Multi-Stakeholder Dialogue on Environmental Claims (MDEC) introduced two principles to judge these claims: they must be presented in a clear, specific, accurate and unambiguous manner, and investors must have the evidence to support them and be ready to provide it. When 2 Degrees Investing Initiative (2Dii) judged the impact claims of over a hundred sustainability funds, they found that 98% of those claims failed to meet the principles set out by the MDEC ¹³. Investors could not objectively substantiate the impact they claimed for their financial products. This risk is far from hypothetical: a lawsuit has [recently](#) been filed against DekaBank on similar grounds to these in Germany, while the Securities and Exchange Commission has set up a new [taskforce](#) to investigate misleading marketing around climate impact.

¹⁰: Kölbel et al., [Can Sustainable Investing Save the World?](#), p.560.

¹¹: Ceres, 2020, [Proxy Voting Guidebook 2020](#), p.2.

¹²: 2Dii, 2019, [Impact Washing Gets a Free Ride](#), p.19.

¹³: Ibid., pp.26–28.

1.3 How can engagement impact be measured?

When an investor succeeds in changing the behaviour of a company by engaging with it, the impact of that engagement can be calculated from two values. First, the size of the resulting **outcome**. How far did the company's actions move it towards the objectives of the Paris Agreement? Second, the share of **responsibility** that can credibly be attributed to the engagement for bringing about that outcome. What was the engagement's role when set against other, intervening factors? These twin problems do not admit simple answers. As discussed, this report is a pilot study designed to help us iterate our methodology, and plan for a larger undertaking in the future. In what follows, this caveat should be kept in mind.

Research scope

We have chosen to focus this pilot study on the **utility sector**. This is because there is a compelling case to be made that of all economic sectors, it is in the utility sector that investors can achieve the most impact. Utilities are the keystone of the fossil fuel economy. Electricity generation accounts for 40% of all energy-related greenhouse gas emissions¹⁴. Other sectors that sit downstream from utilities can only effectively decarbonise if clean energy is first made available to them¹⁵. The electrification of road transport, industry and heating, for example, is essential to the transition to a low-carbon economy. Changes to the utility sector thus have the potential to ramify across the economy. We have chosen, for this same reason, to focus upon fifteen publicly listed utilities drawn from Climate Action 100+'s target list of the largest gross emitters in the world. Those utilities are as follows: AES, AGL Energy, CEZ, Dominion Energy, Duke Energy, ENEA, E.ON, Iberdrola, Kansai Electric Power, KEPCO, NextEra Energy, Origin Energy, RWE, Southern Company, and Tokyo Electric Power..

We study fifteen utility companies spread across **four continents** – North America, Europe, Asia and Australasia – for several reasons. The utilities responsible for the most carbon-intensive power generation in the world are not concentrated in any one region. While [North America](#) and [Europe's](#), coal-powered energy production has dipped over the last thirty years, for example, production across the [Asia Pacific](#) region has increased by more than three and a half times. Investors have tended to focus their engagement on North America and Europe, though this is slowly beginning to change. We seek to help redress this balance by taking a global view, commensurate with the scale of the task. There is also another, methodological reason for taking a global perspective. Many of the factors that need to be held constant to gauge the impact that individual engagements have on companies are systemic in nature. For instance, shareholder rights, investor culture and state regulations all vary by region. The effect of these factors can only be properly understood within a comparative perspective, by contrasting cases in which they are present, to cases in which they are not, to help isolate their role.

Due to the modest size of this study, we have chosen to test our methodology against a single question: which **engagement asks** tend to have the most impact? This is a tractable question. At the heart of any engagement is a demand made of a company. In this sense the number of asks we study is coterminous with our total sample of engagements. This is also a question of enormous potential significance. The ask made in an engagement defines the limits of what it can achieve: a company will rarely exceed what is demanded of it. Yet, there is a stark variation in the asks made by investors. Unlike other variables that likely

14: IEA, 2019, [Tracking the Decoupling of Electricity Demand and Associated CO2 Emissions](#).

15: See, for example, IEA, 2020, [Global EV Outlook](#); McKinsey, 2020, [Plugging in: What Electrification Can do For Industry](#).

predict impact – such as the prestige or assets of an investor– all engagers can change their engagement asks at no cost. Lessons about which asks tend to yield the most impact can be readily implemented by engagers of all types and sizes.

Data generation

We begin by identifying every engagement with our fifteen chosen utilities between 2015 and 2020. We then systematically generate data for each of these cases. We set a timeline of how investors have engaged with the utilities on each issue – e.g., climate risk, target-setting, political lobbying – against a timeline of how the utilities have changed on those issues. We then overlay these two timelines to establish, for each engagement, what company changes it may have played a role in bringing about. We proceed to write detailed case studies on these engagements, encompassing both the interplay of investor and company, and the context in which it took place. We draw our data exclusively from public records, including annual reports, sustainability reports, CDP disclosures, earnings calls, and policy and academic research. We pay special attention to two kinds of variables:

- **Systemic factors** that structure the context in which engagement takes place, enabling and constraining what an investor can do and achieve. This includes a country's shareholder rights, norms and expectations around shareholder activism, the presence of any regulation bearing on the issue engaged on, or the full or partial ownership of companies by the state.
- **Intervening factors** that helped bring about the outcomes that the engagements played a role in. We can then establish what share of responsibility these different factors have for the outcome to isolate the engagement's individual contribution. These factors include other engagements, campaigns, market forces, and state regulation.

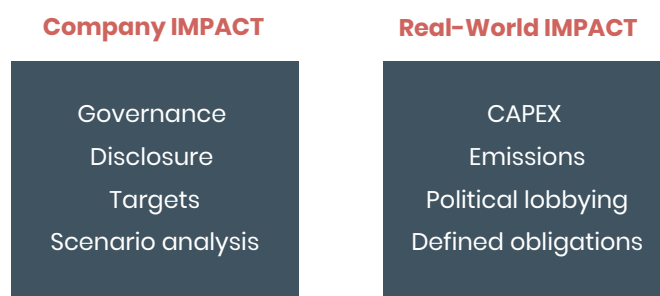
Systemic factors: The example of shareholder rights

In Germany and the Czech Republic, where RWE, E.ON and CEZ are domiciled, the financial requirements to file a shareholder resolution are formidable. In German law it requires 5% shareholdings or EUR500,000, while in Czech law, it requires a 5% share of equity for companies with capital under CZK100 million, 3% of shares in companies with capital between CZK100 and CZK500 million, and 1% of shares in companies with capital over CZK500 million. By contrast, the threshold to file in South Korean law is just 0.5% for the largest companies. Other countries in our study enshrine an alternate route to filing than bulk stock ownership: in Australia 100 shareholders can file, in Japan 300 shareholders can, and under Delaware law – where most US companies are incorporated – a stockholder only needs to hold \$2,000 worth of shares to file.

The low requirements to file resolutions in the United States mean that small investors have an effective mechanism through which to influence companies. But this is not true in the Czech Republic and Germany. As a consequence, our dataset for European engagements is dominated by large institutional investors with significant financial leverage. This helps us interpret our results and qualifies cross-regional comparisons.

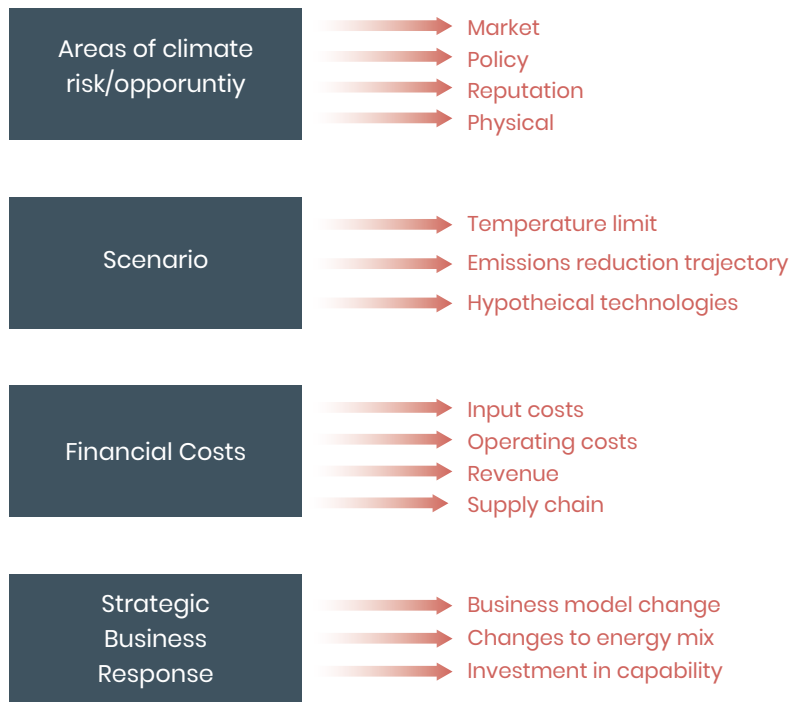
Scoring outcomes

We run the information gathered in our case studies about how companies have changed in response to investor engagement through a scoring framework. This gives us a score for the outcome of an engagement, that we later adjust to reflect the engagement's share of responsibility for bringing about that outcome. This framework is broken down into each of the issue areas on which companies are engaged on climate change: board governance, targets, net-zero targets, lobbying spending, lobbying audit, emissions disclosure, business model change, climate risk, and scenario analysis.



But the impact that can be had in these different areas is not of a kind. We make a high-level distinction between two different forms of impact. An investor has **real-world impact** when they help to green a company's business model and reign in its lobbying against climate legislation. An investor has **company impact** when they force a company to make changes that do not themselves affect their emissions, capital expenditure, or lobbying, but which may affect these real-world activities in the future. Both kinds of impact are important, but we believe that the ultimate index of an engagement's success is how far it moves a company's real-world activities towards Paris-alignment.

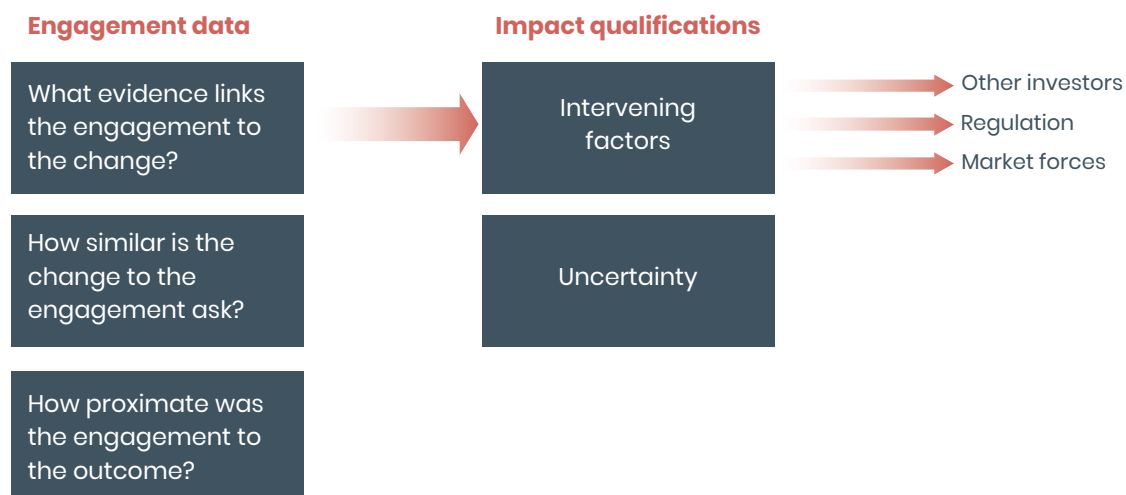
We use **numerical scales** to measure how far companies move towards the Paris Agreement's expectations in each of these areas. We build these scales around widely recognised standards of company behaviour, from the least to most impactful actions that a company may take. For the purposes of illustration, the table below enumerates the criteria against which we evaluate one of these areas: scenario analyses. Drawn from TCFD and IIGCC guidance, these criteria together draw a complete picture of what a quality scenario analysis should look like.



First, analyses should take account of the principal areas of material risk posed by climate change: market and technological changes, new regulation and legal constraints, shifting consumer sentiment and associated reputational risks, and the direct physical risks which climate change threatens. Second, analyses should model how the company would be affected by a Paris-aligned scenario, and outline the emissions reduction trajectory the company would have to follow to meet that scenario over the short- and medium-term. Its envisioned energy mix should not depend heavily on unproven technologies. Third, the analysis should also model how key indicators of financial performance would be affected by a Paris-aligned world, such as its input costs, operating costs, and revenue. Finally, it should draw out the company's strategic response to the findings of the analysis: what actual changes it must begin make to its business model, energy mix, and investment plan to meet the demands of a Paris-aligned world. We score how scenario analyses stand against each of these four areas, and then average out these four scores to reach a final number.

Assigning responsibility

Our scoring framework takes those cases where a company changed on an issue after having been engaged on it by an investor, and then measures how far that moves them towards Paris-alignment. But we then need to moderate these scores to take account of the exact contribution that each individual engagement made to these outcomes. Other factors have usually intervened to help bring about the outcome, entirely independent of the investor's efforts. An investor can only claim credit for a share of an outcome proportionate to their responsibility for bringing it about. This is the problem of **multicausality**.



The issue of multicausality means that there can be no avoiding in-depth analyses of each engagement, and company engaged with. Only then can an informed judgement be made about the balance of factors at play in a given company change. This is one of the principal reasons that any study of engagement impact cannot be limited to collecting fixed data points, but has to be anchored in qualitative case studies. While every case differs, we use three heuristics to guide our analyses of the relationship between an engagement, and an outcome.

1. First, the **direct evidence** tying the investor's engagement to the company's change, such as descriptions of the engagement by the investor, information gleaned from media reports, or company statements.
2. Second, the **similarity** of the change undertaken by the company to the demand made by the investor. In those cases where the investor made a highly specific ask for which the company would have no other likely reason to act on, this gives us a strong reason to believe they played a key role.
3. Third, and most simply, the **proximity** of the investor's engagement to the outcome. In general, the more time that separates the two events, the less likely it is that the engagement played a decisive role.

We can often apply these heuristics to establish the relative contribution of other factors to an outcome, which might come in a variety of forms: other engagements, state regulation, civil society campaigns, and market forces. But once again, because the details of these intervening factors will vary so widely, any complete assessment will have to include case-specific knowledge built up in detailed qualitative studies.

Yet there is a further complicating factor: the fact that our information about cases is always, to varying degrees, incomplete. We are therefore interested not just in responsibility, but in what we call 'credible responsibility'. In light of the evidence available to us, what share of responsibility can we credibly give to an engagement for an outcome? This is the problem of **uncertainty**. We take account of this to generate a 'credence score' for each engagement, reflecting how complete our information is about the role of the engagement in the outcome and the role of other factors. The less information we have available to us, the less responsibility we can credibly assign to the investor's engagement.

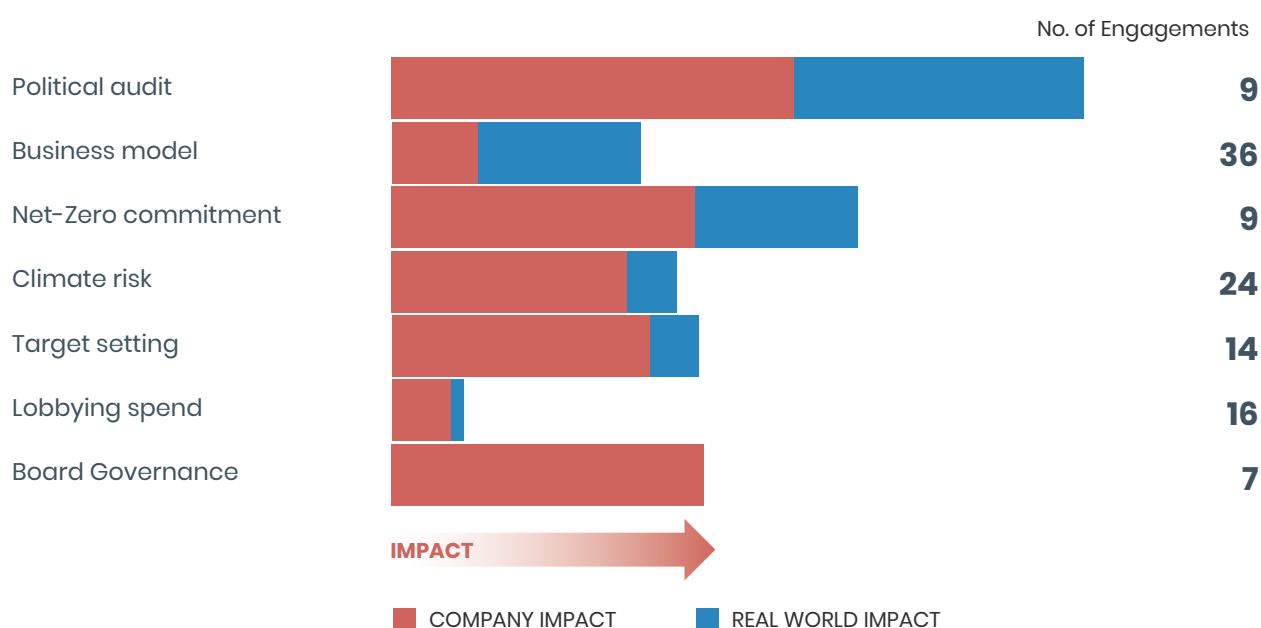
Part 2: Studying Engagement Impact

2.1 Asks

All investors can choose what to ask of their portfolio companies. Yet the possibilities are wide-ranging. Should they ask for increased transparency on lobbying spending, for tighter board governance around climate, the introduction of new emissions targets, or accelerating renewable investment? As these options are so starkly different there is good reason to think that their impact is correspondingly varied. Simultaneously, lessons about which asks tend to yield the most impact are of wide relevance. It is a variable that can be changed in every engagement at little to no cost, by every type of investor.

We studied this question by analysing correlations between engagement impact scores and ask issues, while analysing the influence of other variables on engagement impact – like state regulation, shareholder rights, and investor prestige – in order to control for them. Our top-line results are represented in the chart below. Note that the ‘climate risk’ category includes scenario analyses, and that we have excluded asks for increasing ‘emissions disclosures’ because we found only a small number of engagements on this issue in our sample. The chart separates out company impact and real-world impact.

Average impact by ask issue

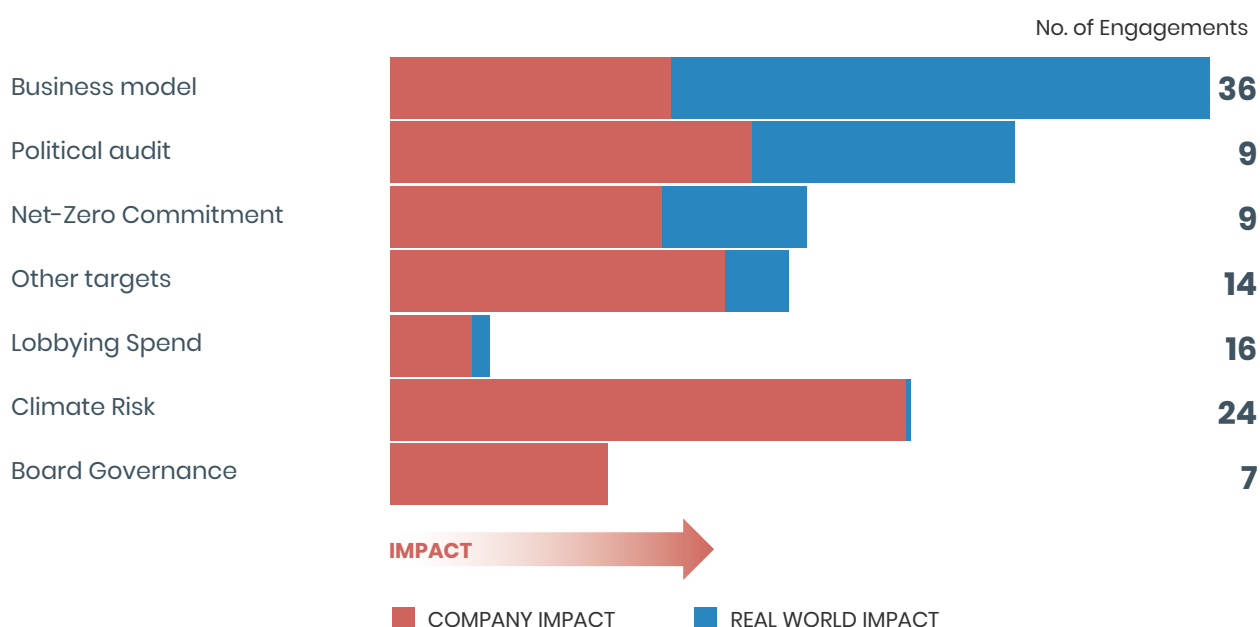


As expected, we discovered a wide variance in the average impact of different asks. Our single clearest result in this regard was a negative one, that investors asking companies to disclose their **political lobbying** spend had little impact. Of fourteen engagements on the issue, only four of these had any impact on company policy. There is no evidence to suggest that disclosure translated into real-world changes to the companies' political activities in any of these cases. Together, this meant that on average these engagements' total impact was just a third of the next lowest ask issue. These asks were particularly prevalent in the United States.

This stands in stark contrast to engagements calling upon companies to audit and reform their lobbying. On average, this ask had the most real-world impact. Soon after AGL and Origin Energy audited their political lobbying, for example, they both left the obstructionist Queensland Resources Council, to great consequence. What explains the difference between asks for political audits, and asks for the disclosure of lobbying spend? One reason is that the former asks companies not only to disclose their lobbying, but to actively judge it by the standards of the Paris Agreement and resolve any deviations. It therefore forces companies to change their real-world activities.

We found a similar trend in the handful of cases we studied in which investors asked for increased emissions **disclosures**. All of them failed to lead to real-world changes in the companies targeted. This is suggestive: across the board, disclosure is the least effective ask in our dataset. The underlying reason is that there is no reliable causal mechanism connecting disclosure, to changes in real-world activities. Disclosure may be of crucial importance for holding companies to account for their actions, but it does not itself drive change. .

Gross impact by ask issue



We found that direct asks for changes to a company's **business model** had the most wide-ranging success. Over many cases, investors of all types and sizes have achieved a considerable degree of impact by making concrete demands for companies to change their capital expenditure, investment, and energy mix. For this reason, more gross impact has been achieved through business model asks than any other ask.

Engagements asking for **net-zero targets** have met with broad success. Lead engagers for the CA100+ coalition contributed, to varying degrees, to seven of the companies in our study adopting net-zero targets. In developing our methodology, we discovered that creating a framework to score net-zero targets is a formidable task that inevitably involves some level of arbitrary judgement. The targets themselves do not shift a company's real-world activities, yet these are major commitments that do sometimes attend genuine shifts in corporate strategy. We decided to evaluate net-zero targets along these two axes: the quality of targets adopted (company impact), and whether there was strong evidence that companies were realigning their business models to meet these targets (real-world impact). Using this methodology, we discovered that asks for net-zero targets had a high average impact, but that this average concealed a wide variation in impact. Both the quality of targets, and their implementation, were inconsistent.

We judge the quality of net-zero targets based on their scope, whether actionable mid-term targets accompany them, and on the pace of decarbonisation that their mid-term targets – where they have them – set them on. Duke, Dominion and Southern have only committed to reducing their Scope 1 emissions to net-zero by 2050, while RWE has committed to do the same by 2040. Origin has not yet formally adopted a net-zero target, and has instead only pledged to do so in the future. At the same time, AGL and Dominion have failed to complement their commitment to net-zero with mid-term targets, meaning there is no check on their rate of emissions reductions. This leaves open the possibility that these companies will defer action far into the future. Duke and Southern have adopted mid-term targets, but not of an ambition commensurate with their net-zero commitments. For example, Southern's mid-term target puts it on pace to make annual reductions to its Scope 1 emissions that are a third of what it will need to reach net-zero.

Have these companies begun to take the steps necessary to change their business models to meet these targets? Putting aside E.ON, whose business model is already Paris-aligned, only Duke, RWE and Dominion have shown any significant realignment so far. Duke has announced new and accelerated retirements of fifty per cent of its coal capacity in the sixteen months since pledging to reach net-zero by 2050, for example, while Dominion has sold off its natural gas transmission and storage business since committing to net-zero. Take the contrasting case of Southern. It shows no substantial shift in its capital expenditure from fossil fuels to renewables, and on [current projections](#) will have more fossil fuel plants than almost any other company in the United States in 2050.

It is worth emphasising that of the nine of our utilities to have adopted net-zero targets, 2 Degrees Investing Initiative (2Dii) calculates that the existing and forward-looking renewable capacity of all of them except for E.ON and Iberdrola falls significantly behind a 2°C scenario. In other words, even in an area where investors have achieved real successes, companies are falling well behind the ambition necessary to avert catastrophic climate change.

In a similar trend, demands for companies to publish analyses of their exposure to climate risks – '**scenario analysis**' – have produced mixed results, partly because the quality of these analyses shows enormous variation. After the non-profit As You Sow [filed](#) two shareholders resolutions demanding that Southern evaluate its climate risks, for example, the company [published](#) a climate report in 2018 that failed to reckon

with any of the key areas of risk identified by the Task Force on Climate-Related Financial Disclosures.¹⁶ It did not address any specific source of risk — new technologies, future regulation, reputational harms, physical risks — and it did not model what Southern would have to do, strategically and financially, to decarbonise in line with the Paris Agreement. It also neglected to address the risk of stranded assets in coal which As You Sow had initially stressed.

Even when companies do publish fully-fledged scenario analyses, the robustness of their assumptions prove inconsistent. Origin's [2017](#) and [2019](#) analyses excluded its integrated natural gas business, Duke's [2017](#) and [2020](#) studies relied heavily on unproven technologies, AES's [2018](#) analysis failed to break down the trajectory the company would have to follow on the way to meeting a 2°C scenario in 2050, and Dominion's [2018](#) report neglected to address how the company intended to act on the results of their analysis.

What lessons can we take from this sharp variation in net-zero targets and scenario analyses? In the case of net-zero targets, investors can build on their successes by pressing companies to adopt targets that cover Scope 1, 2 and 3 emissions, and mid-term targets to check their rate of emissions reductions. Generally, those mid-term targets should set the company on a pace of decarbonisation commensurate with their commitment to net-zero. Even more importantly, investors can continue to apply pressure on companies after they adopt net-zero targets to ensure that they are taking the necessary steps to fulfil them. For most companies, their actions fall short of their promises.

As for scenario analyses, the issue is the inconsistent nature and quality of the reports. In part this is a problem of unregulated and conflicting standards. But investors could help forestall the issue by making more exacting demands about what they expect from a scenario analysis, denying companies the room to under-deliver. Otherwise, the danger is that some companies will use scenario analyses to improve their image – to 'greenwash' – without reckoning with the risks they face, informing investors, or changing their business models.

There remain serious questions about the efficacy of disclosure as a solution to company climate risk. For climate disclosure to achieve its states objectives, it requires:

- The standardization and universalisation of climate risk disclosure
- For investors to screen their holdings using common ESG criteria
- For this screening to depress the share prices of carbon-intensive companies
- For these revaluations to lead companies to reform their real-world activities

Yet, these criteria do not hold. The vast majority of institutional investors believe that current qualitative and quantitative disclosures on climate risks are uninformative and imprecise. ESG ratings are wildly inconsistent. One study found that 'companies with a high score from one rater often receive a middling or low score from another rater', and another that it is 'practically impossible to find two rating agencies that measure the exact same attribute for the same firm'. While there is some evidence that ESG screening can depress share prices when there is a significant enough capital movement, there is no empirical evidence showing that this precipitates any change in companies' real-world activities. It, therefore, stands to reason that even from the standpoint of company risk, investors ought to turn away from disclosure as an instrument to encourage companies to reduce their risk, and directly focus on the end that they are ultimately trying to bring about: a change in real-world company activities.

¹⁶: The Task Force on Climate-Related Financial Disclosures was established in 2015 by the Financial Stability Board. In 2017 it published its industry-standard, [Recommendations of the Task Force on Climate Related Financial Disclosures](#).

2.2 The Engagement Gap

Investors have a dramatically different impact on companies depending on what they ask of them. Our findings suggest that investors can have the most impact by pushing firms to audit and reform their political lobbying, to implement material changes to their business model, and – at least in some cases – to adopt robust net-zero targets. It is in these areas that investors have found the most success. Yet these are not the typical asks of the world's leading asset managers. This suggests that there is a major shortfall between the impact that investors could have, and are having. We refer to this as the 'engagement gap'.

What do leading asset managers engage with companies on? To answer this question, we reviewed the stewardship reports and engagement guidelines of the world's fifteen largest asset managers, ranked by assets under management ¹⁷. The results are set out in the matrix below ¹⁸. It should be noted that we have recorded what asset managers explicitly claim that they engage on, and that they may do more or less than this in practice.

Asset Manager	Climate risk disclosure	Emissions disclosure	Climate governance	Climate targets	Climate lobbying	Paris-aligned business model
Vanguard	X	X	X	X		
BlackRock	X	X	X	X		X
State Street	X	X	X	X		
Fidelity						
Allianz	X			X		X
JPMorgan Chase	X					
Capital Group	X					
BNY Mellon						
Goldman Sachs	X	X		X		
Amundi				X	X	X
LGIM	X		X	X	X	X
Prudential	X					
UBS	X		X	X	X	
BNP Paribas		X			X	X
Northern Trust	X	X		X		
Totals	11	6	5	9	4	5

¹⁷: Thinking Ahead Institute, October 2020, [The World's Largest 500 Asset Managers](#).

¹⁸: Key sources for each asset manager are as follows, including page numbers where relevant: [Vanguard](#) (p.9), [BlackRock](#) (p.9), [State Street](#), [Fidelity](#) (p.7), [Allianz](#) (p.21), [JP Morgan Chase](#) (pp.24–25), [Capital Group](#) (p.2), [BNY Mellon](#), [Goldman Sachs](#) (p.11), [Amundi](#) (pp.21–22), [LGIM](#) (p.8), [Prudential](#) (p.38), [UBS](#), [BNP Paribas](#) (p.19), [Northern Trust](#) (p.20).

Of the fifteen asset managers, we found that only four engaged on climate lobbying of any kind, and only five engaged with companies to push for Paris-aligned business models. In contrast, eleven of the asset managers engaged on climate risk, nine on climate targets, six on emissions disclosure, and five on climate governance. Two asset managers – Fidelity and BNY Mellon – appear not to have published any climate engagement policy at all.

Outside of a small group of engagers in Europe (Allianz, LGIM, BNP Paribas, Amundi), asset managers tended to operate within a paradigm of climate risk. They focused on asking companies to disclose financially material climate risks, and to publish targets to reduce those risks. To be sure, this is of vital importance. But it rarely influences the bottom-line, a company's real-world activities: their actual investment, capital expenditure, emissions and lobbying activities. Investors are not maximising their impact.

One indication that the status quo isn't meeting the scale of the climate emergency is that of the utilities studied in this report, all of them apart from E.ON and Iberdrola are heavily out of line with even a 2°C scenario. Despite the cumulative pressure from many investors, including many successes, this has not even come close to pushing utilities into line with the Paris Agreement. We have drawn on two sources of data on the Paris-alignment of our utilities, one on renewable and coal capacity, the other on political lobbying.

2 Degrees Investing Initiative (2Dii) has provided us with coal and renewable scenario analysis data consistent with what it has provided for the CA100+ benchmarking process. It uses 2Dii's Paris Agreement Capital Transition Assessment (PACTA), looking at companies' future asset-level production and comparing it against IEA scenarios for each technology based on 2026 forecasts. Companies' trajectories for each technology are assessed as either being below a Beyond 2°C Scenario (B2DS <1.75°C), below a Sustainable Development Scenario (SDS 1.75°C–2°C), above a Sustainable Development Scenario (SDS >2°C), or significantly above a Sustainable Development Scenario (SDS >3°C).

PACTA Analysis		
Company	Coal	Renewables
AES	Above SDS >2	Significantly above SDS >3
CEZ	Significantly above SDS >3	Significantly above SDS >3
Dominion Energy	Significantly above SDS >3	Significantly above SDS >3
Duke Energy	Significantly above SDS >3	Significantly above SDS >3
E.ON	Significantly above SDS >3	Below B2DS <1.75
Kansai Electric Power Co	Significantly above SDS >3	Significantly above SDS >3
NextEra Energy	Significantly above SDS >3	Significantly above SDS >3
RWE	Significantly above SDS >3	Significantly above SDS >3
Southern Company	Significantly above SDS >3	Significantly above SDS >3
AGL	Below B2DS <1.75	Significantly above SDS >3
Origin Energy	Significantly above SDS >3	Significantly above SDS >3
Tokyo Electric Power	No data	No data
Kansai	No data	No data
Iberdrola	Below SDS 1.75–2	Below B2DS <1.75
ENEA	No data	No data

We also use InfluenceMap's (IM) climate lobbying scores. InfluenceMap scores companies on a scale from A to F, with F being highly obstructive towards climate change policy and A being highly supportive. Companies that are graded below a B will tend to be directly or indirectly (through trade associations) lobbying against climate legislation. Alongside IM's present scores for the utilities, we also use past IM data – alongside our own research – to gauge how much progress the companies have made on climate lobbying from 2015 up until today. We express this as 'No change,' 'Some improvement,' or 'Significant improvement'.

Corporate political lobbying		
Company	Overall Scores	Progress, 2015-2021
AES	D+	No change
CEZ	C-	No change
Dominion Energy	D	No change
Duke Energy	D-	Some improvement
E.ON	B	Significant improvement
Kansai Electric Power Co	D	No change
NextEra Energy	C-	No change
RWE	C-	Some improvement
Southern Company	E-	Some improvement
AGL	C	Significant improvement
Origin Energy	C-	Significant improvement
Tokyo Electric Power	No data	No data
Kansai	No data	No data
Iberdrola	B	Some improvement
Enea	No data	No change

2.3 Three Impact Case Studies

KEPCO: Influencing a State-Owned Company

The Korea Electric Power Corporation (KEPCO) is the largest electric utility in South Korea, [responsible](#) for 93% of the country's electricity generation. The South Korean government owns a 51.1% stake in KEPCO, giving the state a commanding influence over KEPCO's corporate governance and decision making.

KEPCO has experienced intensive investor engagement over the past year regarding its planned investments in four overseas coal plants: Vung Ang 2 in Vietnam; Jawa 9 and 10 in Indonesia; Sual 2 plant in the Philippines; and the Thabametsi plant in South Africa. The standard mechanism for these engagements has been private dialogue, with media and divestment threats utilised when necessary.

LGIM, Sumitomo Mitsui Trust, and the South Korean non-profit Solutions for Our Climate (SFOC) have all led private dialogues with KEPCO over the past few years, increasingly focusing on KEPCO's overseas coal assets. In 2019, LGIM cut KEPCO from its ESG-themed Future World Funds, as 'the power company failed to meet environmental standards'.¹⁹ In January 2020, KEPCO stated it would 'participate in coal-fired power plants under strict standards in a limited scope'.²⁰

In February, a coalition of investors, four of which are members of the CA100+, [engaged](#) with the utility. The Church Commissioners, Sumitomo, APG, and UBS first led a private CA100+ dialogue with KEPCO, before writing to the Korean Energy Minister in March and threatening divestment. BlackRock engaged over a similar timeframe, conducting a private dialogue in March and then publishing a letter to KEPCO's CEO in late May, requesting a rationale for the overseas coal projects.²¹

In late June, despite this international pressure, the KEPCO board [approved](#) the Indonesian Jawa 9 and 10 coal plants. Following this, the board [approved](#) the Vung Ang 2 investment on 5 October. On 15 October, KEPCO's CEO Kim Jong-gap announced a sudden policy change. KEPCO would go [ahead](#) with its Vung Ang 2 and Jawa 9 and 10 plants, but would scrap or convert the Sual 2 plant in the Philippines and the Thabametsi plant in South Africa. KEPCO's marked shift in strategy is indicative of the significant influence of these various engagements through 2019–2020.

KEPCO's announcement was not enough for Nordea, backed by a coalition of 20 other investors, who sent a joint letter to KEPCO on 22 October, [warning](#) the utility of the risks of the Vietnamese project. KEPCO has not yet relented on their commitment to Vung Ang 2, but on 28 October they did make their [shift](#) in overseas coal policy official. Nordea's letter added substantially to the aggregate pressure on KEPCO to expand on the initial 15 October announcement.

The actions of the South Korean government qualify the responsibility we can attribute to investor for these changes. In April 2020 the ruling Democratic Party pledged to enact a Green New Deal, and in June President Moon announced that the Green New Deal would form on of the two pillars of South Koreans COVID-19 recovery strategy. A month later, members of the Democratic Party [proposed](#) a set of bills that would ban overseas coal development by KEPCO.

¹⁹: Nam Hyun-woo (26 August 2020), '[LGIM may take 'action' against KEPCO on coal projects](#)', *The Korea Times*.

²⁰: Edward White (23 February 2020), '[Global investors warn South Korea's Kepco over carbon emissions](#)', *The Financial Times*.

²¹: BlackRock, April 2020, '[BlackRock Investment Stewardship Global Quarterly Stewardship Report: Q1 2020](#)', p.27; David Stringer, Heesu Lee, and Aaron Clark (28 May 2020), '[BlackRock Warns Korean Utility on Overseas Coal Plant Push](#)', *Bloomberg*.

The Success of Political Lobbying Audits

The utility companies in this study are not passive takers of regulation; in every jurisdiction, they hold significant sway over the progression of legislation. This regulation, in turn, informs their future business models and the rest of the market's, making political influencing activities arguably one of the most significant impact any one company has on the system. Investor engagements on this issue formed a quarter of the engagements studied.

In the US, it is common practice for investors to file shareholders resolutions asking companies to disclose their political lobbying spend. The New York State Comptroller and faith-based groups have mostly led this through resolutions against Duke, Dominion, Southern, and NextEra since 2015.

Here the ambition is to curtail the anti-climate lobbying of companies by pressing them to fully disclose their direct and indirect lobbying expenditure. But these resolutions are notable for their high level of investor support, and low level of real-world impact. Companies have been remarkably resistant to change. For example, the New York State Comptroller's repeated [resolutions](#) calling on NextEra to disclose its lobbying activities have met with increasing shareholder support, rising from 39.57% in 2015 to as much as 48.71% in 2019. Despite this pressure, and the fact that NextEra is — compared to Duke and Southern — a relatively progressive climate lobbyist, it has nevertheless failed to meet investor demands.²² In 2020, NextEra filed with the SEC to [oppose](#) the latest iteration of the resolution. It argued, implausibly, that if it were to disclose its lobbying activities, it would reveal confidential information to competitors about 'where and what kind of projects the company intends to develop'.²³ Other investors, such as Duke, have dismissed similar investor demands on the grounds that, as an American company, it is already subject to some of the most thorough legal disclosure requirements in the world.

In contrast, a parallel track has been more successful. In 2017 the ACCR filed a shareholder resolution against BHP, which responded by adopting new board-level governance principles to align its trade associations with its climate values. The Church of England Pension Board and AP7 further corralled investors [representing](#) \$2 trillion around its Investor Expectations on Corporate Lobbying on Climate Change. The [audit](#) ask, which is now embedded into the CA100+ process, was put to RWE and Origin. In both cases, investor engagement had a clear company impact on both RWE and Origin. Both published a review of all their trade associations that influence climate policy, these groups' lobbying positions, and the action they are taking to resolve misalignments.²⁴

RWE's change in behaviour was superficial, however. Following the review's publication, the utility claimed that none of their trade associations was obstructive to climate legislation and therefore no further action was required.²⁵ Ostensibly, Origin was more decisive in following through with the conclusions of their report: the company identified strong misalignments with the Business Council of Australia and took action to change the lobbyist's position on critical issues such as Australia's [use](#) of carryover credits. However, it took intense public scrutiny and a [shareholder resolution](#) from ACCR in 2019 for Origin to reconsider its membership of the industry lobby group Queensland Resources Council (QRC). Origin [left](#) the QRC in

22: This is based upon InfluenceMap's assessments and scoring system. See: InfluenceMap (October 2019), '[Corporate Carbon Policy Footprint – the 50 Most Influential](#)'.

23: NextEra Energy (2020), [Notice of 2020 Annual Meeting and Proxy Statement](#), p.20.

24: RWE (2019), '[Industry Associations Climate Review 2019](#)'; Origin (August 2020), '[Review of Industry Associations including climate change policy](#)'.

25: RWE is a member of a number of trade associations that continue to resist the ambition of climate legislation, such as Business Europe. See: InfluenceMap (October 2019), '[Corporate Carbon Policy Footprint – the 50 Most Influential](#)'.

October 2020 after the group ran a [controversial](#) anti-green political campaign, but the groundwork for this shift was likely laid by the lobbying audit and ACCR's engagements.

Legal Action as a Potential Engagement Tactic

Until now, investors have taken a decidedly collaborative approach to engagement and have avoided filing litigation to force companies to halt the expansion of carbon-intensive energy production. But the urgency of the climate crisis suggests that, perhaps, investors should look again. Legal action is often protracted, contentious, and expensive, but a recent case demonstrates that it also has a huge potential for impact. Litigation filed by the non-profit Client Earth, and supported by investors, helped contribute to the European utility Enea cancelling the construction of their 1,000MW coal plant Ostrołęka C. How did this happen?

Enea convened an [extraordinary general meeting](#) in September 2018 at which it was able to push through a resolution giving qualified consent to the development of the Ostrołęka C plant because of the Polish government's 51% majority stake in the company. Client Earth [initiated](#) legal action in the Polish courts a month later on the grounds that the project violated the fiduciary duty of executives to act in the best interests of shareholders. It posed an egregious financial risk to shareholders, Client Earth contended, because of increasing carbon prices, EU energy reforms, and the declining cost of renewables.

A [report](#) written by Carbon Tracker to support the case concluded that Ostrołęka C would return a negative profit over its lifetime without out-of-market capacity payments from the Polish state to ensure grid capacity. Yet the size of those payments was unclear, and EU reforms are likely to ban capacity payments to new plants with high carbon intensity rates. LGIM, Aviva, and other investors played a complementary role by engaging with Enea over the plant's financial risks. LGIM [writes](#), for example:

'LGIM opposed the proposal at Enea's extraordinary general meeting in 2018. We also expressed our concern both in letters to the company and publicly in the press and our concerns were cited in a shareholder lawsuit against the company, filed by environmental law group Client Earth.'

In August 2019 the District Court in Poznań [found](#) that the resolution authorising the plant was legally invalid. In July 2020 the Court of Appeal [upheld](#) this judgement. Between these two rulings, in February 2020, Enea [terminated](#) their construction of Ostrołęka C.

Yet two factors complicate any assessment of the case. First of all, Enea has not yet given up on the site. It [announced](#) plans to refit Ostrołęka C as a gas-fired plant in June 2020, though has yet to raise the financing necessary to support the project. This qualifies the impact of Client Earth's legal victory, but certainly does not annul it: gas is less carbon-intensive than coal, and it remains unclear whether Enea's plans to adapt the site will succeed.

Second, Client Earth's litigation was one of several factors that led Enea to cancel the Ostrołęka C coal-plant eventually. [Fitch](#) warned the company that its financial rating could be downgraded if the project was completed, and [EuroRating](#) downgraded the financial rating of Enea's partner on the plant, Energa, explicitly citing the company's commitment to the Ostrołęka C plant as its main rationale.

Enea itself conducted an 'impairment test' – published in early 2020 as part of its financial report for the previous year – estimating its coal plants' projected write-down in light of increased CO2 costs. In the case of Ostrołęka C, it concluded that the 'recoverable value of this stake was determined at zero PLN'.²⁶ In other

26: See p.42, [ENEA S.A. Separate Financial Statements, 2019](#).

words, its projected value was nil. The exact role this test played in Enea's decision-making is unclear, but it seems unlikely that the company remained oblivious to the plant's dire financial prospects. Even when incorporating this fact into the level of responsibility we attribute to Client Earth's legal campaign, however, the size of the outcome means it remains an impressive, high-impact intervention. Its victory is a proof-of-concept of the potential for climate litigation in the future.

Appendix:

Brief Summary of Company Engagements



The AES Corporation (AES)

Investor pressure on AES has been led by the faith-based group Mercy Investment Services and the New York State Comptroller. Mercy submitted shareholder resolutions to AES from 2016 to 2018, each requesting a scenario analysis. The engagement broke through in 2018, with AES [producing](#) a TCFD-aligned scenario analysis in November of that year. In 2018, The New York State Comptroller [filed](#) a shareholder resolution to request that AES adopt long-term greenhouse gas reduction targets. In response, AES committed to achieving a 25% reduction in the carbon intensity of its generation from 2016 to 2020, and by a further 45% by 2030. A recent analysis by the World Benchmarking Alliance, however, [concludes](#) that AES is not on track to meet these targets. Three of AES' peers in the United States, Dominion, Southern and Duke, have all adopted net-zero targets on the back of investor pressure.



CEZ

Between 2015 and 2017, AP7 [engaged](#) in dialogue with CEZ over the need for it to 'phase out coal as an energy source'. CEZ's coal assets attracted further scrutiny in 2018 when Kempen [pressured](#) CEZ to reckon with their climate risks. Other engagers have targeted CEZ's poor disclosure record. In 2017, Axa [engaged](#) with CEZ requesting that they 'improve disclosure on their carbon risk resilience strategies', while in 2020 BlackRock voted against CEZ management to highlight the company's poor disclosure record. CEZ [disclosed](#) data to the CDP in 2020 for the first time since 2013. However, their self-reporting is yet to be TCFD aligned. CEZ has also not disclosed about its risk of stranded assets, despite mounting investor pressure. As of 2019 only 19% of its coal units had [assigned](#) a retirement date.



Dominion Energy (Dominion)

The non-profit As You Sow [filed](#) shareholder resolutions at Dominion AGMs in 2015, 2016, 2017, 2018, and 2020, variously calling for executive remuneration to be tied to climate performance, a report on the risks of biomass use, and a report on their methane stranded asset risk. The New York State Comptroller had a similarly long period of engagement between 2016 and 2020, [filing](#) resolutions that requested scenario analyses and improvements in governance. Faith-based engager Mercy Investment Services [filed](#) a resolution in 2015 calling for better target setting, while the Congregation of Sisters of St. Agnes [submitted](#) a proposal in 2017 pushing the utility to produce an annual report of its political lobbying activities. LGIM has engaged with Dominion continuously from 2016 onwards, and in 2018-19 [divested](#) from the company, extracting concessions on disclosure, governance and climate risk. Acting

as lead engager for the CA100+, CalSTRS helped to pressure Dominion to adopt a 2050 net-zero target in 2020. In the same year, it [abandoned](#) the Atlantic Coast Pipeline Project. However, Dominion is yet to meaningfully divest from its fossil fuels (coal, gas, oil), disclose its lobbying expenditure, or offer a long-term scenario analysis to align itself with a 1.5 degree world. Engagers could pressure Dominion to ensure its 2050 net-zero target translates into real-world impact.



Duke Energy (Duke)

Hermes EOS, the New York State Comptroller, CalSTRS, and As You Sow have all [engaged](#) Duke between 2015 and 2020, pressuring the utility towards to transition away from its fossil fuel assets. This push has met with modest success. In 2019, Duke [announced](#) plans to double its portfolio of biomass, solar, and wind generation by 2025, including major solar projects in Florida. In October 2020, the utility [unveiled](#) a further ten-year investment programme in renewables. However, natural gas remains the [hinge](#) of Duke's decarbonisation plan, and in 2020 only 10% of its coal units [had](#) a retirement date that is Paris aligned. The Nathan Cummings Foundation, Mercy, the New York State Comptroller, and a coalition led by BNP Paribas have all [filed](#) resolutions over 2015-2020 calling on Duke to fully disclose its political lobbying spend. Engagers have succeeded in [pushing](#) Duke towards better disclosure of its political and trade association contributions. Based on the report's findings, investors could push Duke to audit its trade associations, which remain highly obstructive towards climate policy.



E.ON

In 2019, Aberdeen Standard Investments, with the backing of the CA100+, [engaged](#) with E.ON on the need for the German utility company to develop a commitment to net-zero emissions. E.ON enhanced a number of its climate goals after this engagement, [adopting](#) a target of net-zero emissions in its energy usage by 2040 and net-zero emissions in the energy it supplies by 2050, including downstream emissions. It also adopted an ambitious interim target, of achieving a 75% [reduction](#) in Scope 1 and 2 emissions by 2030. Not all of this can be attributed to Aberdeen Standard, however: Germany's ongoing low-carbon [transition](#), its *Energiewende*, places significant regulatory pressure on utilities. Future engagers could encourage E.ON to reduce its Scope 3 emissions, as they [continue](#) to buy and distribute electricity generated by fossil fuels.



Korea Electric Power Corporation (KEPCO)

Since 2019, KEPCO has been under increasing pressure to renege on four planned overseas coal projects. In 2020 a CA100+ coalition, led by the Church Commissioners, Sumitomo Mitsui Asset Management, APG, and UBS, publicly [denounced](#) KEPCO, threatening divestment and writing to the South Korean Energy Minister. A more

recent coalition of 21 investors, led by Nordea, has similarly [criticised](#) KEPCO's overseas strategy. Private dialogues conducted by [BlackRock](#) and [LGIM](#) have escalated into public engagements. Out of the four planned investments, KEPCO has [committed](#) to drop or convert plants in the Philippines and South Africa and is going ahead with their projects in Vietnam and Indonesia. These will be their last overseas coal investments. KEPCO has [targeted](#) an 18% reduction in coal capacity by 2030, yet simultaneously aims to increase its purchase of thermal power produced by Independent Power Producers by almost 60% by 2030. The report shows engagements on business models changes have had the most real-world impact. Therefore engagers could continue to pressure KEPCO and the South Korean Energy Minister to stop Vung Ang 2 and Jawa 9 and 10.



Kansai Electric Power Company (Kansai)

Hermes EOS has [maintained](#) a long-term dialogue with Kansai, encouraging the utility to increase its renewable capacity and to disclose climate data to the CDP. Kansai's largest shareholder, Osaka City, has actively engaged the company for years, filing a [sequence](#) of shareholder resolutions at AGMs from 2016 to 2020, all calling for an increase in renewables investment. While Kansai's domestic renewable capacity has [remained](#) constant at 11 MW, its overseas investments in renewables have [developed](#) significantly over this period. Kansai has also started [disclosing](#) to the CDP, in line with Hermes EOS's recommendation to do so. Future engagers may benefit from framing their requests within the ongoing debates in Japan over nuclear energy.



NextEra Energy (NextEra)

The New York State Comptroller and Newground Social Investment both filed resolutions requesting that NextEra disclose its political lobbying spend between 2015 and 2020. In 2019, a leading group of CA100+ investors [wrote](#) to NextEra asking it to audit its political lobbying activities. In 2019 NextEra [published](#) its corporate political lobbying spend. However, it failed to match any of the expectations around reviewing or auditing its trade association membership. Based on our report findings, engagers could continue to push Nextera to audit its lobbying, while also targeting NextEra's business model, particularly its thermal coal assets. As of 2020, only 22% of the utility's coal units have a Paris-aligned retirement date, [according](#) to Carbon Tracker.



Origin Energy (Origin)

Since 2015, Origin has been subject to continuous high profile public engagements, including shareholder resolutions, brought by civil society groups ACCR and Market Forces. The Australian pension funds Australian Super, which owns 8% of the company, and Aware Super, which engages including on behalf of the CA100+

network, are especially influential. The Australian-based utility has been subject to little climate-related regulatory pressure. Investor-linked engagement is strongly associated with the company setting a coal phase-out date, net-zero targets, its 2017 [scenario analysis](#), and the auditing of its trade associations' political lobbying activities. Existing engagements have not succeeded in making the company bring forward its 2032 coal closure date (which Carbon Tracker [states](#) is misaligned with the Paris Agreement), publish a science-based business model transition plan, and fully account for scope 3 emissions in its analysis.

RWE

RWE

Amundi engaged with RWE from 2016 onwards, pressuring them to adopt more climate targets and a Paris-aligned transition strategy. Amundi may have influenced the company's 2019 [pledge](#) to reach carbon neutrality by 2040. Yet the main driver of RWE's transition and target-setting is likely to be regulatory: it is [subject](#) to the EU Emissions Trading System and will have to comply with the German government's [ban](#) of coal from 2038 onwards. RWE's limited plans to phase out its coal assets are inconsistent with Carbon Tracker's [assessment](#) that they must retire all coal by 2030 to be aligned with the Paris Agreement. In 2019, the company carried out a climate [lobbying audit](#) as requested by a CA100+ backed coalition, but failed to follow-through and actively change its trade association lobbying. Future engagers could push RWE to re-evaluate its lobbying audit and the activities of [obstructionist](#) trade associations, such as Business Europe.



Southern Company (Southern)

Southern has been pressed to report estimates of their stranded assets in coal power in shareholder resolutions [filed](#) by the non-profit As You Sow in 2016, 2017 and 2020. The Sisters of St. Elizabeth and Sisters of Caldwell have both filed resolutions at Southern AGMs calling on the company to disclose its Paris-aligned business strategy. In 2019-2020 Ceres coordinated an engagement among CA100+ members, pressuring Southern towards a 2050 net-zero target. AP7 and Storebrand have both [divested](#) from Southern in [protest](#) against its political lobbying positions. Engagers have successfully [pushed](#) Southern towards a 2050 net-zero target, but the utility's roadmap to decarbonisation is based on natural gas and hypothetical carbon capture technologies. Southern has somewhat moderated its public hostility to climate policy and [exited](#) the climate-denialist American Coalition for Clean Coal Electricity. But it retains its membership of several controversial groups tied to the American natural gas industry. Starkly, none of the company's coal units [have](#) a Paris-aligned retirement date. Carbon Tracker's 2020 analysis [shows](#) that 10% of Southern Company's coal fleet may have a negative operating income today, and they anticipate that 19% could have a negative EBITDA by 2030.

**Tokyo Electric Power Company (TEPCO)**

Two resolutions calling for coal phase-out were [filed](#) anonymously at TEPCO's 2016 and 2020 AGMs. While the resolution in 2016 had no discernible impact, the 2020 proposal was followed by a significant change in TEPCO's coal transition plans. In October 2020, the Japanese firm JERA, a joint venture between TEPCO and Chubu Electric Power, [issued](#) a roadmap to achieve zero carbon emissions by 2050, partly by shutting down its 2.2 GW super-critical coal power plants in Japan by 2030. Yet this step-change can, in part, be attributed to the Japanese government's adoption of a 2050 net-zero target in October 2020, and discussions surrounding its Strategic Energy Plan. In 2018 and 2019, a group of anonymous shareholders [brought](#) resolutions requesting that TEPCO give transmission lines preferential connection of renewable energy. TEPCO has since [emphasised](#) the role of renewable energy in its dispersed power grid, but this has not translated into more renewable investment. JERA's roadmap to net-zero by 2050 is heavily [dependent](#) on the increased use of hydrogen and ammonia to replace its hyper-critical coal plants.