MAPLE-BROWN ABBOTT

INVESTMENT MANAGERS SINCE 1984

# Maple-Brown Abbott Global Listed Infrastructure

## Climate Change Report

April 2023

# Contents

# Summary

In December 2021, we published our inaugural Maple-Brown Abbott Global Listed Infrastructure Task Force on Climate-related Financial Disclosures (TCFD) report as part of our firm-wide commitment to climate change risk reporting. This report outlines the findings of our latest climate change scenario analysis using modelling undertaken by the IEA World Energy Outlook (WEO) 2022 and provides an update on our targets and metrics. This report should be read in conjunction with our inaugural TCFD report, which provides additional detail on our approach to climate change-related governance and strategy.

### Our scenario analysis findings based on IEA World Energy Outlook 2022 scenarios

From our analysis, we have formed the view that a faster pace of the energy transition may create significant opportunities for the Maple-Brown Abbott Global Listed Infrastructure (GLI) strategy. This is most pronounced in the case of electric and multi-utilities, commercial renewable energy developers and railroads which all facilitate the decarbonisation of the energy sector and its end uses (e.g. transportation).

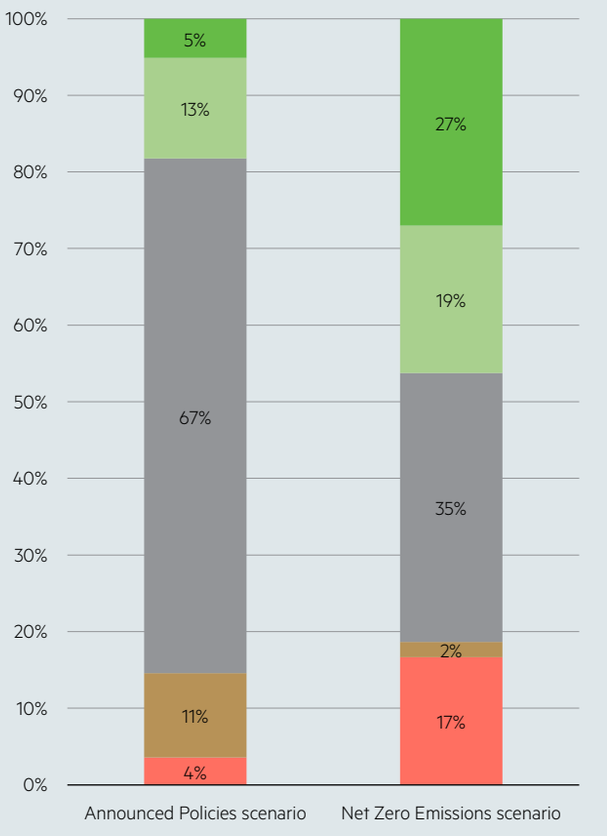
Our analysis demonstrates to us that the impact of a faster energy transition on airport infrastructure is more 'middle of the road' in the sense that the industry does not look to be structurally challenged or exposed to stranded asset risk, but instead could face uncertainties that impact its long-term valuation outlook. Examples of these uncertainties include the economic viability of sustainable aviation fuels, the future of short-haul flying and the extent to which higher carbon taxes change traffic growth.

Our analysis also demonstrates that the most challenged industries – when it comes to a faster-paced energy transition – are the midstream and energy storage companies owing to their exposures to oil and natural gas markets. The pace and scale of the energy transition has a relatively immaterial impact on the valuations of the water utilities, communications infrastructure and toll roads we analysed. Further detail is provided in the section 'Scenario analysis findings'.

### Targets and metrics

In October 2021, we became a signatory to the Net Zero Asset Managers initiative (NZAMi). As detailed in our decarbonisation strategy, we have committed to aligning the GLI strategy with a pathway towards net zero emissions by 2050 and set an interim emissions target to assist with this trajectory. Making this commitment has been a key driving force behind our stepped-up climate risk and decarbonisation research, engagements and proxy voting decisions in recent years. We have seen some excellent outcomes from our engagement and proxy voting efforts – especially in relation to emissions targets and the incorporation of ESG into executive remuneration frameworks – which are further detailed in the GLI Engagement & Stewardship report (2021/22).

**GLI strategy exposure to valuation sensitivities in IEA WEO 2022 scenarios relative to base case[1]**




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

**Valuation sensitivities relative to the IEA Stated Policies scenario (base case)**

| | |
|---|---|
| High opportunity | |
| Moderate opportunity | |
| Low impact | |
| Moderate risk | |
| High risk | |

The chart above illustrates how the GLI strategy (adjusted for stock weights) is positioned in terms of risks and opportunities associated with the energy transition by using the IEA Stated Policies scenario as a base case. For instance, according to our analysis, 18% of GLI strategy holdings see moderate to high valuation opportunities under the IEA Announced Policies scenario, which increases to 46% under the Net Zero Emissions scenario. See pages 8–15 for further details on our methodology and findings.

1 Based on equity weights of a representative fund of the Maple-Brown Abbott Global Listed Infrastructure (GLI) strategy as at 31 March 2023. Valuation sensitivities are measured against the IEA Stated Policies scenario as a base case. Holdings in water utilities have been categorised as 'low impact' due to their minimal exposure to the energy transition risks and opportunities. See pages 8–15 for further details.

*Emissions versus "rate of change"*

As detailed in the section 'Targets and metrics', we believe emissions are not a good metric for forward-looking assessments of companies as they relate to a point in time as opposed to the potential rate of change. We use emissions data for specific purposes in the investment process – such as emissions tracking and engagements – but consider companies' business activities, capital expenditure plans and energy transition strategies to be better forward-looking measures.

The energy transition will not be possible without the right infrastructure investment, especially in the electric and multi-utilities sector which accounted for over one third of global energy related emissions in 2021.[2] According to modelling undertaken by the IEA, the electricity sector is set to lead emissions reductions over the next decade as it carries the most potential to retire emissions-intensive assets and invest in renewable energy, battery storage and the requisite electricity grid infrastructure. When assessing a company's potential rate of change, we consider the:

- impact of climate change scenarios on company and industry valuations (such as terminal values and terminal growth rates);
- capital expenditure apportioned to low carbon infrastructure solutions and technologies relative to conventional energy;
- integrated resource plans relative to various emissions pathways and energy reliability and customer affordability factors;
- opportunities for asset optionality to support the energy transition; and/or
- regulatory and policy settings to incentivise decarbonisation, or lack thereof.

## Climate change scenario analysis

Key to the analysis of transition risks and opportunities is the question of whether the global energy transition from fossil fuels to low and zero emissions sources will be gradual or rapid. For this reason, scenario analysis can assist market participants with analysing the breadth of potential transition trajectories by using different modelling assumptions. Scenario analysis outputs do not provide a forecast of the energy transition trajectory. Instead, the analysis should be considered a stress testing exercise to explore the extreme ends of the energy transition and what this could look like for a portfolio of investments under very specific circumstances.

The process of undertaking this analysis is an important exercise to inform thinking and test long-standing assumptions held by investment teams. Equally important is the act of disclosure for the purposes of informing stakeholders on how, and to what extent, a strategy is exposed to climate-related risks and opportunities. We hope our reporting provides a well-rounded view of how the GLI strategy is positioned as the pace and scale of the energy transition ramps up.

## Methodology

We have refreshed our scenario analysis using the IEA World Energy Outlook 2022 scenarios with the following objectives in mind:

- Update our assessments of the breadth and type of investments exposed to transition risks and opportunities
- Refine our view on the potential financial impact from the low carbon transition down to an asset level
- Incorporate updated transition impacts into financial models
- Refresh aggregate portfolio analysis
- Further inform investment decisions, company engagements and proxy voting

### The challenges and limitations of climate change scenarios

Climate change scenario analysis, while becoming more mainstream in the investment management industry as a tool to help identify climate-related risks and opportunities, has several limitations that should be noted, specifically:

#### Model limitations

The global energy system and the factors that impact it are more complex than any scenario or narrative can capture. Energy projections and assumptions offer only one perspective and are therefore subject to a level of bias.

#### Inconsistent and incomplete company disclosure

There is a lack of consistent and complete reporting across companies and projects relating to climate change and the energy transition. This makes it difficult to quantify and assess valuation sensitivities to different transition assumptions. We expect climate-related reporting requirements to increase as regulators and investors seek better disclosure.

#### Subjectivity

There is some subjectivity associated with translating the climate scenario models and data to assess transition risks and opportunities for individual companies and assets. Climate transition scenarios typically capture impacts at a macro and industry level whereas there are micro level implications for companies that can often be the bigger driver of value.

We have used the directional assumptions outlined by the IEA and tried to avoid over-extrapolation to the point of undermining the scenarios themselves. With this in mind, we are cautious about the definitiveness of any modelling assumption and have weighed the analysis with our own deep understanding of the global listed infrastructure universe and how the various policy and regulatory, technology, market and stakeholder risks and opportunities could play out in the coming years.

2 Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

## The IEA World Energy Outlook 2022

The energy transition carries both risks and opportunities which could unfold gradually or through sudden shocks. These risks and opportunities vary across geographies, sectors and time horizons and according to government and company commitments to limit global temperature rises.

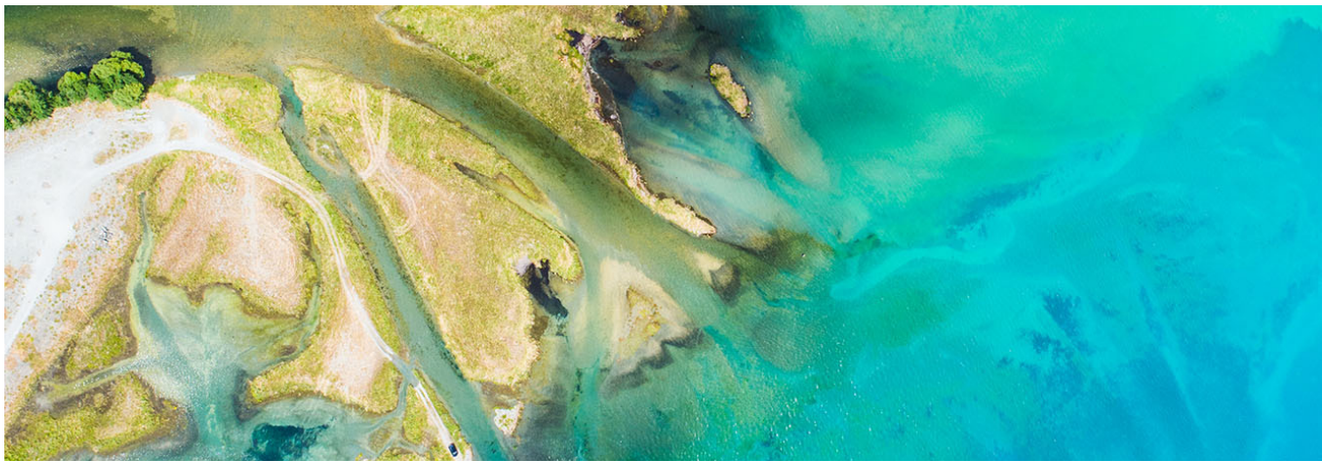
Climate change scenarios can help investors identify short, medium and long-term risks and opportunities to gauge the extent to which these could materially impact investments. While there are several climate change scenarios and models available, we use the IEA scenarios due to transparency and availability of underlying model data, frequency of updates, range of assumptions and global perspective with regional-specific insights. The IEA's annual World Energy Outlook explores global energy supply and demand scenarios to 2050 and associated implications for energy security, climate targets and economic development.

The analysis outlined in this report uses IEA World Energy Outlook's Stated Policies scenario (base case), Announced Pledges scenario and Net Zero Emissions by 2050 scenario. The 2022 scenarios are an evolution from previous years in terms of their assumptions and pathways.

For our scenario analysis, we use the Stated Policies scenario as a proxy for our base case and flexed various assumptions to account for a faster transition (Announced Pledges scenario) and the fastest transition (Net Zero Emissions by 2050 scenario). The gap in outcomes between the Stated Policies and Announced Pledges scenarios is known as the "implementation gap", in other words, the gap that needs to be filled to realise commitments in full. The gap between the Announced Pledges and Net Zero Emissions scenarios is referred to as the "ambition gap" because it reflects how pledges made to date are not ambitious enough to match the long-term temperature goal of the Paris Agreement.

Faster rate of transition

| | Stated Policies scenario (base case) | Announced Pledges scenario | Net Zero Emissions by 2050 scenario |
|---|---|---|---|
| **Description** | Reflects current policy settings currently enacted by governments. The scenario provides a pragmatic exploration of the current policy landscape and gives a view on where the energy system might be heading in the absence of specific new policy initiatives. This scenario is not designed to achieve a particular outcome. It implies a temperature rise of around 2.5°C above pre-industrial levels by 2100 with a 50% probability. | Assumes that all climate commitments are upheld and met in time and in full by governments around the world – irrespective of whether or not those commitments are underpinned by specific policies to secure their implementation. This scenario is not designed to achieve a particular outcome. It implies a temperature rise of around 1.7°C above pre-industrial levels by 2100 with a 50% probability. | Sets out a narrow pathway for the global energy sector to achieve net zero emissions by 2050. It is a back-cast, aspirational scenario that sees significant action taken by all countries – above and beyond current and announced policies – to move towards net zero by the middle of the century. Models a pathway to a temperature rise of around 1.5°C above pre-industrial levels by 2050. |



## Key highlights

- **Global emissions**

  In keeping with the general trend seen with previous climate transition scenarios, the IEA continues to model steeper CO2 intensity reductions across all its scenarios to account for further progress with energy transition policies and measures. That said, the Stated Policies scenario (base case) still leaves the world on track for a temperature rise of 2.5°C above pre-industrial levels by 2100.

- **Energy trilemma**

  While there has been much debate over how the enhanced focus on energy security owing to Russia's invasion of Ukraine will impact the pace of the energy transition, the IEA finds that the transition is accelerating as a result. This is because government policies seen over 2022 shifted towards clean energy deployment as a priority for energy security and affordability, as opposed to solely for the purposes of decarbonisation.

- **New policies**

  New or enhanced policies and packages over 2021/22 from the US, Europe, China, Japan and others imply annual clean energy investment is set to increase by more than 50% from current levels to around $2 trillion by 2030. However, this is still far short of the necessary investments of US$4 trillion per annum by 2030 in clean energy solutions needed for net zero emissions to be possible. Nevertheless, the projected clean energy investment modelled under the base case is a significant step up compared to previous years thanks to flagship policies such as the Inflation Reduction Act (US), Fit for 55 (EU) and RePowerEU.

- **Fossil fuel demand**

  The IEA's scenarios show global demand for fossil fuels peak or plateau. Total demand for fossil fuels declines steadily from the mid-2020s with the share of fossil fuels in the global energy mix falling from ~80% to ~75% by 2030 and ~60% by 2050 in the Stated Policies scenario (base case). The decline in oil demand across the scenarios is aided by increased legislation towards bans on internal combustion engines (ICEs), manufacturers pivoting to electric vehicle (EV) production and a push towards mass public transport (thereby reducing demand by improving energy intensity).

  Moreover, gas demand lowers across the IEA scenarios in favour of more gas-to-renewables switching, less coal- and oil-to-gas switching, avoided demand due to uptake of heat pumps and increased energy efficiencies and higher gas prices owing to a global supply squeeze. This drop in gas demand is most notable from 2030 onwards.

- **Electricity**

  The power sector sees the steepest and fastest cuts in emissions of any sector modelled by the IEA. Coal use in the electricity sector saw an uptick in certain countries over 2022 in response to strong demand, high natural gas prices and energy security concerns, but the IEA expects this to be temporary. Even in the Stated Policies scenario (base case), unabated coal falls from 36% of generation in 2021 to 26% in 2030, reflecting renewables growth, led by solar and wind. In the Announced Pledges scenario, renewables in electricity generation rise from 28% in 2021 to about 50% by 2030.

  Global electricity demand in 2050 is over 75% higher than it is today, 120% higher in the Announced Pledges scenario and 150% higher in the Net Zero Emissions Scenario. In advanced economies, transport is the largest contributor to increased electricity demand as the market share of EVs rises across all IEA scenarios.

- **Electricity networks**

  Electricity networks provide the backbone of electricity systems and need to expand and modernise to support energy transitions. Annual investment rises in the Stated Policies scenario (base case) from around US$300 billion today to US$550 billion by 2030 and averages US$580 billion per year to 2050. The Announced Pledges scenario assumes that investment rises even further to US$630 billion in 2030 and US$830 billion in 2050.

- **Transportation**

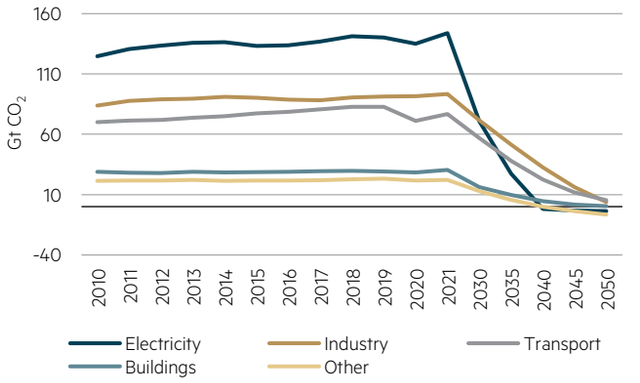
  Global transport consumes a quarter of total final energy consumption and is responsible for around 40% of emissions from end use sectors today. Between 2010 and 2019, increasing demand for passenger and goods mobility resulted in the sector seeing the largest growth in emissions of all end use sectors. Passenger and freight activity more than doubles by 2050 in the Net Zero Emissions scenario, mostly due to higher mobility needs in emerging and developing economies.

  According to the IEA, decarbonising transportation depends primarily on two changes. First is a switch to electricity, especially through EVs and hydrogen fuel cell electric vehicles in road transport. Second is the blending and direct use of low emissions fuels such as biofuels, hydrogen and hydrogen based fuels, especially in aviation and shipping.

### The electricity sector is set to do the "heavy lifting" over the next decade

The electricity sector leads emissions reductions over the next decade. The sector emitted 13 gigatonnes of carbon dioxide (Gt CO2) in 2021, accounting for over one third of global energy related CO2 emissions. Electricity sector CO2 emissions peak in the near future across all IEA scenarios, with steep reductions of 40% under the Stated Policies scenario (base case) and over 80% in the Announced Pledges scenario by 2050. According to the Net Zero Emissions Scenario, net emissions from electricity would need to reach zero by 2040 to limit global warming to 1.5 degrees by mid-century.

**$CO_2$ emissions by sector in the Net Zero Emissions scenario**




Source: IEA (2022), World Energy Outlook 2022, Paris, IEA.

### Assumptions tested

From a quantitative perspective, we considered company valuation sensitivities to a range of industry-specific assumptions aligned with each transition scenario.

#### Regulated electric and multi-utilities and contracted renewable energy

- We looked at varying levels of capital investment (capex) on the basis this will be the biggest valuation driver for this sector over the long-term.

#### Midstream infrastructure

- We looked at the growth rates for fossil fuels supply and demand across different markets as the key driver of volume throughput in addition to the evolution of commodity prices.

#### Energy storage

- We looked at different growth rates for consolidated revenue and joint venture (JV) results while taking into account differences between product type and region.

#### Transportation infrastructure

- Toll roads: we looked at short and long-term traffic growth, toll growth, and capex growth.
- Airports: we looked at passenger growth, aeronautical tariff growth, and commercial earnings in terminal value.
- Railroads: we looked at traffic growth (specifically truck shuttle, car shuttle, passenger rail and freight rail).

#### Communications infrastructure

- We looked at opex and tenancy growth rate inputs (such as new anchor tenants and small cell tenants).
- From a qualitative perspective, we also mapped out the climate-related risks and opportunities for companies using the following categories. It is worth noting that these categories are interchangeable, for example, policy and regulatory changes can render both risks and opportunities for a company.

*Risks and opportunities*

#### Policy and regulatory changes

- Such as carbon taxes, renewable energy investment incentives, regulatory stance on allowable 'pass through' costs for utilities, bans on natural gas for new builds and asset securitisation.

#### Technology and market changes

- Such as the levelised cost of energy (LCOE), supply chain constraints and the cost competitiveness of low carbon solutions including green hydrogen and sustainable aviation fuel.

#### Reputational pressures and shifts in market preferences

- Such as access to new markets and sources of funding, societal pressures related to greenfield projects and flight shaming.

### A note on water utilities

From a materiality perspective, we have not undertaken scenario analysis on the impacts of the energy transition on the GLI strategy's water utilities. We believe the water utilities companies in the strategy are well positioned to manage transition-related risks and pursue opportunities to lower their direct and indirect emissions.

We see the physical effects of climate change as being the greatest source of risks and opportunities for water utilities from a climate change perspective. Especially in relation to increased water demand and reduced water availability due to changing demographics and the long-term effects of more extreme and frequent weather events. For this reason, water utilities are a key focus of our assessment of physical risks and opportunities across investee companies.

We looked at opex and tenancy growth rate inputs (such as new anchor tenants and small cell tenants).

From a qualitative perspective, we also mapped out the climate-related risks and opportunities for companies using the following categories. It is worth noting that these categories are interchangeable, for example, policy and regulatory changes can render both risks and opportunities for a company.

# Scenario analysis findings[3]

## Summary

Our analysis of how companies fared under various transition scenarios is summarised in the below heatmap and detailed in the following commentary. In terms of number of companies assessed, the largest cohort was North American electric and multi-utilities, which comprised a total weighting of around 36% at the time of the analysis.

**Company valuations relative to the Stated Policies scenario (%)**

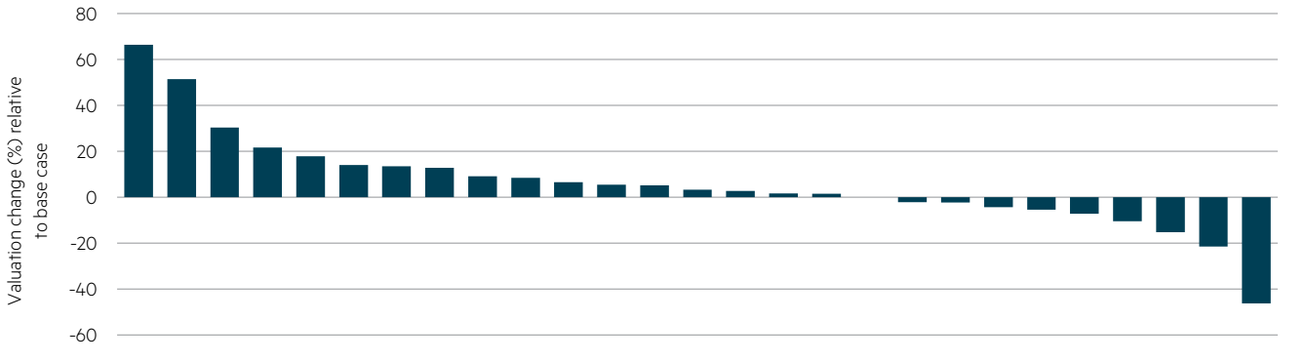
| | | | Faster rate of transition → | | |
|---|---|---|---|---|---|
| **Industry** | **Region** | **Company** | **Stated Policies** | **Announced Pledges** | **Net Zero** |
| **Multi-utilities** | North America | Company 1 | | 5.5 | 12.8 |
| | | Company 2 | | 7.3 | 17.8 |
| | | Company 3 | | 4.2 | 9.2 |
| | | Company 4 | | 2.3 | 6.6 |
| | | Company 5 | | 9.6 | 21.6 |
| **Electric utilities** | North America | Company 6 | | 4.4 | 8.5 |
| | | Company 7 | | 2.7 | 5.5 |
| | | Company 8 | | 2.9 | 5.2 |
| | UK/Europe | Company 9 | | 2.8 | 14 |
| | | Company 10 | | -0.5 | 0 |
| **Contracted renewables** | UK/Europe | Company 11 | | 32.1 | 66.4 |
| | | Company 12 | | 22 | 51.5 |
| **Toll roads** | UK/Europe | Company 13 | | 0.2 | 1.6 |
| | | Company 14 | | -7.1 | -10.4 |
| | Australia | Company 15 | | -1.5 | -2.3 |
| | South America | Company 16 | | -4.8 | -7.2 |
| | | Company 17 | | -2.3 | -2.1 |
| **Airports** | UK/Europe | Company 18 | | -0.6 | -5.4 |
| | | Company 19 | | -1.6 | -15.2 |
| **Railroads** | UK/Europe | Company 20 | | -0.2 | 13.5 |
| **Comms infrastructure** | UK/Europe | Company 21 | | 1.6 | 3.3 |
| | | Company 22 | | 0.7 | 1.5 |
| | | Company 23 | | 1.3 | 2.7 |
| **Energy storage** | UK/Europe | Company 24 | | -6.3 | -30.3 |
| **Midstream infrastructure** | North America | Company 25 | | -4 | -4.4 |
| | | Company 26 | | -15.7 | -21.5 |
| | | Company 27 | | -27.4 | -46.3 |

| **Scenarios** | |
|---|---|
| Stated Policies | Policies enacted (base case) |
| Announced Pledges | Policies enacted + announced |
| Net Zero Emissions | Net Zero emissions by 2050 |

| **Legend** | |
|---|---|
| High risk | <-10% |
| Moderate risk | -10% to -5% |
| Low impact | -5% to 5% |
| Moderate opportunity | +5% to +10% |
| High opportunity | >+10% |

3 Proprietary analysis using IEA WEO 2022 assumptions. A representative fund of the strategy has been used as a proxy for the analysis as at January 2023. This table should not be considered a forecast.

**Estimated valuation impact based on the Net Zero Emissions scenario**




Source: Proprietary analysis using IEA WEO 2022 assumptions as at January 2023. The IEA Stated Policies scenario has been used as a base case. This chart should not be considered a forecast.

## Electric and multi-utilities

The energy transition creates significant investment risks and opportunities for electric and multi-utilities as they transition electricity generation from fossil fuels to renewables and invest in the grid to support new load and greater complexity. The two key drivers of a regulated utility's return are the size of its asset base and the allowed return set by the regulator. In determining the valuation impact across climate scenarios, we focused on the first driver, being the size of the utility's asset base.

We expect the energy transition may provide additional investment opportunities for these businesses in two areas. Firstly, the replacement of fossil fuel generation assets, and secondly, the supporting transmission and distribution (T&D) infrastructure. We also expect that these investments will be made whilst likely maintaining customer affordably. While building renewable assets is capital intensive, build costs have generally declined over time, and the cost of operating these assets is much lower than for fossil fuel plants. Together, this results in a lower levelised cost of energy, and means that although additional renewable investments increase the size of a utility's asset base, it can still lower the cost of energy for customers as it displaces fossil fuel generation over time. Furthermore, the electrification of buildings, transportation and other industrial processes is expected to increase electricity demand, spreading the cost of this investment over a larger load.

As these companies produce and/or act as a delivery mechanism connecting customers with a product that is emissions intensive, they are by nature, highly exposed to transition risks. In general, our analysis suggests that a faster pace and scale of the energy transition has a positive impact on the value of electric and multi-utilities held in the GLI strategy. The GLI strategy has a meaningful tilt towards these companies with approximately 39% of the GLI strategy invested in electric and multi-utilities as at 31 March 2023.[4]

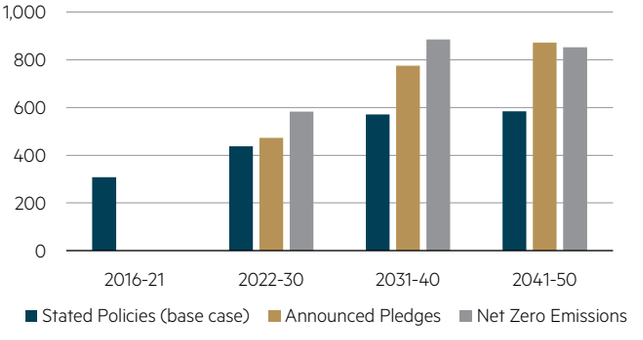
### *Electric utilities*

Our analysis indicates that a faster energy transition has an increasingly positive impact on the value of the electric utilities held in the strategy. The valuation upside is mainly due to the investment opportunities associated with regulated renewables and T&D networks. These investments provide electric utilities with opportunities to increase their rate base and ultimately regulated returns. Investment in T&D networks is critical as it helps enable the expansion of renewables generation through new connections, improves reliability and helps address intermittency issues.

There are some nuances between the electric utilities that have a bearing over the valuation impact. For instance, some electric utilities are vertically integrated across transmission, distribution and generation, while others only own and operate the T&D networks.

There are some potentially negative implications associated with a faster energy transition for electric utilities. For instance, accelerated depreciation and/or write-offs from early closures of fossil fuel plants could translate to a drop in rate base and regulated returns. Notwithstanding this, we believe the transition towards a lower carbon economy could present these companies with more than enough investment opportunities to offset this.

**Electric networks investment (US$bn)**




Source: IEA, World Energy Outlook 2022, IEA, Paris.

4 Position weights are based on a representative fund of the GLI strategy as at March 2023.

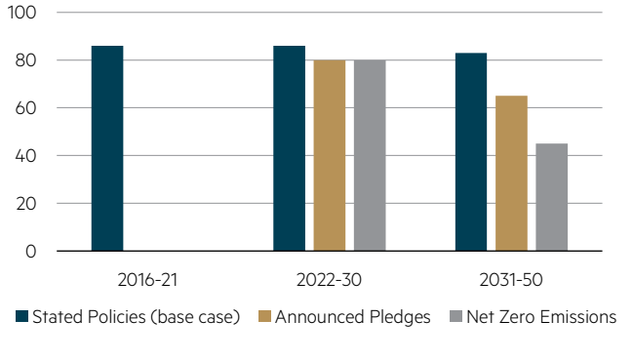
*Gas utilities*[5]

Generally speaking we find that a faster energy transition has a negative impact on the value of gas utilities. Faster energy transitions require increasingly steep reductions in the use of gas, including from electrification of buildings (e.g. heat pumps for cooling and electric stovetops for cooking).

Natural gas demand decreases across all IEA scenarios, especially from 2030 onwards. As gas demand drops, the cost of investing in the gas network would need to be spread over a smaller base, thereby increasing the cost to remaining customers and in turn driving further electrification. There is an ongoing need to invest in gas networks to maintain safety and reliability, however, gas demand will ultimately drive this investment.

The future for gas utilities depends, to an extent, on the economic viability of low carbon gases such as green hydrogen and biomethane, as this could extend the useful lives of gas networks, or even require greater investment in pipes to accommodate these products. The future of gas utilities is also linked with the local climate where, for instance, it may not be economic for some cold regions with very high winter energy loads to become fully electric. To achieve net zero emissions as per the NZE scenario, the IEA assumes that 15% hydrogen would need to be blended into natural gas networks by 2050, which would require relatively moderate investments in natural gas infrastructure. Some gas utilities may also have opportunities to invest in renewable energy projects and electrolysers to generate green hydrogen, although this is very region-specific and dependent on local state legislation, so we have not included this in our analysis.

**Gas networks investment (US$bn)**




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

*Multi-utilities*

From our perspective, the impacts of the energy transition on these businesses would likely be a combination of the two categories above – depending on the proportion of the business exposed to electricity and gas networks.

We found that the multi-utilities held in the strategy at the time of analysis have a greater positive exposure to faster transition scenarios, despite the fact they own both electric and gas businesses.

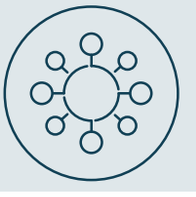
There are a number of reasons for this valuation upside. For instance, when compared to certain pure-play electric utilities, some multi-utilities:

- are spending more on renewable capacity builds, some of which includes offshore wind (which have higher build costs);
- have higher starting valuations, meaning equity funding growth is less dilutive as capex spending increases;
- have stronger capex plans (for example, greater exposure to inter-regional transmission investments), meaning faster transition scenarios amplify the valuation upside even further; and/or
- tend to be financed with greater parent leverage, resulting in a higher spread between their overall return on invested capital (ROIC) and weighted average cost of capital (WACC), and which leads to greater value accretion for each incremental dollar of capex spent.

**A note on customer affordability**

It is difficult to measure the net impact on customer bills across the different scenarios as this depends on a significant number of factors, including changes in commodity prices, power prices, and localised changes in population and load growth. Forecasting these individual factors is difficult to do with a high degree of confidence.

Customer bill impacts are extremely important to monitor, however – given the difficulty of measuring this impact precisely – they have not been explicitly considered in our scenario analysis.



5 Please note the strategy did not have any direct exposure to gas utilities at the time of the analysis, however, we have included an assessment of gas utilities as they are relevant to multi-utilities.

### Contracted renewables

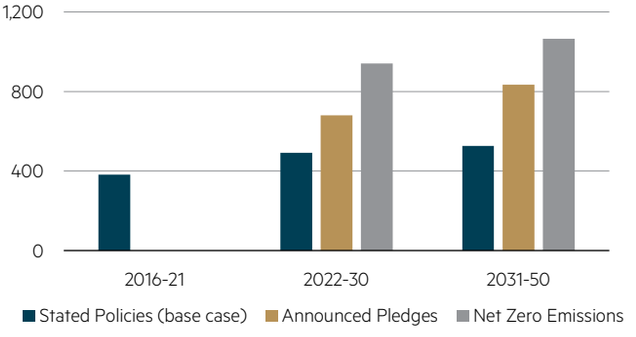
Within the global listed infrastructure universe, we believe there are two main ways to gain exposure to the renewable energy thematic, namely through:

- electric utilities that earn regulated returns on their renewable investments (as detailed above)
- commercial renewable developers that have highly contracted revenues on their renewable generation.

We see a small opportunity set across pure-play commercial renewable developers. Based on our analysis of two renewable energy developers held in the strategy at the time of the analysis, both companies' valuations were positively impacted as the pace of the energy transition increased. This is primarily driven by near and long-term installed capacity growth modelled by the IEA for solar and wind capacity under each climate scenario. One of the companies operates an electricity network business and further benefits from the IEA's assumptions on investments in electricity networks.

The GLI strategy has increased its exposure to these companies as opportunities have arisen in recent years. As at March 2023, the strategy has a 5% exposure to contracted renewable companies.[6]

**Commercial renewables investment (US$bn)**




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

### Transportation infrastructure

Our scenario analysis continues to show that toll roads appear relatively unimpacted by transition risks, with modest downside across most strategy companies due to reductions in car usage and increased uptake of public transport and work from home. We found that airport valuations could be more negatively impacted by a faster energy transition as policies to clamp down on short-haul flying, the incentivisation of high speed rail alternatives and "flight shaming" dampen volumes. Major rail link operators, such as Getlink, see significant valuation upside under a faster energy transition as a low carbon alternative to flying. The specifics of these findings are detailed below.

It is worth noting the IEA scenarios provide minimal regional and country-level insight and data on energy transition assumptions such as availability of public transit options, competing infrastructure, local mobility issues and priorities, government policy and technology uptake. Therefore, our transportation analysis contains some subjectivity. The GLI strategy has a meaningful tilt towards transportation infrastructure with approximately 24% of the GLI strategy invested in toll roads, airports and rail road companies as at 31 March 2023.[7]

#### *Toll roads*

We expect the impact of the energy transition to the bottom line of toll road companies to be minimal. This is because traffic demand is a key driver of value – as opposed to capex – and traffic impact is expected to be relatively muted. Nonetheless, toll roads play an important role in the decarbonisation of transport through:

- facilitating necessary infrastructure, such as EV charging infrastructure, carpooling carparks, ride sharing lanes, truck lanes and cycle paths;
- creating the right incentives, such as "eco-driving" via high occupancy, ride sharing toll discounts and EV discounts; and
- reducing emissions through better design, for instance with "free flow" style toll barriers.

Our analysis indicates that flexible pricing assets – such as managed lanes – are more impacted as they experience the double impact of lower traffic and lower tolls under a faster transition. These assets are typically commuter/peak hour oriented and therefore more susceptible to behavioural changes such as increased working from home and shifts to commuting by public transit, cycling or walking.

We believe an increase in ride and car sharing has limited read-through for energy transition risks and opportunities for toll roads. However, from an environmental perspective, increased penetration of ride and car sharing is beneficial for emissions reductions and therefore an area of focus for certain transportation companies.

Greater adoption of autonomous vehicles could potentially be negative for toll roads due to increased effective road capacity as vehicles drive closer, faster and more efficiently. However, this would likely be offset by increased road demand, new populations on the road, increasing urban sprawl and commuting distances, as well as empty car rides. At any rate, there will still be a significant period of transition where congestion is unlikely to go away, and there are opportunities for toll road companies to participate in facilitating the necessary infrastructure for this technology.

6/7 Position weights are based on a representative fund of the GLI strategy as at March 2023.

*Airports*

The largest valuation driver for airports under varying energy transition scenarios is traffic volumes which comes with various policy and behavioural uncertainties such as:

- **Flight shaming and frequent flyer levies**

  Frequent flyer levies aim to progressively tax frequent flyers, thereby curbing overall demand. A frequent flier levy in the Net Zero Emissions scenario reduces demand by around 17% in advanced economies by 2050.

- **High-speed rail substitution**

  Globally, the IEA assumes that aviation demand will continue to grow, but this is relatively muted within the European Union. According to the Net Zero Emissions scenario, sustained investment in new high-speed rail infrastructure combined with existing tracks enables shifts around 17% of flights that serve routes shorter than 800 km to high-speed rail by 2050.

- **Increasing use of video conferencing in lieu of business travel**

  Under the faster transition scenarios, short haul-flying does not see sudden and immediate impacts but there is potential long tail risk over the medium term. The IEA estimates that 20–30% of current air travel is for business purposes. According to the Net Zero scenario, video conferencing substitutes around one in two long haul business trips by 2050.

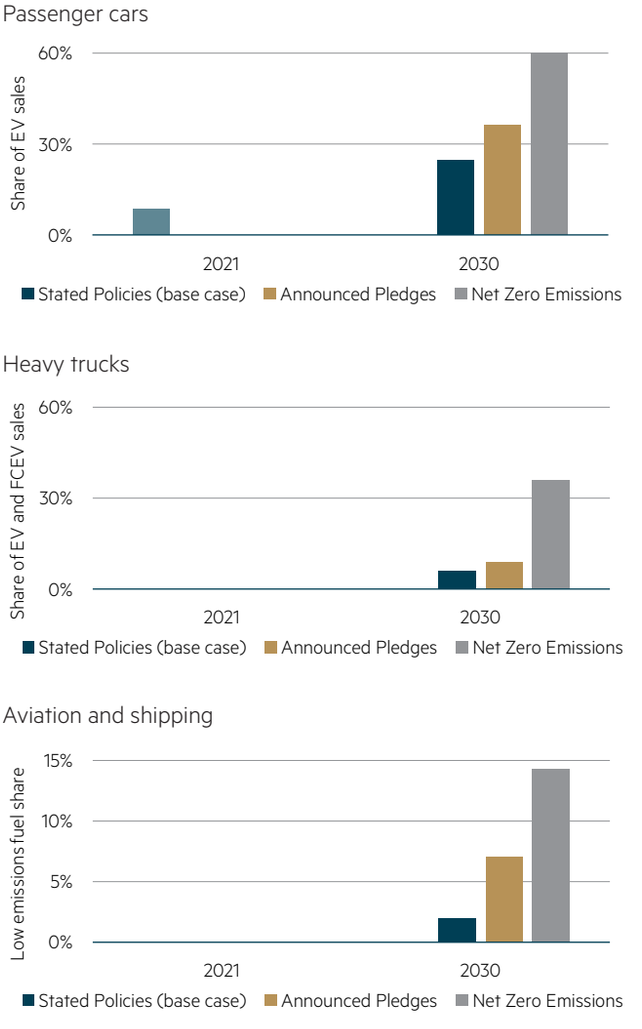
- **Higher cost of airline tickets due to carbon taxes and the cost of carbon**

  A carbon tax would impact ticket prices directly and this would impact demand through price elasticity.

Airports do have some self-help in the form of regulatory mechanisms. All else being equal, a lower passenger volume trajectory should be partly offset by higher aeronautical tariffs at future resets. However, this support would not be available for assets and revenues beyond the regulated scope, for instance, in the case of terminals and retail. Lower short-haul volumes could also increase available capacity for higher value long-haul volumes at capacity-constrained airports, creating a partial offset over the longer term.

In terms of decarbonisation pathways, Sustainable Aviation Fuel (SAF) remains one of the most promising solutions for the aviation sector but continues to face practical, economic and technological hurdles. Policies such as the EU's Fit for 55 and RePowerEU may be able to overcome some of these limitations, for instance, by subsidising SAF and SAF capex or taxing carbon intensive fuels and fuel infrastructure. The Net Zero Emissions scenario assumes that over 10% of aviation fuel consumption will be SAF by 2030 and meet almost 45% of demand by 2050 with synthetic hydrogen based fuels meeting a further 25%. While all of the airports assessed have SAF targets, the pace and scale of uptake in addition to the capital expenditure opportunities remains unclear at this point.

**Growth in alternatives to oil in transport by scenario to 2030**




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

*Railroads*[8]

Like toll roads and airports, volumes are the key driver for climate scenario analysis of rail roads.[9] We continue to find that the impact of the energy transition on rail passenger growth is expected to be similar to that of airport traffic growth, but in the opposite direction. This is primarily due to the substitutability of air travel and rail travel in the markets where we are invested. For example, the Net Zero Emissions scenario expects passenger rail – specifically electricity-based urban metro and high-speed rail – to triple by 2030 as a result of a shift away from short haul flying. In shuttle businesses, we assume sensitivities will be driven by a combination of changes to rail and road traffic (light and heavy vehicles).

In the case of Getlink's Eurotunnel asset, given the long concession length which runs out to 2086, we estimate this impact to be highest out to 2030, followed by a reduced impact between 2030 and 2050, and negligible impact post 2050, as emission reduction targets are generally achieved or approached. This applies to its car and truck shuttle services, which compete with ferries across the Dover straits, as well as its passenger rail service Eurostar, which competes with European airports and airlines that service short-haul flights.

Getlink is in a unique position of offering the lowest carbon emitting transport solution for people travelling between the UK, France and the Netherlands at a time when policy/regulations, consumer sentiment and investors are increasingly advocating for a carbon-constrained world and promoting 'greener' transport solutions. For this reason, our analysis shows the company is positively exposed to faster energy transition scenarios.

### Communications infrastructure

Our analysis shows that a faster transition scenario has a minor positive impact on the intrinsic value of the three companies we assessed. This is due to slightly higher revenues from co-tenancy additions combined with slightly lower costs.

It is possible that customer demand for passive tower infrastructure is higher under faster energy transition scenarios owing to increasing support from end users and governments for mobile communication networks due to potential environmental benefits. This higher customer demand for sites and points of presence would imply higher revenue.

There is increasing support from both a policy and societal perspective globally for ubiquitous mobile networks and mobile coverage, particularly the 4G and new 5G networks, to support new technologies, devices and trends that have positive environmental impacts. Potential examples include enabling remote work and entertainment access via mobile networks instead of travelling and using smart devices/IoT/smart cities to reduce emissions from transport, buildings, households and power networks.

There is also a growing argument that 5G can in fact enhance the efficiency of mobile networks themselves, whilst providing substantially greater capacity and connectivity. This is due to techniques including enhanced power management at equipment level, new siting solutions such as liquid cooling to reduce the need for air conditioning, and flexible use of resources such as spectrum.

Our analysis also considered whether operating expenditures for energy and electricity may be slightly lower due to greater energy efficiencies achieved and/or greater use lower cost renewables. We found that a faster transition would imply higher adoption of renewables, low costs, and high grid reliability from investments in renewables and networks.

It is difficult to assess the risks and opportunities with great accuracy due to limited company disclosures within the communications infrastructure segment. This is further complicated by the fact many of the risks and opportunities are highly interrelated and therefore difficult to isolate. Approximately 13% of the GLI strategy is invested in communications infrastructure as at 31 March 2023.[10]

### Energy storage

A faster transition, as modelled by the Net Zero Emissions scenario, has a negative impact on the intrinsic value of the energy storage company assessed. This is due to decreased demand for oil and gas products, partly offset by slightly higher demand for chemicals and vegoils and biofuels products. This is far less pronounced for slower transition scenarios.

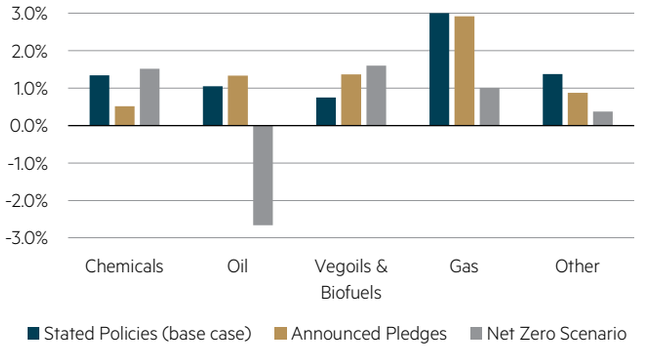
Our analysis indicates the negative valuation impacts are minor before 2027, reflecting (1) the application of scenarios only from 2023/24 to account for capacity changes, and (2) the phasing in of demand impacts to correspond with contract durations, as we assume changes in demand under each scenario will impact revenues when existing contracts are rolled over.

The most impacted business segments are in Europe and Africa (32% of 2022 proportional revenues) and the Americas (26% of 2022 proportional revenues). These regions have the largest amount of revenues from oil products, for which the IEA sees the greatest reduction in demand in faster energy transition scenarios, particularly in those regions.

It is important to note that the scenario analysis does not capture the potential positive or negative implications from the addition or removal of capacity to accommodate for changing product demand, i.e. a continuation or acceleration of trends by the company to reduce exposure to oil products and increase exposure to new energies and low-carbon products such as hydrogen and ammonia. The GLI strategy holds one energy storage position of approximately 4% as at March 2023.[11]

8 Getlink was the only rail holding in the strategy at the time of the analysis.
9 We assume revenue per passenger (i.e. yield), opex or capex are not material drivers of sensitivity in the climate scenario analysis.
10/11 Position weights are based on a representative fund of the GLI strategy as at March 2023.

### Revenue CAGR by product and scenario (2023–32)




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

## Midstream infrastructure

A faster paced energy transition presents long-term challenges for midstream companies. The IEA's 2022 modelling shows oil demand peaks slightly in 2035 under the Stated Policies scenario (base case), while the Announced Pledges and Net Zero Emissions scenarios see oil demand peak at around 2024. This decline in demand is expected to be aided by increased bans on internal combustion engines (ICEs), increased electric vehicle (EV) penetration and a push towards mass public transport.

Moreover, natural gas demand decreases in faster energy transition scenarios. For instance, near-term demand for 2030 decreases by 8% and 22% while long-term demand for 2050 reduces 37% and 72% for the Announced Pledges and Net Zero Emissions scenarios respectively. The drop off in gas demand is primarily due to more gas-to-renewables switching, less coal and oil-to-gas switching, avoided demand (particularly in heating) and a global supply squeeze leading to high gas prices in several global gas markets.[12]

For the two midstream pipeline companies we assessed – we considered factors such as future capex and near-term volume throughput driven by changes in supply and demand for oil and gas in North America. When analysing a liquified natural gas (LNG) exporter, we considered marketing earnings driven by global gas price assumptions under different climate scenarios and the utilisation of facilities driven by IEA estimates of global LNG traded volumes under each scenario. Terminal values were derived from our scorecard assessment of return on invested capital (ROIC) and the weighted-average of segment demand and supply growth.

Concerted efforts to decarbonise and move away from fossil fuel in favour of low-to-zero carbon energy sources could create both opportunities and risks for these companies. In terms of risks, market and technology changes could lead to reduced demand for traditional midstream services and increase customer credit risk and operational costs. Reputational impacts could also lead to increased cost of capital and financing challenges for new projects.

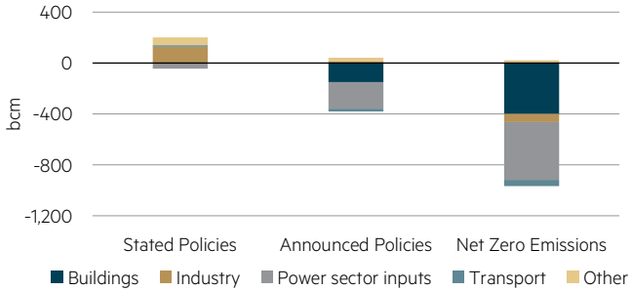
To counter these potential risks, we believe the few midstream companies held in the GLI strategy have opportunities to diversify their business models to facilitate the energy transition – including the repurposing of their pipelines for cleaner fuels, developing carbon capture opportunities and the expansion of self-powered renewable energy development. That said, the Net Zero Emissions scenario still sees a material negative valuation impact.

We continue to see long-term value in certain midstream assets that are strategically positioned and have highly regulated/ contracted earnings which minimises commodity price risks. Our exposure to the sector has materially reduced in recent years as we have become more selective in our investments. Namely, we have revised our growth outlook for some midstream infrastructure assets as the pace of the energy transition accelerates and new projects face ongoing headwinds. We have also stepped up our ESG efforts by more closely scrutinising companies' sustainability progress and performance while testing our ongoing assumptions related to stranded asset and climate change risks through scenario analysis. The GLI strategy has a 6% exposure to midstream infrastructure as at 31 March 2023.[13]

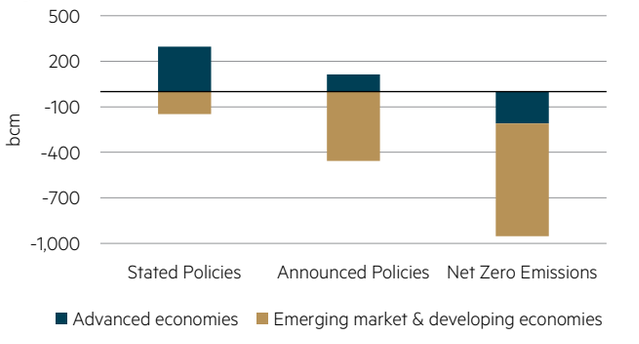
### Change in natural gas demand by sector, region and scenario (2021–2030)

The IEA models show that gas demand does not increase in advanced economies in any scenario.

Sector




Region




Source: IEA (2022), World Energy Outlook 2022, IEA, Paris.

12 In these instances, the balance is not expected to ease until mid-decade when large new LNG exports come onstream (70% of the Stated Policies scenario's gas growth to 2030 comes from LNG).

13 Position weights are based on a representative fund of the GLI strategy as at March 2023.

# Targets and metrics

## GLI strategy targets

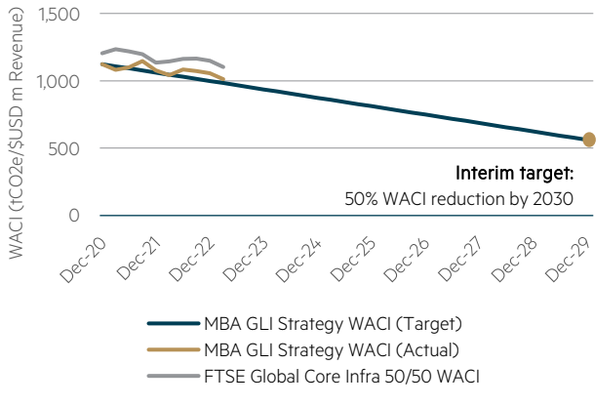
In October 2021, we became a signatory to the Net Zero Asset Managers initiative (NZAMi). As detailed in our decarbonisation strategy, we have committed to aligning the GLI investment strategy with a pathway towards net zero greenhouse gas (GHG) emissions by 2050. We have set a target of a 50% reduction in emissions intensity by 2030 relative to a 2020 baseline for all companies held in the GLI strategy.

Our interim emissions target:

- Relates to all GHG emissions and not just carbon dioxide
- Covers scope 1 and scope 2 GHG emissions[14]
- Uses a weighted average carbon intensity (WACI) calculation in line with the recommendations of the Taskforce for Climate-related Financial Disclosures (TCFD)[15]
- Applies to all GLI investee companies

As part of this commitment, we publicly report to the NZAMi annually on progress with our emissions strategy.

### Interim target progress[16]




Source: Maple-Brown Abbott and S&P Trucost as at 31 March 2023.

## GLI engagement targets

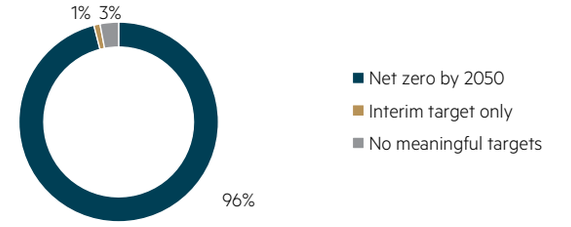
In addition to this, we seek to hold dedicated ESG engagements with at least 40% of investee companies by position weight every year. For instance, in 2022, we held 23 dedicated engagements with 17 companies, translating to 65% of portfolio companies by position weight. Details on our engagements and relevant outcomes are reported annually through our Engagement and Stewardship report.

## Company emissions targets

While meaningful progress to reduce emissions has been made by companies across our investment universe, significant work is still needed to facilitate and support a low carbon world in line with the long-term temperature goal of the Paris Agreement. In recent years we've seen a swathe of net zero emissions targets and commitments across the global listed infrastructure universe.

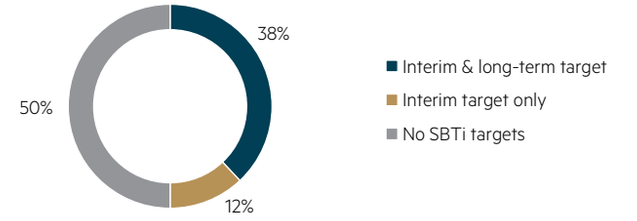
For instance, in June 2021, approximately 77% of companies within the GLI strategy (by position weight) had net zero targets, 5% had interim target only and 18% had no meaningful targets. By comparison, in February 2023, 96% of companies had a net zero target, 3% had an interim target only and 1% had no meaningful targets. It is becoming increasingly clear that the global listed infrastructure universe is moving towards this net zero 'norm'. It is no longer about having a target, but rather having a target that is both viable and ambitious.

### Emissions targets by position weight




Source: Analysis based on desktop research. Weights are based on a representative fund of the GLI strategy as at March 2023.

### SBTi targets by position weight




Source: Maple-Brown Abbott analysis of SBTi targets. Weights are based on a representative fund of the GLI strategy as at March 2023.

*Assessing the quality of targets*

While the trend to set net zero targets is a welcome development, we also take these announcements with a healthy level of skepticism owing to the rising risk of greenwashing. The main question we ask ourselves and companies is: is this statement of intent genuine, viable, detailed and ambitious enough? We fully support and encourage company efforts to decarbonise but doing so cannot simply be a marketing exercise with limited scope and meaning. Further detail on how we assess emissions targets can be found in our short paper 'Not All Net Zero Targets are Created Equal'.

14 While we believe there is a strong and pressing imperative to manage scope 3 emissions, we do not feel that companies' reporting data, monitoring abilities and target setting of scope 3 emissions is currently sufficient for us to develop a target at the portfolio level. We expect this to change over the coming years as companies become more sophisticated in their reporting capabilities and they take a more comprehensive approach to managing their entire emissions value chain. Scope 3 emissions remains an active topic of discussion in our ESG company engagements.

15 The recommendations can be found here.

16 Based on a representative fund of the GLI strategy as at 31 March 2023. Please note that we transitioned to a new third-party ESG data provider in 2022 and have re-stated the strategy's historic emissions in accordance with our new data provider. The WACI for the FTSE Global Core Infrastructure 50/50 Index has been grossed up to account for data that is not available.

The biggest challenge we face is that there are no codified regulatory standards for companies when setting net zero targets. The Science-based Targets Initiative (SBTi) is fast becoming a promising voluntary avenue to add more rigour to the process. However, the pace of take up varies significantly between regions such as Europe and the US due to different business models and sectoral pathways. Therefore, about half of investee companies do not have SBTi accreditation for their emissions targets. This remains a key area of focus for our company engagements.

*Paris Aligned Investment Initiative*

To help us assess company targets, we use the Paris Aligned Investment Initiative (PAII) framework to:

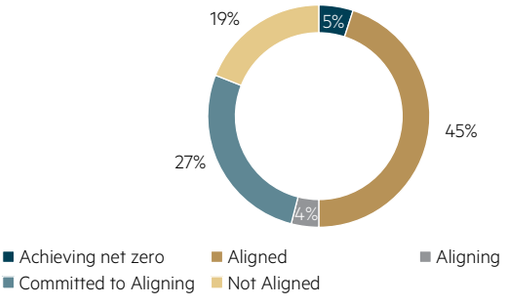
- assess the quality of companies' transition plans;
- estimate GLI strategy alignment with the goals of the Paris Agreement; and
- identify areas for engagement with companies.

The PAII assessment criteria is stringent with 16 sub-indicators that help measure:

- emission disclosure, targets and performance;
- decarbonisation strategy; and
- capital allocation alignment.

As part of our commitment to the NZAMi, we have established engagement objectives to focus on companies that are 'committed to aligned' and 'not aligned' to further progress.

**PAII alignment of investee companies (by position weight)**




Source: Maple-Brown Abbott Global Listed Infrastructure assessment of alignment. Weights are based on a representative fund of the GLI strategy as at 31 March 2023.

**What is the Paris Aligned Investment Initiative (PAII)?**

The PAII is a collaborative investor-led global initiative designed to help investors to align their portfolios and activities to the goals of the Paris Agreement. The initiative was established in May 2019 by the Institutional Investors Group on Climate Change (IIGCC) and has grown to include four other regional investor networks – AIGCC (Asia), Ceres (North America), IIGCC (Europe) and IGCC (Australasia).

Further details can be found here.

**GLI strategy emissions metrics**

As at 31 March 2023 the GLI strategy remains below the FTSE Global Core Infrastructure 50/50 Index, the FTSE Developed Core Infrastructure 50/50 Index and the GLI Focus List[17] in relation to the weighted average carbon intensity (WACI) for scopes 1 and 2. We expect these metrics to improve over time as the GLI strategy's more emissions-intensive positions in electric and multi-utilities decarbonise by decommissioning coal-fired power generation and invest in renewable energy capacity and other low carbon solutions. It is worth noting that progress is never linear and shorter-term fluctuations are expected. For instance, in 2022, we saw a temporary uptick in gas-to-coal switching to overcome gas shortages and high prices and therefore global emissions.

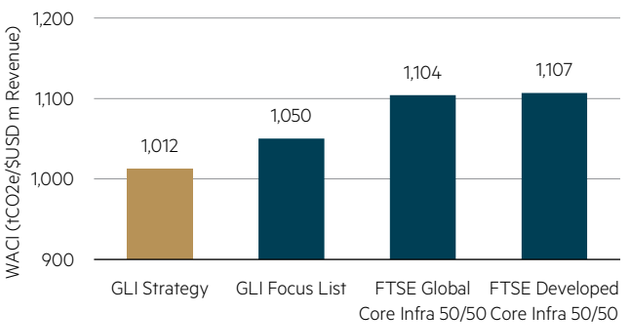
*Emissions versus "rate of change"*

Every electric and multi-utility company in the GLI strategy has a net zero target by at least 2050. Our focus is on the transition potential of a company rather than emissions at a point in time. Utilities and energy infrastructure companies are inherently carbon-intensive, but over the long term they are vital for future economic growth, the provision of essential services and the facilitation of the transition to a low carbon economy. Without the right infrastructure, the world will not be able to deliver on the long-term temperature goal of the Paris Agreement.

We believe emissions are not a good metric for forward-looking assessments of companies. Instead, we use emissions data when:

- undertaking emissions analysis in investment theses which then feeds into stock discussions on whether to initiate a position or not;
- undertaking emissions projections to assess the strategy's rate of change over time;
- assessing companies' targets and progress using the PAII framework;
- convening GLI Investment Committee meetings, where the quality of companies' emissions targets and the strategy's emissions intensity are discussed; and
- engaging with companies and making proxy voting decisions.

**Weighted average carbon intensity (WACI)[18]**




Source: Maple-Brown Abbott and S&P Trucost as at 31 March 2023.

17 The Focus List is a proprietary list of infrastructure stocks considered by the investment team as providing the strongest combination of inflation protection and low cash flow volatility. As at 31 March 2023.

18 A representative fund of the strategy has been used as a proxy for the analysis (USD). Proprietary analysis using S&P Trucost. The WACI (tCO2e/$m Sales) is achieved by calculating the carbon intensity (Scope 1 + 2 GHG Emissions/$m Sales) for each company held and calculating the weighted average by portfolio or index weight. As at 31 March 2023.

## TCFD mapping

| Section | Disclosure | Reference |
|---|---|---|
| **Governance** | Describe the Board's oversight of climate-related risks and opportunities | Maple-Brown Abbott GLI TCFD 2021 Report (2021) (page 5)<br>Maple-Brown Abbott Climate Change Report (2023)<br>Maple-Brown Abbott Climate Change Policy (pages 1–2) |
| | Describe management's role in assessing and managing climate-related risks and opportunities | Maple-Brown Abbott GLI TCFD 2021 Report (2021) (pages 6–7)<br>Maple-Brown Abbott Climate Change Policy (pages 1–2) |
| **Strategy** | Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term. | Maple-Brown Abbott GLI Climate Change Report (2023)<br>Maple-Brown Abbott GLI Decarbonisation Strategy (pages 7–10)<br>Paper: ESG Integration in Midstream Investments<br>Paper: The impacts of the energy transition on infrastructure needs in North America |
| | Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario | |
| | Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning. | |
| **Risk management** | Describe the organisation's processes for identifying and assessing climate-related risks. | Maple-Brown Abbott GLI TCFD 2021 Report (2021) (pages 22–23)<br>Maple-Brown Abbott GLI Engagement & Stewardship Report (2021/22) (pages 8–10)<br>Maple-Brown Abbott GLI Our approach to Engagement<br>Maple-Brown Abbott Climate Change Report (2023) |
| | Describe the organisation's processes for managing climate-related risks. | |
| | Describe how the processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management. | Maple-Brown Abbott GLI TCFD 2021 Report (2021) (page 5)<br>Maple-Brown Abbott Climate Change Report (2023)<br>Maple-Brown Abbott Climate Change Policy (pages 1–2) |
| **Metrics and targets** | Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process | Maple-Brown Abbott GLI Climate Change Report (2023)<br>Maple-Brown Abbott Climate Change Report (2023)<br>Maple-Brown Abbott GLI Decarbonisation Strategy (pages 3–7) |
| | Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets. | |
| | Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks. | |

## About us

Maple-Brown Abbott has significantly evolved since our origins nearly 40 years ago across investment styles, asset classes, geographies and client types. Today we are a boutique of boutiques, focusing on active management of differentiated listed equity strategies. As one of the earliest Australian managers to sign up to the PRI, we have a long history of deep ESG integration which is core to each of our strategies. We are privately owned with around 60 staff in Sydney with around A$9.4 billion in assets under management as at 31 March 2023.

The MBA Global Listed Infrastructure business was established in 2012 in conjunction with Maple-Brown Abbott Limited and is majority owned by the MBA Global Listed Infrastructure (GLI) founding Principals and staff. The team manages approximately A$4.5 billion on behalf of clients across North America, Europe and Asia Pacific regions.

The MBA Global Listed Infrastructure strategy invests in listed infrastructure equities with a focus on sustainability and environmental, social, and governance (ESG) factors. The strategy invests in companies that provide essential services to society and typically have a market capitalisation greater than US$500 million. We see it as our fiduciary responsibility to consider the financial and non-financial issues which may impact the performance of our clients' assets. We actively engage with companies and use proxy voting decisions to help drive more sustainable long-term outcomes for investors. We assess a company's environmental, social, and governance (ESG) risks and opportunities as part of our detailed industry and company research at each step of the investment process.