Europe

Infrastructure Report

Quarterly Report: Forecasts to 2034

Contents

Key View

Key View: *Europe is set to see moderate construction growth over the near term, with easing monetary policy to gradually support a strengthening activity after a deceleration in 2024 driven by headwinds including the ongoing effects of tighter monetary policy in recent years. Decarbonization will be a key driver of construction activity over the long term, as key markets in the region advance energy transition efforts.*

Key Forecasts And Latest Updates

- Europe's construction industry is set for moderate growth over the coming years as we forecast the industry will expand by 1.5% y-o-y in 2025 and by 2.3% y-o-y in 2026 in real terms.
- Over the medium term, we forecast annual average real growth of 2.0% y-o-y between 2025 and 2029 and of 2.1% y-o-y over our 10-year forecast period to 2034.
- European construction will benefit from the easing of monetary policy throughout 2025, following a period of limited financing availability.
- Within the infrastructure segment, decarbonisation efforts will be a key driver of investment across the transport and power segments.
- Among markets in the region, Turkiye and other Central and Eastern European markets will stand out for construction growth and infrastructure development.

Infrastructure - Construction Industry Forecasts (Europe 2024-2034)

	2024	2025f	2026f	2027f	2028f	2029f	2030f	2031f	2032f	2033f	2034f
Europe Construction industry value, USD	1,419.2	1,563.0	1,708.9	1,796.3	1,883.0	1,974.7	2,062.0	2,154.3	2,251.1	2,351.0	2,455.0
Europe Construction industry, real growth, % y-o-y	0.2	1.5	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Central & Eastern Europe Construction industry value, USD	356.6	417.3	446.9	476.5	505.7	539.1	570.9	605.1	641.1	677.8	716.5
Central & Eastern Europe Construction industry, real growth, % y-o-y	3.4	3.9	2.9	2.5	2.4	2.6	2.5	2.6	2.5	2.5	2.5
Western Europe Construction industry value, USD	1,062.6	1,145.7	1,262.0	1,319.8	1,377.3	1,435.6	1,491.1	1,549.2	1,610.0	1,673.2	1,738.5
Western Europe Construction industry, real growth, % y-o-y	-0.9	0.6	2.1	2.0	2.0	1.9	1.9	1.9	1.9	2.0	2.0

f = BMI forecast. Source: National sources, BMI

Risk/Reward Index

- The North America and Western Europe region presents the most attractive infrastructure development environment globally. On average, the region's markets score 38.5 out of 100 in our Infrastructure Risk/Reward Index (RRI), which assesses the relative attractiveness of infrastructure markets globally, with a lower score indicating a more attractive market. This places the region far ahead of a global average score of 50.0.
- The Central and Eastern Europe region offers a varied infrastructure development landscape. On average, markets in the region score 52.6 out of 100 in our Infrastructure RRI. This places the regional average slightly above the global average of 50.0.

Infrastructure Risk/Reward Index (Global October 2025)

	Industry Rewards	Country Rewards	Industry Risks	Country Risks	Risk/Reward Index	Regional Rank
North America & Western Europe	56.1	47.4	18.0	16.7	38.5	1
Asia-Pacific	39.3	47.9	46.5	43.9	43.7	2
Middle East & North Africa	46.0	44.8	53.4	56.0	49.2	3
Central & Eastern Europe	56.7	55.6	48.8	45.3	52.6	4
Sub-Saharan Africa	45.3	52.3	68.7	80.0	58.6	5
Latin America	59.7	51.5	66.7	60.0	59.2	6

Note: May include territories, special administrative regions, provinces and autonomous regions. Scores out of 100; lower score = more attractive market. Source: BMI Infrastructure Risk/Reward Index

Regional Overview

Europe Construction Competitive Landscape: Domestic Firms To Maintain Lead Across Project Roles

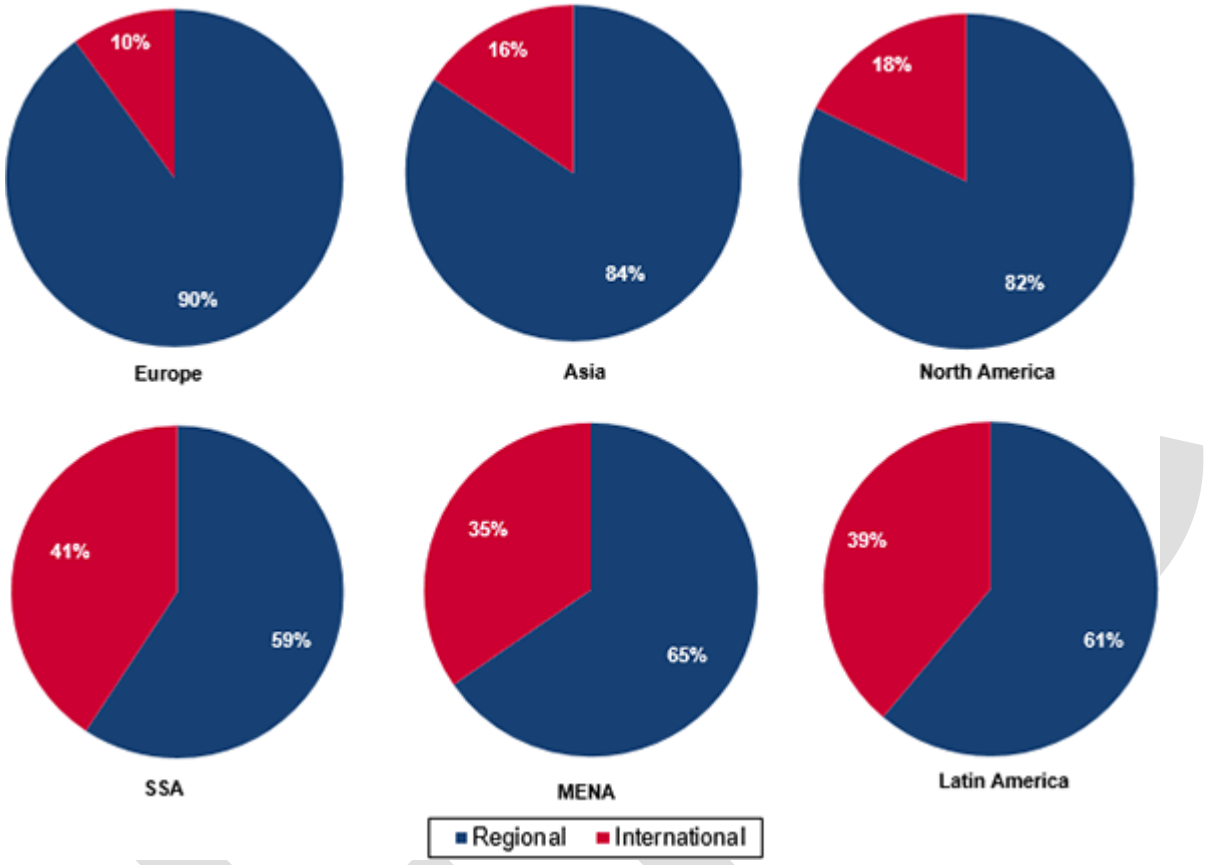
Key View

- Europe's construction and infrastructure competitive landscape will continue to be dominated by Europe-based firms, with Europe standing out among regions globally for the share of project roles held by companies based within the region.
- The prominence of Europe-based firms will continue to extend across key project roles, with European companies leading in both construction and financing roles in the region.
- A relatively significant involvement of non-regional financiers within the energy & utilities sector in particular points to this remaining an outperforming segment for international involvement.

Europe's construction and infrastructure competitive landscape will continue to be dominated by Europe-based firms, with Europe standing out among regions globally for the share of project roles held by companies based within the region. According to our proprietary BMI Infrastructure Key Projects Data (KPD), which includes global infrastructure and construction projects valued at over USD30mn, Europe-based firms and entities account for the vast majority of roles on projects currently in planning and under construction in the region. Firms or entities from within the region account for 89.4% of all roles in terms of project count, including financing, sponsorship, equipment provision, feasibility studies, operation, consultancy and construction roles. This positions Europe as the region with the lowest level of participation of firms from outside the region. In comparison, Sub-Saharan Africa leads as the region with the most internationalised construction industry, with 41% of project roles held by firms and entities based outside the region.

International Presence In Europe Lowest Across All Regions

Global - Share Of Project Roles By Region & Entity/Firm Origin, % project count



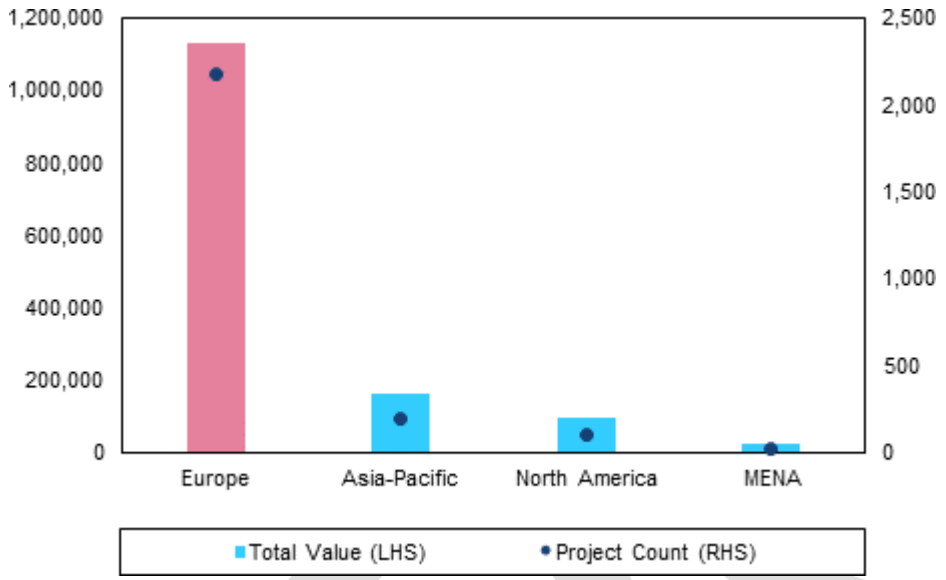
Note: May include territories, special administrative regions, provinces and autonomous regions. Blue = firms/entities based within region; Red = firms/entities based outside region. Excludes cancelled and completed projects. Source: BMI Infrastructure Key Projects Data

Several factors have historically kept involvement of non-regional firms in the region low and will continue to see European firms dominating project roles within the region's construction and infrastructure sectors. These include the region's highly diverse construction industry and significant political, administrative and economic differences across each market that strongly shape investment dynamics. For example, tender structures and bidder evaluation processes vary noticeably. Regulatory complexities are also particularly hard to navigate, posing a further challenge to international firms, which must ensure full compliance with local regulation in each market. As a result, domestic companies in particular benefit from a distinct local knowledge advantage. Additionally, EU-based firms benefit from easier access to capital, including EU funds, providing a competitive advantage. These regulatory and local market nuances make other regions comparatively more attractive for international players in terms of barriers to entry.

This low degree of internationalisation in Europe varies only slightly between construction and financing roles, with a marginally higher level of international participation in financing roles.

European Firms Dominate Construction Roles

Europe - Number & Value (USDmn) Of Projects Involving Contractors From Each Region



Note: May include territories, special administrative regions, provinces and autonomous regions. Only includes projects with at least one listed contractor. Excludes cancelled & completed projects. Source: BMI Infrastructure Key Projects Data

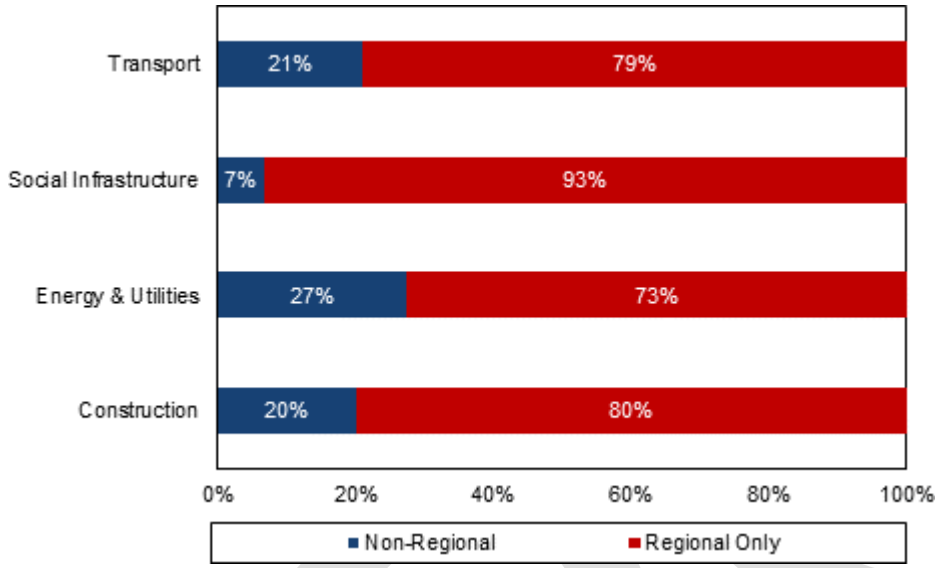
Construction Roles: Domestic Firms Dominate

The prominence of regional firms will continue to extend across key project roles, with European companies leading in both construction and financing roles in the region. According to data from our KPD, projects with at least one Europe-based construction firm account for 88.4% of US dollar value of the total project pipeline in the region, when only projects with at least one contractor are included. Non-regional participation in Europe's construction industry is led by North America- and Asia-Pacific-based companies and entities, followed by firms based in the MENA region.

European contractors also lead overall within sectors such as social infrastructure, energy & utilities and transport. According to our KPD, social infrastructure projects with at least one construction firm from within the region hold construction roles on projects which account for 93% of US dollar value of the total project pipeline in the region, when only projects with at least one contractor are included.

Regional Construction Firms Lead In All Sectors

Europe – Total Value Of Projects With Involvement Of International Contractors

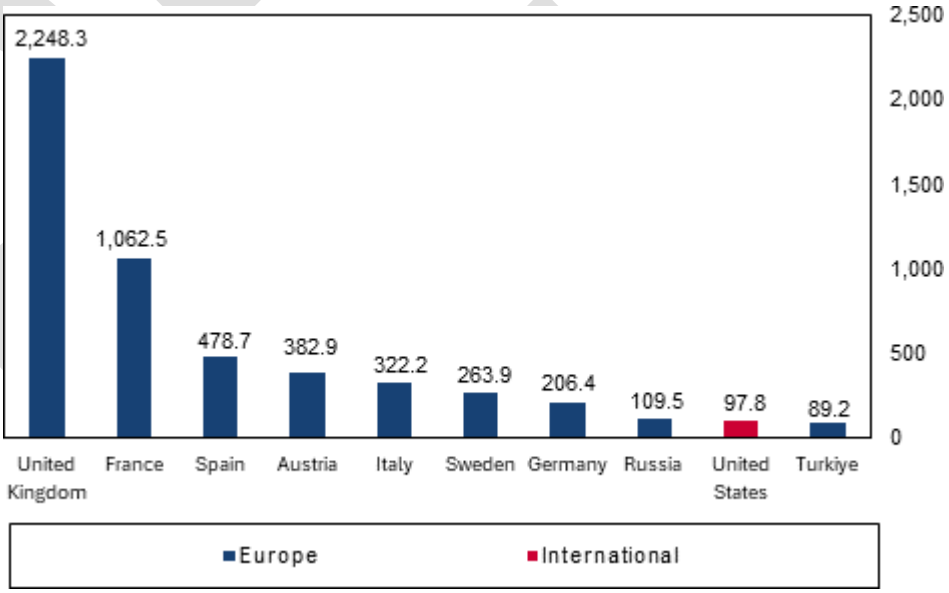


Note: Only includes projects with at least one financier listed. Excludes completed and cancelled projects. Source: BMI Infrastructure Key Projects Data

Among the most active firms in the regional construction landscape are companies from the UK, France and Spain. UK-based firms in particular stand out, with involvement in projects within Europe with a combined value of over USD2.2trn. This represents more than double the total pipeline value accounted for by projects involving French-based companies in construction roles. Among the largest regional firms holding construction roles in Europe, we highlight Balfour Beatty, Skanska, Vinci and ACS.

UK Firms Involved In Projects Totalling Highest Investment Value

Europe - Construction Roles By Entity/Firm Origin & Total Project Pipeline Value, USDbn



Note: International = firms based outside the region. Excludes completed and cancelled projects. Source: BMI Infrastructure Key Projects Data

The relatively limited participation of non-regional firms in construction in the region is attributed to the fragmented nature of Europe's construction industry, which is characterised by the presence of many small- and medium-sized enterprises. With

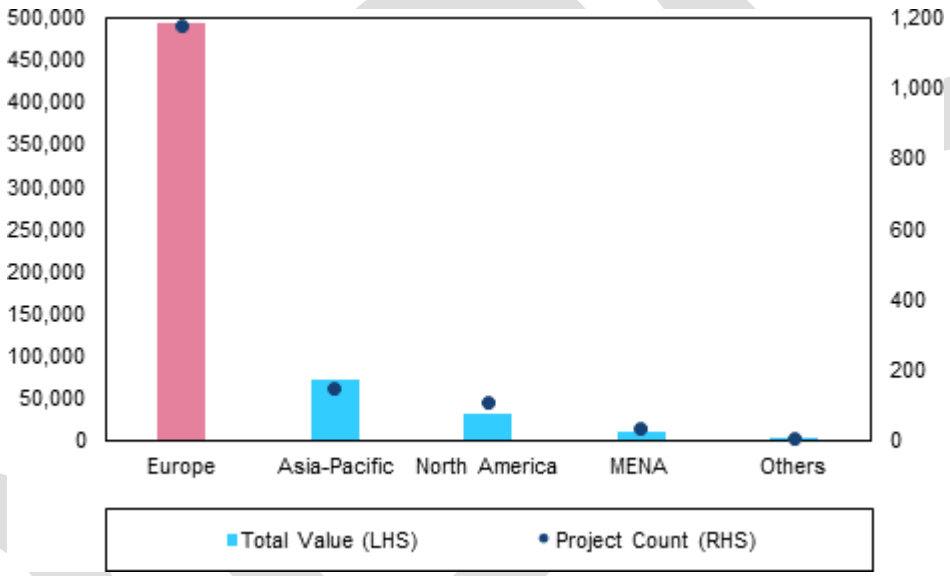
competition among construction firms being heavily price-based, tenders could be won by large foreign companies. In practice, non-regional participation in the industry remains very low, reinforcing our view of the importance of local regulatory knowledge and giving Europe-based construction companies a clear competitive advantage.

Financier Roles: Largest International Presence In Energy & Utilities

As in the case of construction roles, financiers from within Europe play a notable role in the region's competitive landscape. According to data from the BMI Infrastructure KPD, European entities and firms participate as financiers in projects that, taken together, account for 93.0% of the total US dollar value of projects in the region, when considering only projects with at least one financier.

Significant Involvement Of Non-Regional Financiers

Europe - Number & Value (USDmn) Of Projects Involving Financiers From Each Region



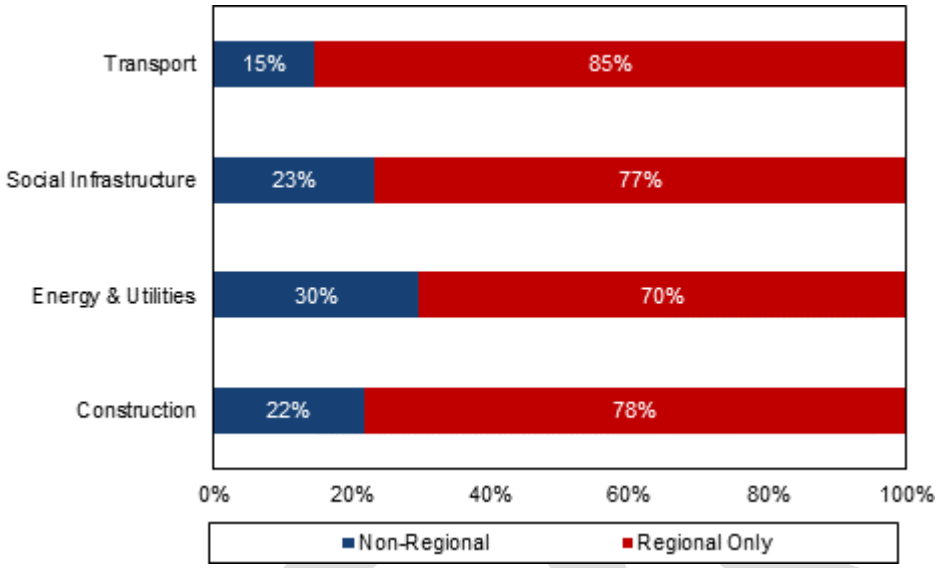
Note: May include territories, special administrative regions, provinces and autonomous regions. Only includes projects with at least one listed financier. Excludes cancelled & completed projects. Source: BMI Infrastructure Key Projects Data

We highlight a relatively significant involvement of non-regional financiers within the energy & utilities sector. Energy & utilities projects with at least one non-regional based financier account for 30% of the total US dollar value of projects in the region which have at least one financier. In our view, this points to this segment remaining an outperforming one for international involvement over the coming years. Accounting for the biggest share of this international presence in the sector are companies from the Asia-Pacific region. This is mainly due to key players such as Exim Bank of China and the Asian Development Bank, each with significant involvement in the sector.

Comparatively, transport projects with at least one non-European-based financier account for only 15% of the total value of projects in US dollar terms in the region that have at least one financier.

Non-Regional Participation Highest In Energy & Utilities

Europe - Total Value Of Projects With Involvement Of International Financiers



Note: Only includes projects with at least one financier listed. Excludes completed and cancelled projects. Source: BMI Infrastructure Key Projects Data

Industry Trend Analysis

EU 2028-2034 Budget Proposal To Boost Infrastructure Spending, Despite Risk Of Cuts Before Final Approval

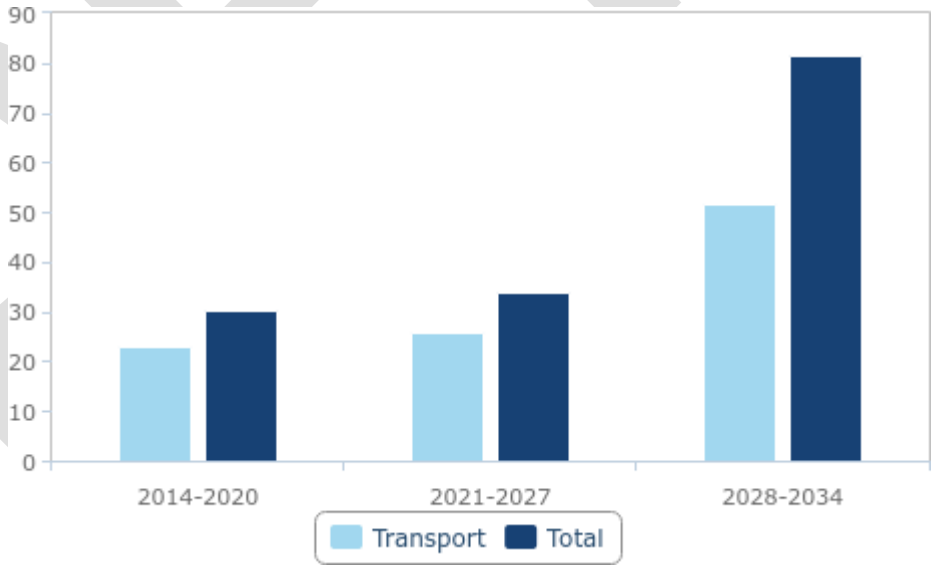
Key View:

- European infrastructure spending is set to see a boost under the proposed EU 2028-2034 budget, primarily driven by the Connected Europe Facility (CEF), pending the budget's full approval.
- The sharpest increase in infrastructure budget spending is expected for the military strand of the CEF, supporting dual-use infrastructure alongside civilian projects, with total allocated funding multiplying tenfold.
- While the budget in its current form is likely to face significant cuts, we anticipate that infrastructure will remain one of the primary areas of investment.

European infrastructure spending is set to see a boost under the proposed EU 2028-2034 budget, primarily driven by the Connected Europe Facility (CEF), pending the budget's full approval. On July 16, the European Commission unveiled the 2028-2034 EU budget proposal, also known as the Multiannual Financial Framework (MFF), amounting to EUR1.8tn or 1.26% of the EU's gross national income on average between 2028 and 2034. If passed in its current form, EUR81.4bn of the budget would be earmarked for the new CEF, which would finance the completion of Trans-European Networks (TEN-T), foster cross-border energy and transport projects and support investments in digital infrastructure. This proposed total funding for the CEF would more than double that of the current 2021-2027 CEF, worth EUR33.7bn.

CEF Budget To See Large Increase

Connecting Europe Facility Budget By Period, Total & Transport (EURbn)



Source: European Commission, BMI

Most of the 2021-2027 CEF is directed to its transport programme, CEF Transport, which amounts to EUR25.8bn or 77% of the total EUR33.7bn in funding for the CEF. It focuses on cross-border initiatives and projects aiming at removing bottlenecks or bridging

missing links. This prioritisation of transport infrastructure within the CEF stems from EU goals to deliver a sustainable transport network, as well as to boost resilience and competitiveness across the continent.

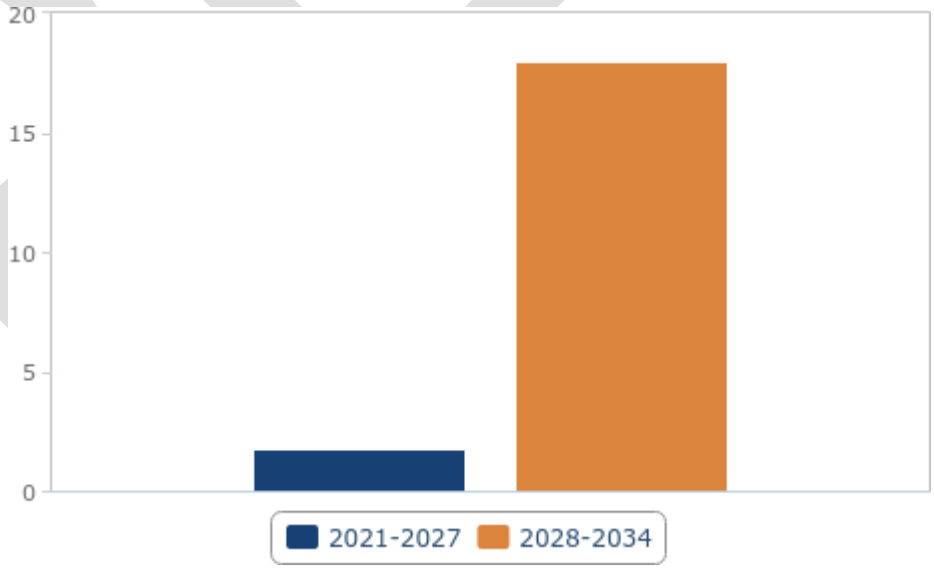
Within this focus on transport infrastructure, which is set to persist in the proposed new CEF, most cross-border transport infrastructure investments on the list of common interest are high speed rail (HSR) projects in particular. Key HSR lines which will be allocated funding in the new CEF include Lyon-Turin, Munich-Verona, Zagreb-Ljubljana, Tallin-Riga-Vilnius-Warsaw and Madrid-Lisbon. Several inland waterways are also set to receive funding, such as the Rhine/Danube canal. Details on the exact distributions of funds by project have not yet been specified and will be announced upon full passage of the budget, expected by the end of 2027.

Further financing for transport infrastructure in the proposed budget would come from the Cohesion Fund, supporting investments in TEN-T and decarbonisation projects in less economically developed regions and member states. In the 2021-2027 EU budget, funding for the Cohesion Fund totalled EUR36.6bn. However, the proposed budget seeks to merge existing funds, including the Cohesion Fund, under a single strategy to be implemented through 'National and Regional Partnership Plans'. By combining funds, these plans aim to streamline funding allocation and reduce lengthy validation procedures. National and Regional Partnership Plans would have a social target of 14%, with a portion of funding earmarked for social infrastructure, including health and educational facilities and social housing. Nevertheless, as the most contentious part of the proposal, it is likely to be subject to revisions.

The sharpest increase in infrastructure budget spending is expected for the military strand of the CEF, supporting dual-use infrastructure alongside civilian projects, with total allocated funding multiplying tenfold. This funding would be part of the CEF Transport programme's military mobility strand that supports the EU Military Mobility Action Plan. In the 2021-2027 CEF Transport programme, EUR1.75bn was designated for military mobility and dual-use infrastructure projects, which refer to transport infrastructure fit for both civil and defence usage. If passed in its current form, total funding for this strand would be ramped up to EUR18bn in the 2028-2034 period. Projects would include railway infrastructure upgrades to allow the circulation of larger and heavier trains, as well as works to increase port and airport capacity and strengthen road bridges.

Allocation To Dual-Use Infrastructure Ramped Up

CEF Allocated To Military Mobility & Dual-use Infrastructure, EURbn



Source: European Commission, BMI

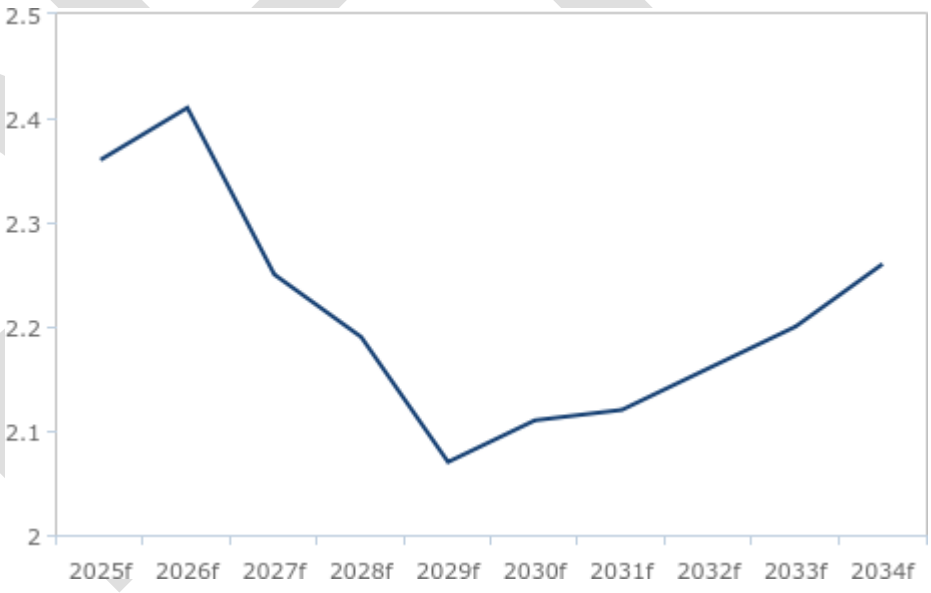
There would also be synergies between trans-European energy and transport projects and defence infrastructure supported by the CEF and projects within the scope of the European Competitiveness Fund (ECF). The proposed 2028-2034 ECF would allocate EUR131bn to support investments in defence, security, and related infrastructure.

While the budget in its current form is likely to face significant cuts, we anticipate that infrastructure will remain one of the primary areas of investment. Before its final approval, our Country Risk team expects significant cuts to be made to the budget over what is typically a two-year negotiating horizon. The sharp increase in spending is likely to lead net contributors to the budget such as Austria, Sweden, the Netherlands and Finland to rule out the increase. Germany, for example, has already voiced its opposition. The budget proposal is also expected to face considerable resistance from governments that want different priorities reflected in the budget than the Commission is currently proposing.

Tough negotiations loom on the topic of the merging of the Common Agricultural Policy (CAP) into the Cohesion Fund as well as its overall declining share of the budget since its inception. Cuts to these programmes have largely been a result of increased military spending, which in comparison, is unlikely to be reduced significantly in budget negotiations given previous commitments agreed upon by members and the clear focus on defence established by the EU this year. Similarly, we expect this to also be the case for overall infrastructure spending in the budget, and for transport in particular. Though cuts are likely during the years before it is approved, we highlight that the scale of funding allocated to infrastructure will largely persist. Furthermore, given the large share that transport represents out of total funding, we are optimistic of the effect that increased infrastructure spending in the budget will have on the industry's long-term outlook. Over our 10-year forecast to 2034, we forecast Europe's infrastructure construction industry value will see average annual real growth of 2.2%.

Industry Value To Pick Up From 2029

Infrastructure Industry Value, Real Growth, % y-o-y



f = BMI forecast. Source: National sources, BMI

That said, the delayed nature of budget funding, typically disbursed only three years after the end of the last budget, combined with the extended timeframes of the industry, means the effects fall outside the scope of our long-term forecasts, with impacts more geared towards the 15-20-year time horizon.

Italy's Messina Bridge Project Advances With Final Approval, But Major Hurdles Remain

Key View:

- Final project approval of the Strait of Messina Bridge marks a significant development for the project, now in its most advanced stage of approval since its inception.
- We hold a cautious outlook on the project's realisation, given its high cost and technical complexity.
- While we note growing momentum for the project, a precedent of failed attempts to advance it in the past highlights the potential risks facing this new effort.

Final project approval of the Strait of Messina Bridge marks a significant development for the project, now in its most advanced stage of approval since its inception. On August 6 2025, the Interministerial Committee for Economic Planning and Sustainable Development (CIPESS) gave final approval to the long-planned bridge, which, once completed, would connect Sicily and mainland Italy. Total investment for the bridge and related works is estimated at EUR13.5bn, according to the government, making it Italy's largest infrastructure project and one of the largest projects in planning in Europe. The final project proposal was submitted by the Ministry of Infrastructure and Transport in July 2025. As the highest authority for economic planning coordination and infrastructure investment in Italy, CIPPES' approval marks a key development for the project, allowing preliminary activities to commence. This includes preparation of construction sites, utilities diversions and geological surveys, paving the way for construction to begin by October 2025. This step follows notable advances for the project since the relaunch of efforts to advance it following the formation of the current government under Prime Minister Giorgia Meloni in 2022. That in turn followed a long period of minimal progress on the project after previous plans to advance it were paused in 2012 amid fiscal consolidation efforts. Other recent milestones for the project include the approval of the project's Environmental Impact Assessment and anti-corruption controls in June 2025.

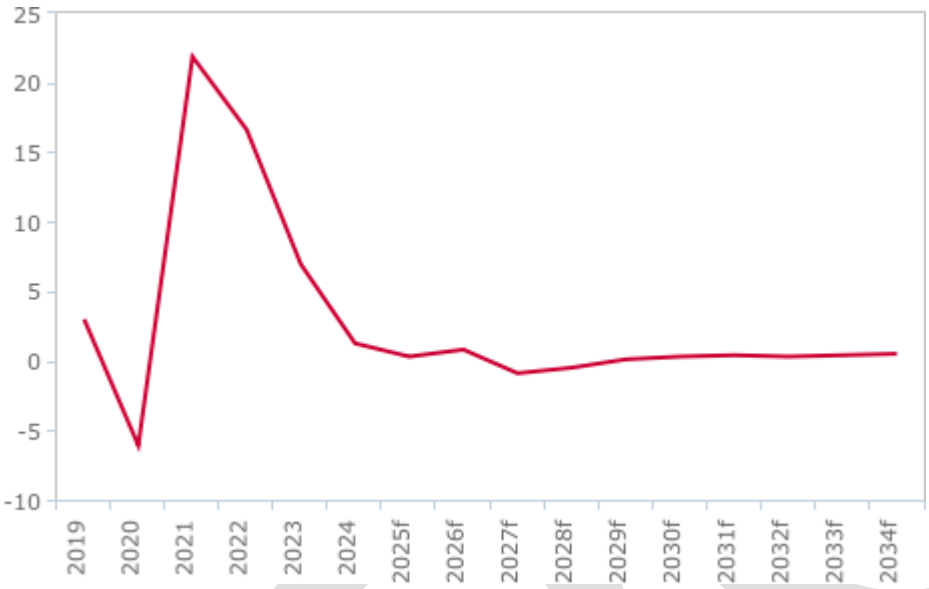
If completed as planned, the Strait of Messina Bridge would become the largest single-span bridge in the world, featuring a suspended central span 3.3km long and 60m wide, with towers nearly 400 m tall. The bridge's deck is planned to accommodate both rail and roadways, with three traffic lanes in each direction and a double-track railway line. Plans also include connections to the Sicilian and Calabria roadway and rail networks. On the Sicilian side, three underground railway stations are also planned.

Construction of the project is set to be undertaken by Eurolink, a consortium led by Webuild, under a contract awarded in 2006 following an international tender.

If advanced as planned, the project would inject substantial investment into Italy's infrastructure sector over most of the coming decade. As such it poses significant upside risk to our forecast for Italy's construction industry, which we anticipate will grow in real terms by an annual average of 0.2% y-o-y between 2025 and 2034.

Industry To Flatten Beyond 2026

Construction Industry Value, Real Growth, % y-o-y

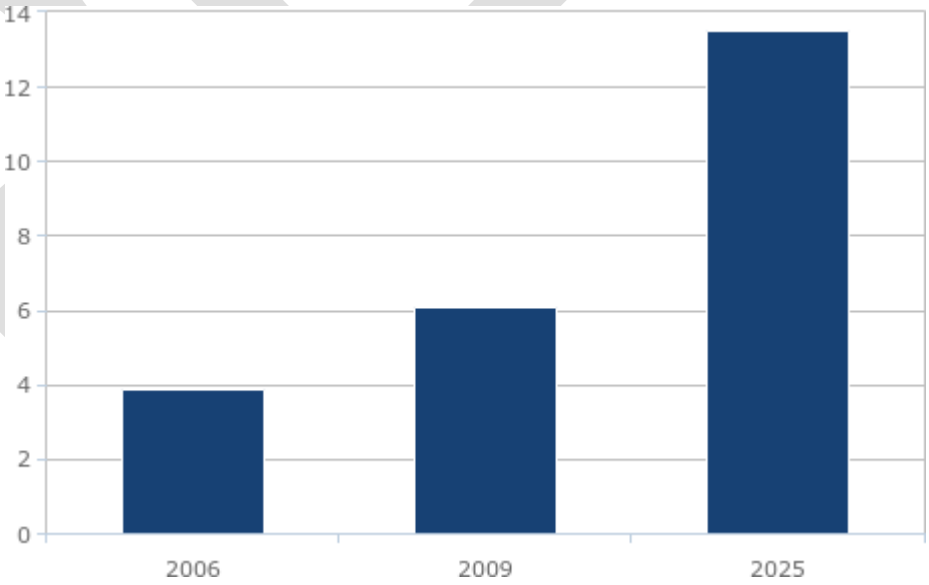


f = BMI forecast. Source: Istat, BMI

We hold a cautious outlook on the project's realisation, given its high cost and technical complexity. Notably, the project faces challenges surrounding its cost, given the existing level of public debt and fiscal consolidation efforts in Italy. Throughout the years, the estimated costs for the project have multiplied from EUR3.9bn in 2006 to EUR13.5bn in 2025. Approximately 40% of the current total is allocated for the construction of the bridge itself, with the rest for related works and to accommodate for potential cost overruns.

Total Planned Investment For The Project Has Multiplied

Estimated Costs Of The Bridge Over Time (EURbn)



Sources: Ministry of Infrastructure and Transport, BMI

Though EUR13.5bn over the next ten years has been set aside in the 2025 Finance Law, we note significant potential for cost overruns for a project of such magnitude and technical complexity, which would require the Italian government to locate additional funding resources.

We do see the potential for the Italian government to look to the EU for funding for the project. We also note reports that indicate that the government could look to classify the bridge as a dual-use infrastructure in order to qualify for related funds, though no official steps have been taken in this direction.

In addition to the project's high cost, its technical complexity has also been a long-standing impediment for the project's realisation. The bridge would be located in the Strait of Messina, an area of very high seismic risk and strong winds. From a technical standpoint, another challenge lies in its unprecedented scale. If completed, the Strait of Messina Bridge would become the longest single-span bridge in the world, over 63% longer than the Çanakkale Bridge in Turkey, which is currently the longest. Additionally, much of the connecting road and rail infrastructure would also require tunnels through difficult terrain.

At the same time, the project's construction also faces additional challenges, including opposition on cost and environmental grounds, as well as a precedent for elevated corruption and involvement of criminal groups on public contracts in Sicily and Calabria.

While we note growing momentum for the project, a precedent of failed attempts to advance it in the past highlights the potential risks facing this new effort. Amid the challenges posed by the project's high costs and complexity, previous unsuccessful efforts to advance the project highlight the potential for obstacles to derail it. Over the past several decades, repeated attempts have been made to advance this project, followed by repeated moves by governments to pause it. This includes an effort in 2003 by the Italian government under then Prime Minister Silvio Berlusconi to advance the project, leading to the signing of the contract with consortium Eurolink, noted above. This was followed by steps taken to pause the project by the following government under Prime Minister Romano Prodi in 2006 due to concerns about its viability and cost. Upon returning to government in 2008, Prime Minister Silvio Berlusconi again moved to advance the project, leading in 2011 to the approval of the final design for the project by the Stretto di Messina company. Following the collapse of the Berlusconi IV government in late 2011 and greater concerns around fiscal spending, preparatory works for the project were halted by Decree-Law no.179 of October 18 2012, enacted by the government of Prime Minister Mario Monti.

While we note progress from the project's final approval following years of uncertainty, the challenges faced by past administrations highlight the potential risks facing this new attempt. Financing capacity in particular has posed a considerable obstacle, illustrating the risks to the continued advance of the project if Italy's government were to face additional spending constraints or EU funding for the project fails to materialise.

Infrastructure Methodology

Connected Thinking

BMI employs a unique methodology known as 'Connected Thinking'. This means that our analysis captures the inter-relatedness of the global economy, and takes into account all of the relevant political, macroeconomic, financial market and industry factors that underpin a forecast and view. We then integrate them so as to explain how they interact and affect each other. Our Connected Thinking approach provides our customers with unique and valuable insight on all relevant macroeconomic, political and industry risk factors that will impact their operations and revenue-generating potential in the industry/industries within which they operate.

We use a transparent forecasting model as a base for our industry forecasts, but rely heavily on our analysts' expert judgement to ensure our forecasts capture all of the insights we derive using our unique Connected Thinking approach. We believe analyst expertise and judgement are the best ways to provide the most accurate, up-to-date and comprehensive insight to our customers.

Infrastructure Methodology

Our data and forecasts capture the entire spectrum of construction activities, including all areas of civil engineering and building construction, as defined under the ISIC Rev.4.

Our data and forecasts for Infrastructure are broken down into: transport (road, rail, ports and airports) and energy & utilities (power plants & transmission grids, water, oil & gas pipelines). Our building data and forecasts are broken down into residential and non-residential construction.

Construction Industry

Construction Industry Value

Our construction data is derived from national accounts from each market's national statistics office (or equivalent) or from international organisations which compile national account data, most notably the UN. Specifically, it measures the gross value added (GVA) of the construction industry over the reported 12-month period in nominal values. GVA (also known as GDP by industry) measures the contribution to overall GDP. The components of value added consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. We source our construction industry value data in nominal local currency terms.

This data is used because it is reported by virtually all markets and can therefore be used for comparative purposes.

Construction Industry Value Real Growth

Our construction industry value forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables, such as gross fixed capital formation, from BMI Country Risk.

In addition, we will also apply analyst expert judgement to refine and finalise our construction industry value real growth forecast, based on exogenous and endogenous variables or events, not captured by our regression model. Real growth is defined as industry value nominal growth adjusted for industry-specific inflation (construction deflator).

Bearing in mind that other factors need to be taken into consideration, both quantitative and qualitative, our analysts also factor in industry-specific issues in deriving our forecasts:

- Political risk - potential change in leadership, policy continuity
- Regulatory outlook - pricing structures of specific markets, bureaucracy, red tape
- Currency outlook - currency volatility, cost of imports
- Funding availability - fiscal health of the government, openness to private/foreign investment
- BMI Infrastructure Key Projects Data - indication of a market's infrastructure project pipeline by sector
- High Frequency Data – construction permits, starts, confidence etc
- Company developments - reflective of market dynamics and competitive landscap

Construction Industry, % Of GDP/Construction Value (USD)

These are derived indicators, calculated using our Country Risk team's GDP and exchange rate forecasts.

Construction Output

These figures refer to the gross output of the construction industry. Gross output measures the total sales or receipts of the industry, including sales to final users in the economy as well as sales to other industries. Gross output consists of construction industry value and intermediate consumption.

As in the case of construction industry value data, our construction output data is derived from national accounts from each market's national statistics office (or equivalent) or from international organisations which compile national account data, most notably the UN.

Forecasts are the result of a regression model, using a market's own historical time series as well as our construction industry value forecasts.

Construction Intermediate Consumption

These figures refer to the intermediate consumption of the construction industry. Intermediate consumption measures the goods and services employed in the production process of other goods and services and not for final consumption. Intermediate consumption is equivalent to the difference between gross output and GVA.

Our Construction Intermediate Consumption figures are a function of construction output minus construction industry value.

Cement Data

We forecast Portland cement production, consumption and net exports, in millions of tonnes.

Our historical national production data is sourced from the United States Geological Survey (USGS), while trade data is sourced from TradeMap by the International Trade Centre. By calculating production and net exports, we are able to determine historical consumption levels.

These consumption levels are then forecast over our 10-year forecast period using our construction growth forecasts, reflecting the changing demand picture for cement from the industry.

Construction Sector Employment

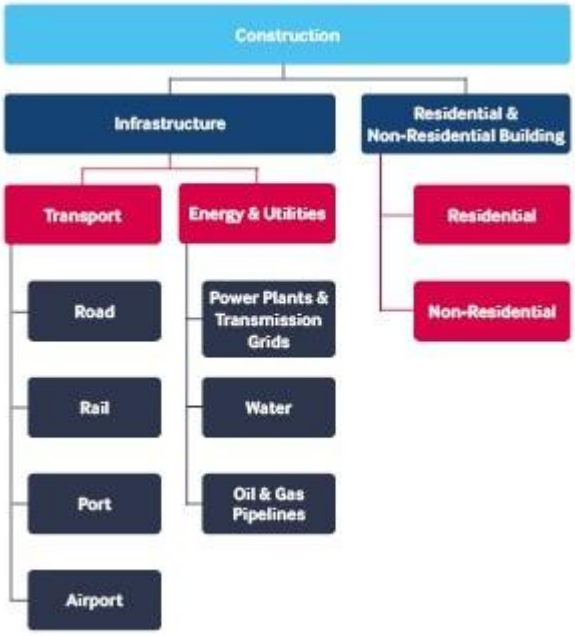
Total Construction Employment

This data is sourced from either the national statistics office or the International Labor Organization. It includes all those employed within the sector.

Our total construction employment forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables from our Country Risk service.

Infrastructure Data Sub-Sectors

Infrastructure Data Sub-Sectors



Source: BMI

For select markets, in addition to our construction industry value figures, we also provide industry value (gross value added) figures for subsectors of the construction industry.

We use a combination of historic data as reported by central banks, national statistics agencies and other official data sources, and leverage our analysts' knowledge of market and subsector dynamics and project information included in our proprietary BMI Infrastructure Key Projects Data, a comprehensive catalogue of the major power, transport, utilities, residential and non-residential projects in each market.

Given a variation in construction sub-sector classifications under various national accounts systems currently in use, we segment official construction sub-sector data into consistent and proprietary categories to compare industry value across sub-sectors. First, our construction industry data is broken down into infrastructure construction on one hand and residential and non-residential

building construction on the other. Infrastructure construction is then broken down where possible into transport infrastructure and energy and utilities infrastructure, which are then further broken down where possible into the categories illustrated in the figure above. Residential and non-residential building construction in turn is broken down where possible into residential building and non-residential building.

Our infrastructure sub-sectors industry value forecasts are based on a regression model, using a market's own historical time series and key macroeconomic variables, such as fixed capital formation, from our Country Risk service.

In addition, we also apply analyst expert judgement to refine and finalise industry value real growth forecasts, based on exogenous and endogenous variables or events, not captured by our regression model.

The residential and non-residential industry values are a function of construction minus infrastructure industry value. We further rely on national sources and our BMI Infrastructure Key Projects Data to further estimate the separation between the two areas of building when historic data is not available.

Infrastructure Risk/Reward Index

Our Infrastructure Risk/Reward Index (RRI) quantifies and ranks a market's attractiveness within the context of the Infrastructure industry, based on the balance between the **Risks** and **Rewards** of entering and operating in different markets.

We combine industry-specific characteristics with broader economic, political and operational market characteristics. We weight these inputs in terms of their importance to investor decision-making in a given industry. The result is a nuanced and accurate reflection of the realities facing investors in terms of first the balance between opportunities and risk and second between industry-specific and broader market traits. This enables users of the index to assess a market's attractiveness in a regional and global context.

The index uses a combination of our proprietary forecasts and analyst assessment of the regulatory climate. As regulations evolve and forecasts change, so the index scores change providing a highly dynamic and forward-looking result.

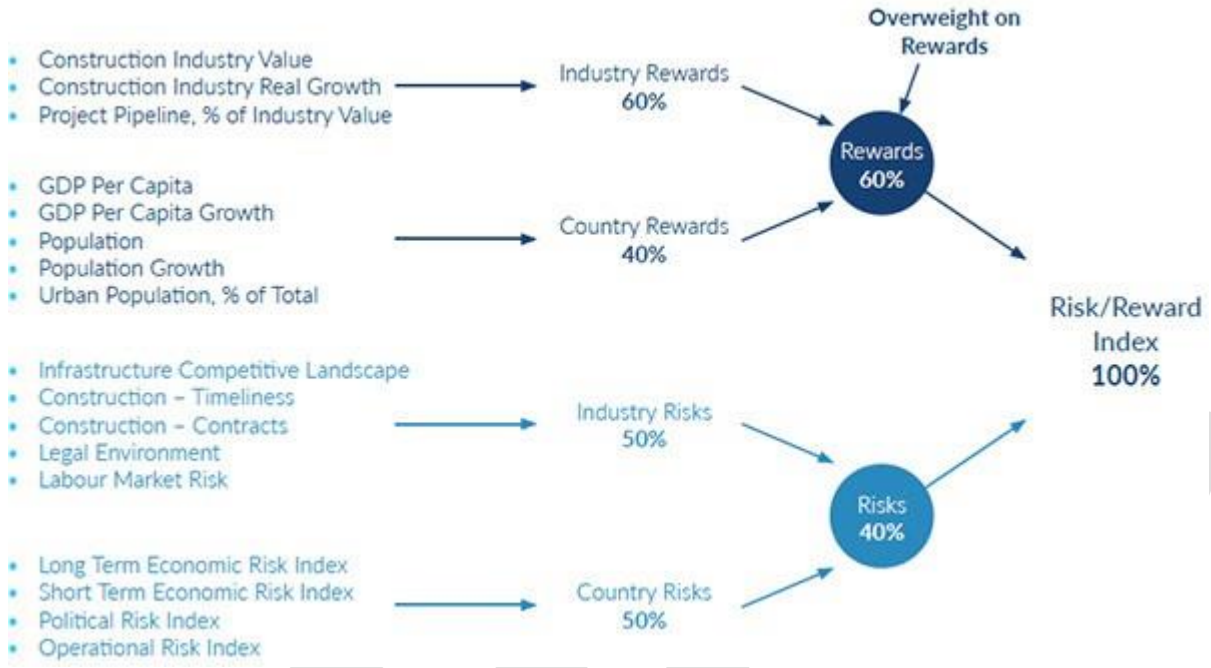
The Infrastructure Risk/Reward Index universe comprises **104 markets**.

Benefits Of Using Our Infrastructure RRI

- **Global Rankings:** One global table, ranking all the markets in our universe for Infrastructure from most attractive (closest to zero) to most risk (closest to 100).
- **Accessibility:** Easily accessible, top-down view of the global, regional or sub-regional Risk/Reward profile.
- **Comparability:** Identical methodology across 104 markets for Infrastructure allows users to build lists of markets they wish to compare, beyond the confines of a global or regional grouping.
- **Scoring:** Scores out of 100 with a wide distribution, provide nuanced investment comparisons. The higher the score, the less favourable the market profile.
- **Quantifiable:** Quantifies the Rewards and Risks of doing business in the infrastructure industry in different markets around the world and helps identify specific flashpoints in the overall business environment.
- **Comprehensive:** Comprehensive set of indicators, assessing industry-specific risks and rewards alongside political, economic and operating risks.
- **Entry Point:** A starting point to assess the outlook for the infrastructure industry, from which users can dive into more granular forecasts and analysis to gain a deeper understanding of the market.
- **Balanced:** Multi-indicator structure prevents outliers and extremes from distorting final scores and rankings.
- **Methodology:** The index is a combination of proprietary BMI forecasts, analyst insights and globally acceptable benchmark indicators.

Weightings Of Categories And Indicators

Infrastructure Risk/Reward Index



Source: BMI

The RRI matrix divides into two distinct categories:

Rewards: Evaluation of an industry's size and growth potential (**Industry Rewards**), and macro characteristics that directly impact the size of business opportunities in a specific industry (**Country Rewards**).

Risks: Evaluation of micro, industry-specific characteristics, crucial for an industry to develop to its potential (**Industry Risks**) and a quantifiable assessment of the political, economic and operational profile (**Country Risks**).

Assessing Our Weightings

Our matrix is deliberately overweight on **Rewards** (60% of the final RRI score for a market) and within that, the **Industry Rewards** segment (60% of final Rewards score). This is to reflect the fact that when it comes to long-term investment potential, industry size and growth potential carry the most weight in indicating opportunities, with other structural factors (demographic, labour statistics and infrastructure availability) weighing in, but to a slightly lesser extent. In addition, our focus and expertise in emerging and frontier markets has dictated this bias towards industry size and growth to ensure we are able to identify opportunities in markets where regulatory frameworks are not as developed and industry sizes not as big as in developed markets, but where we know there is a strong desire to invest.

Infrastructure RRI Indicators - Explanation And Sources

	Source	Rationale
Rewards		
Industry Rewards		
Construction Industry Value	BMI Forecast	Size of the construction industry indicates potential for opportunities and scale of operations. USDbn, Five Year Average Forecast.
Construction Industry Value	BMI Forecast	Growth of the construction industry indicates potential for growth in opportunities. Real Growth, % Change y-o-y, Five Year Average Forecast.
Project Pipeline, % of Industry Value	BMI Key Projects Data/BMI Forecast	Size of the project pipeline in the pre- and under-construction phase relative to the construction industry size, indicates the potential for project opportunities, progression of projects through the pipeline and growth of pipeline.
Country Rewards		
GDP Per Capita	BMI Forecast	The wealth of the population indicates demand for infrastructure. USD, Five Year Average Forecast
GDP Per Capita Growth	BMI Forecast	As a population gets richer, we would expect to see greater demand for infrastructure, especially transport. Local Currency, % Change y-o-y, Five Year Average Forecast. Except: Zimbabwe & Venezuela where USD is used.
Population	BMI Forecast	Larger population creates greater demand for infrastructure. Five Year Average Forecast
Population Growth	BMI Forecast	Growth of population necessitates increased infrastructure stock. % Change y-o-y, Five Year Forecast.
Urban Population % Of Total	BMI Forecast	High and growing concentration of population in urban areas indicates greater pressure on infrastructure assets. Five Year Average Forecast.
Risks		
Industry Risks		
Infrastructure Competitive Landscape	BMI Subjective Indicator	Assesses the openness of the competitive landscape. Considers the sophistication and saturation of the existing market, the ability to compete fairly in tenders and barriers to international companies entering the market.
Construction - Timeliness	BMI Project Risk Index	Measures the risk of delays to project development. Based on ability to secure permits and the potential for protracted bureaucracy to delay or increase the cost of operations.
Construction - Contracts	BMI Project Risk Index	Measures the risk of contracting issues. Assesses both the efficiency of contract resolution and the sophistication of local regulations.
Legal Environment	BMI Operational Risk Index	Measures risk stemming from lack of transparency and legal protection. Assesses the strength of rule of law, transparency and investor protection.
Labour Market Risk	BMI Operational Risk Index	Measures the risk to project development based on the labour market. Assesses the size, education levels and cost of employment.
Country Risks		
Long-Term Economic Risk Index	BMI Country Risk Index	Takes into account the structural characteristics of economic growth, the labour market, price stability, exchange rate stability and the sustainability of the balance of payments, as well as fiscal and external debt outlooks for the coming decade.
Short-Term Economic Risk Index	BMI Country Risk Index	Seeks to define current vulnerabilities and assess real GDP growth,

	Source	Rationale
		inflation, unemployment, exchange rate fluctuation, balance of payments dynamics, as well as fiscal and external debt credentials over the coming two years.
Political Risk Index	BMI Country Risk Index	The Political Risk Index is a score made up of the mean average across three distinct pillars: Governance Risk, Society Risk and Security Risk. These are aggregated into an overall assessment of Political Risk.
Operational Risk Index	BMI Operational Risk Index	Focuses on existing conditions relating to four main risk areas: Labour Market, Trade & Investment, Logistics, and Crime & Security.

Source: BMI

Disclaimer: This information is sourced from BMI Country Risk & Industry Research, a product of Fitch Solutions Group Ltd, UK