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RESILIENT Infrastructure

Rising to the challenge of a more sustainable future

Contents

The world of infrastructure investment is changing... and the pace of that change will only accelerate

The Covid-19 pandemic has led to disruption on an unprecedented scale. Economies around the world have suffered severe dislocation, while asset prices have fluctuated as investors struggle to understand what a post-Covid world will mean for their portfolios. Meanwhile corporates, governments and others are having to assess the impact of this disruption against a backdrop of increasing sustainability pressures and technological change which continue to offer new challenges and opportunities across the global economy.

For many, the attractions of infrastructure as an asset class have been reinforced by the pandemic: the stable, long term returns they bring can appear a welcome source of security in an uncertain world. But the sector is likely to see its own significant disruption in the next few years, unrelated to the virus. Large-scale, secular, global forces are driving change. Issues like climate change and rapid technological advancements will put pressure on the industry as never before, and mean a substantial alteration to the patterns of demand for the asset class, impacting potential returns. The danger is that market participants who have become used to the robust, predictable infrastructure demand and returns of the past fail to fully understand the potential impact of these forces, and suffer the consequences as the pressures that will continue to drive change lead to a fundamental overhaul of the sector's dynamics.

But what is the magnitude of those changes, and how significant will they be? What are the barriers that may prevent the market from responding to them? And what are the implications for designing and pricing infrastructure in the future? Perhaps most importantly, do investors, governments, regulators and others understand the changes, and are they prepared to meet the challenges and opportunities they bring?

To find out, Ashurst surveyed 124 business leaders – including c-suite members, in-house legal teams and general counsels, as well as commercial and business development executives – for their perspectives. Their areas of specialism included transport, social infrastructure and water, while their offices were located around the world, in both developed and developing nations. Together, they offer a global insight into the attitudes of those at the heart of the infrastructure sector today, and how they view its prospects for the years ahead.

The findings demonstrate a need for the industry to put a greater focus on more resilient infrastructure – assets that are flexible and robust enough for this changing landscape – to meet the needs of the future. The pressures on the sector mean that strategies which may have worked in the past cannot be relied upon to provide guidance for the future. Many of the norms that have previously informed long-term capital allocation will be significantly different in the years ahead. The assets that investors are used to financing today may not be appropriate in a world that will face powerful, complex issues such as how to respond to global warming, or how to harness and respond to the digital revolution.

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Attitudes towards risk are changing for some, but not for all

Our survey confirms there has been – and will continue to be – a shift in the perceived risk attached to the infrastructure sector. And this shift is not just linked to the pandemic: our results show the evaluation of risk has changed for reasons that go well beyond the impact of Covid-19, significant though that has been.

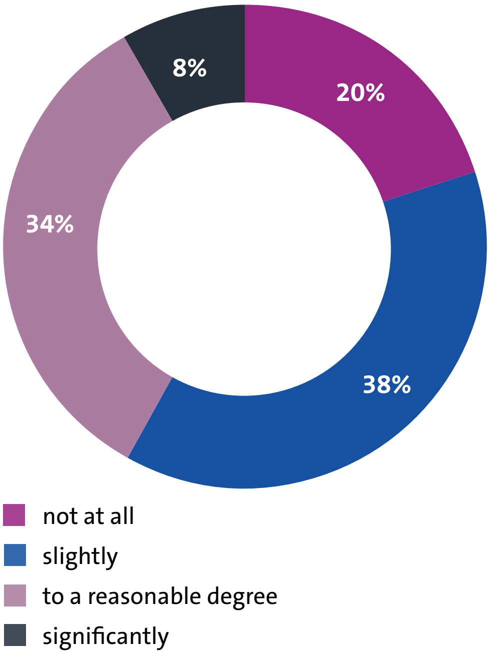
There was widespread agreement among those who took part in the survey that the pandemic had increased the medium to long term risk attached to the sector. Just under 80% believed that the risk had increased to some degree, while nearly one in twelve felt that the risk had increased significantly.

However, for many of our survey participants, it wasn't just the pandemic that was changing the perception of risk attached to infrastructure. Even taking Covid-19 out of the equation, nearly 50% felt the risk profile of the sector was increasing - indeed, more than 10% thought the future risk profile of the sector would be significantly higher, driven by the factors highlighted below.

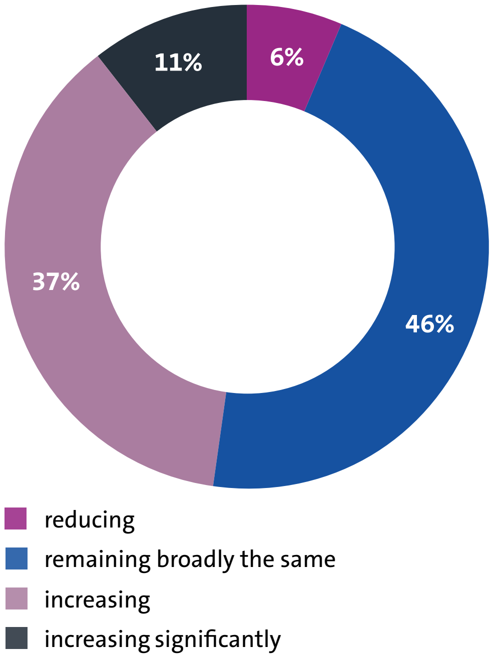
Yet while many evidently see an increase in risk, a significant number of others have not been persuaded that the landscape has shifted. Indeed, more than half of our respondents felt the risk profile hadn't changed, or had actually declined. Does that indicate a reasoned response to these forces of change, or does it suggest a degree of under-appreciation of the potential impact of these forces on the risk profile of the asset class among some market participants?

Perhaps most importantly, does it suggest they are making an implicit assumption that the resilience of the infrastructure industry seen in recent years will continue into the future? This may prove to be a mistake: after all, the survey showed that a significant number of participants believe we are seeing fundamental changes which are likely to lead to significant disruption in the sector, reshaping its dynamics and testing the resilience of infrastructure assets to an extent not seen in the past.

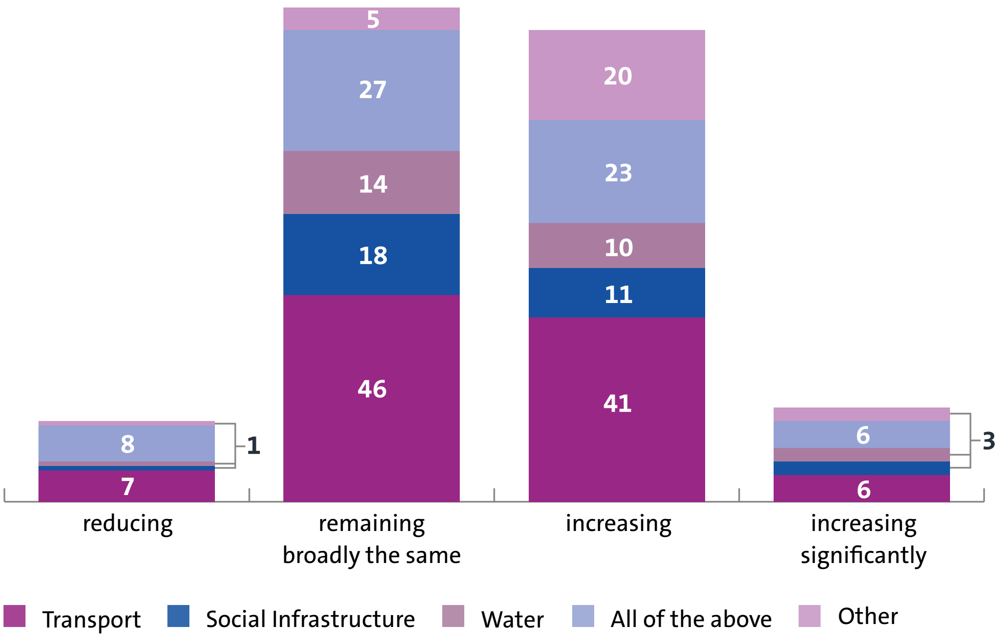
Impact of the pandemic on respondents' perception of the medium to long-term risk attached to the sector



Future risk profile of the infrastructure sector



Future risk profile across infrastructure sectors



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Fundamental forces will drive even bigger change in the future

Top of the list of challenges likely to affect the sector was the **drive to reach net-zero carbon emissions:** our survey found more than eight in ten rated its impact as either high or very high. There is plenty of evidence to suggest this assessment is correct: according to PwC's Global Infrastructure Trends report in 2019 for example, estimates show that around 70% of the increase in future greenhouse gas emissions will come from infrastructure that is yet to be built. Meanwhile, at a COP26 roundtable event McKinsey noted that 30% of the world's carbon emissions are generated by the construction industry. The focus put on net zero at COP26 in Glasgow earlier this year also suggests this issue will only grow in significance. Mitigating this challenge means infrastructure assets will need to have a significantly reduced carbon footprint in the future. That means a focus not only on clean technology such as carbon capture and hydrogen power, but also on innovations in areas such as re-purposing and more carbon-efficient supply chains.

Yet while the move towards net zero scored highest in terms of impact, other factors were also seen as significant. **Technology** ranked second in our survey, with 79% believing it had a high or very high impact.

There are number of forces currently at work which may be behind this. For example, investment in digital infrastructure, such as data centres and fibre networks, driven by the increasing use of data, the cloud, consumer demand for streaming services and the growing reliance on Artificial Intelligence (AI) is only set to rise. However, the digital infrastructure revolution brings with it its own sustainability challenges. These networks and alternative solutions will in their own right demand a significant amount of energy and related infrastructure, and investments will need to ensure their power supply is sustainable if they are to be resilient in the face of pressure from governments, investors, environmentalists and others.

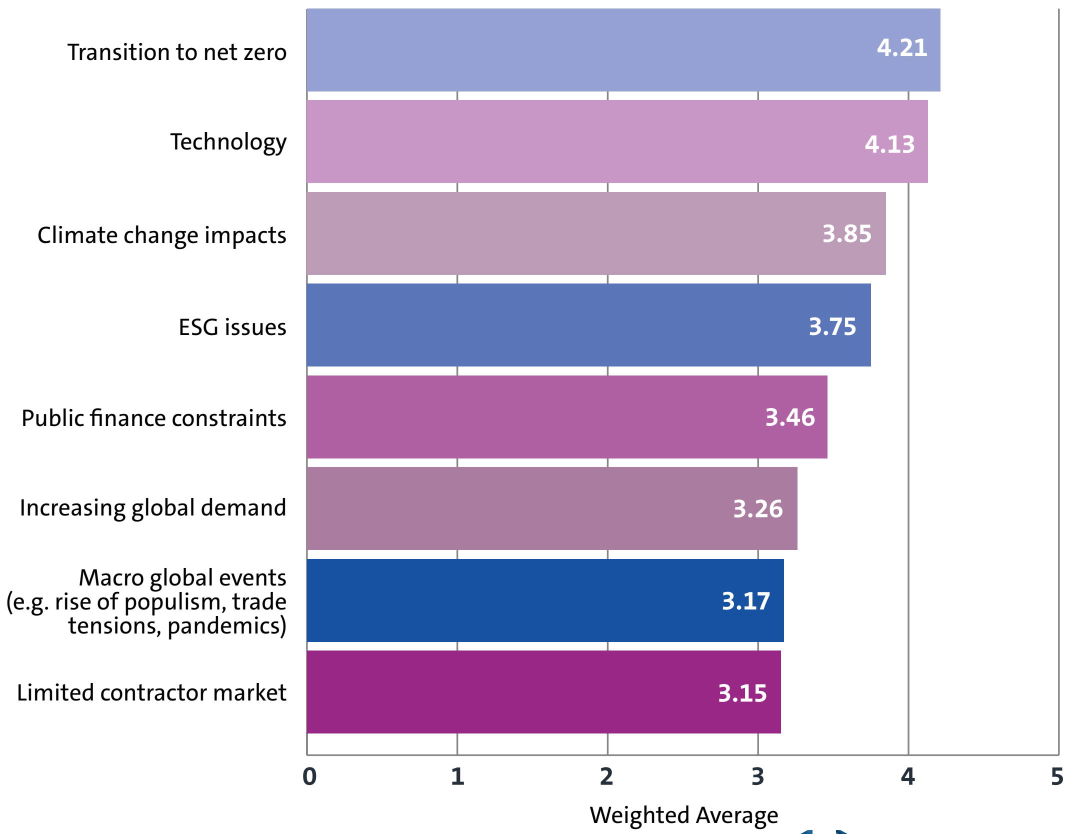
The growth of digital infrastructure is just one of the forces behind the increasing impact of technological advancement on the infrastructure sector. Technological change to the transport sector is another: digital solutions can unlock additional capacity and enhance mode flexibility. The advent of cheap and ever-improving virtual connections is likely to have a lasting impact, on business travel in particular. At the same time, increasing demand for more joined-up travel solutions and alternatives through Mobility as a Service (MaaS) platforms - such as the growing popularity of car sharing/hiring - as well as of micro-mobility – the use of bicycles, scooters and mopeds – is likely to need significant capital to enhance the related infrastructure to ensure it is fit to meet the demands of the years ahead.

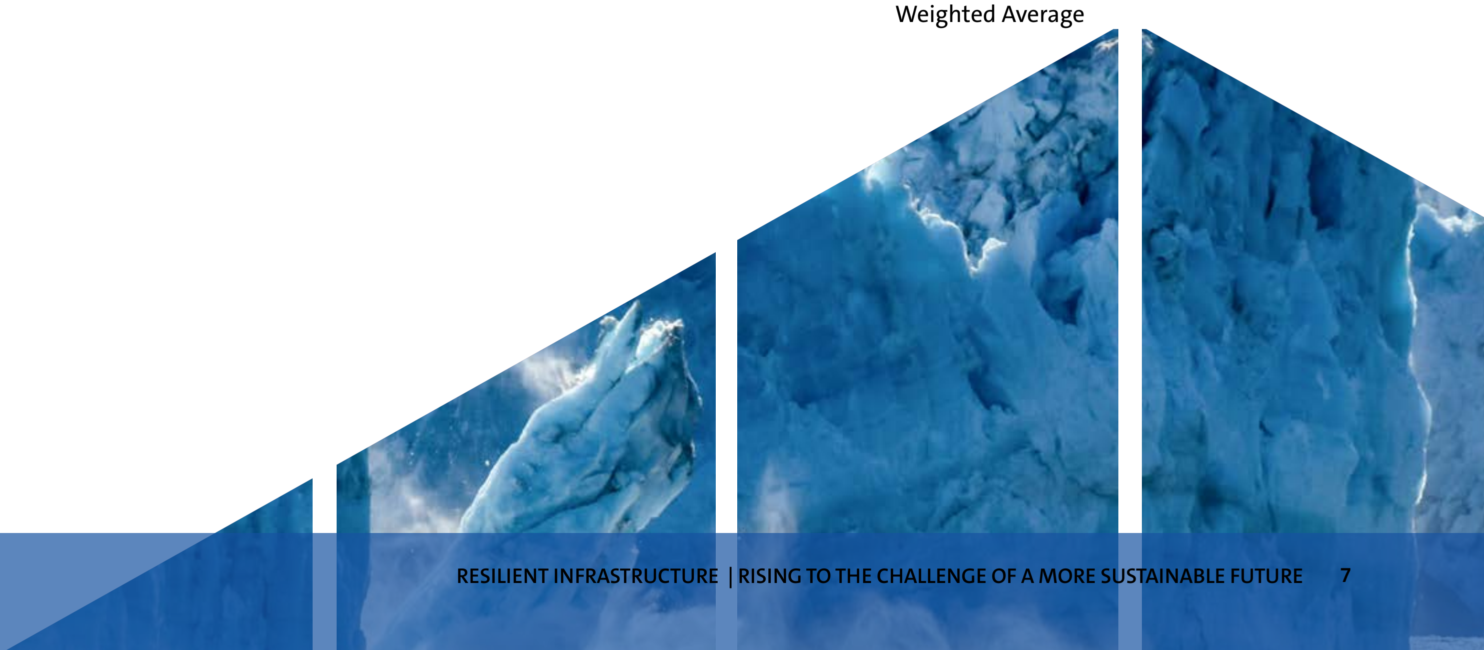
Every new wave of technology pushes engineering boundaries, in turn testing risk-sharing structures and increasing the potential for disputes as teething issues are worked through. First mover projects and participants will need to be increasingly alert to identifying and managing these risks if they are to build in appropriate resilience and protect their investments.

Behind net zero and technology, **climate change** was seen as being the third most significant factor affecting the infrastructure sector: two-thirds of our survey respondents rated it as having a high or very high impact. Indeed, many infrastructure investors are already analysing their capital allocation through Environmental, Social and Governance (ESG) filters, and will only invest in assets that meet global sustainability criteria. The risks from climate change range from the impact of rising sea levels on cities to the effect of changed rainfall patterns on agricultural economies. Financial markets – and governments - are responding by issuing Green Bonds to back infrastructure projects that mitigate the effect of global warming.

Our survey confirms that ESG has become embedded in mainstream decision making, so infrastructure promotors, developers and investors will need to take note of the impacts they are creating – and the way they are mitigating the issue – when designing future infrastructure and deploying capital. Businesses will also need to be cautious of any representations they make about their ESG credentials: this is an area where we are likely to see increasing claims and litigation in the future.

Factors impacting the infrastructure sector





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Governments are one of the biggest influences on the sector's response… but also the biggest obstacle to change

Our survey shows that many – but by no means all – market participants believe that the perceived risk of the infrastructure sector has risen, and that a number of long-term forces are set to impact the industry further. The challenge, then, for the infrastructure sector will be to design, structure, finance and build future-fit assets that are resilient: robust and flexible enough to insulate them from the impact of ever-changing global patterns of demand and ever-increasing global challenges.

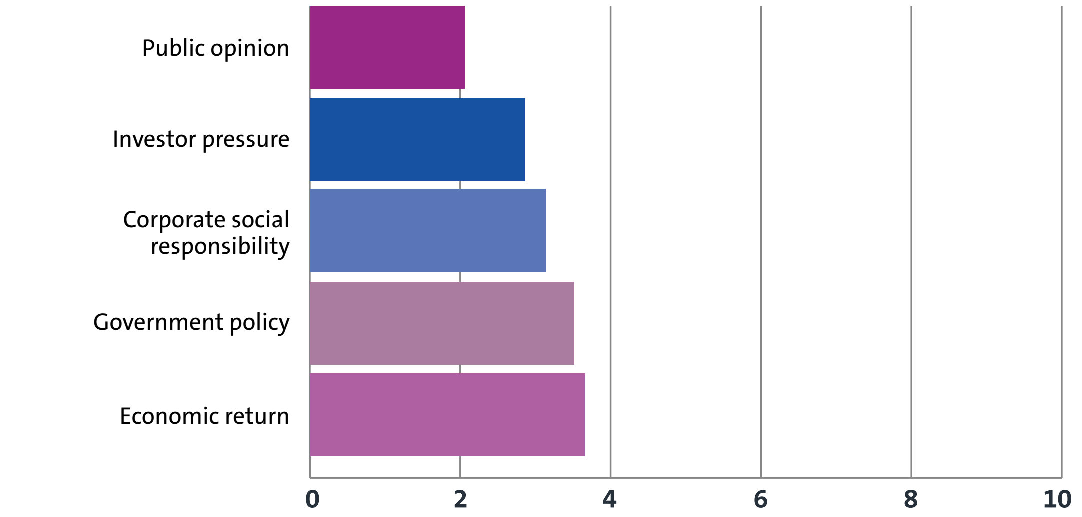
What are the outside influences that are affecting the way the industry is responding to these changes? Our survey showed the **continued need to make a good economic return** for investors in spite of the changed environment was the most significant factor influencing the way organisations were responding. However, this was closely followed by **government policy**, with the drive for **Corporate and Social Responsibility** third.

But there are a number of barriers preventing the infrastructure sector from providing a coherent response to the changing environment, our survey found. Indeed, if governments were seen as being among the most significant influences on the sector, many in the survey were frustrated at the way those governments were carrying out their role. By a substantial margin, a **lack of coherent government policies** was named as the biggest barrier to a coordinated response to the changes likely to impact the sector. Indeed, more than three quarters of respondents named it as a main barrier for them.

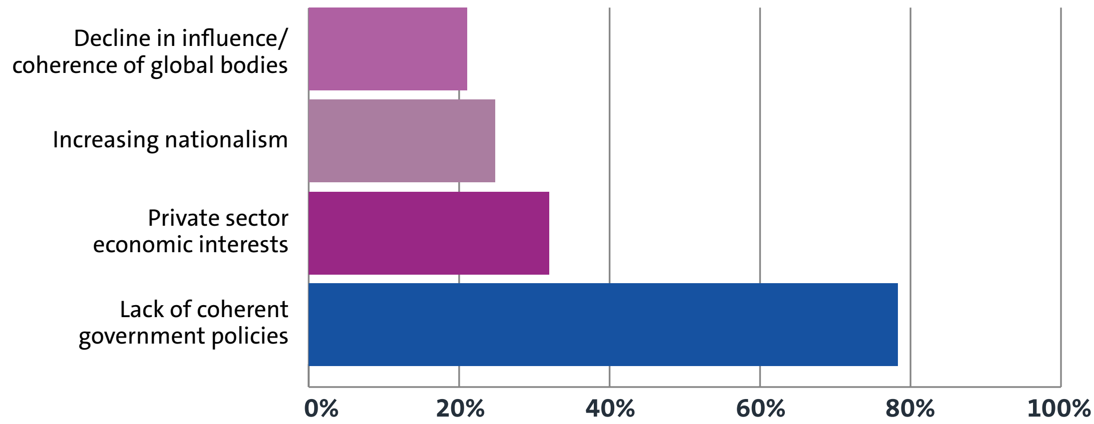
The lack of a stable global policy framework on which to base infrastructure investments may be one source of this frustration. The competing policies around fossil fuel investment between developed countries such as those in Europe on the one hand, and fast developing parts of the world such as China and India on the other, illustrate the difficulty in finding a globally co-ordinated response to climate change. The challenge for governments then is to make a step change in the way they regulate and legislate for the sector, to create an environment that will encourage more resilient infrastructure to emerge. For example, if businesses and investors face an increasing "carbon cost" in some jurisdictions but not others, this is likely to distort investment decisions in favour of the lower cost jurisdictions, at the same time making the challenges of achieving net zero even greater.

While a lack of coherent government policy was seen as the most significant barrier to ensuring a joined-up response to the industry's challenges, other issues were also noted as a problem. Just under a third saw **private sector economic interests** – which made it difficult to develop sustainable and financially-viable public-private partnerships – as being a barrier, while just under a quarter pointed to **increasing nationalism**. As governments on different continents increasingly adopt nationalistic or protectionist policies, that means investors and other stakeholders may well need to focus on better understanding global treaties and trade regulations if they are to navigate a less globalised world.

Factors influencing response to the challenges/opportunities facing the industry



Barriers to a co-ordinated response



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Some market participants are therefore changing the way they think about the sector. But for others, it seems to be ‘business as usual’

Wherever they look then, those we surveyed see a number of global challenges as they focus on building infrastructure resilient to meet changing demands. Increased risk, the growing impact of technology, the drive to net zero, climate change, as well as frustration caused by a lack of coherent government response, all present a fundamentally different picture to that seen in recent years.

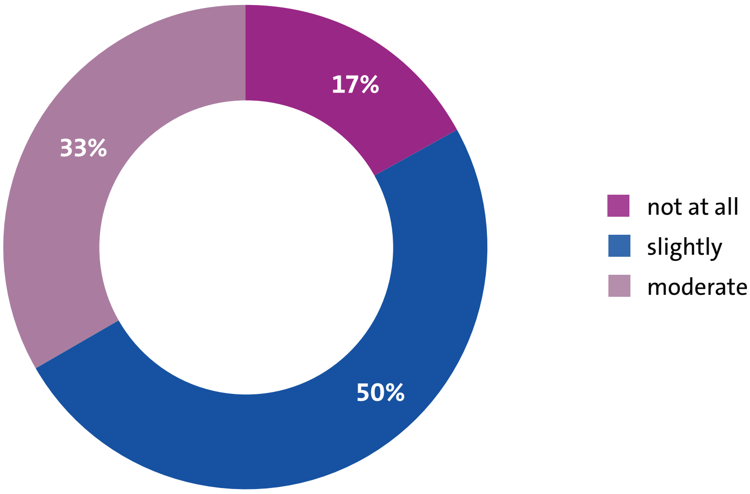
For many, this has meant a shift in the way they think about the sector. More than 80% of those who took part in our survey said they had changed their approach to the evaluation and assessment of risk because of this changing landscape. But just how big a change are they willing to make? A significant majority of those who said their approach had changed said it had changed only slightly. Indeed, more than one in six said it hadn’t changed at all. Are they underestimating the impact of disruption on the sector? If so, many market participants may find themselves having to ask themselves hard questions in the near future about whether they have fully understood the full nature of the changing demands on infrastructure.

Yet in spite of this newer, riskier environment with its need for assets that match the changing requirements of society, the attraction of the infrastructure sector appears undiminished, our survey found. Half of those who took part said the potential impact of these changes would not affect their appetite for infrastructure, while more than a third felt the changes would actually increase their interest – at least to some extent - in the sector. Indeed, more than one in eight said their interest would materially increase as a result of the factors influencing infrastructure’s changed future dynamics.

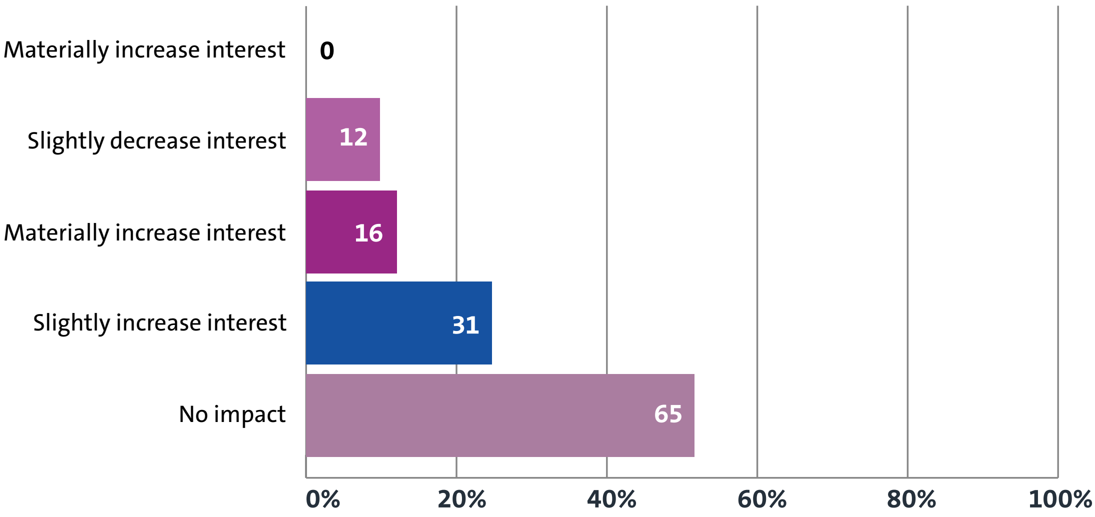
And, while there was some evidence that the emerging patterns of risk would impact the way they invested – more than a quarter said they would broaden their horizons and look at alternative areas of infrastructure to their current portfolios – more than 70% said they would remain focused on the same areas as now.

In a world where liquidity remains plentiful, interest rates remain, at least for the time being, at subdued levels, and returns available elsewhere are still low, it is therefore evident that the asset class will remain attractive. Based on the survey results however, for a significant number of participants, this will be caveated by the sector’s ability to prove that its assets are flexible and robust enough to meet the needs and challenges of the future.

Changing approach to assessment and evaluation of risk



Effect on interest in the infrastructure sector



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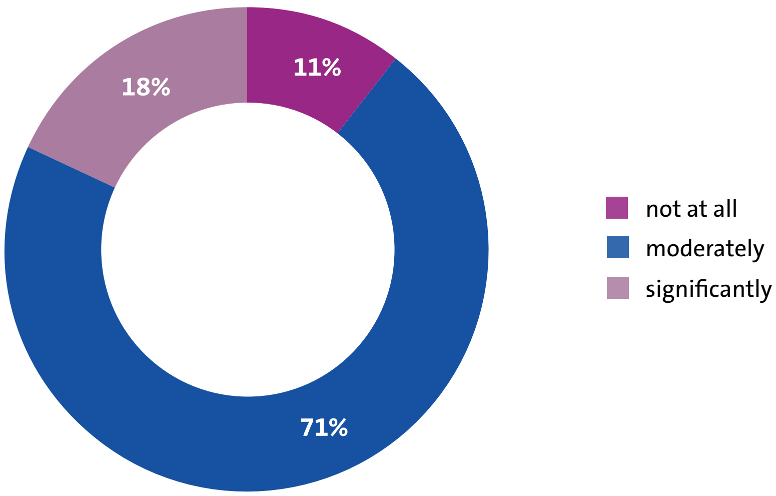
The implications for pricing

How will this new environment with its demand for resilient infrastructure affect pricing? Our survey suggests investors will demand better returns to compensate them for the elevated risk the sector faces in the years ahead. Only around one in ten thought there would be no impact at all, while more than two-thirds thought it would have a moderate impact. More than one in six thought it would significantly change the way they priced risk. It seems that delivering the more resilient infrastructure asset base required to succeed in a time of greater uncertainty will include a marked impact on the return demanded by investors for their capital.

In part, this may simply reflect the traditional, broad cycle of infrastructure investment: new technology can command higher prices and returns at the beginning of a cycle, but as the advancements bed down, costs and returns drop to lower - and more enduring - levels. Industries such as wind farms and solar, for example, both saw high prices when the technology was new, but have subsequently seen prices fall as that technology matures. And while some investors may be put off, others may welcome the uncertainties, particularly if they are able to understand and evaluate the risk of operating in a different world.

Elevated risk its effect on pricing



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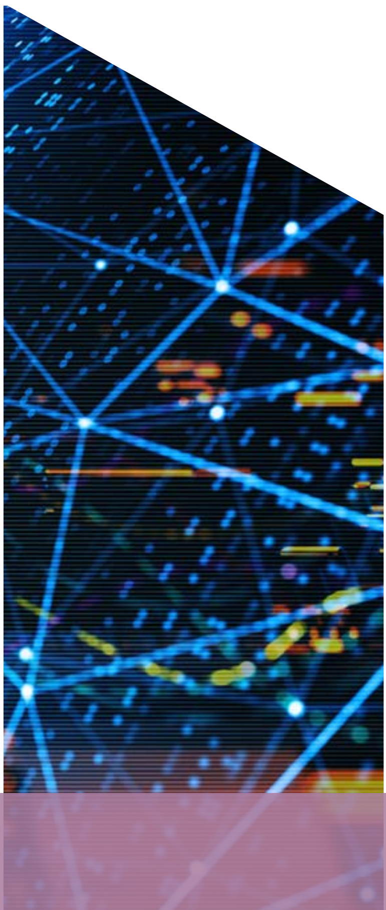
In conclusion: how to prepare for a new, riskier world

What are the risks for those who fail to adapt to the changed world? The main concern is that those investors who continue to invest in the sector expecting things to be the same as they were in the past end up allocating capital to projects that will not be designed or priced to be fit for purpose in 10 to 15 years' time. Not only does that increase the risk that assets become white elephants, it will also impact negatively on those long term, stable returns that made the asset class so attractive in the first place, and potentially reduce the investor base and available capital. More broadly, it also increases the risk that society as a whole will not see the type of infrastructure being built that is required to meet the challenges posed by climate, new technology and the other forces of change.

How then, should the public and private sectors respond to ensure the world's future infrastructure needs are met? For their part, governments and regulators will have to take the joined-up decisions needed to create the right playing field for the sector to flourish. They will need to set stable policy frameworks, decide which types of infrastructure are important, what role they want private companies to play, and ensure the right regulatory, economic and policy platforms are in place to ensure finance continues to flow. After all, the public sector will not itself have the resources to meet the needs of electorates: the private sector will continue to be required to provide the funding to build the resilient infrastructure needed in the future.

For its part, the private sector will need to better understand the changes that are taking place, and be prepared to shift focus. Investors, financiers and developers will need to better evaluate their projects and the associated risks and pricing models. Most importantly, they will need to accept that the kinds of decision making and capital allocation strategies that worked in the past may not work in the years ahead. And more than ever, it will be vital for both public and private sectors to have the right expertise and advice to make informed choices about how to design, develop and finance projects that are fit for the future, and resilient to the increasing uncertainties that lie ahead.

Infrastructure has long been a haven for investors seeking a stable, sustainable return in a changeable world. However, new technology, the impact of climate change, and the other forces highlighted in this survey will challenge those assumptions as never before. Yet, as the survey shows, the appetite for the sector is likely to remain undiminished. With the right support, those who can come to understand the new market dynamic and the need for more resilient infrastructure will be best placed to navigate a world of increased risk – and greater opportunity.



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