THE STATE OF LOCAL INFRASTRUCTURE INVESTMENT IN EUROPE

EIB MUNICIPALITIES SURVEY 2024-2025

European Investment Bank

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April 2025

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The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in the definition of its positioning, strategy and policy. The department and its team of economists is headed by Debora Revoltella, director of economics.

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About the EIB Municipalities Survey

The EIB Municipalities Survey collects information from officials from local municipalities on local infrastructure investment activities and needs. This overview presents selected findings from the fourth wave of the survey, based on telephone interviews with 1 002 municipalities across the European Union carried out between June and September 2024.

The first wave of the survey was conducted in 2017. The EIB Economics Department originally developed it as a complement to the EIB Investment Survey (EIBIS). It is managed by the department with the support of Ipsos MORI.

About this publication

The reports resulting from the EIB Municipalities Survey provide an overview of data collected for the 27 EU Member States. These reports are intended to provide a snapshot of the data. For the purposes of this publication, data are weighted (by population or cohesion) to better reflect the contribution of different municipalities to the aggregated picture.

EIB MUNICIPALITIES SURVEY 2024 – KEY FINDINGS

Investment dynamics, needs and obstacles

A majority of European Union municipalities and cities plan more investment to fight global warming and social infrastructure such as public schools and housing.

Municipalities and cities in Europe plan to spend more on fighting climate change and social infrastructure such as public schools, hospitals, care institutions and social and affordable housing. According to the survey, 56% of participating municipalities aims for greater investments to cut greenhouse gas emissions and 53% intend to boost budgets for social infrastructure over the coming three years. This trend is consistent for regions classified as cohesion regions.[1] A particularly high share of municipalities in less developed areas plan to invest more in social infrastructure (over 62% of municipalities).

The importance of investment activity by municipalities and cities for economic development across the EU has risen recently.

Subnational governmental investment grew strongly in 2023, accounting for about two thirds of the increase in total public investments in the EU. The increase reflects meeting both an accumulated investment gap from the past decade but also increased investment pressures for subnational governments in several areas such as climate protection, social affairs and transport. For example, in the area of climate change mitigation, investment at the local and regional levels makes up the largest share: it accounted for about 60% of total investments in 2019 according to OECD.[2]

A persistent challenge for many municipalities and cities in implementing investment in the EU is finance and regulatory barriers.

Nearly two-thirds of municipalities find financing and almost a half lengthy regulatory processes to be major obstacles to investment. These have both become bigger barriers since 2022. Other obstacles have eased, including as a major barrier having the necessary technical capacity, technological uncertainty, and the need for agreement with other municipalities and stakeholders.

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1 EU cohesion regions are defined for the period 2021–2027 based on NUTS 2 regional GDP per capita level in purchasing power standards vs. the EU average (2015–2017). EU cohesion policy defines cohesion regions as comprising less developed regions with a GDP per inhabitant less than 75% of the EU average, and transition regions as those with a GDP per inhabitant between 75% and 100% of the EU average.
See OJ L 244/10, 9. 7. 2021 (document C(2021) 4849), URL: https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32021D1130.

2 The EU figure is a weighted average based on 22 EU members states that are OECD members (OECD Subnational Government Climate Finance Database, using a more refined approach to the COFOG classification). According to the latest Eurostat data for expenditure by function (COFOG classification), in 2023 more than two thirds of the total spending in the EU occurred at the (state) local and regional level.

A significant shortage of experts in environmental and climate assessment, as well as engineering and technical skills, continues to hinder investment programmes across municipalities and cities.

Shortages of experts in environmental or climate assessment, and on the engineering or technical side, was reported as a major obstacle by 30% and 26% of municipalities, respectively. This issue is particularly acute in transition regions and less developed regions, where municipalities struggle to hire such experts. While the two main areas of need in terms of expertise for delivering investment programmes remain unchanged from 2022, in terms of skills needed to implement investments in 2024, expertise in legal and regulatory issues has overtaken expertise in tendering and procurement.

Only a minority of municipal investment projects are independently assessed for financial sustainability, project impact or climate effects at the appraisal stage or an independent ex-post evaluation.

Financial sustainability assessments are the most frequent form of independent assessment, with over one-third of projects reviewed in this way in 2023. Ex-post assessments of project impacts or effects on climate resilience and adaptation are done for approximately one-fourth of projects. Larger municipalities, specifically those with populations over 50 000, tend to conduct more evaluations.

Financing municipal investments

Municipalities and cities relied predominantly on own resources, government transfers and EU funds.

Besides using their own resources, municipalities primarily relied on project-specific funding – capital transfers/subsidies/investment grants – from central and regional governments, and EU resources for investment purposes. External financing, such as through capital markets, continues to make up only a small portion of total financing (around 15% or less).

The less developed regions are credit constrained and rely more on concentrated sources of financing from governments and the EU.

Less developed regions have the highest relative share of project-specific financing[3] (60%), whereas more developed regions depend more on their own resources (49%) and external financing (almost 20%). Less than half of municipalities looked for external financing (449). Of these, about half received the full amount of funding desired (52%). A lower share of municipalities from Central and Eastern Europe and Southern Europe received the total amount of external funding sought compared to Western and Northern Europe.[4]

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[3] Project-specific financing includes capital transfers/subsidies/investment grants from regional/national governments or EU programmes.

[4] Western and Northern Europe includes Austria, Belgium, Denmark, Finland, France, Germany, Luxembourg, the Netherlands and Sweden. Southern Europe includes Cyprus, Greece, Italy, Spain, Malta and Portugal. Central and Eastern Europe includes Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia. Some country group allocations have been different in previous editions of this publication.

A large and growing share of municipalities and cities view financial instruments provided by the EU as critical to finance future infrastructure investment.

For planned investment projects, the most common financing source for municipalities is EU grants (83%), followed by government transfers for capital projects (74%). Interest in using the other EU financing source, EU-funded financial instruments, recorded a substantial increase as it is planned to be used by about 60% municipalities (up from about 40% in 2022). This could, for example, include turning grants into guarantees that would then be used to attract funding at higher levels from organisations such as banks or other types of financing. Lastly, direct market-based financing plays a much lower role – considered only by about one in three municipalities, with the higher income and larger municipalities only tending to have this option.

Progress with the twin transition

More municipalities and cities are investing in both the green and digital initiatives than in previous surveys.

The number of municipalities investing in both green and digital initiatives is noticeably higher than in 2022. However, despite these positive trends, the more developed regions still come out ahead, with nearly 70% of municipalities there making progress in both areas, compared to just over 40% in less developed regions. Green investment activity was somewhat higher than investment activity directed at the digital transition. The size of the municipality makes a difference: Larger municipalities are more likely to have the capacity to make both digital and green investments.

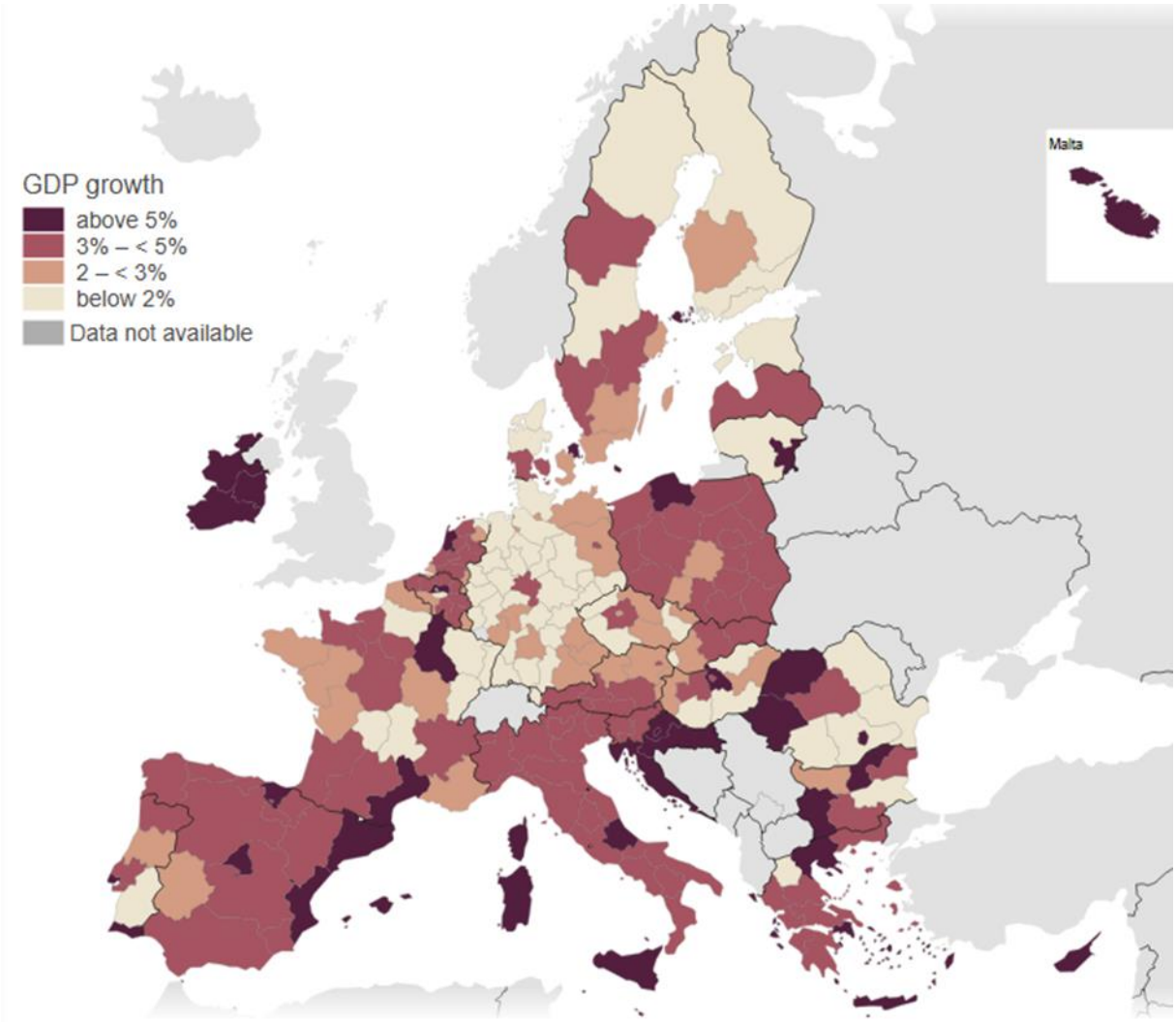
Municipalities and cities' perceptions of digitalisation are positive, but they are still more pessimistic about the effects of climate change.

A large share of municipalities tends to see digitalisation as an opportunity. On the other hand, municipalities are concerned about ageing populations. Municipalities have diverging views on outward migration, particularly in less developed countries and in Central and Eastern Europe. The effects of climate change are also perceived as a matter of concern. These results are broadly in line with the findings of the 2022 survey. Geopolitical risks are considered a greater challenge in the regions Southern Europe and Central and Eastern Europe than they are in the region Western and Northern Europe.

MACROECONOMIC ENVIRONMENT – MAJOR INCREASE IN PUBLIC INVESTMENT

Differences across regions have become a visible feature of economic development. The rapid post-pandemic economic recovery in many European regions has been disrupted by a series of shocks (energy crisis, war in Ukraine) and by the structural adjustments required by the green transition. Although per capita income and employment across the European Union have risen, the economic development observed in many regions has not brought the same benefits to all. Intra- and inter-regional economic performance varies, as a result of variation in the factors that drive structural competitiveness, and of aspects like economic structure or overall education levels, which influence development from region to region.

Figure 1: GDP growth at the NUTS 2 level (in percent).

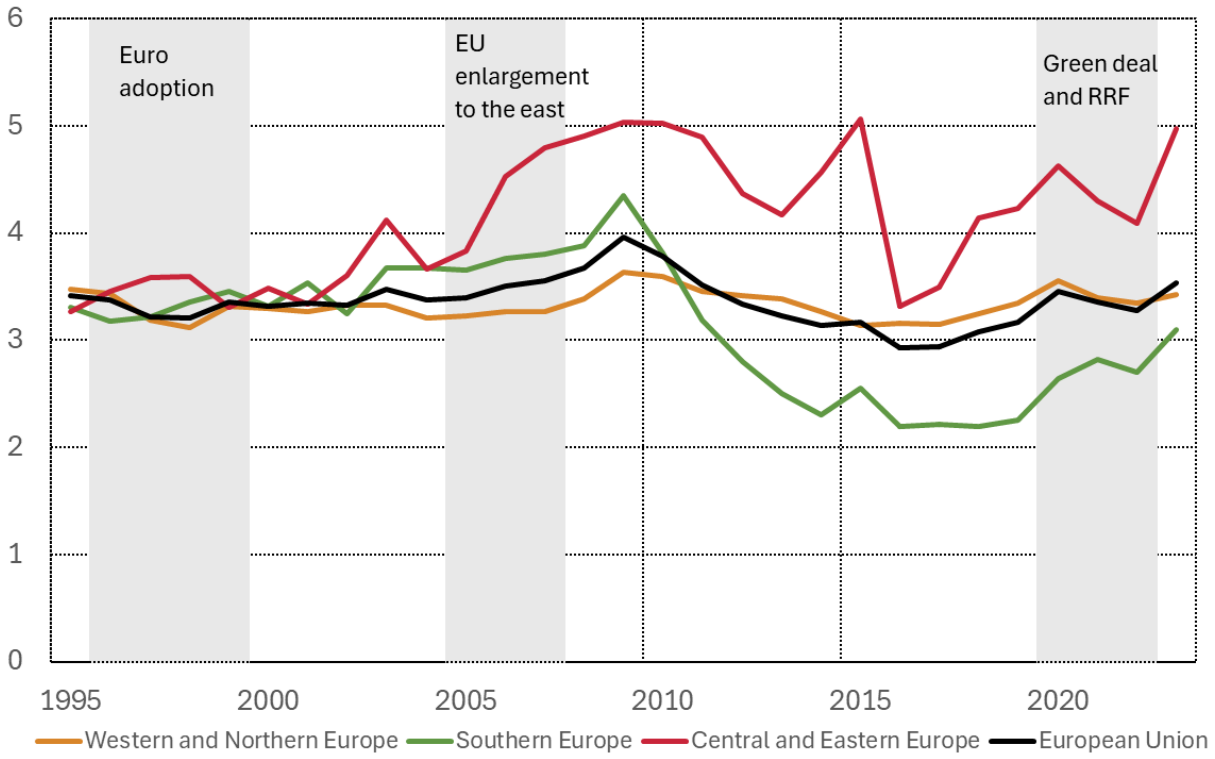


Note: Average real GDP growth, 2021–2023. 2023 data are preliminary for some NUTS 2 regions. Portugal: average growth for 2022–2023 in regions other than Norte and Algarve. NUTS 2 regions use the NUTS 2024 classification. Source: Eurostat, EIB staff calculations.

EU economic growth is typically driven by private investment and household consumption but, since 2023, government consumption has become one of the main drivers. Household consumption suffered from high inflation (eroding real income and the real value of savings) after the pandemic, followed a period of above-average rates of household saving due to slow economic recovery and political uncertainty. Private investment was initially supported by high corporate profits and the delayed response of financing costs to interest rates, but it has weakened recently, on the back of high financing costs, weak domestic and external demand, and high uncertainty. Instead, the government sector contributed substantially to growth in 2023 and 2024 – although continuous fiscal stimulus has been unable to compensate for the reduced contributions of other major GDP components, reflecting the broader economic soft landing driven by geopolitical events and a slower return of monetary policy to its neutral stance.

In 2023, government investment grew at a record rate.[5] Government investment in the EU has been growing since 2017 (Figure 2), after years of depressed growth and volatility that created substantial pent-up investment needs. Countries in Southern Europe (such as Italy and Spain), which were hit particularly hard, benefited substantially, and were the main driver of this trend. The continuous increase in government investment rates (as a percent of GDP) catapulted them to highs not seen since the late 1990s or the years of fiscal stimulus following the global financial crisis.

Figure 2: Government investment, EU and EU macro regions, 1995–2023 (in percent of GDP).



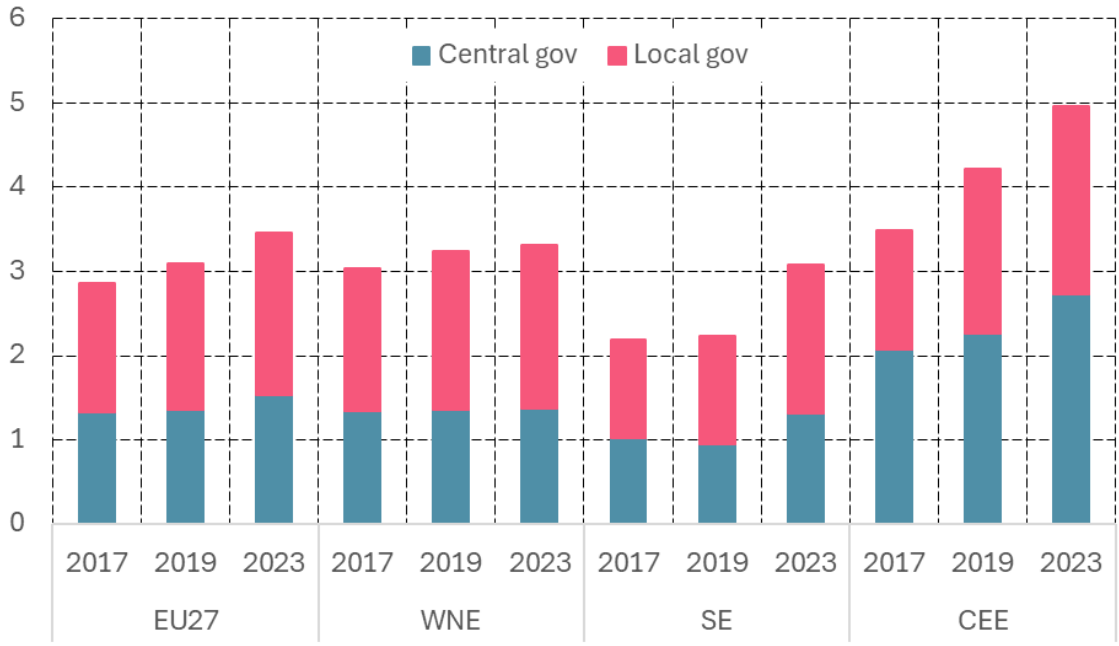
Note: Gross fixed capital formation over GDP. Regional aggregates constructed using respective countries' GDP share in total EU GDP. Source: Eurostat, EIB staff calculations.

[5] In line with the EIB Investment Report 2024–2025: Innovation, integration and simplification in Europe, government investment is defined as gross fixed capital formation by the government.

Real public investment at the regional and local level saw the biggest increase in decades in 2023, and continued to rise in 2024. Gross fixed capital formation by the general government grew at a record rate of 15% in the European Union in 2023 and government investment surpassed 3.5% of GDP, almost one percentage point above the 2017 level (Figure 3).[6] At the subnational level (state and local),[7] investment exceeded 1.9% of GDP – about half a percentage point above the level in 2017.[8]

Considering a longer time horizon, subnational government investments have been growing since 2017. Overall public investment growth during the 2016–2023 period was particularly high in Central and Eastern Europe, driven by a significant pick-up in investment by local and regional governments (Figure 3). Investment also grew strongly in Southern Europe after the pandemic, after years of depressed rates of government investment – except for a short-lived rebound just after the global financial crisis – particularly in Southern Europe, which had implemented fiscal and structural measures in a rebalancing process. EU support through NextGeneration and EU structural funds contributed significantly to the rise of investment by regional and local governments in 2023, and not just in smaller countries. For more details, see Chapter 2 of the 2024/2025 EIB Investment Report: Innovation, integration and simplification in Europe.

Figure 3: ***General government investment rate (percent of GDP), selected years, by level of government*****.**



Note: Gross fixed capital formation over GDP. General government aggregates consist of central, state (where applicable) and local government contributions. Blue bars = state government; red bars = state (where applicable) and local governments. EU macro regions based on GDP weights aggregation. Source: Eurostat, EIB staff calculations.

An overwhelming share of the increase in government investment comes from investment activity at the regional and local levels. Local and regional governments accounted for about two-thirds of the increase in

[6] Even when corrected for relatively high growth of prices (GDP deflator, 6.1%), the 2023 outturn was the biggest real rise since at least 1996: 10%.

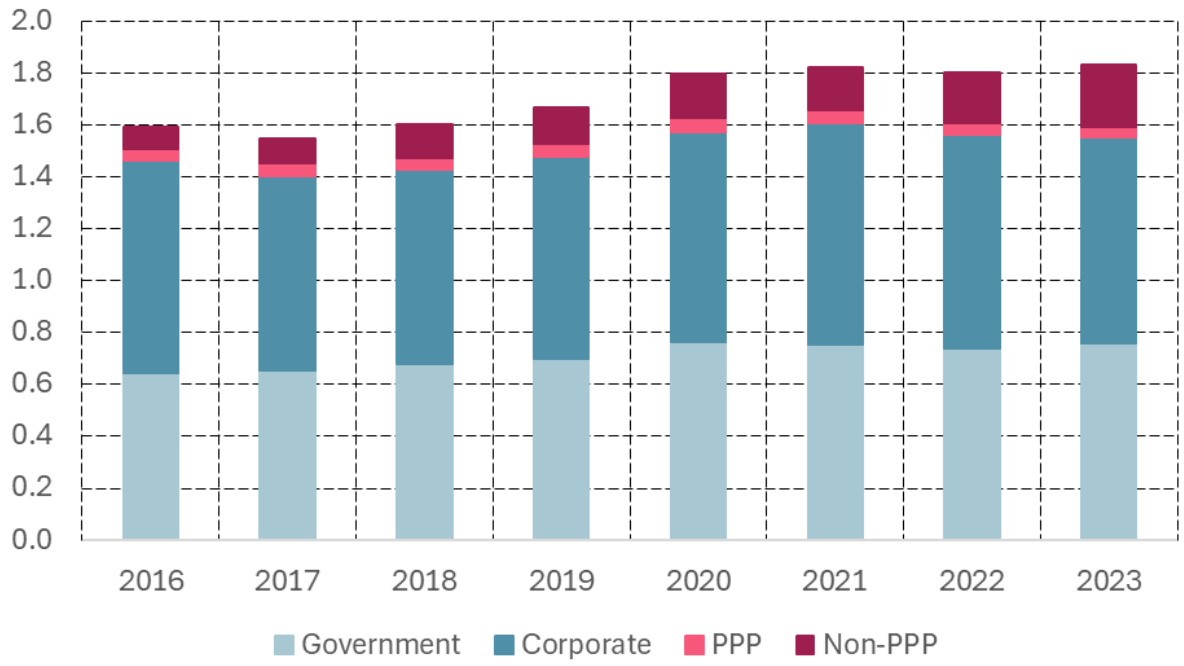
[7] Subnational governments can facilitate infrastructure projects that are closely tailored to the specific requirements of the area due to their local knowledge and administrative capabilities. This includes essential infrastructure like public transport networks, electricity grids and wastewater systems, and upgrades to public buildings like schools, hospitals and social housing. Building on their understanding of local needs and priorities, local authorities ensure that infrastructure investments yield maximum social and economic benefits.

[8] According to OECD's Subnational Government Climate Finance Database, subnational governments are also the main investor in specific areas of governmental infrastructure investments such as environment (on average around 60% for the EU members and over 63% for all OECD members in 2019).

government investment across the European Union (Figure 3). That contribution was substantially stronger in Western and Northern Europe (80%), while somewhat less pronounced (about 40%) in Central and Eastern Europe, where government finances tend to be more centralised or fewer levels of government exist.

Government infrastructure investment has remained broadly stable since the pandemic. In 2023, public financing increased its contribution to 0.75% of GDP in the European Union (Figure 4), while the role of the private sector remained sizeable and stable. Government financing has increased and kept up its contribution to infrastructure investment growth since the pandemic. Non-public-private partnerships (non-PPP) special purpose vehicles[9] are growing in importance (particularly in Western and Northern Europe), while the share of public-private partnerships (PPP) in investment growth is low and stable. The recent rise in infrastructure financing in Central and Eastern Europe is predominantly supported by government investment. Meanwhile, project financing through public-private partnership has remained relatively subdued, consistent with trends observed in previous years.

Figure 4: Infrastructure finance in the European Union by institutional sector (% GDP).



Source: Eurostat; IJGlobal; EPEC; EIB staff calculations.

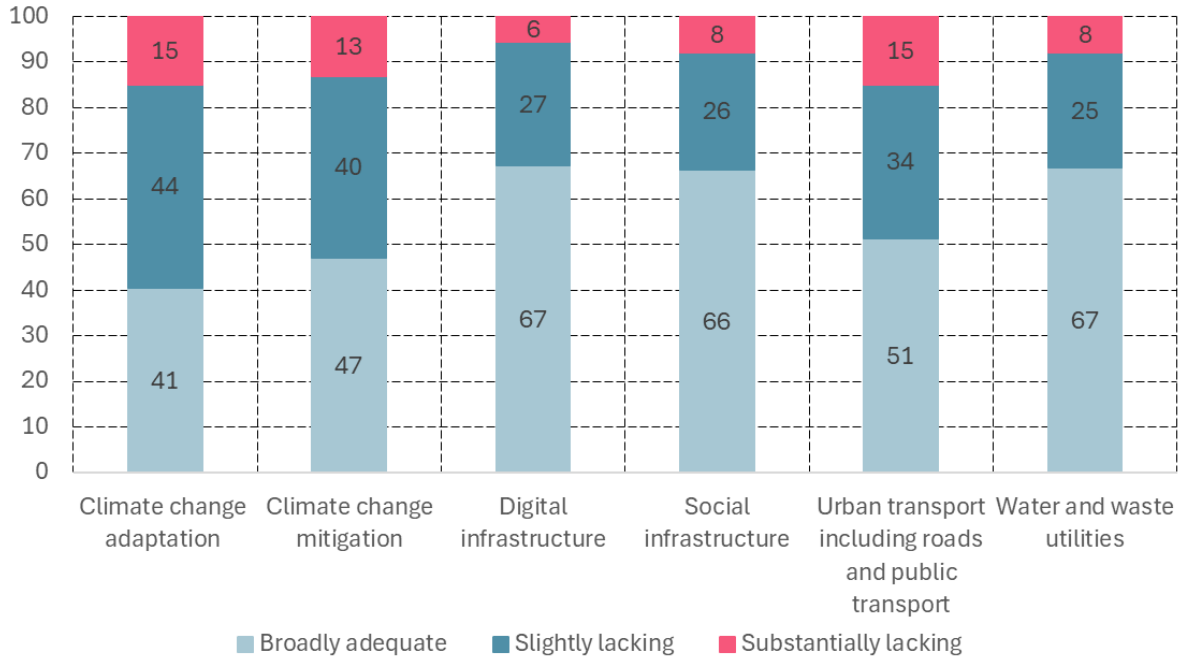
[9] A specific company that is set up to build and operate one particular infrastructure asset for a pre-defined period.

SURVEY RESULTS FOR THE MAIN CATEGORIES

What are municipalities' main investment gaps?

A majority of municipalities indicated that there has been a lack of investment in climate change adaptation and mitigation infrastructure in the last three years (2021–2023). Around half of municipalities are dissatisfied with their investments in urban transport, and about one-third of municipalities cited a lack of investment in social and digital infrastructure, and in water and waste utilities.

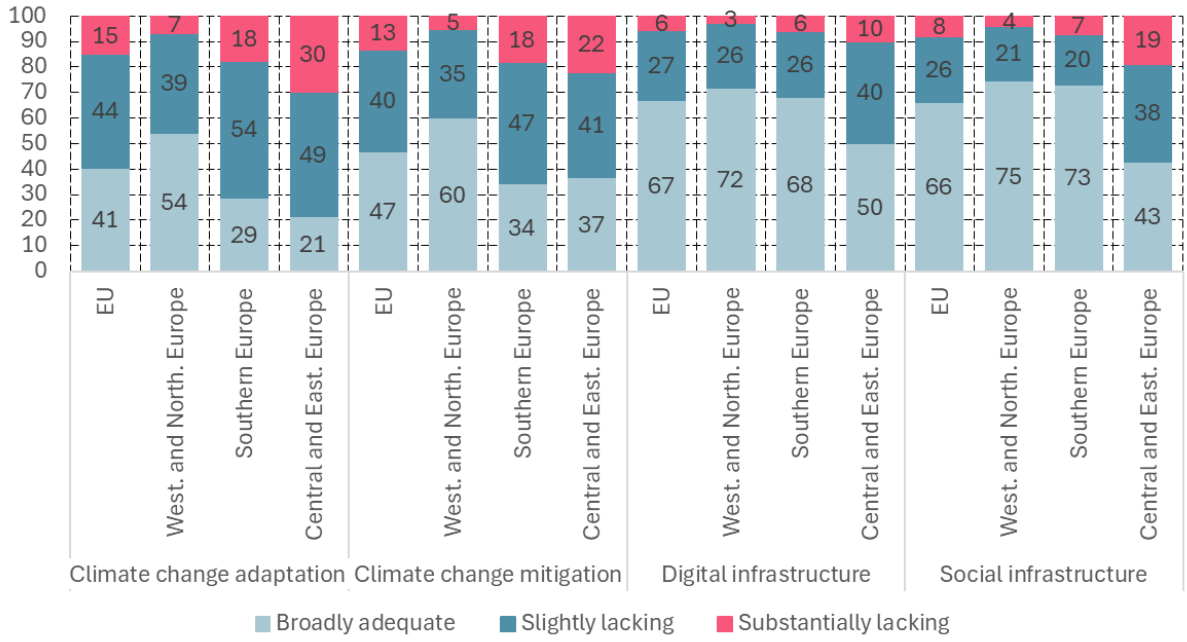
Figure 5: Past infrastructure investment (% of municipalities), EU 27



Q: In the last three years (2021–2023), would you say that within your municipality the level of investment in infrastructure projects was broadly adequate, slightly or substantially lacking? (Q4), in percent.
Note: climate change mitigation includes measures aimed, for example, to reduce emissions via energy efficiency and low-carbon energy investment. Climate change adaptation includes measures aimed, for example, to enhance the resilience of the municipality to changing weather patterns or extreme weather events. Digital infrastructure includes for example provision of public services via internet. Social infrastructure includes for example healthcare, childcare, care for elderly, education and training, social and affordable housing, sports and cultural and public administration. All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in Central and Eastern Europe and in Southern Europe tend to consider their past investments in climate change mitigation and adaptation as substantially lacking more frequently than those in Western and Northern Europe. Municipalities in Central and Eastern Europe are also much more likely to perceive investment gaps in social infrastructure.

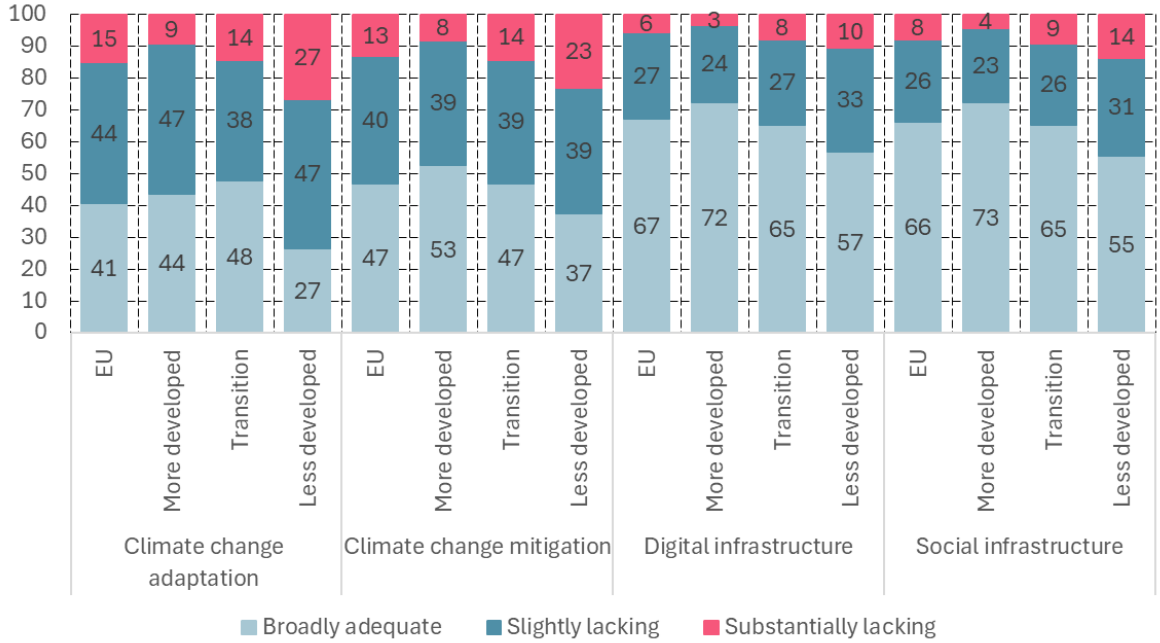
Figure 5a: Past infrastructure investment (% of municipalities), EU macro regions



Q: In the last three years (2021–2023), would you say that within your municipality the level of investment in infrastructure projects was broadly adequate, slightly or substantially lacking? (Q4), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Transition and less developed regions are generally more likely to perceive investment gaps.

Figure 5b: Past infrastructure investment (% of municipalities), EU cohesion classification

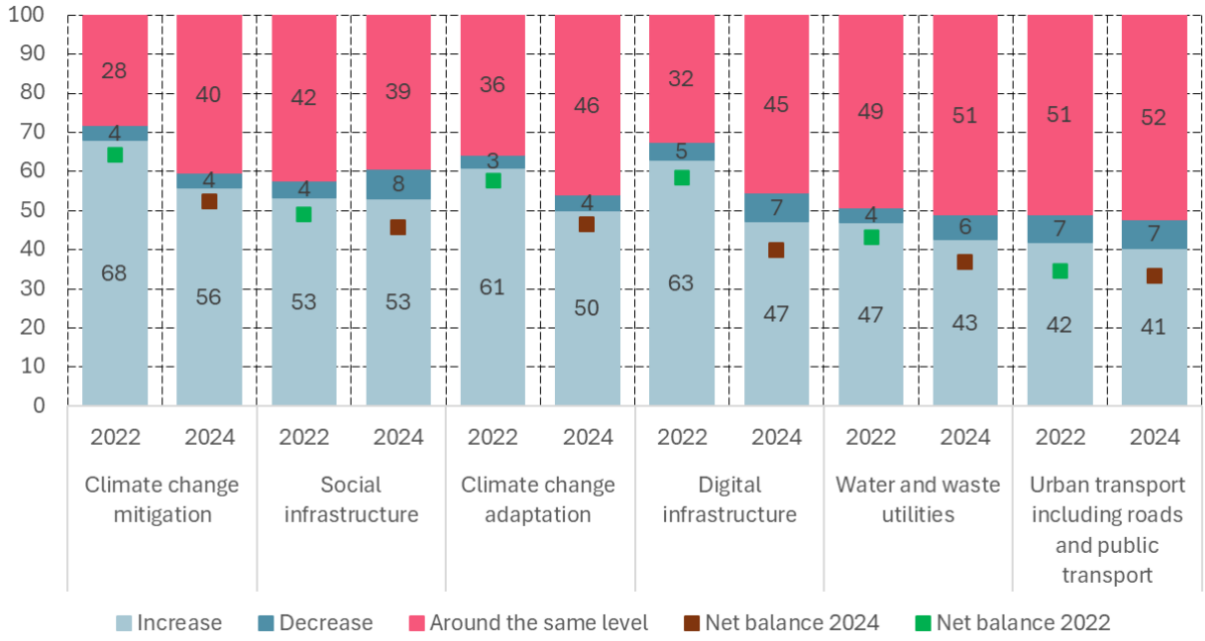


Q: In the last three years (2021–2023), would you say that within your municipality the level of investment in infrastructure projects was broadly adequate, slightly or substantially lacking? (Q4), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

What are municipalities' investment plans?

Municipalities primarily intend to increase their investments in climate change adaptation, climate change mitigation and social infrastructure (over 50% of municipalities) in the next three years in comparison to the investment levels of the previous three years.

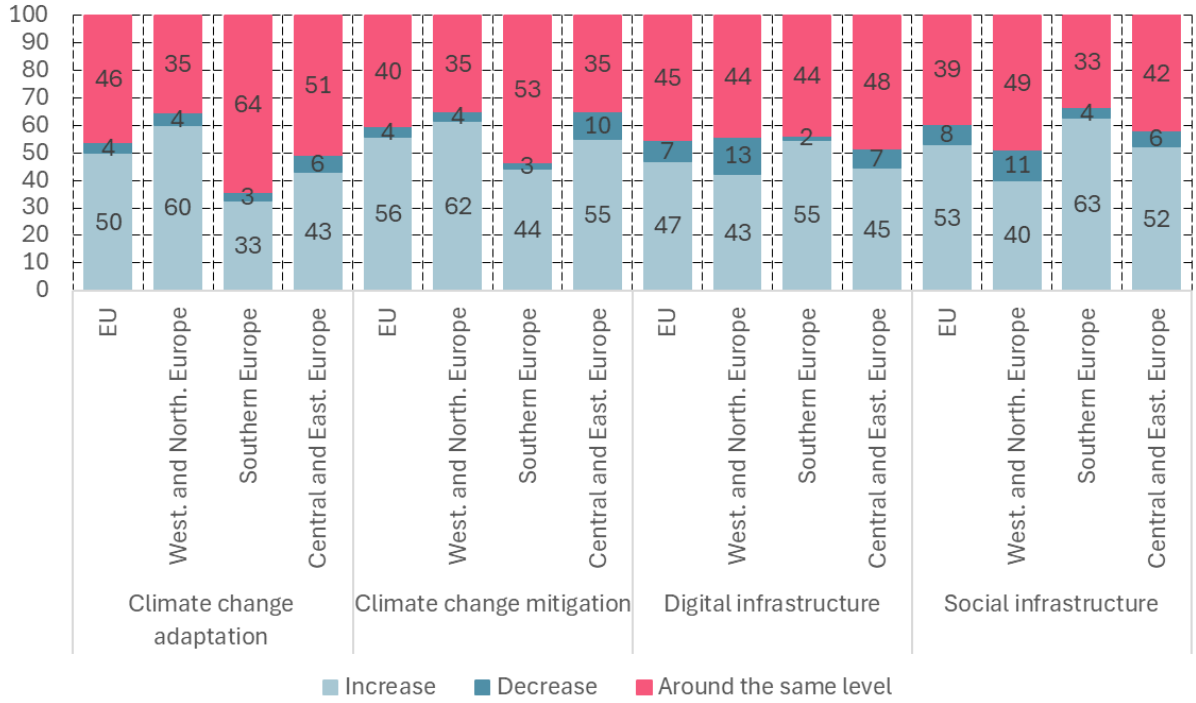
Figure 6: Future infrastructure investment (% of municipalities), 2022 and 2024, EU 27



Q: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the 2024–2028 period versus the average annual infrastructure investment recorded in 2021–2023, does your municipality expect to increase, decrease or have around the same level of spending on infrastructure investment? (Q5), in percent.
Net balance is the difference between cumulative increase responses and cumulative decrease responses.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Future investment in climate change mitigation and adaptation shows a considerable disparity across EU macro regions: In this area, the share of municipalities in Central and Eastern Europe or in Southern Europe that intend to increase their investment is notably smaller than in Western and Northern Europe.

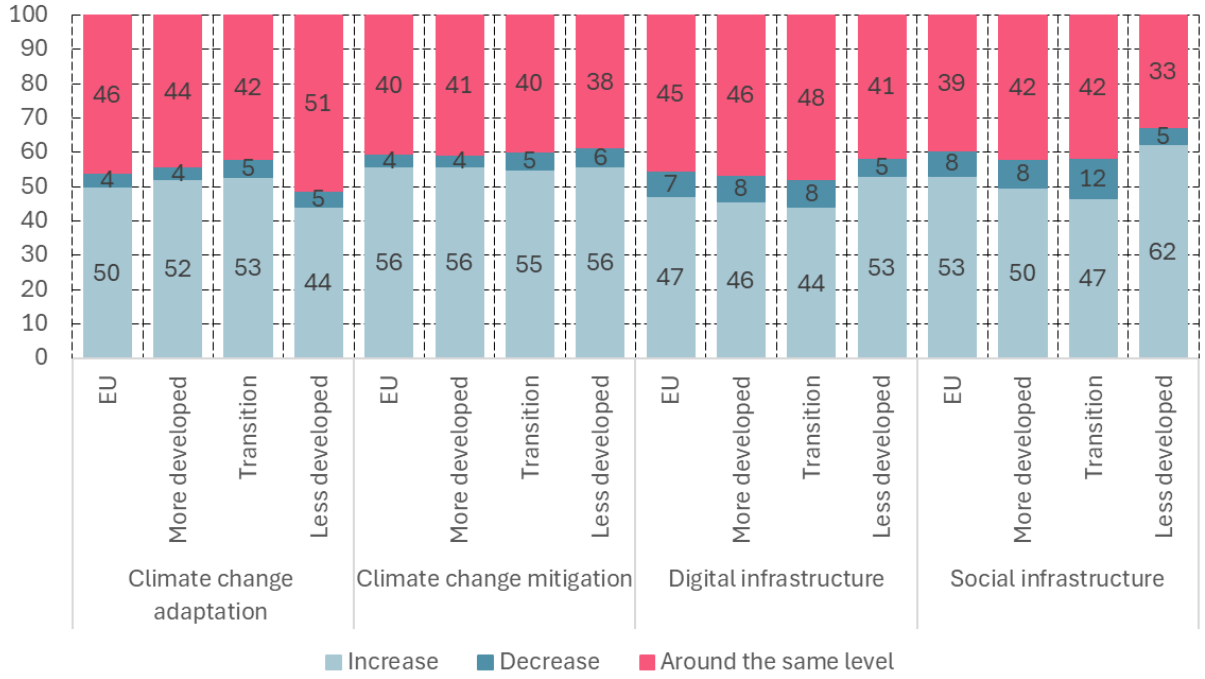
Figure 6a: Future infrastructure investment (%of municipalities), EU macro region



Q: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the 2024–2028 period versus the average annual infrastructure investment recorded in 2021–2023, does your municipality expect to increase, decrease or have around the same level of spending on infrastructure investment? (Q5), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities have broadly similar intentions to increase their future infrastructure investment across cohesion regions in the coming years.

Figure 6b: Future infrastructure investment (% of municipalities), EU cohesion classification



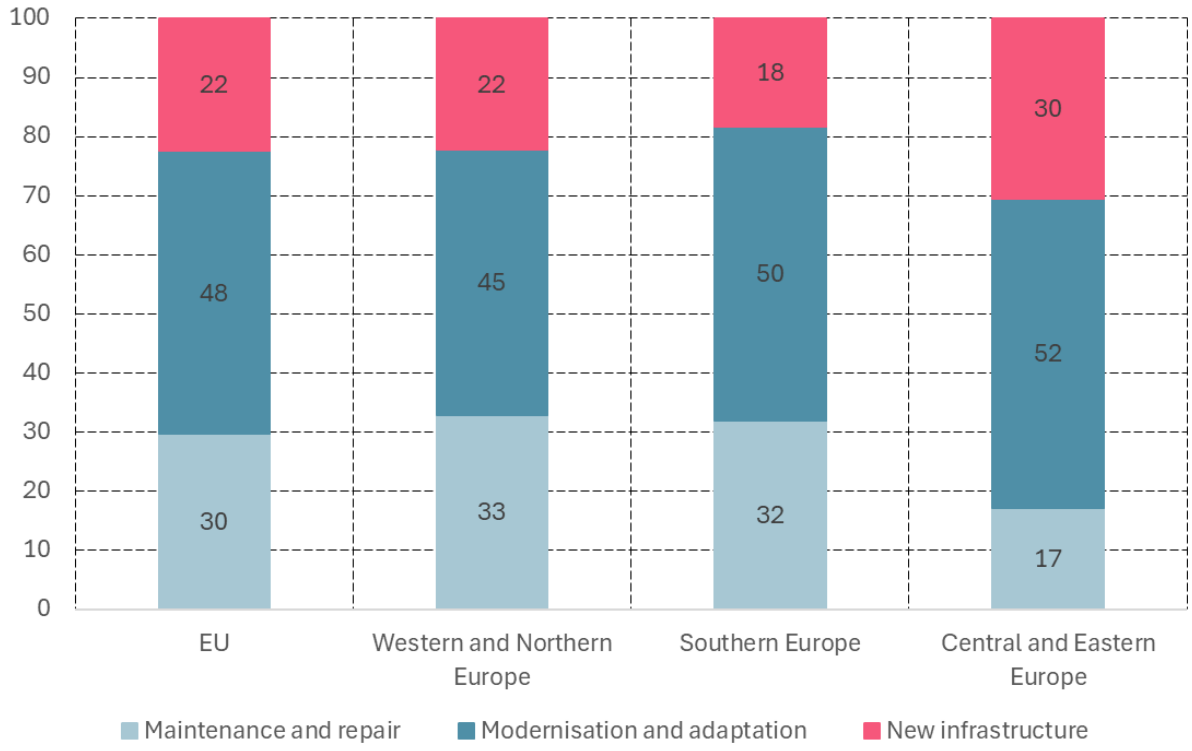
Q: For each of the following areas, if you compare the average annual infrastructure investment you are planning for the 2024–2028 period versus the average annual infrastructure investment recorded in 2021–2023, does your municipality expect to increase, decrease or have around the same level of spending on infrastructure investment? (Q5), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Interestingly, larger municipalities in Western and Northern Europe indicate higher rates of increase across almost all categories of infrastructure investment, while in Southern Europe this is only true for one climate-related infrastructure category (adaptation).[10] The picture is more mixed across municipalities in Central and Eastern Europe and in Western and Northern Europe, where larger increases are reported by medium-sized municipalities.

Modernisation and adaptation of infrastructure remain the largest expected investment expenditure items across municipalities. Municipalities in the region Central and Eastern Europe tend to allocate slightly higher shares of their investment budgets to new infrastructure, while municipalities in the regions Southern Europe and Western and Northern Europe tend to allocate higher shares to investment in maintenance.

[10] For the purpose of this analysis, municipalities are labelled as: small (up to 5000 inhabitants), medium-sized (between 5000 and 20000 inhabitants) and large (above 20000 inhabitants). Any EU-wide classification is arbitrary since the size of municipalities varies greatly across EU Member State. A municipality classified as large in one country can be actually "small" in some other.

Figure 7: Structure of infrastructure investments by component, EU 27 and EU macro regions (% of municipalities)

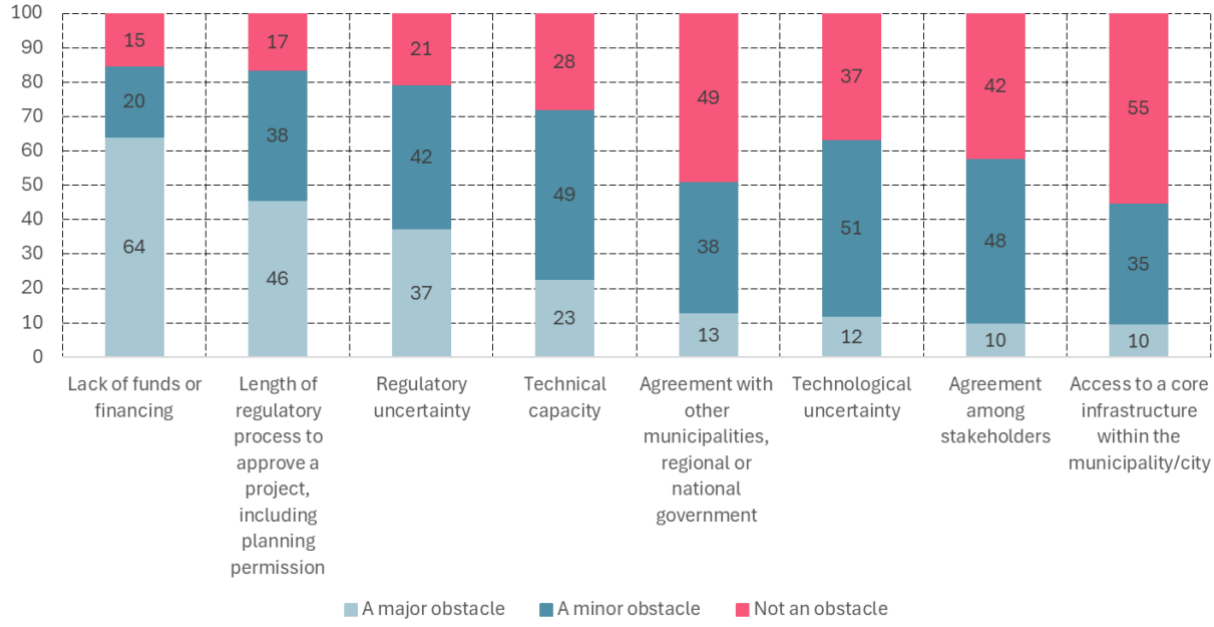


Q: In 2024–2028, except for routine maintenance, which of the following activities do you expect will have the largest share in terms of your infrastructure investment spend? (Q7), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

What are the main investment obstacles that municipalities face?

Insufficient funding and regulatory hurdles, like length of approval processes and uncertainty, are the primary barriers to municipalities' infrastructure investments. Financial constraints pose the major obstacle for most EU municipalities, while regulatory burdens and technical capacity are other common challenges across all regions.

Figure 8: Obstacles to the implementation of infrastructure investments (% of municipalities reporting as an obstacle), EU 27



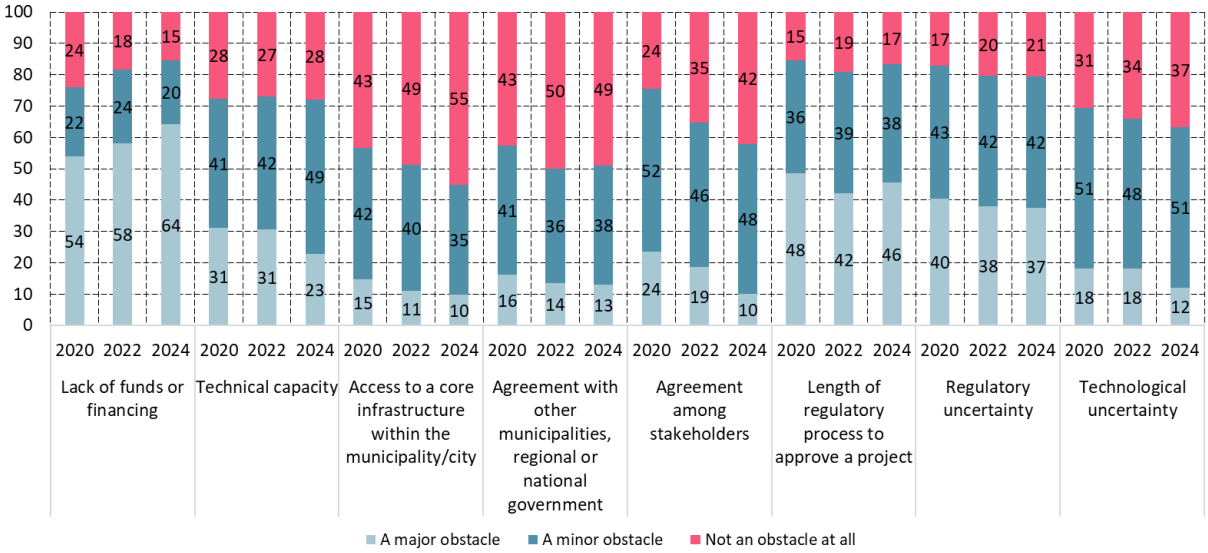
While smaller municipalities in the regions Southern Europe and Central and Eastern Europe tend to report barriers in the same order of degree, larger municipalities in the region Western and Northen Europe perceive some barriers as even more binding (such as technical capacity or regulatory uncertainty).

Q: To what extent is each of the following an obstacle to the implementation of your infrastructure investment activities? Is it a major obstacle, a minor obstacle or not an obstacle at all? (Q23), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Lack of funding, red tape and regulatory uncertainty are consistently cited as the biggest obstacles to municipalities' infrastructure investments over time. The problem of insufficient funding has even worsened over time.

Figure 8a: Obstacles to the implementation of municipal infrastructure investment, longer-term view (% of municipalities reporting as an obstacle), EU 27



The main obstacles are more binding in less developed and transition regions. For almost three-quarters of municipalities in less developed regions, the lack of funds or financing poses a major obstacle to their investment activities.[11] In addition to the financing gap, regulatory hurdles are another major barrier for about half of municipalities in Southern Europe.

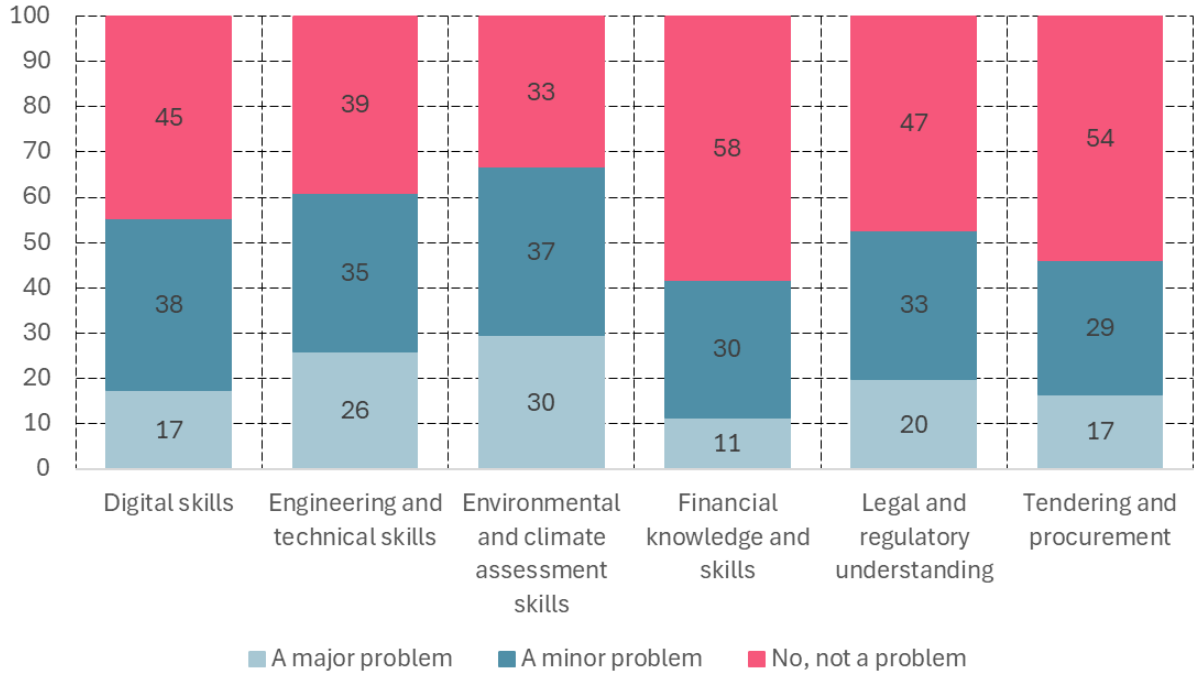
Q: To what extent is each of the following an obstacle to the implementation of your infrastructure investment activities? Is it a major obstacle, a minor obstacle or not an obstacle at all? (Q23), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2021, 2023, 2025, EIB staff calculations.

Municipalities also face a shortage of experts with environmental and climate assessment skills. Additionally, accessing experts with engineering and technical skills poses the second-greatest challenge in delivering municipal investment programmes.

[11] Municipalities that rely more on financing through transfers or external financing (more than 50% of their budget) more frequently report the lack of funding as a major obstacle.

Figure 9: Access to experts (% of municipalities reporting as an obstacle), EU 27



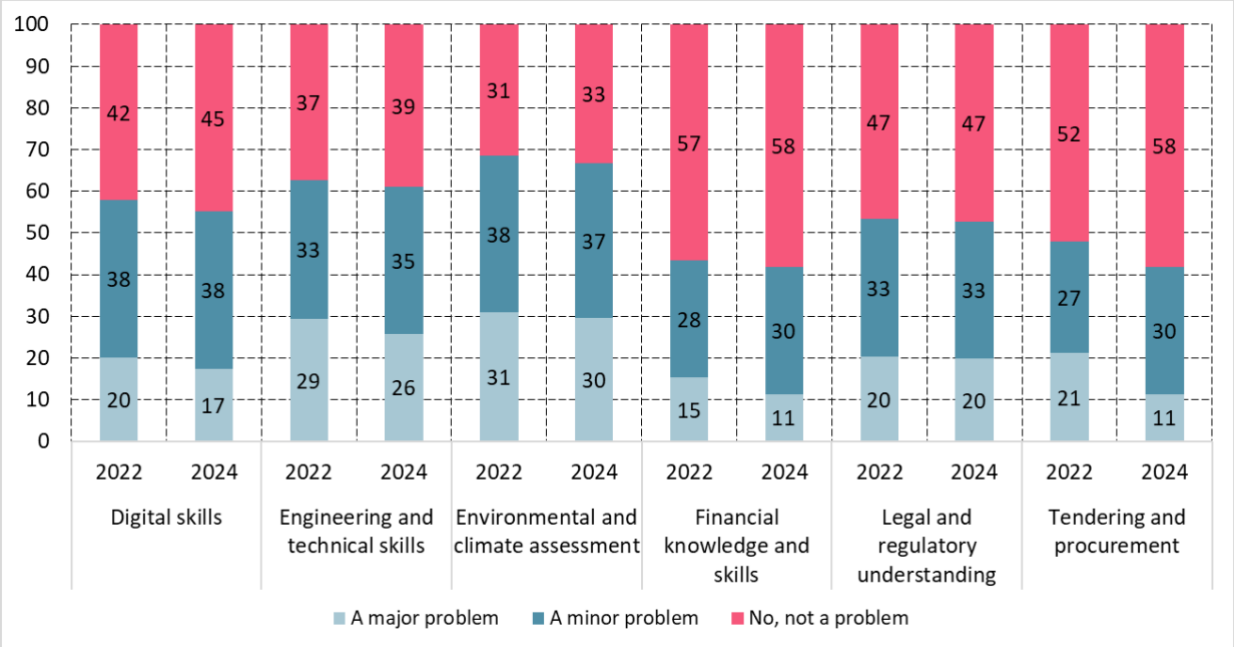
Municipalities perceive these shortages similarly across cohesion and also macroeconomic regions. Larger differences in answers are in financial knowledge or tendering procedures (more perceived as a problem across municipalities in Southern Europe).

Q: For each of the following areas, to what extent is access to experts a problem to the delivery of your municipality investment programme? (Q11), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Experts with environmental and engineering skills remain in short supply for municipalities. No significant improvement in other skills categories was observed.

Figure 9a: Access to experts, 2022 vs. 2024 (% of municipalities reporting as an obstacle), EU 27



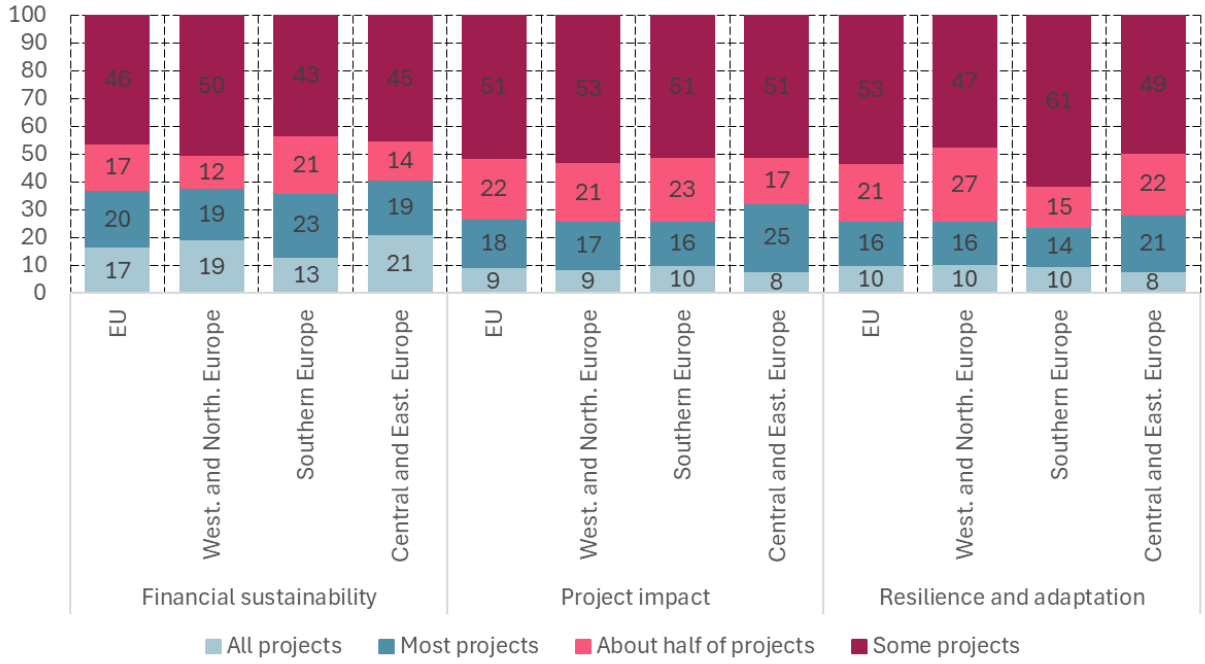
Differences emerge at the EU macro region level and by municipality size: While municipalities in Central and Eastern Europe and in Western and Northern Europe perceive the greatest lack to be in engineering and environmental skills, municipalities in Southern Europe cite regulatory environment and environmental skills as the most problematic. Smaller municipalities tend to perceive the lack of skills as more serious, but not unilaterally across categories and EU macro regions.

Q: For each of the following areas, to what extent is access to experts a problem to the delivery of your municipality investment programme? (Q11), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Around half of municipalities assessed only a minor share (less than 25%) of their potential infrastructure projects in 2023. Ex-ante financial assessment is slightly more frequent. Geographically, ex-ante assessments are slightly more frequent in municipalities in the region Central and Eastern Europe (around one-third, across categories) than it is in the regions Western and Northen Europe and Southern Europe.

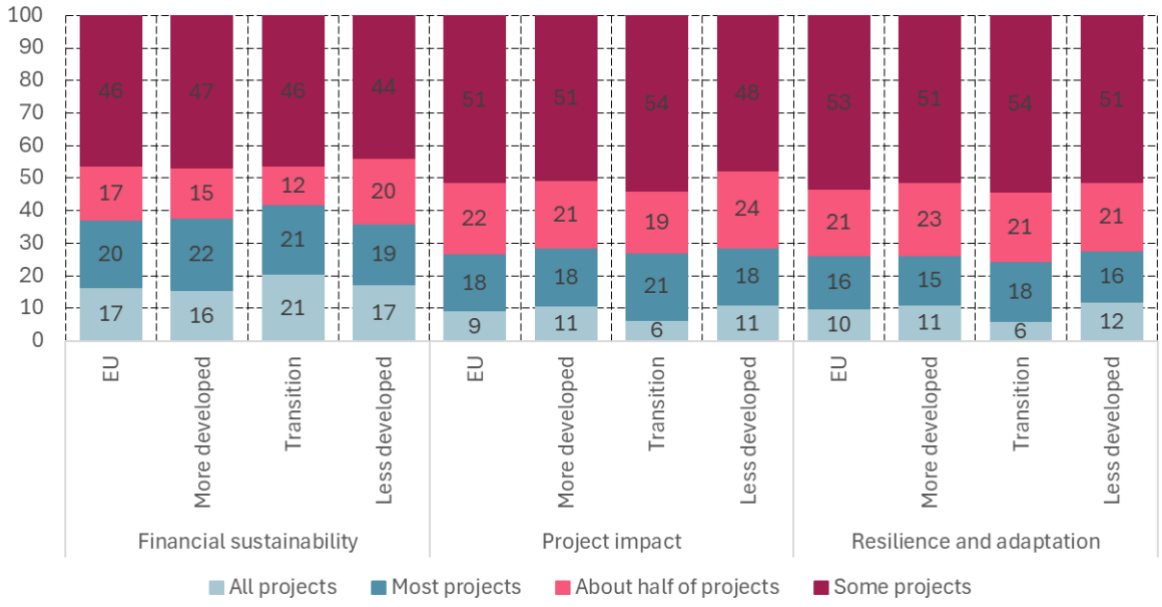
Figure 10: Independent assessment of potential infrastructure projects (% of municipalities), EU macro regions



Q: Before going ahead with an infrastructure project undertaken in 2023, did your municipality obtain an independent assessment of any of the following…(Q9), in percent.

More regular infrastructure project assessments were carried out for financial sustainability across EU cohesion regions, while only around one project in four was independently assessed for project impact or resilience and adaptation in 2023.

Figure 10a: Independent assessment of potential infrastructure projects (% of municipalities), EU cohesion classification

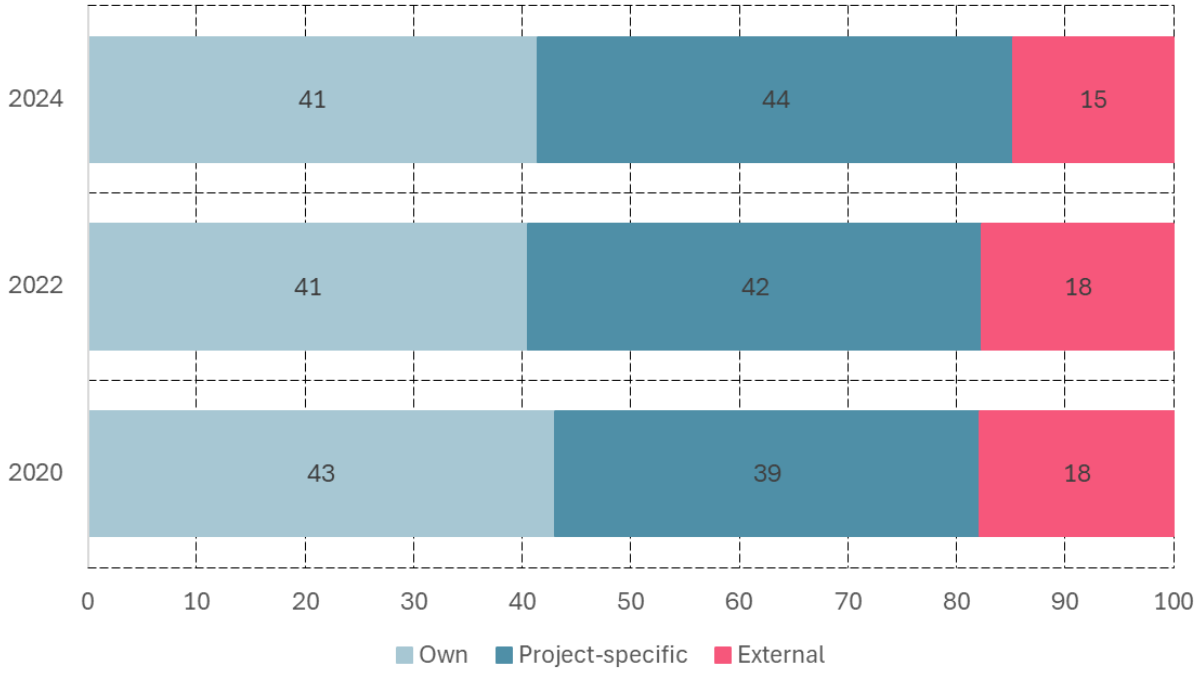


Note: All municipalities (excluding don't know/did not respond). All projects = 100% of projects; Most projects = 75–99%; In about half of projects = 26–75%; Some projects = 1–25%. Source: EIB Municipalities Survey 2025, EIB staff calculations.

How do municipalities fund their investments, and where are funding shortages?

The financing mix among municipalities is almost unchanged between 2020 and 2024. The shares in overall financing of own funds, transfers for project-specific funding and external debt financing remained relatively stable.

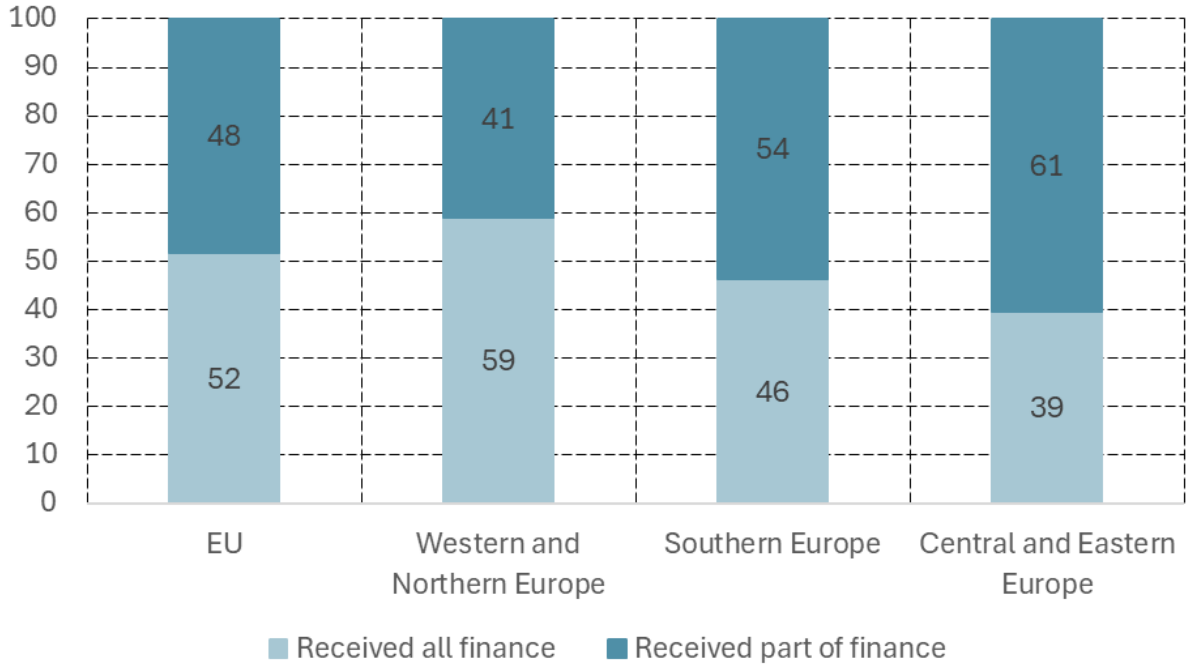
Figure 11: Financing of infrastructure investment activities, longer-term view (% of municipalities), EU 27



Q: Can you tell me approximately what proportion of your infrastructure investment activities over the last three years were financed by each of the following? (Q17), in percent.
Note: Own = for example, own tax-based revenues; Project-specific = for example, EU funds and grants. All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

About 15% of EU municipalities had utilised external debt financing to fund their infrastructure investment in the preceding three years. Among these municipalities, about half successfully obtained all the external debt financing they had sought. The degree to which municipalities obtained all the external financing requested differs across regions, with the highest share in Western and Northern Europe, and the lowest in Central and Eastern Europe.

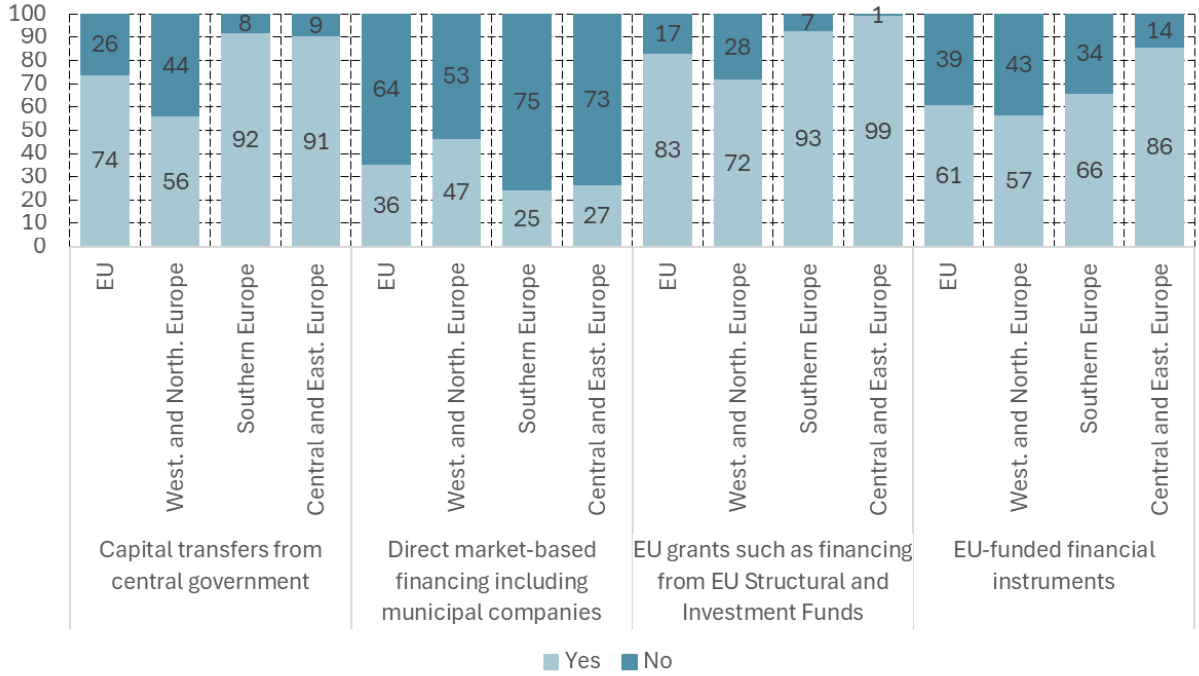
Figure 12: External finance received for past planned investments (% of municipalities), EU 27 and EU macro regions



Q: Looking back at the investments you had planned over the last three years, did you receive all of the external finance that you sought for the planned investments, or only part of the external finance you sought? (Q20), in percent.
Note: Conditional on giving a positive answer about the use of external financing in the previous question (Q17): sample of 449 (Western and Northern Europe: 199; Central and Eastern Europe: 132; Southern Europe: 118) out of 1 002 municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Direct capital transfers and EU grants are the most popular financing sources for municipal investment projects, in particular among municipalities from Southern Europe and Central and Eastern Europe. While only about half of municipalities in Western and Northern Europe plan to use EU-funded instruments, this figure is almost nine in ten for Central and Eastern Europe.

Figure 13: Financing of municipal infrastructure projects (% of municipalities), EU 27 and EU macro regions

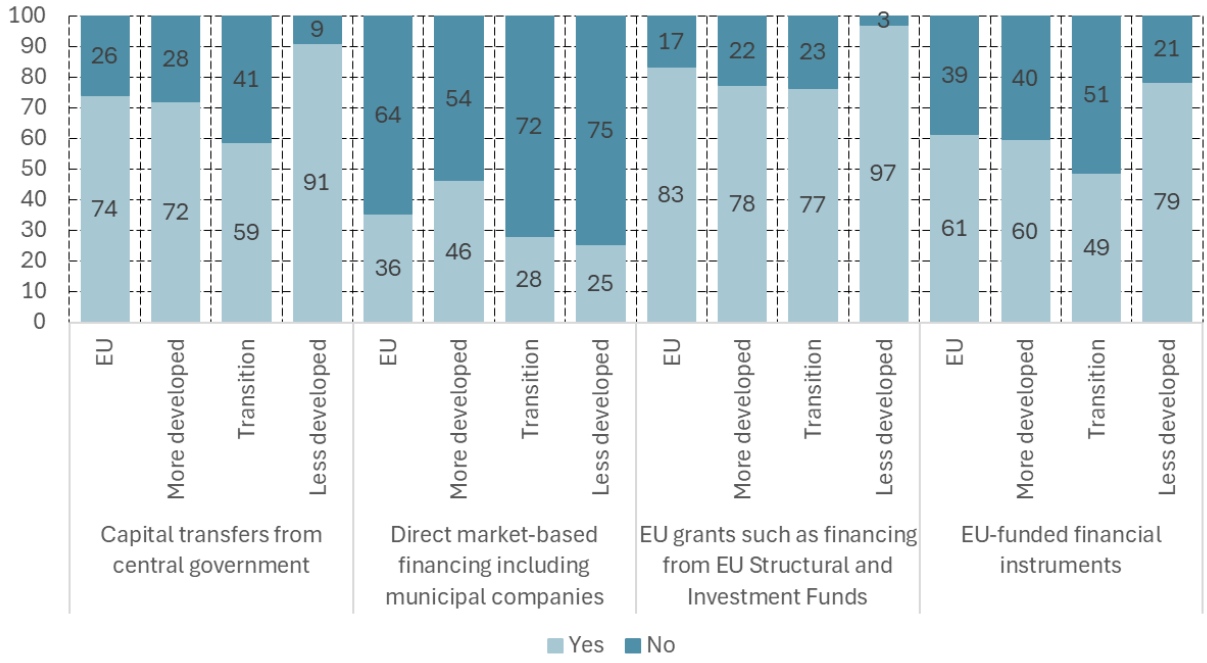


Q: In the future, in order to finance planned investment projects, does your municipality plan to draw on any of the following? (Q21), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in less developed regions predominantly finance their investments via direct capital transfers and EU grants. The planned use of capital transfers and EU-funded instruments is the lowest among municipalities in transition regions.

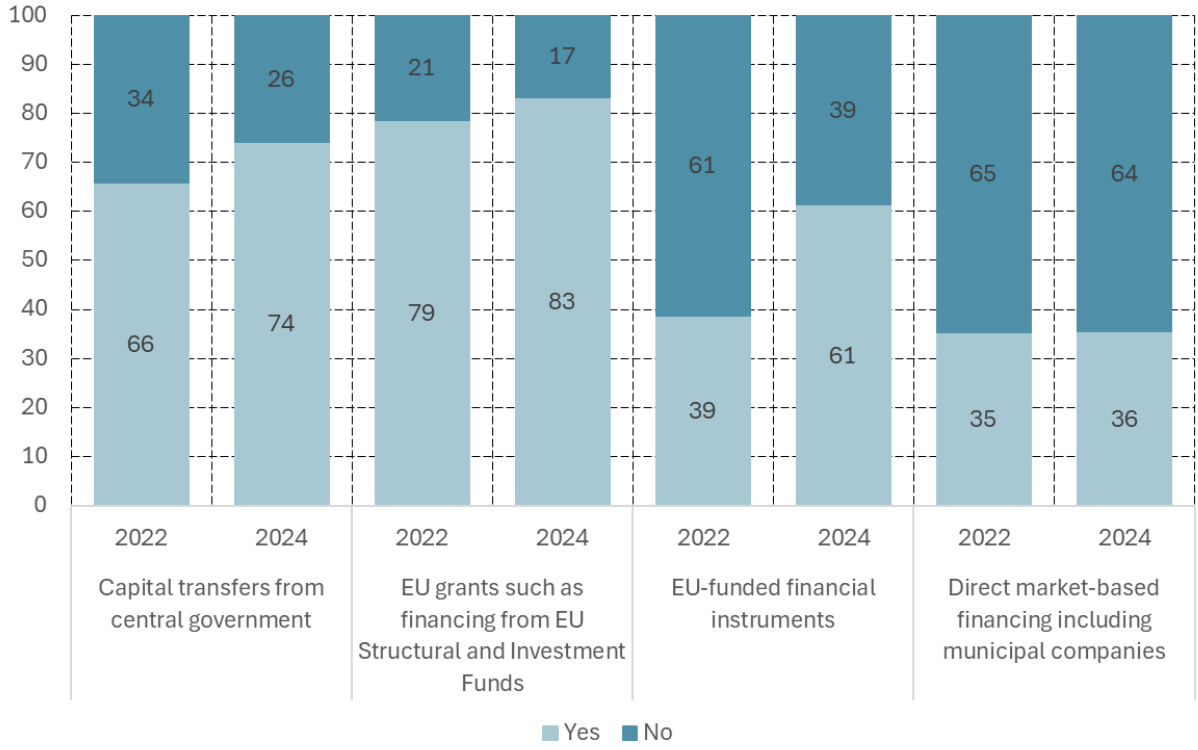
Figure 13a: Financing of municipal infrastructure projects, EU 27 and EU cohesion classification



Q: In the future, in order to finance planned investment projects, does your municipality plan to draw on any of the following? (Q21), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Capital transfers and EU grants remain key for financing municipal infrastructure projects. 61% of municipalities plan to use EU financing instruments.

Figure 14: Financing of municipal infrastructure projects (% of municipalities), 2022 and 2024, EU 27



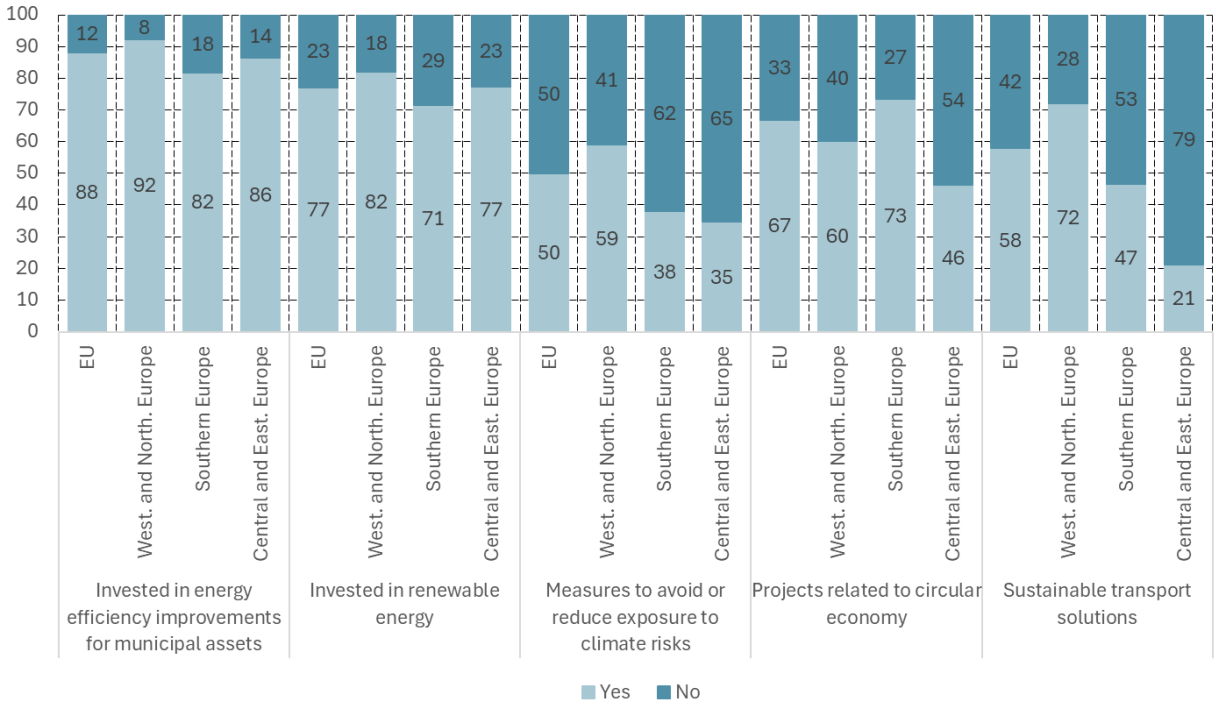
Q 2022: In the 2024–2028 period, in order to finance planned investment projects, does your municipality plan to draw on any of the following? (Q21), in percent. Q 2024: In the future, in order to finance planned investment projects, does your municipality plan to draw on any of the following? (Q21), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2023, 2025, EIB staff calculations.

How are municipalities moving towards the green and digital transition?

Municipalities in the region Western and Northern Europe are more likely to have implemented almost all actions in terms of climate mitigation. Municipalities in Central and Eastern Europe are relatively active in energy efficiency and investment in renewables, while less focused on other measures.

Figure 15: Share of municipalities that report having already implemented green measures (in percent), EU 27 and EU macro regions

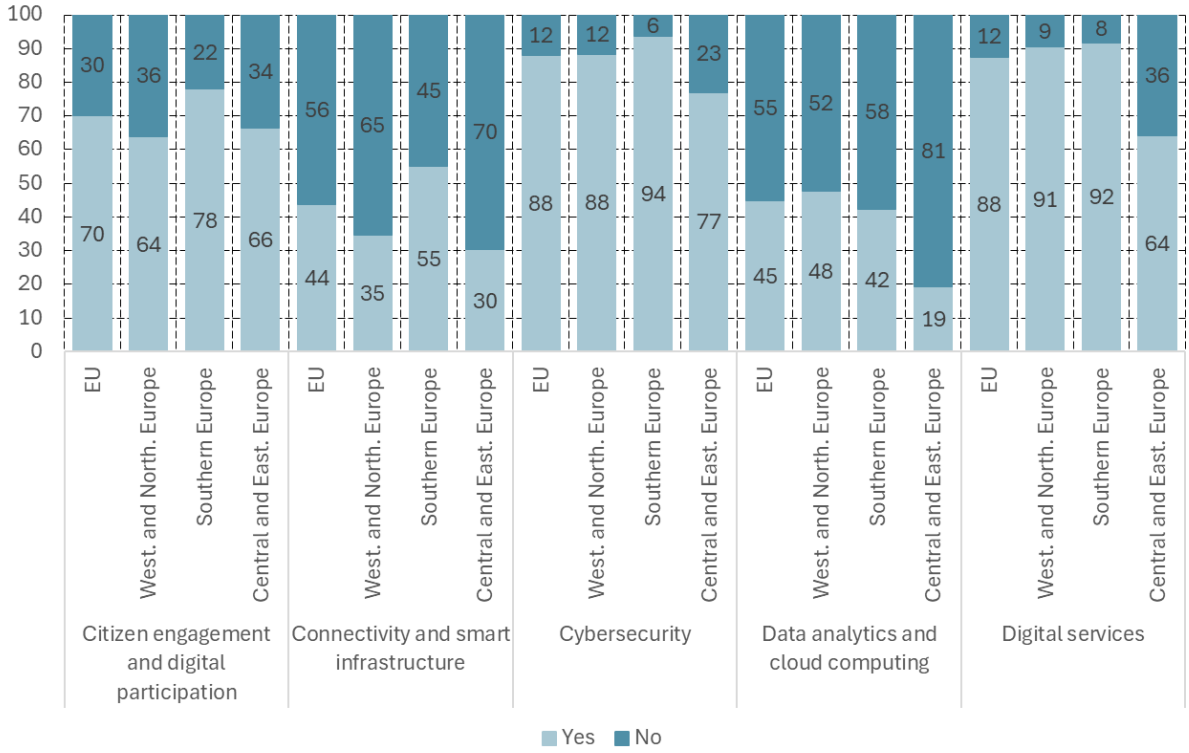


Q: Share of municipalities that reported having already implemented green measures mentioned in the survey, at EU level and across regions (Q12a), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in Western and Northern Europe and in Southern Europe report more implementation of digital measures concerning cybersecurity and digital services than in Central and Eastern Europe. The lowest implementation rates are for connectivity and smart infrastructure, and data analytics and cloud computing, across municipalities in all regions, but especially in Central and Eastern Europe.

Figure 16: Share of municipalities that report having already implemented digital measures (in percent), EU 27 and EU macro regions



Q: Share of municipalities that reported having already implemented digital measures mentioned in the survey, at EU level and across regions (Q12b), in percent

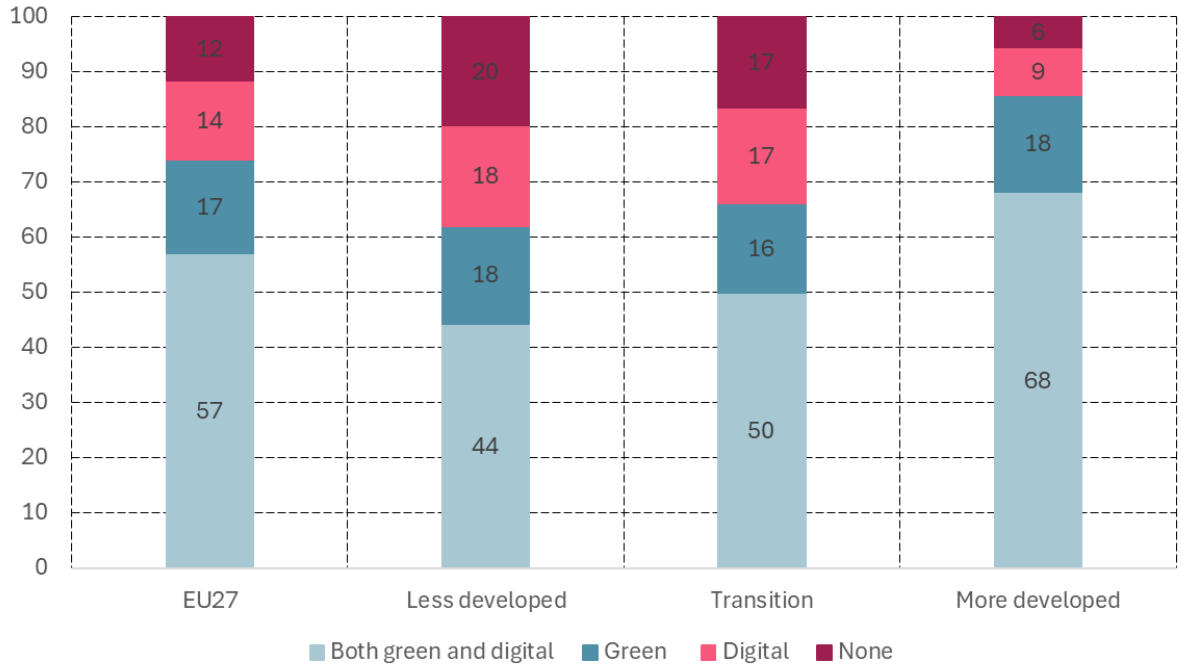
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Around one in five EU municipalities can be labelled as being ahead in "green" measures,[12] which is somewhat higher than the share of municipalities that excel in the digital agenda.[13] Over half of municipalities meet both criteria. More developed regions have a significantly higher share of municipalities that are advanced in both green and digital measures than less developed regions.

[12] Green municipalities are defined as municipalities that report having already implemented at least three green measures out of the five that are mentioned in question 12a (Invested in energy efficiency improvements for municipal assets; Invested in renewable energy; Measures to avoid or reduce exposure to climate risks; Projects related to circular economy; Sustainable transport solutions).

[13] Digital municipalities are defined as municipalities that report having already implemented at least three digital measures out of the five that are mentioned in question 12b (Citizen engagement and digital participation; Connectivity and smart infrastructure; Cybersecurity; Data analytics and cloud computing; Digital services).

Figure 17: Share of digital and green municipalities (shares in percent), EU 27 and EU cohesion classification



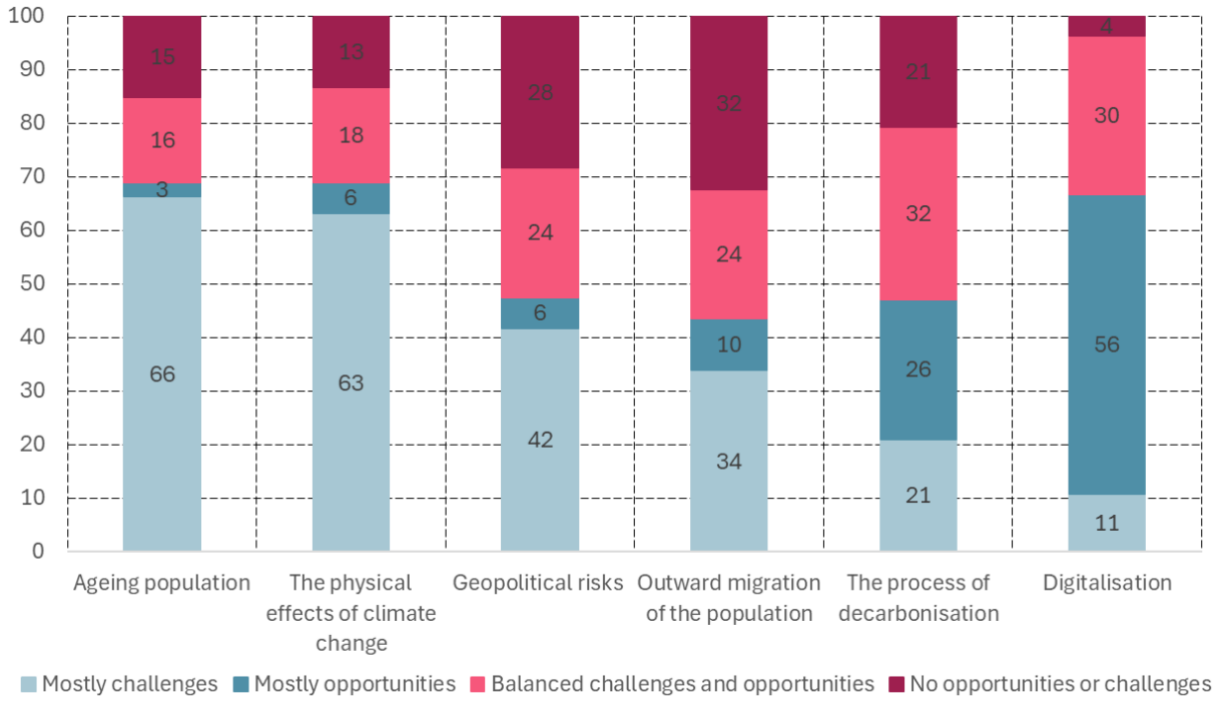
Q: Share of digital and green municipalities in the European Union and across regions (implemented at least three digital measures out of five and three green measures out of five), (Q12a and Q12b), in percent.

Note: Shares of municipalities, based on Q12a and Q12b, that have at least three out of five measures. All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

What are the main challenges and opportunities?

More than half of respondents finds digitalisation to be an opportunity for their municipality. On the other hand, an ageing population is the most significant obstacle faced, with the physical effects of climate change a close second. About two-fifths of municipalities identified geopolitical risks as a major challenge, with a third stating that population migration is a similarly serious issue.

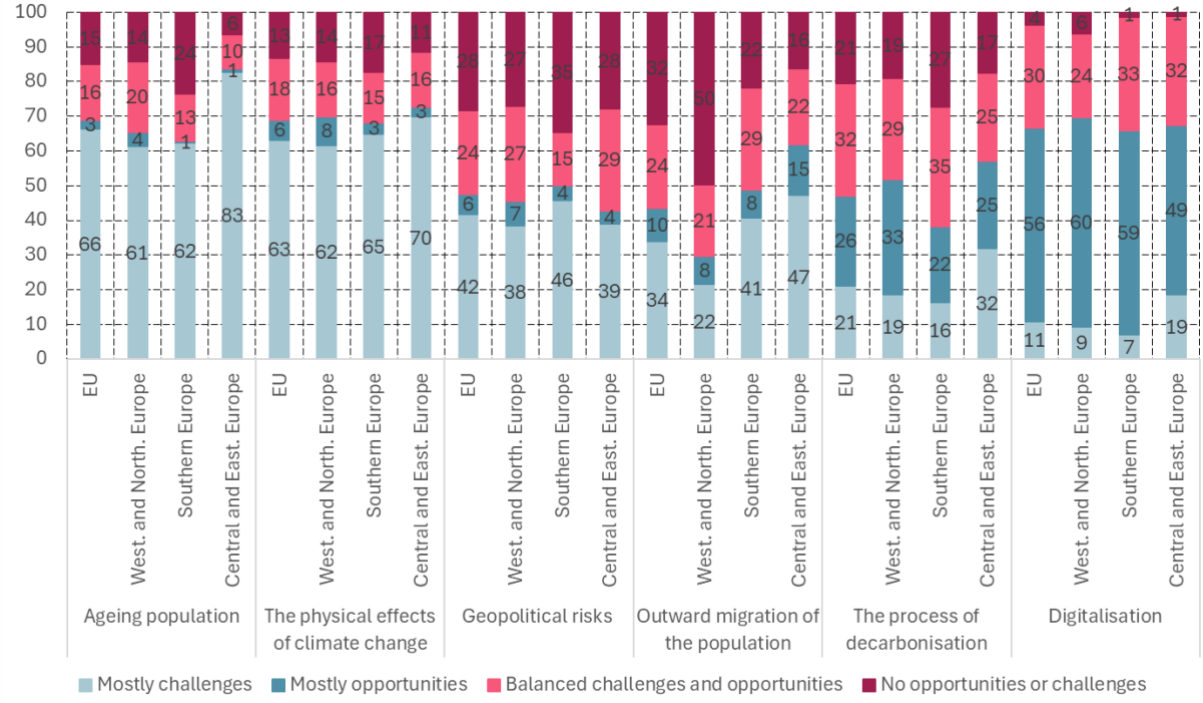
Figure 18: Global trends – opportunity or challenge (shares in percent), EU 27



Q: Thinking about the following considerations, do you expect each to present opportunities or challenges to your municipality? (Q3), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in Western Northern Europe and in Southern Europe view digitalisation more optimistically than those in Central and Eastern Europe, which also express more concerns about the impact of population ageing and the physical effects of climate change. Outward migration is viewed rather heterogeneously across municipalities.

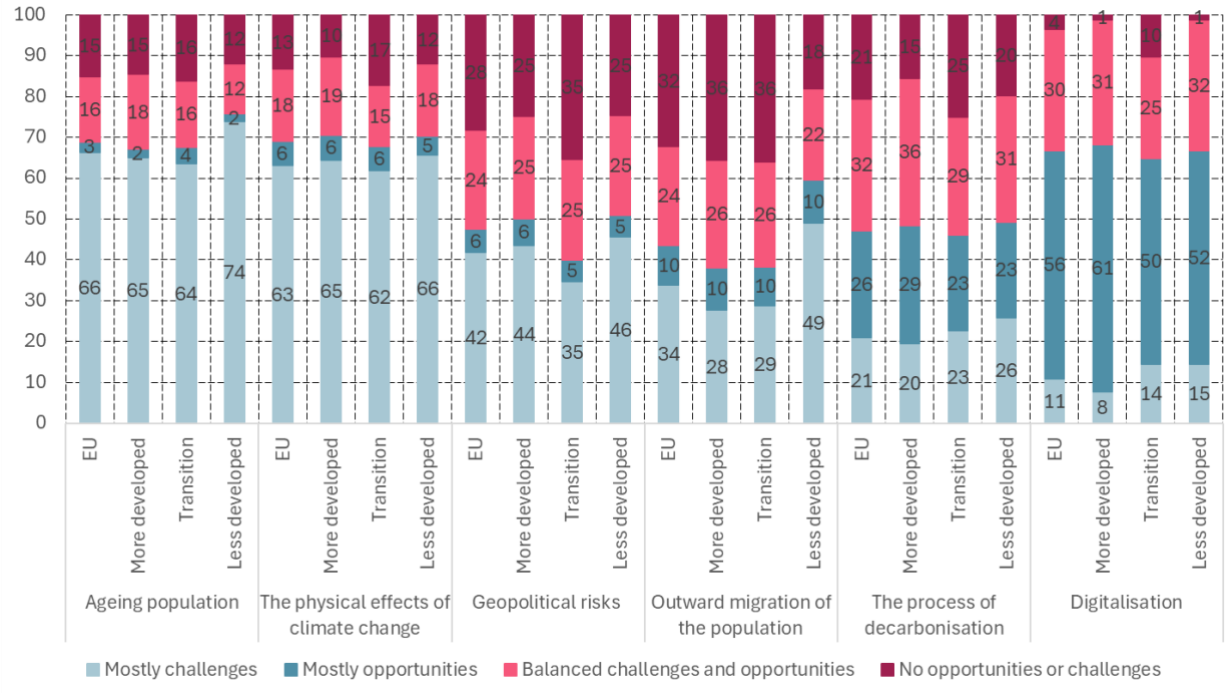
Figure 18a: Global trends – opportunity or challenge (shares in percent), EU macro regions



Q: Thinking about the following considerations, do you expect each to present opportunities or challenges to your municipality? (Q3), in percent.
Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in cohesion regions are relatively united in their positive views on digitalisation and concerns regarding the ageing population and climate change. Municipalities in less developed regions are more concerned with outward migration than in other regions.

Figure 18b: Global trends – opportunity or challenge (shares in percent), EU cohesion classification



Q: Thinking about the following considerations, do you expect each to present opportunities or challenges to your municipality? (Q3), in percent.

Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

ANNEX 1: DETERMINANTS OF LOCAL PAST AND FUTURE CLIMATE-RELATED INFRASTRUCTURE INVESTMENTS

Municipalities across Europe have witnessed an increase in the frequency of adverse weather events such as flooding or extreme winds. These events can cause more exposed municipalities to be less satisfied with their levels of climate-related infrastructure investment, as these investments may be more easily (and/or frequently) negatively affected. The perceived risk of damage to municipal infrastructure can also provide impetus for municipalities to plan to respond with more appropriate infrastructure investments (adaptation or mitigation) when preparing their future infrastructure investments.

This brief empirical analysis aims to shed more light on the extent to which climate change-related events influence municipal investment decisions, as captured by responses to two survey questions. It also analyses the significance of other possible individual determinants of past and future (planned) infrastructure investments at the municipal level.

Municipalities' responses are recorded in three categories: an increase, a decrease or no change in the existing level of investment in the future. For this reason, the analysis relies on a decision tree[14] classification method to find the most important variables affecting municipalities' responses.

Public infrastructure investment can be affected by many things: for instance, the general (macroeconomic) development of the economy, the political and institutional environment (such as the level of fiscal decentralisation), the type and amount of available financing (internal and external, project-specific and repayable), various regional characteristics (such as the existence of a country border or the predominant type of urbanisation) and, last but not least, the presence of any of a number of physical climate events.[15] The latter determinant is captured in terms of the prevalence of any of the four main types of climatic events common on the European continent.[16] It is defined as the quarterly frequency of: (a) heat wave days, (b) extreme precipitation days, (c) wildfire danger days and (d) high universal thermal climate index (UTCI) days. All these events are measured as ten-year averages. Because we work with municipalities, our analysis uses regional data at the NUTS 2 level when available.

Our findings reveal that municipal infrastructure investment depends on variables that capture the availability of financing resources, and on the surrounding institutional environment (ease of planning and investing) – but

[14] A decision tree is a predictive model used in machine learning and statistics to classify data into distinct categories. It is similar to the cluster data technique. It starts with the entire dataset and splits the data based on specific criteria or questions related to particular features. Each split, or decision, is made to maximise the separation of the data into homogeneous subsets, often using metrics like information gain. This process continues until no further improvement is possible, at which point the final classification outcome is reached. For instance, in classifying fruits, the tree might first split based on colour (e.g. red vs. not red), then size (e.g. small vs. large), and so on, until each branch ends in a leaf node that classifies the fruit (e.g. cherry, apple, orange). This hierarchical structure allows for intuitive visualisation and interpretation of the decision-making process, making it a powerful tool for both classification and regression tasks.

[15] The main sources of utilised indicators include Eurostat and OECD databases, and the ARDECO database (European Commission, DG Regio).

[16] The source of the extreme weather data is the project COPERNICUS (with the European Commission's Joint Research Centre). The mean values per dimension are normalised to one, after which each metric is entered into the model. This index is preferred to some other available datasets – such as the international disaster database (EM-DAT) from the university KU Leuven in Belgium. This dataset may suffer from bias when collecting the underlying data for recent updates and given its focus on economic losses associated with climate events worldwide, it may not accurately represent the exposure of European regions to climate events.

also on the structure of the local economy, and at least partially on the actual occurrence of adverse climate events.

On average, municipalities tend to be more satisfied with their past level of climate-related infrastructure investment (both adaptation and mitigation) – that is, to consider it adequate – the higher the quality of local governance (EQI index),[17] the greater the amount of Recovery and Resilience Facility resources devoted to climate objectives[18] in its country, and the greater the degree of decentralisation, in particular in terms of fiscal and political decentralisation (proxied through a Committee of the Regions index[19]).[20]

Future climate-related infrastructure investment appears to depend on somewhat different regional characteristics. A municipality is more likely to reply "increase" for this type of investment in the future in the survey if: it lies in a region with a bigger economic role (gross value added) for the tourism and agricultural sectors,[21] and it saw a higher level of extreme weather events, as captured by our synthetic measure.[22] In addition, the quality of governance (EQI index) and EU funding through NextGenerationEU are also important variables in explaining municipalities' responses with respect to future climate infrastructure investment.

The findings about variables that likely impact climate-related infrastructure investments may seem intuitive, but a number of alternative explanations exist for municipalities' behaviour around this specific type of public investment, as recorded in the survey. For example: the long-term build-up of adequate mitigation or adaptation infrastructure in more exposed regions of some countries (like the Mediterranean area); competing investment needs stemming from stricter and more likely binding budgetary constraints (after the recent pandemic, for instance); the prevailing institutional environment; or the recent infrastructure investments that already take into account the possible impact of climate change at the regional level in some EU regions, like Nordic countries and Central and Eastern Europe. Finally, because adverse weather events can be highly localised, their impact may only be felt by one municipality, and not by the others in the same NUTS 2 region.

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17 This suggests that adequate, or rather inadequate infrastructure spending, may face a constraint in the efficacy of government. The data and description of the EQI governmental quality index can be found in Charron, N., Lapuente, V., and Bauhr, M., The Geography of Quality of Government in Europe. Subnational variations in the 2024 European Quality of Government Index and Comparisons with Previous Rounds. University of Gothenburg, Department of Political Science, QoG Working Paper Series 2024:2, February 2024.

18 The model indicates that past climate investment is more likely to be deemed adequate where the climate expenditure objective from the relevant country RRF is higher.

19 We have used the 2021 decentralisation index of the European Committee of the Regions, which has three dimensions: political, economic and administrative decentralisation at the country level (see Borrett, C., Tugran, T., Gancheva, M. and Zamparutti, T., Developing a decentralisation index for the Committee of the Regions Division of Powers Portal, European Committee of the Regions, Brussels, 2021).

20 This may suggest that greater governmental decentralisation allows for more budgetary autonomy, particularly for climate-related infrastructure spending.

21 Municipalities seem eager to adapt to the future impact that ongoing climate change could have on these climatically more exposed (vulnerable) economic sectors.

22 Municipalities that have suffered worse consequences from extreme weather events feel a stronger need to mitigate the effects of climate change through appropriate infrastructure investment.

ANNEX 2: DIGITAL TRANSITION – HOW FAR HAVE MUNICIPALITIES COME?

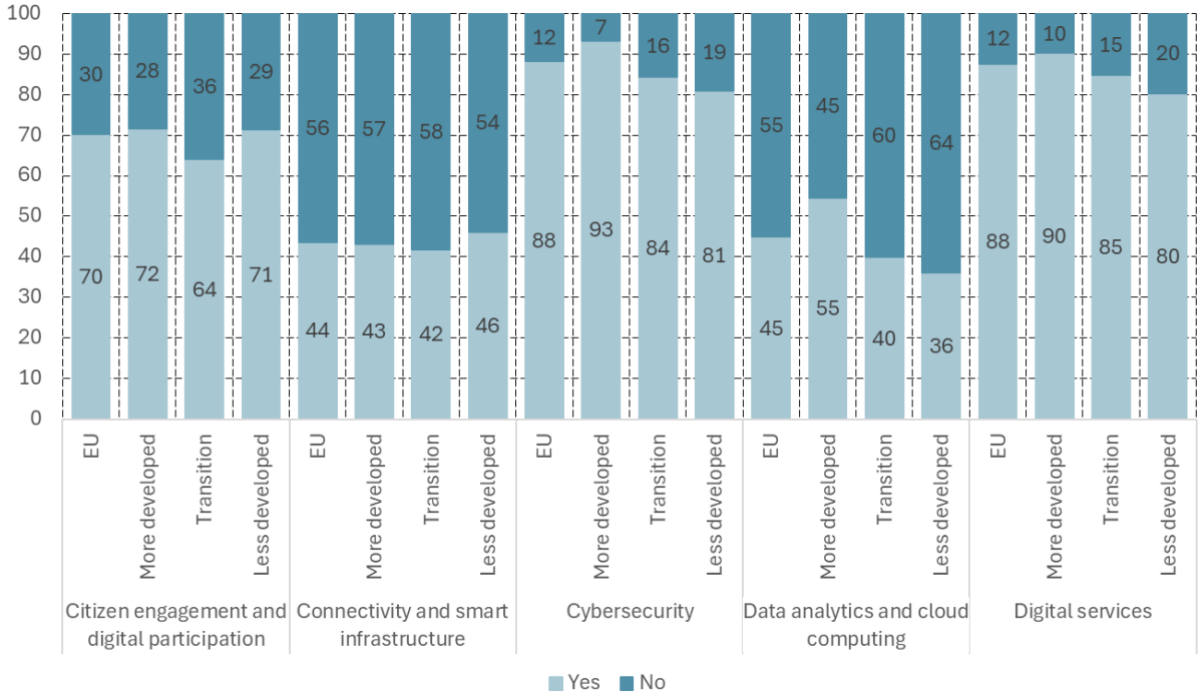
The digital transition and the changing economic environment have created new challenges to the way municipalities traditionally work. New technologies and trends in providing public services to citizens are challenging the way municipalities traditionally work and provide services to customers. The EIB Municipalities Survey 2024 asked EU municipalities about their progress concerning digital capabilities, following up on the previous edition of the survey.[23] The focus of this brief analysis is to review most of the recent achievements in digitalisation and using new tools and to give an update on the main obstacles reported by municipalities.

Questions in the survey aimed to analyse and compare municipalities' digital capabilities in particular areas of development and deployment (like cybersecurity), while some categories reflect the pandemic's impact on trends in digitalisation and the development of opportunities to employ a specific digital product in the municipal domain (such as cloud computing). The digital capabilities included in the survey are: (a) implementing technologies and policies to protect municipal data and systems against cyber threats; (b) offering online access to government services, including payments and document management; (c) employing data analytics for informed decision-making, leveraging cloud computing for efficient administration and enhancing service delivery; (d) improving internet access and embedding smart technologies into urban infrastructure for monitoring and management; and (e) facilitating platforms and tools for digital civic engagement, including social media, to enable residents to participate digitally in public discourse, decision-making processes and feedback mechanisms.

Most EU municipalities and cities surveyed have already implemented measures to support digital services and improve cybersecurity. Most municipalities also utilise IT tools for civic engagement and digital participation (Figure A1). However, connectivity and smart cities, as well as data analytics, remain two main areas to work on. Interestingly, a similar pattern holds across municipalities split according to EU cohesion classification, as richer regions have very similar adoption rates to poorer ones.

[23] See Chapter 5 of the *EIB Investment Report 2022–2023: Resilience and renewal in Europe* for a summary. Due to a revision of the digital categories in the question, direct comparison is limited.

Figure A1: Share of municipalities that reported having already implemented digital measures mentioned in the survey (Q12b), at EU level and EU cohesion classification, in percent.



Note: All municipalities (excluding don't know/did not respond). Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities in less developed regions and smaller municipalities have lower digital capability rates. Municipalities with a higher adoption rate (the adoption of three or more digital technologies, as defined above) – that is, municipalities with greater digital capabilities (digitally advanced) – represent around 72% of municipalities in the European Union. There is substantial heterogeneity across EU macro regions: While around 77% of municipalities in more developed regions are digitally ahead, this is only about 62% for transition regions (Figure A2, panel a). The difference is even more dramatic when looking at digital capabilities by municipality size: 83% of large municipalities are digitally ahead, but only about 58% of small municipalities are (Figure A2, panel b).

Figure A2: Advanced digital capability, EU cohesion classification (share of municipalities, in percent).

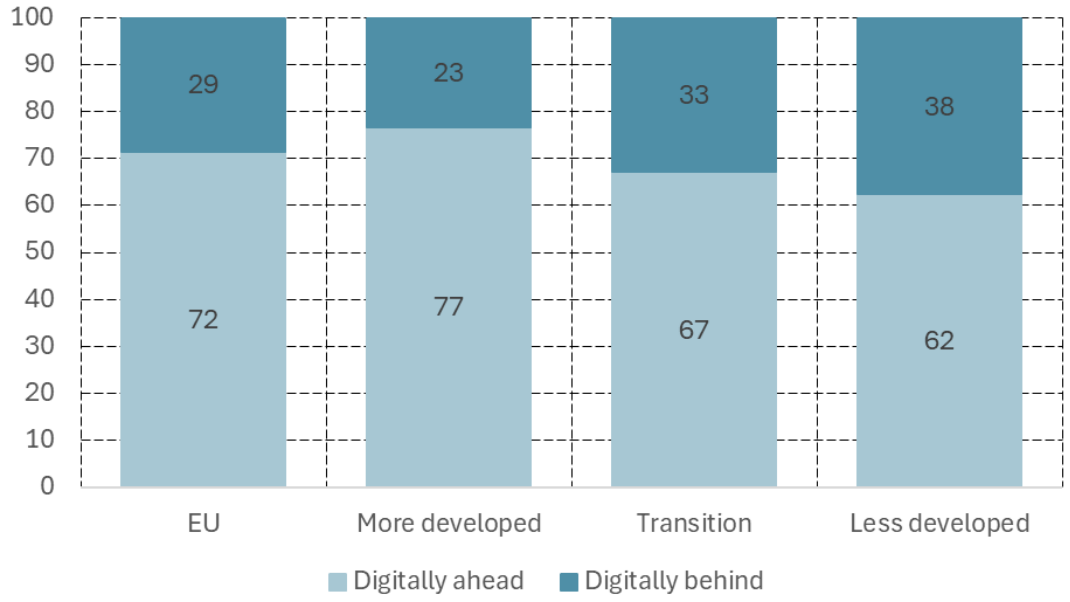
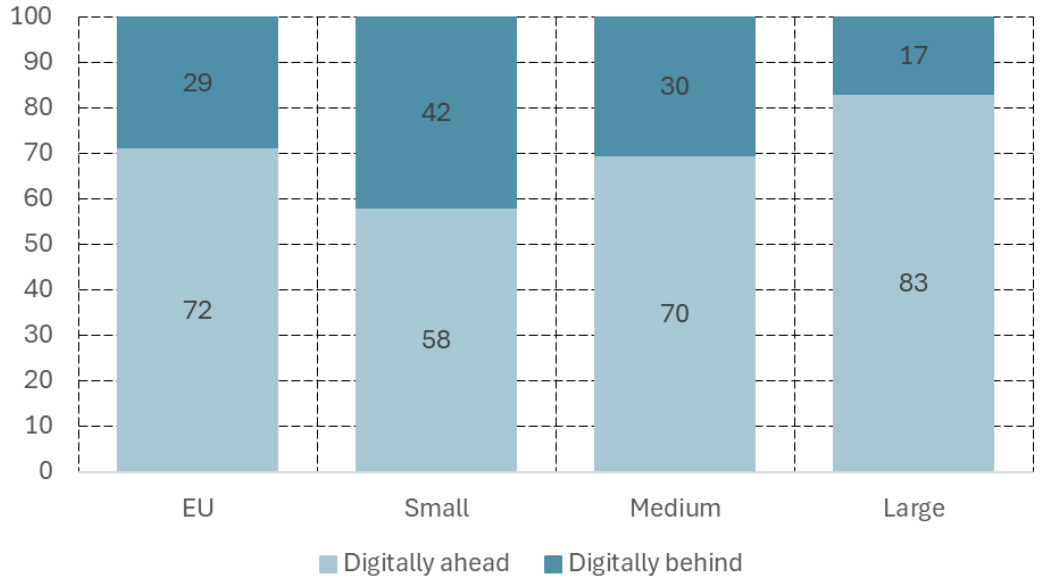


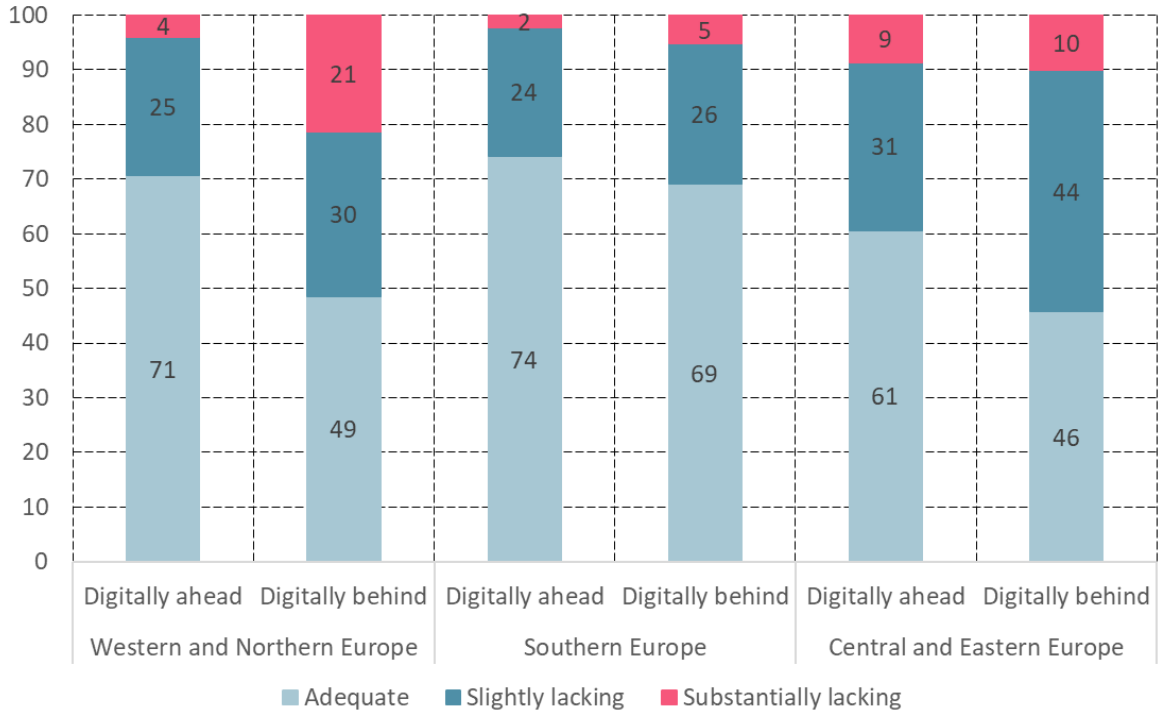
Figure A2a: Advanced digital capability, by size of municipality (share of municipalities, in percent).



Note: A municipality is considered advanced in digital capability if it has implemented at least three of the five digital capabilities in Figure 16 in the main text. Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities with greater digital capabilities are less likely to report a lack of investment in digital infrastructure. This relationship is particularly strong in Western and Northern Europe and in Southern Europe. Only about half of digitally lagging municipalities in Western and Northern Europe and in Central and Eastern Europe consider their investment in digital infrastructure to have been broadly adequate over the last three years (from 2021 to 2023), while this is about 70% in Southern Europe (Figure A3).

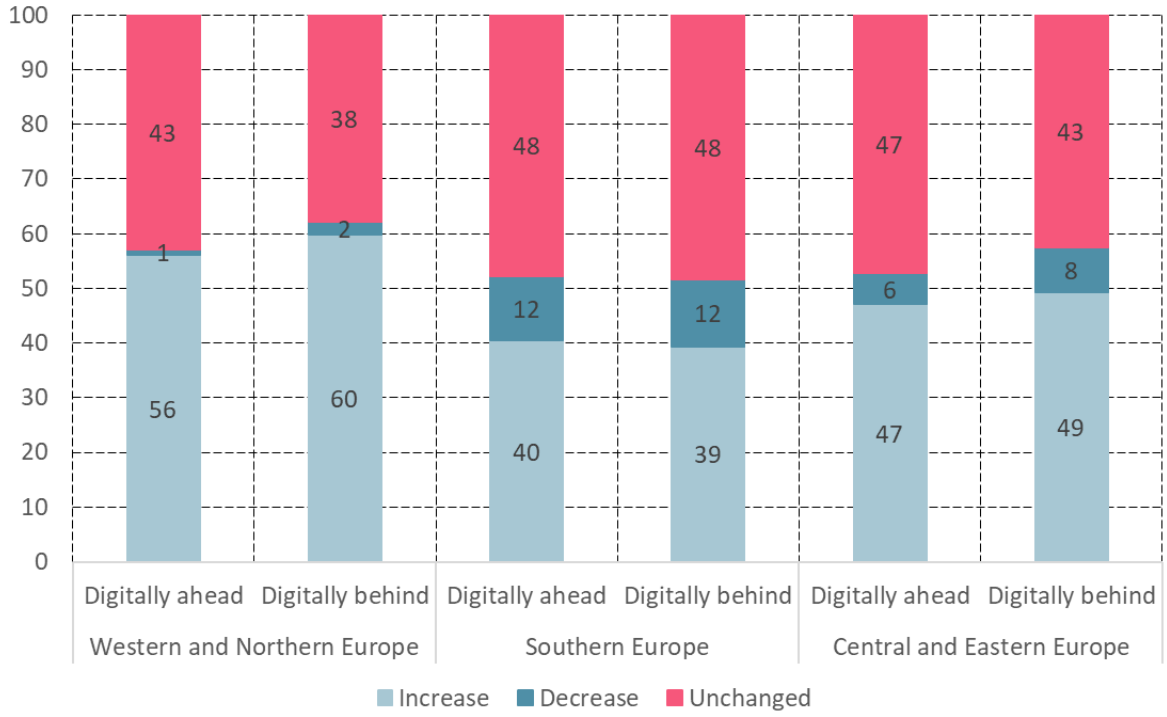
Figure A3: Assessment of digital infrastructure (share of municipalities, in percent), by digital capability.



Source: EIB Municipalities Survey 2025, EIB staff calculations.

Municipalities with lower digital capabilities are more likely to state that they are planning to increase investment in digital infrastructure. A large share of municipalities in Western and Northern Europe, irrespective of their digital capabilities, said they do plan to increase their investment levels between 2024 and 2028 (Figure A4), with slightly higher share of digitally lagging municipalities. That could potentially reduce the existing infrastructure gap with more digitally advanced municipalities. A similar pattern emerges for municipalities in Central and Eastern Europe.

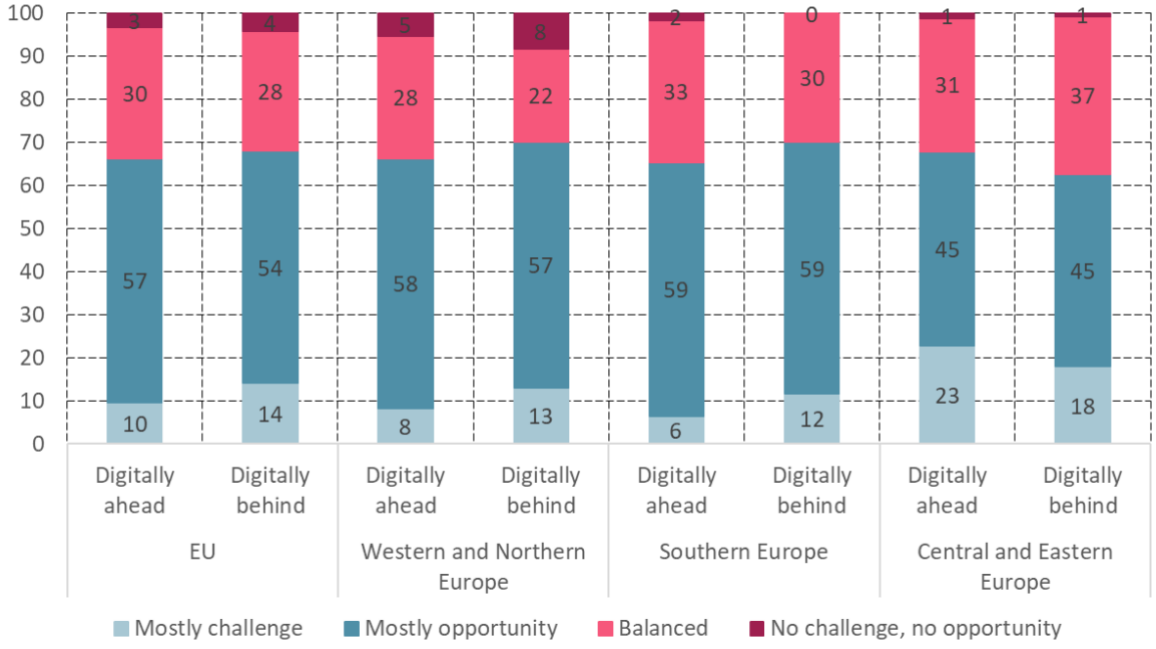
Figure A4: Future digital investment spending (share of municipalities, in percent).



Source: EIB Municipalities Survey 2025, EIB staff calculations.

Most EU municipalities and cities view digitalisation as an opportunity. Municipalities with lower digital capabilities are somewhat less optimistic about the digital transition and see it slightly more as a challenge than opportunity. Municipalities in the CEE region have the highest shares of seeing digitalisation as challenge, with almost one-quarter of municipalities classified as digitally ahead (Figure A5).

Figure A5: Digitalisation – opportunity or challenge (share of municipalities, in percent) by digital capacity.



Source: EIB Municipalities Survey 2025, EIB staff calculations.

Access to funding, regulatory processes, regulatory uncertainty and technological capacity are major obstacles to EU municipalities' digital transformation. Digitally lagging municipalities perceive these obstacles to be more constraining (Figure A6). Other obstacles confronting laggard municipalities are technological uncertainty and agreements among different stakeholders (Figure A6a). Improving digital capabilities is not only about financing digital infrastructure, but also about the availability of experts with the right skills. Even municipalities labelled as digitally ahead have trouble finding enough experts with digital skills (almost 55% of them, vs. about 60% for the lagging municipalities). Frequently cited skills mismatches include experts with engineering and technical, environmental, and legal and regulatory skills, among others.

Digitally lagging municipalities in Southern Europe tend to indicate higher obstacles across all skill categories, while municipalities in Central and Eastern Europe tend to be more optimistic (especially those that are digitally ahead). Small digitally ahead municipalities tend to report a higher lack of skills across all categories, while large municipalities tend to be the most optimistic about the lack of skills.

Figure A6: Barriers to digitalisation – obstacles to implementation (share of municipalities, in percent) by digital capability.

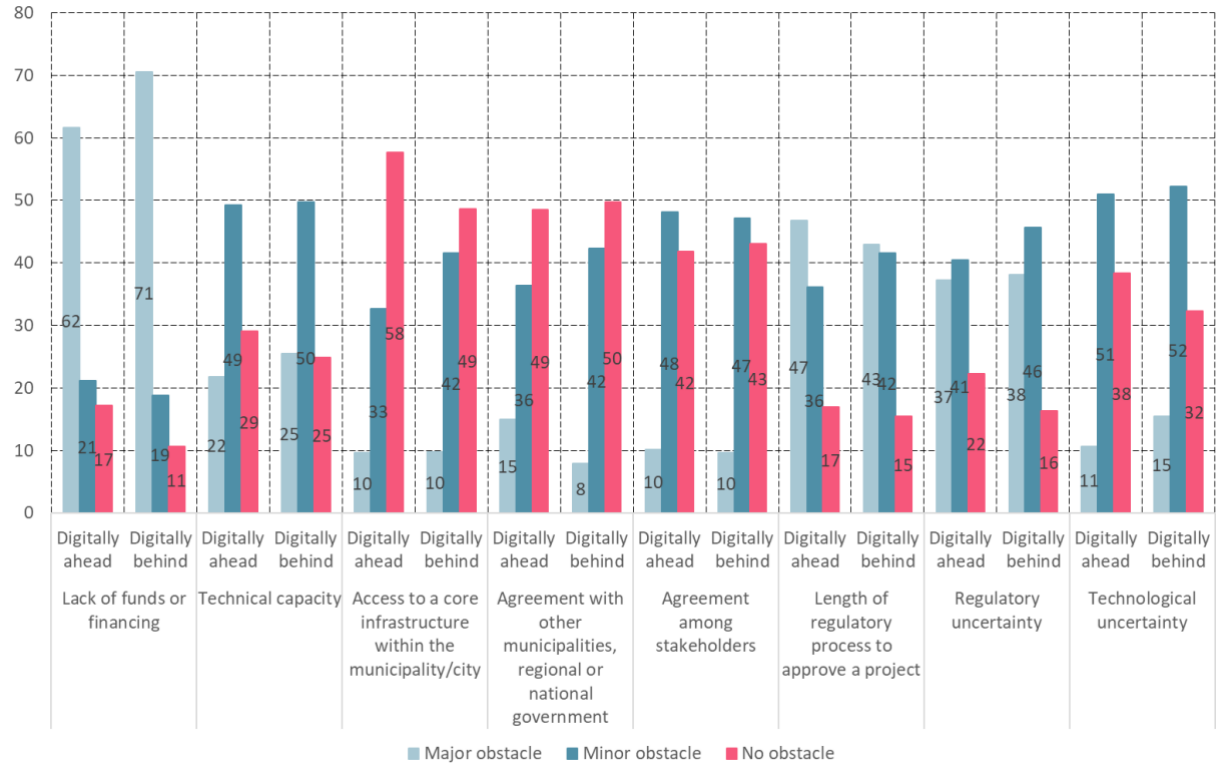
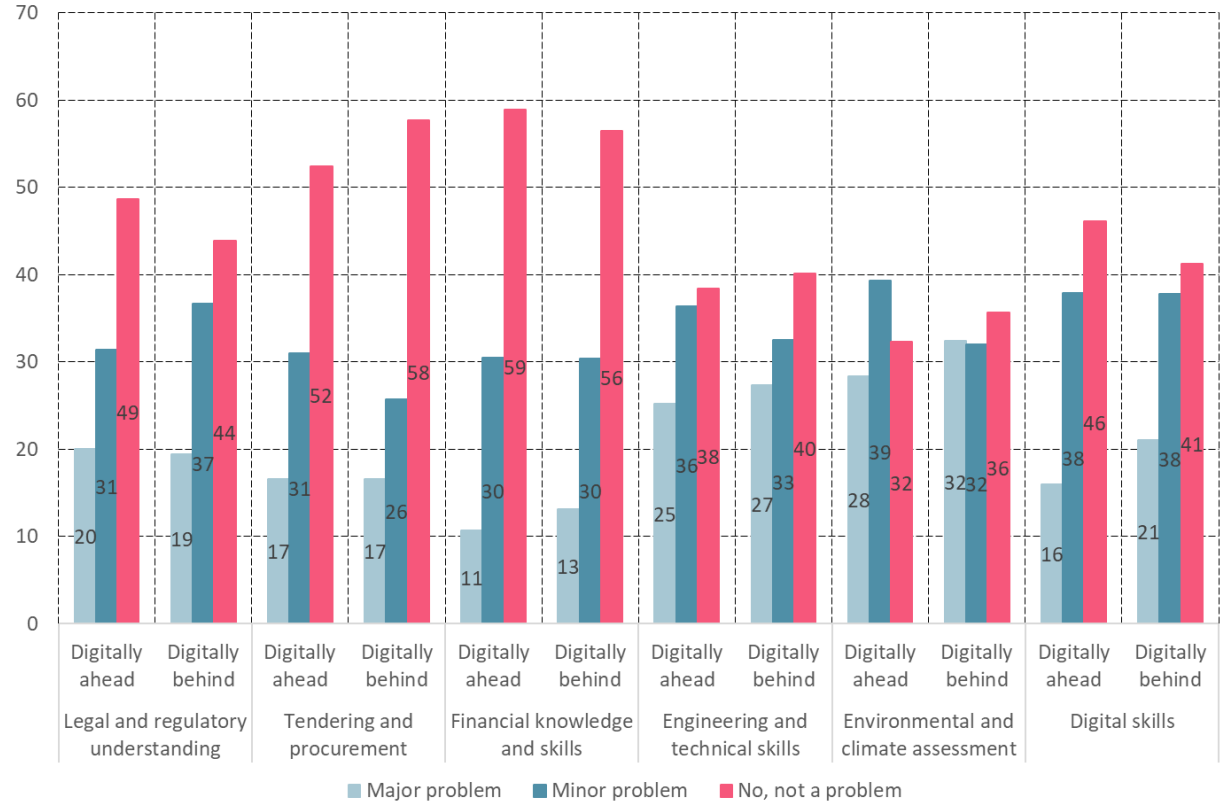


Figure A6a: barriers to digitalisation – availability of experts (share of municipalities, in percent) by digital capability.



Source: EIB Municipalities Survey 2025, EIB staff calculations.

ANNEX 3: EIB MUNICIPALITIES SURVEY 2024 – TECHNICAL DETAILS

The EIB Municipalities Survey at a glance

The fourth wave of the EIB Municipalities Survey was conducted between early June and the end of July 2024, with additional surveys conducted in September in France, the Netherlands and Czechia.

The 2024 survey consists of 13 main questions and one qualifying question. The set of questions has been adjusted somewhat compared to previous surveys: Seven questions were removed, one question was simplified and four questions were reformulated. However, the latest survey includes several questions consistent with those from the 2022 and 2020 survey waves. Specifically, questions related to investment barriers, financing, and green and digital transformation have remained, allowing for direct comparison of the results from different survey waves.

The sample size for the 2024 survey was 1 002 municipalities, representing a 35% increase compared to the 744 municipalities surveyed in 2022 (see Table A1). Over 40% of the municipalities surveyed in 2024 have fewer than 10 000 inhabitants, and about another 40% have populations between 10 000 and 50 000 inhabitants. The size of the municipalities varies significantly across countries. For example, some countries like Denmark and Sweden typically have larger municipalities, while others like France and Italy have many small municipalities that represent only a tiny fraction of the country's population.

When grouped by size into small, medium and large municipalities, the percentage shares in the 2024 survey are broadly similar to those in 2022. Most of the sampled municipalities are located in towns and suburbs (49%) and rural areas (41%), with a smaller portion in cities (10%). This distribution is similar to that of 2022.

The respondents who took the survey work in the mayor's office (14%), in the chief financial office (63%), in the chief technical (engineering) office (18%) or in other units of the municipality (6%).

The increase in the sample size was accompanied by a change in the survey design. Unlike previous surveys, the 2024 survey only targeted municipalities with at least 2 000 inhabitants, with the exception of about a dozen municipalities in six different countries. The capital cities of all EU Member States were excluded due to their specific characteristics. In a similar vein, a few regions of several EU member states outside Europe and some (remote) islands were also excluded. The municipalities and cities that took part did so on an anonymous basis.

The sample for this survey was prepared using different sources of information, including Eurostat, national sources and internet searches. Interview targets within the countries were set to proportionally divide the sample across regions. Certain country cohesion segments were underrepresented due to lower participation rates from municipalities, particularly wealthier ones. This issue was observed in nearly all EU countries, and especially in Czechia and the Netherlands. The 2024 survey sample takes into consideration cohesion classification, using a weighting methodology similar to that used in 2022, and the EIB macro-regional structure in addition.

Two main weighting schemes were applied to the municipality data: standard weights and cohesion region weights. The standard weights are calculated to reflect the size of the urban population of each country within the overall urban population size of all countries (see the distribution of municipalities by so-called macroeconomic regions defined above in the footnote 4, Figure A7). In addition, cohesion-level weights were calculated by NUTS 2 level to reflect EU population totals correctly at the cohesion level. The cohesion groups (three levels) are set at NUTS 2 level (Figure A7a). Constructing the weights at this level meant the weighting targets for each group were set on the same basis.

Figure A7: Sample size by EU macro region (in percent of total sample).

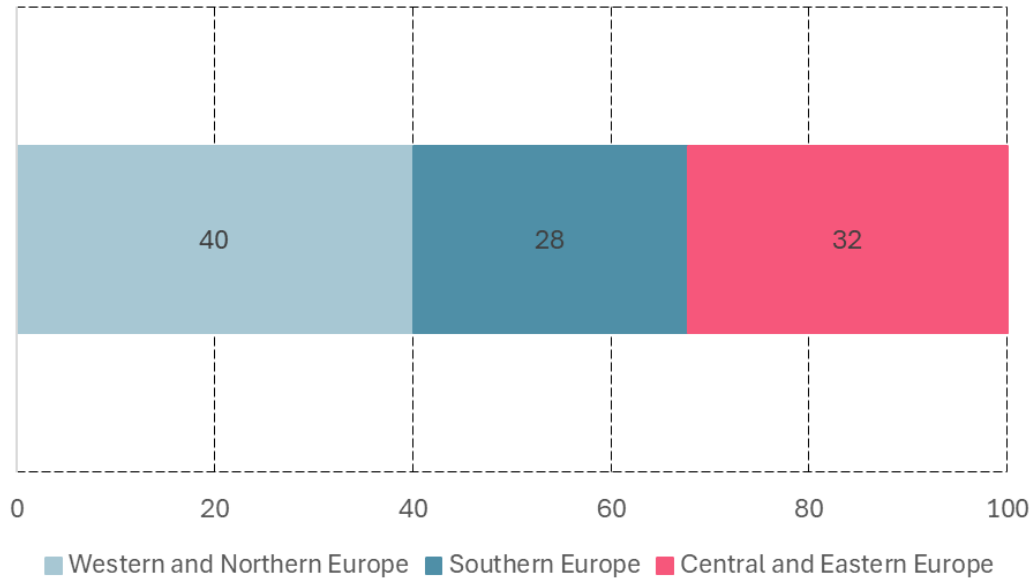
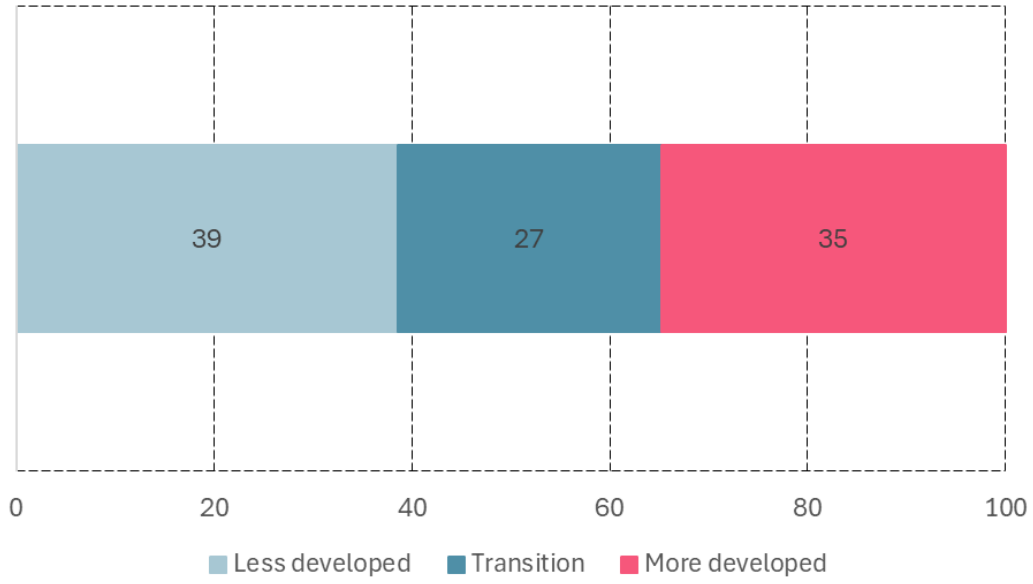


Figure A7a: Sample by EU cohesion classification (in percent of total sample).



Source: EIB Municipalities Survey 2025, EIB staff calculations.

Sample details

The final data are based on samples, rather than the whole populations of the municipalities, so the percentage results are subject to sampling tolerances. These vary with the size of the sample and the percentage figure concerned (omitting the effect of weighting of the survey data).

Table A1: Sample comparison by Member State

Country	Survey 2024	Survey 2022
Austria	25	33
Belgium	40	31
Bulgaria	30	35
Croatia	18	7
Cyprus	5	6
Czechia	15	30
Denmark	11	12
Estonia	10	7
Finland	20	30
France	100	54
Germany	131	56
Greece	31	39
Hungary	30	35
Ireland	9	9
Italy	107	57
Latvia	12	7
Lithuania	14	10
Luxembourg	5	5
Malta	7	5
Netherlands	29	33
Poland	98	58
Portugal	28	39
Romania	58	36
Slovakia	20	8
Slovenia	18	5
Spain	100	57
Sweden	31	40
Total	1002	744

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