AtkinsRéalis

CONSTRUCTION INTELLIGENCE REPORT

Q3 2026 UK & Ireland



EXECUTIVE SUMMARY

This edition of the Construction Intelligence Report highlights conflicting signals from the sector where many indicators around investment decisions are positive, and tender price inflation remains stable, but there is clearly still uncertainty, affordability pressures and persistent viability challenges. Indeed viability appears to be the defining issue across the industry.

We can see that economic growth has been modestly stronger than anticipated and inflation remains lower than earlier forecasts, but geopolitical instability continues to create risk across energy, material and logistics markets.

The ongoing Middle East conflict being one of the main events which has tested supply chain resilience and contributed to cost uncertainty.

As a result construction activity remains subdued with new orders and output softened as clients defer investment decisions and prioritise certainty. But contractors remain selective, and tender prices continue to hold firm despite weaker market demand, with infrastructure expected to outperform other sectors over the forecast period.

These external pressures are particularly evident in housing where rising construction costs, financing charges and regulatory requirements have significantly outpaced growth in residential values. Viability has overtaken planning as the primary barrier to delivery, particularly for small and medium-sized developers.

At the same time, land values are adjusting downward as market expectations realign with economic reality. So unless stakeholders adopt a more pragmatic approach to land values, planning obligations and development returns, ambitions to increase housing delivery will remain difficult to achieve.

Alongside commercial pressures, climate resilience is becoming a strategic imperative with 2026 on track to be one of the hottest years on record. Overheating risks are creating new challenges for buildings, infrastructure and communities as the economic impact of extreme heat is already significant and is expected to grow.

Retrofitting existing assets, embedding heat resilience into new developments and strengthening critical infrastructure must become key considerations for both public and private investment decisions.

Our report sets out some clear recommendations for firms needing to weather an uncertain climate. First, clients should take advantage of current supply chain capacity and stable tender pricing to progress well-developed projects. Secondly, developers must reassess viability assumptions, particularly around land values, returns and project phasing. Thirdly, public and private sectors should accelerate investment in climate adaptation and resilience.

And finally, policymakers must align planning reform, regulatory requirements and delivery expectations to ensure that ambition is matched by economic reality.

Those who act decisively now will be best positioned to benefit when market confidence and activity ultimately recover.

The PM sees regional growth as key to improving the UK economy.

Richard Bonner
Managing Director
Buildings and Places



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INTRODUCTION

The economy has performed better than the initial estimates at the start of the Middle East conflict had predicted - the lessons learnt from earlier this decade have helped with diversified supply chain and a just-in-case mentality. More importantly, a low level of confidence combined with viability issues have led to low demand across many sectors both in the UK and globally.

With the periodic closing of the Straits of Hormuz, Iran and America in military conflict, and no progress towards either a ceasefire or an agreement to ending the crisis, this initial resilience will be further tested. GDP has softened; inflation has currently remained lower than anticipated enabling the Bank of England to retain interest rates at 3.75% at present. This gives a more optimistic view than our 2nd quarter report but if the conflict continues, the effect on the economy may have been delayed rather than averted.

With Andy Burnham replacing Kier Strarmer as Prime Minister, it brings with it different policy emphasis - early priorities are action on the cost of living for households, more social rather than affordable homes and continued investment in infrastructure. However, a change in PM doesn't alleviate familiar economic challenges and the budget earmarked for October will define the government direction for the remainder of the term.

Viability is the key issue at the present time and according to the BCIS since 2020 we have seen tender price inflation increase by 24% and building cost inflation by 41%. This doesn't include the changes in building regulations either to increase building safety or to meet net zero targets, we will look at the challenges facing developers and the importance of land values in the equation in this report.

Meanwhile 2026 is on track to be the hottest year on record, with many regions experiencing drought and hosepipe bans. Record temperatures will again lead to debate about building designs and standards potentially leading to regulatory changes further down the road. Our Climate Change and Resilience team look at the challenges of adopting to hotter weather and its impact on the built environment.



ECONOMIC OVERVIEW

100 Days of Andy Burnham

As we approach the ending of the first 100 Days of Andy Burnham's tenure as Prime Minister, the main focus has been the attention on the cost of living with small incremental steps to assist day-to-day living.

Attention is turning to the Autumn Budget, which may be the defining moment for the current government. The new Chancellor John Healey is expected to reinforce a commitment to fiscal discipline while hopefully adopting a pro-business agenda.

Regional growth is likely to feature highly as he pushes for 'growth in every postcode' and leaning on his experience as Mayor of Manchester his aim is to devolve more power including tax and spending powers to the regional mayors and local authorities. But councils will need to have more control over land, planning and housing development to realise his vision for the UK not to be dependent on private developers to provide social and affordable housing. The key policy of housing may experience a shift in emphasis, as Andy Burnham has long been a supporter of social housing and has called for "the biggest council housebuilding programme since the post-war period", stating that the decline in council housing since the 1980s has been a significant contributor to today's housing problems.

There will be a need to balance the books and there are concerns that investment in roads may be reduced as the government looks for increased spending on defence and measures addressing the cost of living. While no schemes have been formally cancelled, the A47 Newark Bypass and A38 Derby Junctions have joined the A303 Stonehenge Tunnels on the postponed list as funding is reviewed.

One of the first things that Andy Burnham did when taking over as Prime Minister was to announce a pragmatic view regarding North Sea oil. While the previous regime had ruled out granting new licences, two oil and gas fields Rosebank and Jackdaw have previously had drilling permitted by regulators, but a 2025 legal challenge overturned that. The debate is whether to permit companies to produce oil in the two areas with the new Energy Secretary Miatta Fahnbulleh saying that the manifesto allows exploitation of existing licences and that oil and gas are "part of the mix" but did not go as far as confirming plans for new drilling.

The appointment of Miatta Fahnbulleh as the UK energy secretary poses interesting questions about the direction of the government, she is seen as someone who is outspoken about the climate crisis with her appointment perceived as a continuation of the Miliband era. This would seem to suggest a maintenance of net zero policies under the new regime.

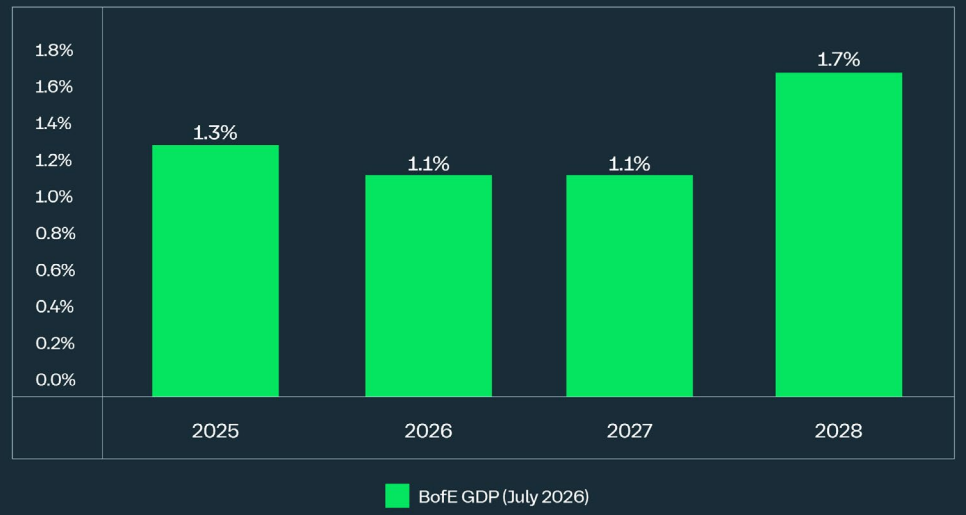


GROSS DOMESTIC PRODUCT (GDP)

The ONS announced growth of 0.4% in the second quarter, driven by spending to purchase commodities and supplies at the onset of the Middle East conflict. This growth will taper off in the second half as soft momentum persists and the effects of the Middle East conflict weigh on demand.

Low underlying GDP growth partly reflects a continuation of weak momentum prior to the Middle East conflict, consistent with muted household and business confidence. The conflict is also judged to have begun to weigh on demand through lower household real income growth, greater uncertainty and tighter financial conditions. Business investment is expected to reduce over coming quarters, as lower confidence and higher borrowing costs weigh on investment intentions. Business investment grew by 0.9% in 2026 Q1 but is expected to soften over coming quarters. Measures of business confidence have fallen since the Middle East conflict, although by somewhat less than after the 2022 energy price shock. With increases in energy price caps household spending is expected to moderate, but not to contract sharply.

GDP Forecast



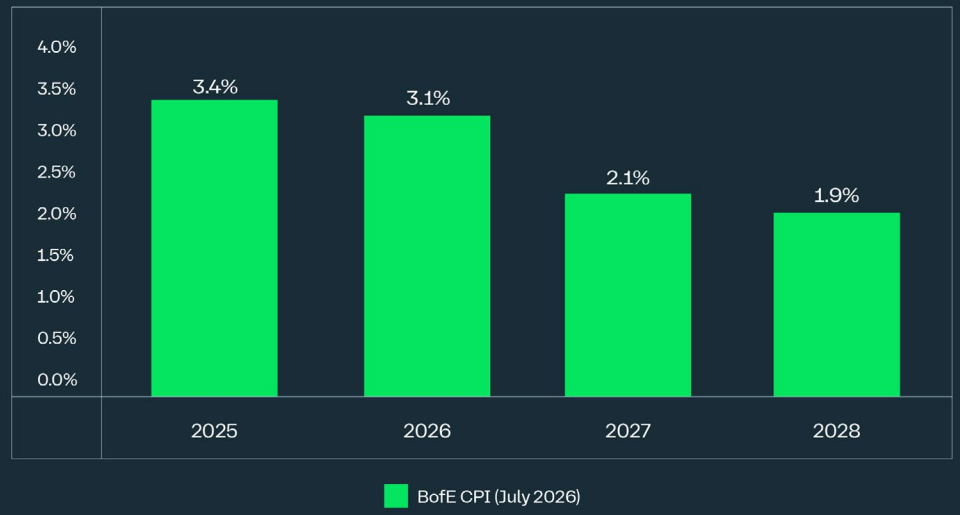
Source: Bank of England July 2026 Economic Forecasts

CONSUMER PRICE INFLATION (CPI)

The near-term CPI inflation forecast by the Bank of England is for inflation to peak at 3.2% in October and November 2026 before falling back slightly. As well as increasing energy prices, higher food and other goods price inflation are expected to drive much of the increase in inflation. Building price pressures for memory chips are also expected to contribute to the rise in core goods inflation

If wage setting or pricing decisions are fed by the effects of energy cost, there is a possibility of more persistent inflation

CPI Forecast



Source: Bank of England July 2026 Economic Forecasts



INTEREST RATES

The Bank of England is in a tricky position at the moment, the Middle East conflict has disrupted the transportation and supply of energy, raising its price and pushing up transport and utility bills. This uncertainty has seen mortgage rates and borrowing costs increase since the start of the conflict, leading to reduced spending and a squeeze on job availability. However they realise that inflation is the result of global energy price increases and that monetary policy wouldn't solve this.

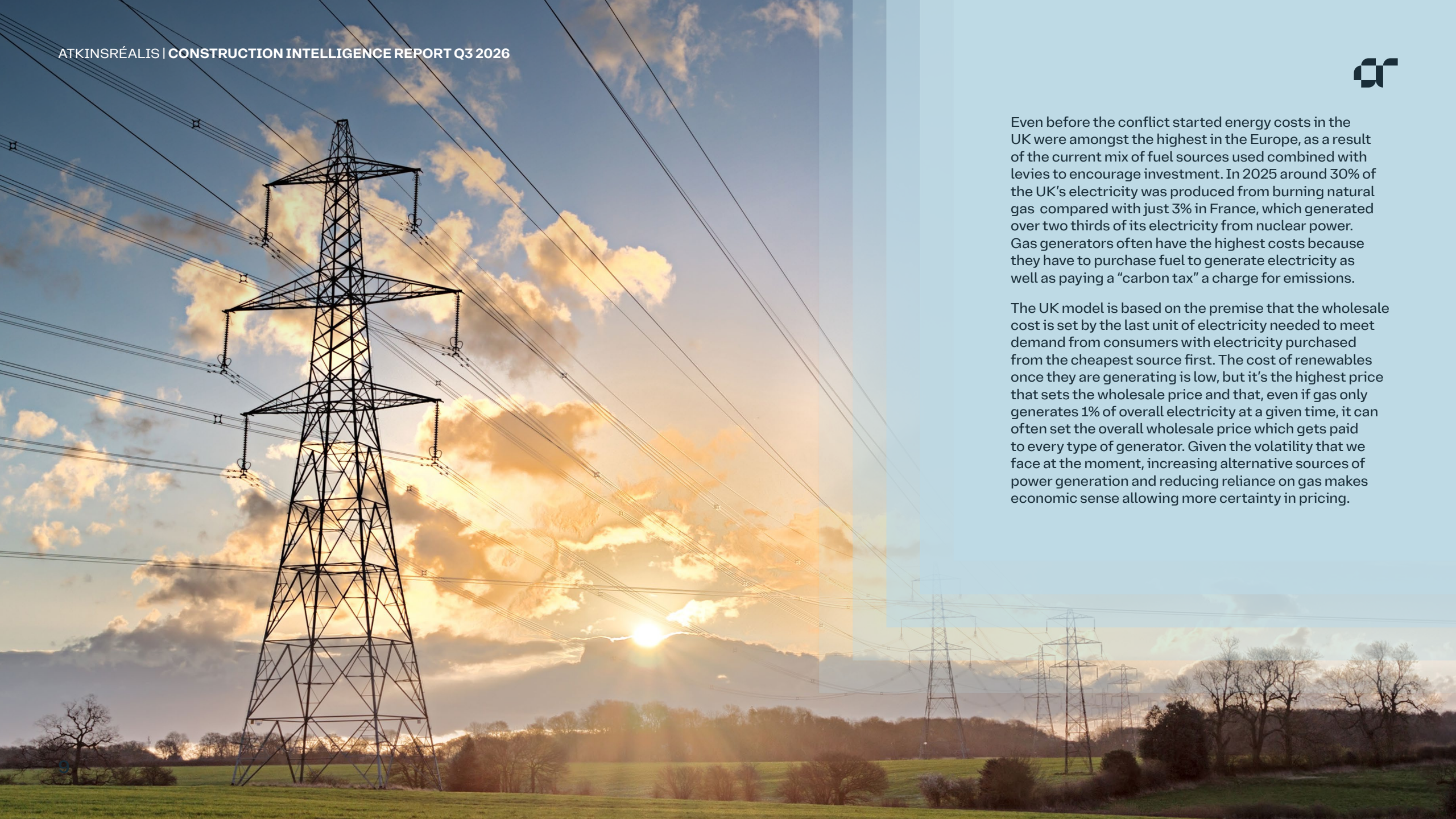
While inflation is lower than expected at 2.8%, the target for the Bank of England is to have inflation at 2% and rising interest rates is the main lever in this ambition. While the Bank of England held interest rates in September at 3.75% financial markets are continuing to price in two base rate rises over the coming months and this is likely to remain the case until a lasting resolution to the Iran conflict is found.

CONSTRUCTION OVERVIEW

It is certain that the fallout from the Middle East conflict has impeded the ability of the UK&I construction sectors to deliver as effectively as they would like. The economic and political fallout has introduced more cost uncertainty into a landscape already struggling to get projects viable.

While the Bank of England base rate hasn't risen yet, the banks borrowing rates have increased, statistics from the ONS show a fall in the number of new orders and construction output has fallen by 2% since 2Q2025.





Even before the conflict started energy costs in the UK were amongst the highest in the Europe, as a result of the current mix of fuel sources used combined with levies to encourage investment. In 2025 around 30% of the UK's electricity was produced from burning natural gas compared with just 3% in France, which generated over two thirds of its electricity from nuclear power. Gas generators often have the highest costs because they have to purchase fuel to generate electricity as well as paying a "carbon tax" a charge for emissions.

The UK model is based on the premise that the wholesale cost is set by the last unit of electricity needed to meet demand from consumers with electricity purchased from the cheapest source first. The cost of renewables once they are generating is low, but it's the highest price that sets the wholesale price and that, even if gas only generates 1% of overall electricity at a given time, it can often set the overall wholesale price which gets paid to every type of generator. Given the volatility that we face at the moment, increasing alternative sources of power generation and reducing reliance on gas makes economic sense allowing more certainty in pricing.

CHANGING WINDS

Political decisions have played a considerable role in price uncertainty with the introduction of steel tariffs this year and the forthcoming carbon border adjustment mechanism (CBAM) in 2027 bringing further uncertainty as to what the final price will be. Early procurement of steel will be needed to ensure its origin, so avoiding tariffs and reducing costs.

With commitment by the government to increase defence spending to 3% of GDP in the next few years and increased devolution to regional mayors, inevitably there will be an impact on the pipeline and the possibility of Central Government having to reallocate government CAPEX spending projects to meet these choices. This coupled with increases in tender prices may see projects delayed or cancelled. Any projects delayed until after the next general election face the possibility of being cancelled due to changes in the incumbent government policies.



LABOUR & MATERIAL TRENDS

We have already cited the impact of materials being affected by increased energy costs as a result of the continuing Iranian crisis but the impact has been less than the Ukraine conflict. While energy costs have not reached the peaks of that conflict the cost of natural gas and oil is increasing as Europe looks to ensure it has enough reserves for the forthcoming winter.

In early September we have seen natural gas prices reach a three year high and Brent oil reached $100 a barrel further testing the resilience of the sector. Copper hit a record high of over $14,600 a ton on the London Metal Exchange. Copper is generally seen as a gauge of economic growth prospects but this surge is being attributed to hoarding in the US, as importers try to stock up anticipated new tariffs are placed on copper in the USA.



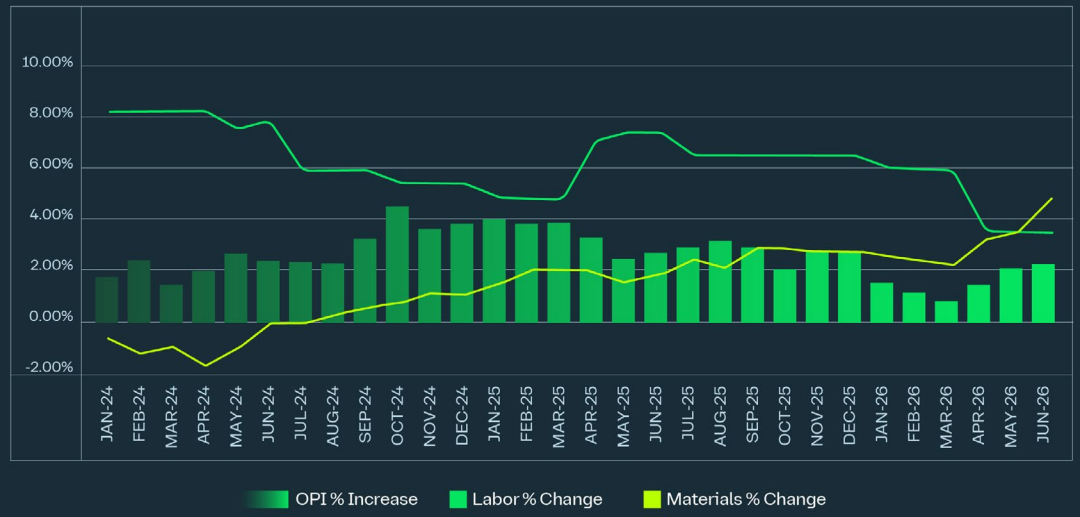


As a result of these movements it represents the first time that material percentage increases are higher than labour since early 2023.

Wage and salary agreements have contributed to this being lower than previous years as the CPI decreased. Tricky economic conditions have also contributed by reducing labour demand, keeping earnings in check. Historical evidence from the previous energy crisis suggests national wage agreements for 2027, despite falling consumer inflation, will also be influenced by current inflation.

Weak demand has meant that there is at present capacity in both material and labour supply chains. If demand picks up then supply chains will be stretched and prices will increase as all parties scramble for available resources.

LABOUR & MATERIAL INCREASES AGAINST OUTPUT PRICES



Source: ONS, BCIS

CONSTRUCTION OUTPUT

The latest ONS figures estimate that construction output grew by 0.3% in the second quarter compared with the first quarter of 2026. This represents a fall of 2.3% between June 2025 and June 2026 with the important private housing subsector falling by almost 6% and infrastructure by 5%.

Data from the ONS has backed up recent surveys highlighting diminishing new orders as Clients maintain a risk averse attitude and delay decision making amid the uncertainty of the Middle East conflict and the challenging viability issues.

Forecasts by the CPA and Experian both have output falling this year before a small increase in 2027 and further growth in 2028. This aligns with recent surveys by Lloyds and Markit which have shown that business confidence is actually improving. The August edition of the Lloyds Business Barometer reported wider business confidence rose to a five month high as optimism increased with the number of firms indicating price rises falling slightly and employment expectations broadly stable. Construction firms also remained positive albeit at a slightly lower level.

IHS Markit reported that while the mood of construction firms remains subdued for this year, they are more upbeat about the amount of activity for next year.



CONSTRUCTION FORECAST

If we were to look purely at the headline data it would be the perfect time to progress schemes. Tender prices are steady and the recent producer input and output costs actually fell. Both labour and material supply chains have adequate capacity to progress schemes and recent polls show optimism in the industry.



However moving away from these encouraging signs the outlook returns to more familiar territory. Levels of uncertainty are creating increasing risks in doing business and with the need to protect ourselves in the constructions industry.

Global geopolitical concerns remain, providing supply chains with changing challenges to overcome and extreme climatic conditions are becoming more frequent, with the threat of a supersized El Nino to come. All of these contribute to inflationary factors.

A new Prime Minister brings with him new directions and the Budget in October has the potential to be a defining moment in his tenure so far, detailing plans for this parliamentary term and beyond.

The Iranian conflict rumbles on with little signs of an immediate resolution, at the same time energy prices continue to edge higher, the price of natural gas has reached a three year high. To date most of the increased costs have been absorbed by the supply chain. One of the differences between now and the start of the Ukrainian conflict has been the amount of activity in the market place.

At the start of the Ukraine conflict the market was in a dynamic state, rebounding from the pandemic lockdowns and before the subsequent inflationary effects.

This war landed with a soft market struggling with viability issues. The market is exerting pressure on the supply chain to absorb price increases but some point these will be passed on to the supply chain. Much of the decision will depend on the position the firm occupies and as we have witnessed from earlier this decade, firms down the supply chain, who are usually smaller and more exposed to cash flow volatility will face pressure to reduce their margins further placing them at increased risk of insolvency.

Risk adversity remains with contractors continuing to be selective and unwilling to undertake fixed price work with design elements considered incomplete placing onerous risk on them. Lessons learnt from early this decade will see tenders caveated and returns reflecting the insulation that contractors will require



Our forecast from the previous quarter, remains largely unchanged we had expected to see some increases in costs but inflationary pressures from regulations, tariffs, goods and services are still currently being suppressed by a soft marketplace. Although output and new orders have fallen, there is still sufficient work to prevent wholesale buying of projects which would drive tender pricing down.

It was anticipated that public sector and utilities would drive the recovery through 2026, before improving viability and affordability would increase potential for private sector work from the latter half of 2026. This has changed as finance rates have crept up, higher inflation has reduced public confidence and spending is likely to retreat. The downward trend in the volume of housebuilding and purchases reinforces this. With the Bank of England likely to increase base rates the cost of finance increases, placing more stress on businesses and consumers alike.

So is this another year where our promised recovery hasn't come to fruition? There are green shoots of recovery, many reforms, such as planning have been put in place, companies have restructured to make themselves more focussed on sectors and delivering projects profitably for themselves.

We have placed ourselves into a position where we wait for better conditions to arrive, the question we should ask is this potentially the best time to commit? Should we reassess our expectations, whether that's final returns, margins or land values. We know the risks we face now, but will they change in the future?



Max Wilkes
Market Intelligence Lead
UK & Ireland

ATKINSRÉALIS TENDER PRICE FORECASTS 2026 - 2030

Location	2026	2027	2028	2029	2030
National	3.50%	3.00%	3.00%	3.00%	2.75%
London	3.50%	3.25%	3.25%	3.25%	3.00%
Infrastructure	5.00%	4.50%	3.75%	3.50%	3.50%
Ireland	3.25%	3.25%	3.25%	3.00%	3.00%



SECTOR UPDATES

Challenges Facing Viability

"Over recent years, the viability of home building in the UK has come under mounting pressure, with the sector facing an increasingly complex and challenging commercial environment."

HBF – The Viability Crunch May 2026

The Government wants to build 1.5m homes during the course of this parliament. The Housing Sub-Sector accounts for 40% of the total construction output in the UK.

But away from the usual solutions to enabling viability- lower finance charges, reducing construction costs, support for buyers or house prices increasing - what can be achieved to improve delivery of residential properties?

A recent report by the HBF revealed that viability has replaced planning delays as the most significant supply-side challenge facing SME home builders. Since 2021 construction costs have exceeded house price growth, with the report noting the cost of constructing a new home has increased by on average 45%. Half of this is due to the well documented construction inflation, while increased taxes and new policy costs account for the rest with new building regulations, Biodiversity Net Gain and Future Homes Standard adding £23k to the cost.

The cost to housebuilders has increased by 40% while new home prices have risen by 32% [on average across the UK?] as increased mortgage costs and reduced consumer confidence have led to a lack of buyer demand resulting in slower sales rates.

With increased construction costs, finance and statutory fees leading to higher development costs and house prices falling behind, something needs to give to enable viability of a scheme.

Land value is a key aspect of development cost and overall viability as a development can become unviable because the land value is too high relative to the revenue the completed project can generate.



The aim of the current planning reforms is to facilitate development, whether it's delivering housing or data centres. These different sectors yield distinctly different returns for developers influencing land values dependent on what can be built on it. Historically re-zoning land for housing or commercial use has seen land values rise while the current government aim of permitting higher-density developments near transport hubs will have a similar effect.

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The purchase of a site (i.e.. the residual land value) is based on projections for anticipated returns (development value) less development costs including developer's return, build costs, finance costs and planning obligation costs. The greater the planning obligations under Section 106 agreem ents for conditions including affordable housing quotas, biodiversity requirements, or infrastructure contributions and community infrastructure levy (CIL), the less capital a developer has for land acquisition resulting in land values diminishing.

Affordable Housing viability assessments (required for planning applications, where policy compliant affordable housing percentages cannot be met) apply the existing use value (EUV) of the land, plus a premium for the landowner to incentivise the sale. Studies have shown that the premium for greenfield sites was generally between 10 – 25 times the EUV with smaller sites able to command a greater premium, sometimes reaching 80%. Brownfield sites meanwhile generally attracted between 10% and 30% with 20% being the most common.

Land values have fallen by 3 – 5% over the last year (following previous smaller but steady decline since 2022) as demand has fallen, development costs have increased and developers are more selective with sites. Sites offering quick development opportunities are still in high demand but remain in short supply and attract a premium. Sites requiring remediation, significant infrastructure investment, or with legal uncertainties are less attractive. Urban brownfield sites are facing greater viability challenges and this has resulted in urban land values falling at a faster rate than greenfield sites.

There are changing dynamics also, where previous land values were often shaped by location, proximity to cities or transport links, climate change is starting to play an increasing role, with sites being viewed as more resilient and therefore attractive where they are less vulnerable to flooding, water scarcity or other climate related events. Growing concerns with hotter summers will lead to the need for developments and infrastructure to display more heat resilience, further challenging viability.

Land values and viability issues are not limited to the housebuilding sub-sector. Commercial buildings have seen development costs, financing costs and occupier expectations outpace rental increases and yield growth. As a result, some prime office schemes throughout the UK, without strong tenant covenants, struggle to generate sufficient returns to justify development without either substantial pre-letting agreements, public sector support or assumptions about higher rental growth. This has contributed to the current shortage of Grade A office space

Conclusion

The reform of planning policy offers opportunities for development, potentially impacting land values positively.

However, supplementary costs placed on the developer – whether increased infrastructure obligations or in the form net zero requirements or building regulations will limit the amount of available capital for land acquisition and negatively impact land values.

Landowners are unlikely to sell land for less than its current existing use value (EUV) and they may refuse to sell in the hope of higher prices in the future, especially if planning policy changes are expected, permitting different uses with higher residual land values.

But with planning policies looking to encourage development, a realistic view of land value would assist in achieving viability and increasing delivery rates.



Emma Davies
Director

HOUSE PRICE INDEX AGAINST PRIVATE HOUSING CONSTRUCTION PRICE INDEX 1Q2020 - PRESENT

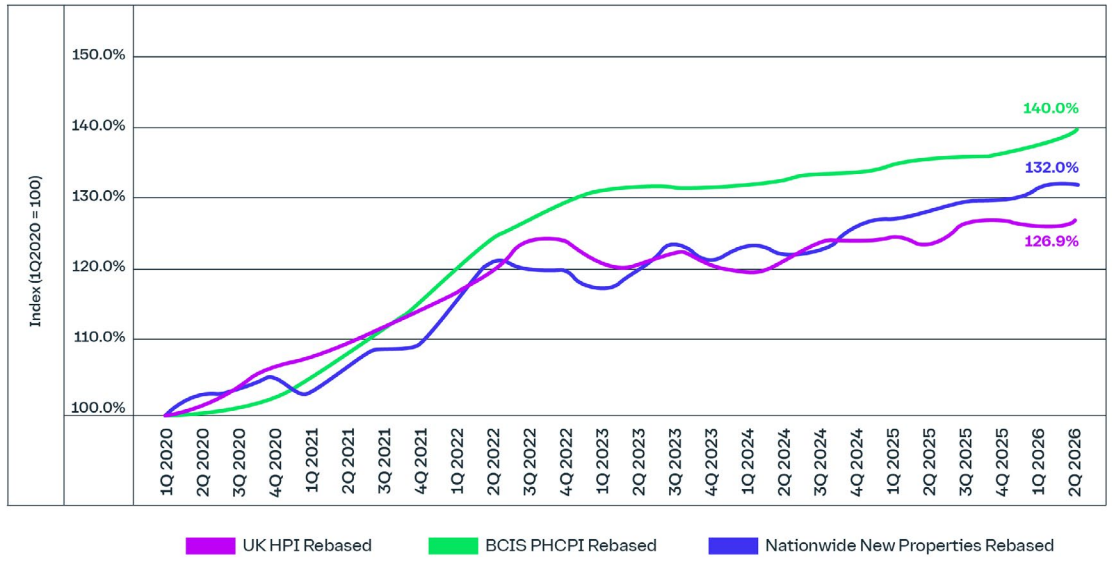


Figure 1. *Movement of the House Price Index Against the Cost of Building Private Housing*

Introducing Extreme Heat Resilience

UK heatwaves may have cost economy £4.4bn in lost output so far this year

According to the think tank Verdant the UK heatwaves may have cost economy £4.4bn in lost output so far this year. If the heatwaves continue to intensify at the same rate as in the last decade, it suggests the annual economic cost could rise to more than £25bn by 2030.

Vedant's estimates exclude indirect losses such as the cost of fighting wildfires, and additional electricity consumption from running fans and air conditioning. These estimates are based on cross-European estimates by the insurer Allianz, that suggest for every degree above 30C that temperatures rise, workers' output an hour declines by 3%. The Government agency DEFRA climate adaptation planning assumption is that the UK should adapt to 2°C global warming by 2050.

Analysis reveals one million London homes alone may be at high risk of overheating, with more than 1,300 schools, 60 hospitals and 351 care homes located in high heat risk areas. Retrofitting homes to combat summer temperatures is expected to cost up to £45bn over 25 years, roughly £2bn per year. It's a significant sum that needs to be considered alongside the cost of inaction. Retrofitting homes and buildings with relatively straightforward measures such as shading, ventilation improvements, and targeted cooling will reduce health risks, and reduce the burden on healthcare systems and emergency services.

The public sector, including the NHS, social care and emergency services benefit when fewer people need urgent support. Employers and businesses benefit when heat causes less disruption to staff, customers and services while infrastructure operators benefit from reduced disruption and damage. By protecting economic activity and reducing losses, adaptation can also help safeguard tax revenues, generating a direct fiscal benefit for central government.

This makes it essential to strengthen infrastructure to maintain economic and operational continuity in a hotter climate, whether that's power networks capable of handling higher cooling demand or resilient water supplies and networks.



Taking Steps to Achieve Heat Resilience

The Climate Change Council recommends that a combination of passive and active adaptation should enable safe and appropriate temperatures in healthcare facilities by 2035, care homes by 2040, and schools and prisons by 2050

It will take several decades to be resilient to heat risk, so it is critical the first steps on that journey are taken now. Short-term measures are needed to minimise the impact on health, productivity, critical infrastructure allowing major medium and long-term measures to be implemented in parallel.

Short-term actions include supporting households and businesses to practise heat-safe behaviours; strengthening existing preparedness and response measures; and building the capacity of the health and care system, infrastructure, and frontline workers.

Over the medium to long term, retrofitting homes and buildings to reduce indoor overheating is an essential measure, as much of UK building stock was not designed for current and future summertime temperatures. While passive cooling measures must play a key role, climate projections indicate that in some settings passive measures alone will not be sufficient and active cooling will also be required to address overheating in some homes and buildings.

Key actions for the Built environment include

- Retrofitting the highest-risk buildings, whether that is homes at risk of indoor overheating, using for example, shutters, insulation and ventilation and air conditioning or non-residential buildings that deliver essential public services, for example, schools and care homes.
- Ensuring new buildings and major refurbishments are designed for heat resilience.
- Installing outdoor shading structures to reduce temperatures and decrease sun exposure – for example, shade canopies.
- Working with Oxford County Council, AtkinsRealis identified vulnerability to heatwaves from population characteristics, including the proportion of the population including elderly, children and disabled groups. The study also included rented properties, population density and the index of multiple deprivation.
- Exposure is assessed based on the number of buildings and building height as higher buildings are more exposed to overheating. This identified current heatwave hazard, which is concentrated primarily in built up areas such as Oxford City, Henley-on-Thames, Abingdon, Witney and Bicester. Lower current hazard can be viewed where there is greater access to green space, lower cooling degree days and areas which are not built up.
- Approximately 200,000 people live within these heatwave risk areas with substantial groups of children, elderly and disabled residents. Buildings within this risk metric included 130 educational establishments, 51 care homes, 4 hospitals and 40 GP and healthcare facilities are located in areas of high current heatwave risk.
- Using this method allows enables the priority targeting of areas and buildings for heat resilience retrofitting work.

Green space and nature

- Ensuring nature and green infrastructure can thrive in future higher temperatures. Solutions include managing and expanding tree cover and green space in areas of high cooling and shading need. Increasing the usage of greening on and around buildings.
- Improving management of habitats and green spaces to reduce wildfire risk.

Measure needed for Infrastructure resilience include

- Improving the transport sector's understanding and management of direct heat-related risks to infrastructure assets and services by, for example, exploring the use of heat-resilient materials and technology.
- Continue ensuring safe working conditions for transport workers, and journeys that are as comfortable as operationally feasible for passengers.
- Reducing strain on water and wastewater systems during high temperatures and peak demand.
- Enhancing phone and internet networks to avoid disruption caused by high temperatures.
- Making electricity and gas networks reliable during hot weather and peak energy demand by, for example, ensuring Local Area Energy Plans (LAEPs) are resilient.

Our work with Oxford County Council also investigated the threats posed to critical infrastructure and identify those at risk. This included approximately 1,600km of road length, 200km of the rail network, 100km of National Cycle Networks in Oxfordshire will be located in areas with a high heatwave hazard. This may increase the likelihood of damage to road and cycle path surfaces and lead to buckling of rail tracks.



The current heatwave hazard metric is calculated based on the number of cooling degree days, urban heat island effect (the proportion of urban and suburban land use) and proportion of green space.

While electricity transmission lines are located primarily in more rural areas with lower current heatwave hazard risk. However, rising temperatures pose a hazard to electricity transmission lines even rurally as higher ambient temperatures overall require electrical current to be reduced to prevent overheating of equipment, and hotter power lines are less efficient. The changing nature of energy demand, with less requirement for heating in winter and a growing demand for cooling in summer, may exacerbate these risks.

Railway lines are located primarily in areas of lower heatwave hazard. However, key railway stations and routes are located in Oxford City, Didcot and Bicester which have a high heatwave hazard.

The OCC's Resilient Highways Network also identifies roads which are vital to maintain economic activity and access to essential services during extreme weather. These strategic roads are concentrated within built up urban areas which have a high current heatwave hazard, primarily Oxford City and Abingdon including the A34, A4144 and A420.

Making Investment Cases

The sheer scale of making the UK heat resilient will require a blend of public and private sector financing solutions. Public funding will be needed to play an important role, but the amount of capital available will not suffice, highlighting the importance of enabling private investment. Building the evidence base to strengthen the investment case is a critical first step. Public authorities, lenders, insurers and academic institutions can help strengthen the evidence base by highlighting the costs and benefits of heat adaptation. This should include both general and site-specific analysis, with a focus on who benefits, where financial savings or revenues may arise, and who could reasonably contribute to delivery costs.

A clear distinction is needed between wider economic benefits, such as improved health, productivity and avoided disruption, and financial benefits, such as reduced operating costs, lower energy bills, avoided repairs or higher rental income. Better evidence on cashable financial benefits could help show where heat adaptation projects might generate enough savings, income or reduced risk to justify borrowing or attract private finance.



Developing prioritised, costed investment pipelines for place-based heat adaptation measures would support stronger business cases by clarifying what is needed; where investment should be targeted highlighting the costs and benefits together with the most appropriate delivery routes.

This should include identifying barriers to investment, such as high upfront costs and fragmented funding and financing sources.

This would also help identify where private, or partnership models may be viable, and where public funding will remain essential. Embed cooling measures into existing programmes. Building on the Warmer Homes Plan's recognition of the importance of cooling in home retrofit, there are opportunities to better integrate heat adaptation with net-zero policy and funding mechanisms.

A clear and lean governance and delivery framework will help to galvanise, coordinate and prioritise effort and investment across the nation.



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