

### Market View Winter 2022

**Tipping Point?** 

## Introduction

The UK's construction market has continued to defy the gloom engulfing the wider economy, with output and new orders both increasing in third quarter 2022. While the tipping point has been reached, whether the downturn will affect the building and infrastructure markets in equal measure remains to be seen.

### The downturn arrives

They say that a week is a long time in politics, but three months is an age in terms of a Market View update. The political and economic fall-out from September's disastrous 'mini-budget' saw several weeks of turmoil in the markets, another government, and yet more uncertainty.

While the waters have calmed a little, recent weeks have seen further downward revisions to UK GDP forecasts and even weaker confidence. Third quarter GDP saw an overall contraction of 0.2%, with the government now admitting that the country is entering a shallow but prolonged recession. Meanwhile inflation reached a 41-year high of 11.1% in October and is likely to remain above 9% until the middle of 2023. Further interest rate hikes to a peak of between 4.5% and 5%, are forecast in the coming months, up from a low of 0.1% in December 2021 to 3% in November 2022.

Business investment has been weak for some time and latest Bank of England (BoE) forecasts suggest it is expected to fall by 3.5% in 2023 and a further 6.5% in 2024, reflecting weakness in overall demand and rising interest rates. Meanwhile government spending on debt interest has more than doubled in the last 12 months to £120.4bn, or 4.8% of GDP, a level not seen since the Second World War.

#### Construction has held up until now

In contrast to the gloom around the wider economy, the UK construction sector has remained relatively robust. The industry's output rose again in the third quarter of 2022 by 0.6% to make it the strongest quarter ever recorded.

Meanwhile, having fallen in H1 2022, total new orders were up by 6.4% (£774m) in Q3 2022, compared with Q2, driven in part by demand for retrofit of offices in the resurgent commercial segment. Indeed, Deloitte's latest London Office Crane Survey highlights that refurbishments are a strong feature of new construction activity, representing 26 of 31 new office starts. Overall, construction new orders in Q3 2022 were 11.5% above pre-pandemic levels.

Whilst it is worth remembering that these positive figures are backward facing, they nevertheless highlight that demand remained resilient right up until the turmoil of September 2022 and will provide a solid cushion of workload ahead of the expected slowdown in 2023.

#### Stronger warning signs

In terms of forward-looking signals, the evidence that we are at a tipping point in the cycle is beginning to mount up. The RIBA Future Trends Workload Index, for instance, has fallen 33 points in the last six months and returned a balance figure of -20 in October, indicating a further decline in architects' confidence. This is the lowest level since May 2020, during the first Covid-19



lockdown. About 30% of architects surveyed expect workloads to decrease in the coming three months, with pessimism strongest in London.

An increasingly difficult market is at play here, characterized by persistent challenges such as planning delays and viability concerns. Many clients are choosing to pause projects as they reach the end of a design stage to wait out an uncertain market. Anecdotal evidence from BoE Agents supports this, suggesting that an increasing number of new projects are being paused, due to a combination of uncertainty about the outlook, the recent sharp rise in borrowing costs and elevated material and labour costs.

A correction in the UK housing market is forecast too, with prices expected to fall by about 10% in 2023, following an eye-watering 24% gain since March 2020. Rising mortgage rates and increasing house-buyer concerns around the state of the economy are affecting demand, with volume housebuilders seeing the pace of sales halving. Their reaction has been to slow down investment in new land and housing delivery to conserve cash. Delivery of new homes could fall to 190,000 next year according to broker, Peel Hunt, from a peak of 243,000 in 2019/20, a fall of over 20%. This compares to a peak to trough fall of 50% between 2007 and 2010.

### Construction growth expectations subdued

The construction sector will have been relieved to hear Chancellor Hunt commit in his Autumn Statement to maintaining planned spending levels to 2024/25 as well as committing to major infrastructure projects like HS2, Northern Powerhouse Rail and Sizewell C nuclear power station. However, there will be concerns about the scale and timing of planned and future public sector infrastructure programmes and the delivery of the government's levelling-up agenda. This is because, depending on future levels of inflation, longer-term spending on capital projects could, in real terms, be £15bn a year less by 2027-28 compared to peak spending in 2024/25. Our Zoom Into section in this report looks further at the Autumn Statement and the implications for the construction market.

One critical element of the Autumn Statement was the announcement about the Energy Price Guarantee. No further detail was given concerning continued support for businesses' energy costs beyond spring 2023. Ministers say "significantly lower" levels of help will be offered to business, even though many organisations are highly exposed to energy prices. There is no detail as to whether future support will cover construction product manufacturers making items such as bricks and glass – as a result, this inflationary risk is very much alive.

Meanwhile the labour market is expected to remain relatively tight over the next few quarters. However, both BoE and OBR forecast that UK unemployment will rise substantially from current levels of 3.5% to peak at between 5 and 6% in 2024.

Given all the above, it is no surprise that recent evidence from the Construction Products Association (CPA) suggested that construction companies' growth expectations for the year ahead remained very subdued, with new build output forecast to fall by 3.7% in 2023 before recovering by 1.5% in 2024.

### Forecast

Whilst we still don't forecast that construction prices will fall, the impact of a slowdown is already being felt in tender markets, particularly in building markets exposed to the high cost of finance.

### **Predictions playing out**

UK construction markets have been battling against the twin headwinds of sky-high inflation and rising finance costs since Spring 2022. As highlighted in our introduction, performance measured by both output and orders has surprised on the upside and the industry has continued to grow, even as the wider UK economy has started to contract.

But markets cannot defy gravity for ever. Whilst construction inflation has stabilised, borrowing costs are on an upward curve. Even low-cost borrowing from the Public Works Loan Board has increased by over 1.6% since May to just over 4%. High-risk project finance is much scarcer and more expensive, with further knock-on effects for the viability of private development. Latest predictions of the state of the new build housing market are dire.

The pressure is on for a price reset but the supply chain's ability to respond is constrained. The UK is at the height of its stagflation cycle, and with the OBR warning that living standards in the UK will take the biggest hit since the mid-1950s, prospects for a wage-led price cut look remote. Similarly, materials price inflation remains at double-digit levels even as the prices of some categories like timber and steel fall.

With infrastructure workload somewhat protected by continuing Government investment and with inflation risk-sharing becoming more widespread it is increasingly likely that price trends in commercial and public/ regulated markets will diverge in the early stages of the coming downturn, with much higher inflation affecting infrastructure schemes.

### Strong foundations ahead of a slowdown

Despite the gloomy outlook, construction will enter a downturn in a strong position. Many sectors including housebuilding, infrastructure, industrial and even nonhousing repair and maintenance are delivering record levels of workload. On the one hand, this implies that firms will be able to consolidate from a position of stretched capacity and overtrading. On the other hand, a fall from peak levels of activity risks being deeper and longer.

Not all sectors will fall into recession. With public sector and utility investment protected through the Autumn



Statement and regulated settlements, the stage is set for a divergence between financially sensitive markets where viability determines levels of workload and the public sector, where work will continue, but where levels of inflation will start to eat away at budgets. However, compared to the last downturn in 2007/8, the infrastructure and housing sectors have a much bigger share of the overall construction pie, with new housing accounting for 26% of total spend and infrastructure nearly twice as large at 15%, giving them the potential to have a much bigger influence on the wider construction market

With housing demand so high, the sector could prove to be more resilient than the pessimists predict. By contrast, for infrastructure, as highlighted by the recent NAO report on National Highways, the challenge will be to prioritise and progress investment in the face of continuing inflationary pressure.

### Workers still missing in action

Construction's missing workforce will play a key role in determining the next steps in construction's response to slowdown. Construction's labour shortage is getting worse, which means that downward pressure on wages is less likely to act as a deflationary factor in 2023 than in previous cycles.

Unexpectedly, even as workload peaked in Q3 2022, the workforce contracted by 2% to 2.14 million. In particular, the self-employed workforce has shrunk by nearly 25% since early 2019. Self-employed labour traditionally has supported the industry's flexible pricing model, and with IR35 having increased impact, this is a less significant factor.

For the directly employed workforce, there are two major considerations for 2023. The first is retention. The BoE recently reported that employers are likely to hang onto their expensively acquired workforce for as long as possible in the face of an uncertain market. For clients and contractors, this will result in lower productivity in the short-term. The other factor is that construction workers are well behind the curve on cost-of-living stakes adjustments. Construction earnings including bonuses increased by 5.4% in the 12 months to



September, and employees are likely to push for a catchup settlement in 2023.

As a result, contractors are unlikely to make big bets on their labour costs until the next settlement is concluded in summer 2023– suggesting that there might be less flexibility in labour pricing in early 2023 than might have been hoped.

### Materials - up and down

The good news is that materials inflation has peaked and has slowed considerably since the early summer, when rampant steel price inflation drove inflation to over 30%. BEIS's measure of materials inflation is running at 16% year on year, and many commodity prices are down by 30-40% since Spring 2022. The bad news is that just as one category of materials such as steel falls in price, others are increasing. The contrasting fortunes of timber and insulation products illustrate not only how waves of inflation keep breaking out, but also how the drivers of inflation evolve over time.

- Timber and plywood increased in cost by over 70% in 2021 as the global Covid-19 recovery raced away. Inflation was demand-driven. Availability has stabilised, despite Ukraine disruptions and prices have fallen by over 10% in the past 3 months. With the key housing market likely to slow, prices still have some way to fall.
- Thermal insulation products are up in price by nearly 20% in 3 months and 45% in the year. Demand is high and supply is being controlled by allocation. The main inflation drivers are energy and feedstock costs, which are much less likely to respond to a change in demand conditions.

Although markets are stabilising and the rate of price inflation is down, conditions are not yet set for an industry-wide correction. Manufacturers including brickmaker Forterra continue to state that they can pass price rises to their customers. With another round of price hikes due in January affecting bricks, plasterboard and other basic materials, the scene is set for a showdown. The outcome will go a long way to determining the trajectory of pricing in 2022.





### Upside and downside risks - high levels of uncertainty

Materials pricing will be the main upside risk during 2023. Even though energy prices have fallen by 50% since August, there is no sign of a change in the fundamentals of Europe's fuel cost crisis, and in the UK, reduced levels of government support will kick-in as energy hedges fall out. Our analysis in the Autumn Market View highlighted the sensitivity of the costs of basic materials to changes in energy prices. Uncertainty levels will be very high for at least the next 12 months.

Other upside risks include:

- Labour costs related to the cost-of-living crisis and continuing workforce attrition
- Industry capacity related to insolvency, investment and insurance availability trends

The critical downside risk is of course the speed and size of any market correction. As highlighted in the introduction, although there is very little data available to measure this, our own experience is that an increasing number of building projects in particular are either delayed by descoping or are on hold as viability challenges multiply.

Our expectation is that the contraction will be significant enough to prompt at least some discounting by main contractors and their supply chain focused on the costs that they control – management, preliminaries, risk allowances and margins. This will help to hold inflation in check but will not usher in falling prices.

#### Forecast

We have been predicting a slowdown in construction for 2023 to 2025 since our May 2022 forecast. Our initial hypothesis relied on headwinds created by general inflation including delays in procurement as well as project cancellations. Headwinds have intensified since September as the UK has entered recession and as the era of low finance cost has rapidly come to a close.

However, the Government has confirmed its commitment to maintaining progress on its infrastructure programme, even if record levels of inflation mean that the volume of work delivered will be far below that originally planned.

Our forecast has two major components:

- Input cost inflation affecting labour and materials will continue to result in higher construction costs, even as workload falls,
- Inflation trends affecting infrastructure and buildings will continue to diverge, with infrastructure being affected by materially higher inflation than for buildings.

This forecast is subject to even higher levels of uncertainty than usual. On the demand side, the extent to which finance-driven sectors like property, manufacturing and logistics slowdown simultaneously is unclear. Similarly, whether long-term countercyclical investments such as gigafactories and net-zero office buildings go ahead will have an impact on wider sentiment.

On the supply side, risks associated with the materials market remain as high as ever, even as many of the demand-led disruptions of the past two years are resolved.

- We **confirm** our 2022 forecast at 10% for buildings and 12% for infrastructure.
- We **increase** our forecast for infrastructure inflation for 2023 to 6 to 7%, reflecting the high volumes of investment that will continue to be delivered and the use of procurement practice such as Early Contractor Involvement (ECI) that reduces competitive pressure during the later stages of bidding.
- For 2024 and 2025, we anticipate that infrastructure inflation will **fall** to 4%, in part reflecting the much lower levels of inflation expected in wider markets.
- We **reduce** our buildings forecast in both London and Regional markets to 2% for 2023.
- Our forecast for buildings inflation for 2024 and 2025 **remains** low at 3% for buildings in all UK markets.



	Regional Building Construction TPI	London Building Construction TPI	National Infrastructure Construction TPI
2021	5% (5%)	6% (6%)	6% (6%)
2022	10% (10%)	10% (10%)	12% (12%)
2023	2% (2-3%)	2% (2-3%)	6-7% (5%)
2024	3% (3%)	3% (3%)	3% (4%)
2025	3% (3%)	3% (3%)	3% (4%)
2026	5% (5%)	5% (5%)	5% (5%)
Total	28% (28-29%)	29% (29-30%)	35-36% (36%)

### Inflationary drivers

### Deflationary drivers

Peak levels of workload	General economic slowdown	
Increased certainty of public sector workload	Simultaneous property slowdown	
Energy price risk	<ul> <li>Weaker prospects for commercial and residential order book replacement</li> </ul>	
Core inflation	• Tax cuts and supply side changes	
• Scarcity	Risk attitude	

### Spotlight on: The tension between cost and price in the construction industry.

In our Autumn 2022 Market View, we examined the differences between the 2008 recession and current market conditions. Our aim was to highlight why conditions were different in 2023 and why construction prices are unlikely to fall as demand slows down.

This does not mean however that the relationship between prices and costs won't change. Indeed, our forecast for inflation in 2023 assumes that contractors and their supply chains are likely to absorb continuing cost pressure, particularly if energy prices continue to rise during 2023. With construction margins still wafer thin, at around 1.7% for the Top 20 according to CN100 data, main contractors are clearly concerned about the impact of a downturn and what this might do for competitive conditions.

Construction price increases have been lagging general inflation for some time. Prices stagnated or fell during the worst of the pandemic and construction inflation only really kicked-in in Summer 2021. Having been in catch-up mode against some of the highest inflation seen since the 1970s, a reversal of the market could be very damaging. With prices rising on average at about 10%, the construction sector continues to lag CPI, which recently peaked at over 11%.

If construction prices have been discounted during 2022, who has been picking up the slack? Clearly, not all

sectors are equally affected. Housebuilders have up until recently been able to readily absorb construction cost inflation because house prices were moving even faster. Similarly on many infrastructure projects contracted on a Target Cost basis, employers have shared some of the exposure through pain/gain mechanisms.

By contrast, main contractors in the buildings sector, focused mostly on commercial, industrial and publicsector schemes, will have seen most pressure exerted even though the bidding environment has been less competitive over the past 18-months. Two-stage procurement for example has focused a lot of early competitive pressure on a general contractor's on-costs and margin rather than the costs of sub-contracted work.

Inflationary pressure is absorbed within the supply chain and over the past 18 months we have seen an increasing divergence in the way in which inflation risks are managed by contractors and their suppliers.

• General contractors in the building sector subcontract most work and as a result, their exposure is linked to arbitrage, risk management and change management. Markets have been very challenging over the past 18 months because it has been so difficult to secure fixed prices. One of the drivers for sky-high inflation will have been increased allowances for unpriced risk. In a market where material suppliers and labour have been able to trade on scarcity to push for higher prices, competitive pressure on margins and management costs has been high and these have been trimmed back in competitive bidding. Profits for 2023 and beyond will be hard won.



# 72.96 71.44 3417.92 3320.78

- In client-led joint ventures, where client and contractor partner have an equal share in both input costs and outturn revenues, the benefits of openbook contracting and aligned incentives have come to the foreground. Teams have had to work together to redesign schemes, reprocure packages, adjust the financial model and/or secure additional funding to deal with cost pressures. The sub-contract supply chain will have also come under pressure to find solutions to enable projects to move forward. Working as a JV has been very challenging, but they have functioned well because of a high level of transparency. This has created trust and supports informed, optimal decision-making.
- Vertically integrated contractors have a very different model, relying on the in-house resourcing of many core construction elements including structure, envelope and MEP. The high level of control and visibility that these contractors have over their cost base has enabled them to compete very effectively during the past 1-2 years when markets have been so unstable. Delivery using in-house resources also means that some procurement and overhead/margin costs can be absorbed. However, the integrated model concentrates a lot of single point of failure risk onto the main contractor, and if inflation risks aren't fully hedged, projects could become challenging to deliver. Integrated contractors have expanded their markets very successfully over the past 2-3 years and their performance in the downturn will be a real test of the resilience of the business model.
- Infrastructure contractors also have a lot of in-house resource, particularly directly employed operatives, and common commercial models provide a greater

level of protection for contractor teams, albeit often at the expense of client's budget. Early Contractor Involvement (ECI) for example involves a trade-off between value-adding input into design and planning on the one-side, and competitive pressure on the other. In a highly inflationary market, the supply chain is likely to have secured the better part of the deal through inflation protection, which is reflected in our infrastructure TPI for 2023, which is 4-5% higher than for the buildings sector. Looking forward, we are seeing further moves to manage risk, either through the adoption of fluctuations, which is more common in infrastructure or through 'carve-outs' of inflation risk from elements of the Target Price.

Regardless of the model adopted, inflation is being absorbed somewhere in the chain – all the way from selfemployed labour to the client in a JV or pain/gain share. As markets get tighter in 2023 and beyond, the level of absorption will increase and alongside that, so could the commercial stress.

This analysis highlights that construction markets are increasingly varied, meaning that commercial pressures are applied in very different ways. With energy and labour costs still likely to be significant cost drivers in 2023, such variation in practice and procurement means that clients and their advisors will need to think even more carefully about how their bid strategy will share the cost and price tension across the wider project team.



### Zoom into: The impact of the Autumn Statement on construction

### Are first impressions too comforting?

At first glance, the Autumn Statement, delivered by Jeremy Hunt on 17th November, appeared to be better than expected for construction, with a recommitment to £600bn of capital spending over the next five years.

But while the near-term future might see little disruption, delve a bit deeper and the outlook for the medium-term is much less certain. Expenditure beyond 2024-25 is subject to a future Comprehensive Spending Review (CSR), but even under current plans, day to day spending increases will be capped at 1% in real terms until 2027-28 which will mean unprotected departments missing out on £17bn from their budgets, according to the Institute for Fiscal Studies. At the same time, the Office for Budget Responsibility (OBR) suggests that flat departmental capital budgets from 2025-26 will reduce public investment in real terms by 8% by the final year of the forecast in 2027-28.

Extra government borrowing required to fund lower levels of spending growth is still forecast to see underlying debt rise from 85 per cent of GDP last year to a 63-year high of 98% by 2025-26. No wonder then that the Government has pushed back by two years its fiscal rule of getting underlying debt falling by 2025-26. However, the sharp rise in interest rates this year already means that the share of revenues consumed by servicing that debt will rise from under 5% in 2019-20 to 8.5% in 2027-28.

This combination of factors means that some departments will see significant cuts to spending and expose public finances to an increased risk from future swings or shocks in market sentiment.

Looking forward, inflation has become a sector-wide limiting factor in the past 12 months. With no further inflation adjustment, every extra pound spent today is one less pound that will be spent on other programmes between now and 2028, eating into existing budgets and forcing current programmes to cut back on what can be achieved. Many projects would either be scaled down or pushed out to later delivery dates.

However, the impact could be moderated if the OBR's prediction for inflation materialises. They suggest CPI

inflation will drop sharply in 2023, from a 40-year high of 11.1% in late 2022 and will even fall below zero for eight quarters from mid-2024, due to falling energy and food prices.

Whilst Arcadis doesn't predict falling construction prices, negative CPI will reduce much of the upward pressure on contractor's prices.

### What is certain and what could be at risk?

As already highlighted, very little expenditure is assured beyond the end of the current spending review in April 2025.

The Autumn Statement recommitted to £600bn of capital spending over the next five years, including the Northern Powerhouse Rail 'core' network, HS2 to Manchester and the National Hospital Programme. Plans to accelerate delivery of projects across the infrastructure portfolio, rather than the 138 'priority projects' identified by Hunt's predecessor Kwarteng, were also announced and followed by the Infrastructure and Projects Authority's updated project pipeline. Elsewhere, the Autumn Statement also confirmed the second round of the Levelling Up Fund worth £1.7bn, with winners announced in December 2022.

Hunt also announced a £6bn three-year extension to the Social Housing Decarbonisation Fund measures. This will make some contribution towards meeting a new "national ambition" to cut energy consumption in buildings and industry by 15% by 2030. Given the size of the challenge, many would argue that the budget and delivery target is still way short of what is required. Nevertheless, it marks a significant increase from the current £1.3bn annual investment.

However, there will be concern around the Government's ability to deliver on other initiatives. For example, a total of £5.2bn has been allocated by the Department for Environment, Food and Rural Affairs and the Environment Agency to fund around 2,000 projects as part of a six-year flood and coastal defence programme in England, which is due to run until 2027. Inflation will be eating into what can be delivered for that sum, and no further monies have been allocated.

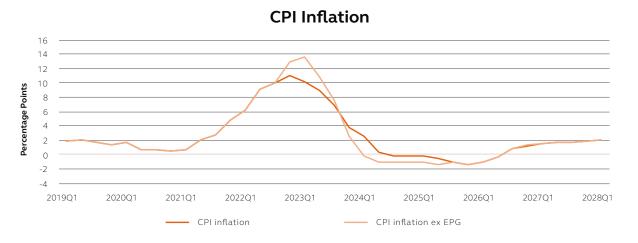


Chart 2. Comparison of CPI highlighting the impact of the Energy Price Guarantee. Source: OBR

Another watch-out could be progress on the Ministry of Justice's £4bn 'New Prisons Programme', building 18,000 additional places by the mid-2020s. One new prison has been delivered, one is nearly complete and four new schemes are underway. However, there will be concern that later phases could be delayed.

Plans for upcoming programme commitments in roads and rail will also likely require re-scoping following the Autumn Statement. Indeed, a subsequent National Audit Office (NAO) report suggested the Department for Transport (DfT) is experiencing cost pressures from inflation across its programme of transport infrastructure work in rail and road. It added that National Highways "may have to delay work, de-scope projects or cancel projects to remain within its overall budget" for the current Roads Investment Strategy (RIS 2), which runs until 2025. The Government has already cut RIS 2 funding £3.4bn, so even more projects are likely to be moved into the third Roads Period (RIS 3).

In rail, Network Rail's Control Period 7 (CP7) covers project delivery from April 2024 to March 2029. CP7 will most likely be set before the next CSR, meaning that long-term expenditure plans will be set before the supporting funding is confirmed. The budgeting process will also be muddied by the planned replacement of Network Rail by Great British Railways, for which development has been placed on hold.

### **Potential Opportunities?**

Even though public investment levels are expected to fall, prospects are still good. Most importantly, investment will remain much higher than seen during the austerity years from 2012 onwards. There are other state-supported sources too, including the now up-andrunning UK Infrastructure Bank (UKIB).

The UKIB opened for business in 2021 with £22bn of funding for public bodies and businesses. £4bn is available to local authorities. However, the UKIB's ramp-up will be a slow burn, with the Bank announcing 10 deals overall as of the end of October 2022. A total of £117m was lent to two local authorities in the year to March 2022, including one to support the delivery of net zero travel infrastructure. Given that UKIB lending rates are linked to the 10-year swap rate, its finance has become much more expensive over the past 12 months.

Meanwhile, with the Labour Party riding high in the polls, it is important to look at what their plans might be. Plans for a 'National Wealth Fund' were announced at the party's conference in September. The Fund could reach £8bn in the first instance and would allocate funding to the EV battery sector, net-zero industrial clusters and low-carbon steel production technologies. Given that government CapEx is planned to reach £115 billion by 2024-25, the fund is unlikely to shift the dial.

### What are the implications?

First impressions were right. The good news is that the 2022 Autumn Statement did not cut any programmes between now and the end of the current spending period to 2024/25.

However, with infrastructure construction inflation running at 10%, the annual spend in the next couple of years will not deliver anywhere near the volume of growth-boosting outcomes expected by 2024/25.

There will also be fierce competition between departments for future investment in the next CSR. This will necessitate public infrastructure clients having to repeatedly highlight the value of their programmes, both from a monetary and societal perspective. In response, industry will be asked to invest in its future, even as future programmes become less certain. This will be a tough ask, given that supply-side investment in skills and capability will become harder to justify as the size of the firm pipeline diminishes.

Further collaboration will be required, both to make new projects viable and to achieve delivery of those already planned. All players in the sector, from clients to contractors, will need to be involved in some re-scoping activity in the next couple of years, in order that planned projects are delivered and the societal benefits achieved.



### Contact



### Simon Rawlinson

Head of Strategic Research & Insight

simon.rawlinson@arcadis.com



### Ian Goodridge

Market Intelligence Lead

ian.goodridge@arcadis.com



### **Ross Baylis**

UK Head of Cost and Commercial Management for Places

ross.baylis@arcadis.com

#### Arcadis

Our world is under threat – from climate change and rising sea levels to rapid urbanisation and pressure on natural resource. We're here to answer these challenges at Arcadis, whether it's clean water in Sao Paolo or flood defences in New York; rail systems in Doha or community homes in Nepal. We're a team of 27,000 and each of us is playing a part.

#### Disclaimer

This report is based on market perceptions and research carried out by Arcadis, as a design and consultancy firm for natural and built assets. It is for information and illustrative purposes only and nothing in this report should be relied upon or construed as investment or financial advice (whether regulated by the Financial Conduct Authority or otherwise) or information upon which key commercial or corporate decisions should be taken. While every effort has been made to ensure the accuracy of the material in this document, Arcadis will not be liable for any loss or damages incurred through the use of this report.

©2020 Arcadis



www.arcadis.com/uk