The state of local infrastructure investment in Europe
EIB Municipalities Survey 2020

July 2021

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About this publication
The EIB Municipalities Survey gathers information from officials at local municipalities on local infrastructure investment activities and needs. This overview presents selected findings of the second wave of the survey, based on telephone interviews with 685 municipalities across the EU and carried out between May and August 2020. The first wave of the survey was conducted in 2017. As a complement to the EIB Investment Survey (EIBIS), it was developed by the EIB Economics Department and is managed by the department with the support of Ipsos MORI.

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About the EIB Economics Department
The mission of the EIB Economics Department is to provide economic analyses and studies to support the Bank in its operations and in its positioning, strategy and policy. The department and its team of 45 economists is headed by Debora Revoltella, director of economics.

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Preface

The confluence of COVID-19 and the twin climate and digital transition has put public investment back on the policy agenda, with enhanced local investment important. In the context of ultra-low interest rates and stagnating productivity, the value of public investment that enhances growth is widely recognised. Growth-enhancing public investment is central to policy makers response to the asymmetric effects of the pandemic and the new needs generated by the twin digital and green transitions and related social and distributional challenges. Commensurate with the important role that local infrastructure investment has to play in implementing this, it is on the G20 agenda.

Investment by local authorities has been a major casualty of the global financial crisis. In absorbing the economic shock from the global financial crisis, policy makers faced increased demand to use of fiscal stabilisers to support current demands, such as induced by heightened unemployment. At the same time, fiscal balances deteriorated and indebtedness increased. In an effort to stem deficits while safeguarding current expenditure, public capital expenditure came under sustained pressure. The impact was particularly marked for sub-national public investment. In many European regions, this sustained period of substantially reduced investment has bequeathed a legacy of investment gaps at the local level. Addressing this legacy is all the more pressing as the importunate transition towards a smarter and greener economy tears open new gaps.

Could this time be different? The policy response to the global financial crisis favoured fiscal austerity over considerations for growth-enhancement, which led to a prolonged drop in investment levels, notably by the public sector. In response to the COVID-19-induced crisis, however, the Stability and Convergence Plans submitted by Member States include public investment plans, which are domestically financed or supported through EU Funds, notably the Recovery and Resilience facility. By and large, these plans acknowledge the importance of public investment. Implementation will be crucial, especially at the local level. The experience of large investment programs of the past suggests that beyond adequate funding, this requires working in a complex space that involves ensuring absorptive capacity and the removal of barriers to investment.

Socio-economic activity and organisational capital are concentrated in municipalities, which renders them critical nodes for the implementation of policies tackling the twin transition. Agglomerations of people, municipalities attract capital – not only tangible, but also intangible, such as human and institutional. The types of infrastructures in which municipalities invest, is vitally important for the implementation of public policy, as is how they conduct their business.
• **Some 45% of government investment in the EU is conducted by local authorities.** This capital expenditure includes basic infrastructures, such as public transport networks or wastewater infrastructure. It also goes to building and modernising public buildings, such as schools, hospitals, or social housing. Prioritisation of energy efficiency in these projects is highly relevant for climate change mitigation. Municipalities’ land zoning is relevant for climate change adaptation, e.g. by ensuring overflow areas to mitigate flooding, or biodiversity, e.g. the revitalisation of green areas.

• **Municipalities provide a wide variety of public services.** How municipalities deploy their administrative capacities says a lot about how they engage with green and digital transitions. Do their procurement policies incorporate climate considerations? Are their public services provided digitally? Aside from the immediate impact of their actions, the standards they thus set also impact on how the wider public goes about its business. Indeed, this can be an important driver of public-private synergies.

**No one municipality is quite like the other, each exhibiting particular needs and capacities.** As dynamic entities, their regional specificities, demographic characteristics, economic development, and sectoral orientation give rise to ever-evolving requirements. Moreover, these requirements are never fully aligned with the infrastructures in situ. In addition to adequate means, optimising outcomes requires significant planning and implementation capacities. Yet, these vary tremendously by municipality type, which range from the cosmopolitan and metropolitan centres to remote rural towns. In the EU, geographic location remains an important determinant of development and needs. In order to support these varied needs but also to prioritise climate change and digitalisation, public policy needs to provide solutions that are adapted to the local situation. The EU’s multiannual financial framework (MFF) for 2021-2027 and, in particular, the Next Generation EU (NGEU) Funds promise a major leap forward in tackling the twin transition. Delivering on this promise requires significant absorptive capacity.

**The EIB surveys municipalities across Member States, with a view to better understanding local investment and capacity needs.** The EIB 2020 Municipality Survey interviewed 685 municipalities between May and August 2020. The survey asked municipalities to self-assess infrastructure gaps, investment needs and constraints. The twin challenges related to climate change and digitalization were afforded particular attention, seeking to learn about not only investment but also related administrative capacity. As the first wave of COVID-19 was unfolding, the survey also asked questions about the impact of the pandemic. This 2020 survey follows an inaugural run conducted in 2017. An initial analysis of the 2020 survey was published in the EIB Investment Report 2020/2021.
Municipalities in Europe perceive investment gaps. Despite generally increasing efforts in terms of infrastructure investment in the three years to summer 2020, the majority of municipalities signal investment gaps. The principal gaps relate to climate change, digitalisation, and urban transport. Going forward, municipalities stated their intention to focus on digital and green transitions, with COVID-19 leading many to place renewed emphasis on social infrastructure. As one might expect, gaps were not homogenously spread across the EU; smaller municipalities and those in poorer regions more frequently identify gaps and exhibit lower levels of green and digital capacity.

A lack of funds is the principal impediment to municipalities’ investment, followed by regulatory red tape and a lack of technical capacity. Tackling the twin challenge of green and digital transition requires active engagement by municipalities. Yet, when asked about whether relevant capacities are in place, a large share of municipalities displayed a lack of either. By 2020 almost 70% of EU municipalities had limited capacity in place to deal with the green transition, while some 43% do not provide standard digital services. Most municipalities had plans, however, to develop such capacities in subsequent years.

For the European Investment Bank, municipalities represent an important channel via which it pursues public policy goals. Sustainable infrastructure, support to economic restructuring to create new jobs and growth, as well as investment in social infrastructure to ensure a just transition are key policy objective. In the wake of COVID-19 and as the priorities of public sector investments in many countries shift to address the crisis, the EIB’s commitment to Cohesion remains central, as varied economic growth and rising inequalities will require targeted investments. This includes measures to strengthen the rural-urban nexus, to address inequalities within cities and to foster development in rural regions. The EIB is also in a good position to continue contributing to the EU’s Urban Agenda and complementary initiatives. In terms of meeting technical capacity needs, the EIB stands ready further to develop the dedicated urban investment facility, URBIS.

Debora Revoltella, Chief Economist EIB
Interviews were carried out between May and August 2020. The results are weighted by the share of urban population.

### Investment activity
Pre-COVID-19, municipal infrastructure investment had been picking up. In the three years leading up to the pandemic in 2020, nearly two-thirds of EU municipalities had increased infrastructure investment, thus reversing a decade of fiscal austerity. The highest shares of increases were for digital and social infrastructure assets as well as those mitigating climate change.

### Investment gaps
Increased investment notwithstanding, the majority of EU municipalities considered infrastructure investment lacking, especially for digitalization, and climate change mitigation and adaptation, but also urban transport.

### Administrative capacity
Taking on the twin challenge of green and digital transitions requires adequate administrative capacity. While there are plans to further develop these, the majority of municipalities exhibited gaps: Nearly two-thirds display a lack of green administrative capacity and nearly half for digital.

### Investment priorities
Pre-COVID-19, the majority of municipalities planned to further increase infrastructure investment. Their focus coincided with gaps identified, notably for climate change and digitalization. Relative to gaps identified, social infrastructure received more attention and urban transport less.

### Impact of Covid-19
Even as the first wave of the pandemic was unfolding, over one-third of EU municipalities anticipated having to adjust their investment plans for this reason – municipalities shifted their priorities towards digital and social infrastructures. Smaller municipalities and those located outside of Western and Northern Europe were less confident about the resilience of their digital and health infrastructures to the pandemic.

### Investment barriers
EU municipalities frequently identified lack of funding, regulatory red tape, as well as lack of technical capacity as major barriers to investment. When looking at investment to deal with climate change, the order of barriers is similar, with lack of funding clearly standing out as the principal issue.

### Investment planning
Independent ex ante project assessments and coordination with other municipalities remained far from the norm: less than half of municipalities regularly conducted such assessments or coordinated with peers.

### Investment finance
On average, one-fifth of municipal investment financing is sourced externally, with the remainder split between capital transfers and own funds. More than one-third of EU municipalities reported having benefited from EU financial instruments, with the share set to increase significantly. One in seven municipalities is external finance constrained.
Note: As a proxy for infrastructure investment, the graph shows gross fixed capital formation in buildings and other structures for the principal infrastructure sectors as a share of GDP; broken down by institutional sector. Once project finance (PPP and non-PPP) is subtracted from the total, the government share in the remainder is approximated using COFOG data, with the share of other buildings and structures in economy wide capital stock serving as proxy for the share of other buildings and structures in government GFCF. The share of local government in general government GFCF is used to proxy for the share of local in government infrastructure investment. Source: Eurostat, EPEC, IJ Global, EIB calculations.

In the wake of the global financial crisis, infrastructure investment as a share of EU gross domestic product (GDP) has been on a declining trend, picking up only in 2018. This decline was driven by a falling government share, which was most pronounced in Member States facing fiscal austerity, notably in Southern Europe.

Where the government investment dropped, the share in local government investment tended to bear the brunt of the reduction. Local government shares have tended to recover with the general government share, but the sustained and substantial nature of the drop over the preceding decade has contributed to widening investment gaps, notably in the South.
Nearly two-thirds of EU municipalities (63%) increased infrastructure investment in the three years leading up to the COVID-19 pandemic.

Investment focused on certain infrastructure assets, notably digital and social infrastructure assets (70% and 60% of municipalities, respectively) as well as those mitigating climate change (56%).

Regional differences are important. In contrast to other EU regions, where nearly three quarters of municipalities increased infrastructure investment, in Southern Europe over half of municipalities decreased investment or kept it constant.

Categorising municipalities by quartiles of population size, a lower share of micro municipalities report increases of investment compared to larger ones.

Base: All municipalities (excluding don’t know/refused responses).

Q. Thinking back to between 2017 and 2019, did investment in your municipality increase, decrease or stay around the same in each of the following areas? The number in the circle shows the net balance of municipalities reporting an increase in investment vis-à-vis those reporting a decrease in investment (in %).

Social infrastructure
Urban transport
Digital infrastructure
Water and waste utilities
Climate change mitigation
Climate change adaptation

Base: All municipalities (excluding don’t know/refused responses).

Q. Thinking back to between 2017 and 2019, did investment in your municipality increase, decrease or stay around the same in each of the following areas?
In the three years leading up to the pandemic, the largest share of municipal investment across Europe was on average directed towards maintenance and repair (42%), followed by modernisation and adaptation (30%) and new build (28%).

Regional differences are palpable. Southern European municipalities expended nearly half of investment on maintenance and repair (46%), leaving little for new build (25%), in particular. In contrast, the share of new build is highest for Central and Eastern Europe (34%). A possible explanation lies in the boost provided by EU funds.

Micro municipalities dedicated nearly half of investment to maintenance and repair (48%).

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**INVESTMENT FOCUS, 2020-2025 BY REGION AND MUNICIPALITY SIZE**

Q. Looking ahead to the next five years, will the largest share of your spend on infrastructure in each of these areas be for maintenance and repair, modernisation or the construction of new infrastructure?

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**INVESTMENT FOCUS, 2017-2019 BY ASSET**

Q. Looking back over the past three years, was the largest share of your spend on infrastructure in each of these areas for maintenance and repair, modernisation or the construction of new infrastructure?
The majority of municipalities considered that infrastructure investment was lacking in the years leading up to the pandemic.

The adequacy of investment was most frequently deemed lacking for infrastructure assets related to both climate change mitigation and adaptation (65% and 69%, respectively), digitalisation (47%) and urban transport (46%).

Regional differences are significant, with Western and Northern European municipalities more satisfied with recent municipal investment compared to one-third elsewhere.

Urban transport stands out as an issue for the majority of Southern European and micro municipalities.

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**Base:** All municipalities (excluding don’t know/refused responses).

Q. Would you say that within your municipality the level of investment in infrastructure projects between 2017 and 2019 was broadly adequate, slightly lacking or substantially lacking in each of the following areas?
## TRANSPORT INFRASTRUCTURE GAPS, BY REGION AND MUNICIPALITY SIZE

<table>
<thead>
<tr>
<th>Service</th>
<th>EU</th>
<th>CEE</th>
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<th>WN</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
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<td>Cycling lanes and footpaths</td>
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<td>Urban public transport</td>
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<td>Electric charging stations</td>
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<td>67</td>
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<td>76</td>
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<td>for vehicles</td>
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</table>

**Base:** All municipalities (excluding don’t know/refused responses).

Q. Would you say that the quality of transport infrastructure is satisfactory, slightly lacking or substantially lacking? The number in the circle corresponds to the sum of municipalities having indicated a slight lack and those having indicated a substantial lack in investments (in%).

## SOCIAL INFRASTRUCTURE GAPS, BY REGION AND MUNICIPALITY SIZE

<table>
<thead>
<tr>
<th>Service</th>
<th>EU</th>
<th>CEE</th>
<th>SE</th>
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<th>Micro</th>
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<td>Care for elderly</td>
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<td>19</td>
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<tr>
<td>Education and training</td>
<td>16</td>
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<td>19</td>
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<tr>
<td>Social and affordable housing</td>
<td>51</td>
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<td>64</td>
<td>35</td>
<td>54</td>
<td>49</td>
<td>44</td>
<td>59</td>
</tr>
</tbody>
</table>

**Base:** All municipalities (excluding don’t know/refused responses).

Q. Would you say that the quality of social infrastructure is satisfactory, slightly lacking or substantially lacking? The number in the circle corresponds to the sum of municipalities having indicated a slight lack and those having indicated a substantial lack in investments (in%).
EU – Green and digital administrative capacity

**GREEN CAPACITY**

Base: All municipalities (excluding don’t know/refused responses).

Q. For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

- Green Budgetting
- Inventory of carbon footprint
- Land use planning

**DIGITAL SOPHISTICATION**

- Wireless internet in public spaces
- Digital government services
- Digital payments or traffic monitoring

- Included
- Plan to include
- Has no plans to include

**SHARE OF MUNICIPALITIES LACKING IN GREEN AND DIGITAL CAPACITY**

Base: All municipalities (excluding don’t know/refused responses).

Q. For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

- Adaptation to the twin challenge of green and digital transition requires active engagement by municipalities, While many plan to build capacity in these areas, large shares of municipalities displayed gaps.
- Green administrative capacity (such as green budgeting) lags behind digital sophistication (such as provision of digital government services).
- Regional differences matter, with Western and Northern Europe leading, and Southern Europe lagging in green, in particular, whereas Central and Eastern Europe lags behind on digital sophistication. Both regions have designs on catching up in these areas.
INVESTMENT PLANS, 2020-2025, BY ASSET

- Asked about their investment plans pre-pandemic, two-thirds of EU municipalities (64%) planned on increasing infrastructure investment from 2020 through 2025.
- The shares planning on increasing infrastructure investment were higher for digital infrastructure (68%), climate change mitigation (67%) and climate change adaptation (64%), which corresponds to perceived gaps.
- From a regional perspective, Central and Eastern European municipalities’ focus is climate change mitigation and adaptation (respectively 71% and 68%); in Southern Europe it is digital infrastructure (68%).
- In terms of size, micro municipalities were less inclined to increase investment than larger ones. They also did not focus their investments on identified gaps.

INVESTMENT PLANS, 2020-2025, BY REGION AND MUNICIPALITY SIZE

- Social infrastructure
- Urban infrastructure
- Digital infrastructure
- Water and Waste utilities
- Climate change mitigation
- Climate change adaptation

Base: All municipalities (excluding don’t know/refused responses).

Q. And for each of the following areas, over the next five years, does your municipality expect to increase, decrease or have around the same level of spending on infrastructure investment? The number in the circle shows the net balance of municipalities reporting an increase in investment vis-à-vis those reporting a decrease in investment (in%).

Base: All municipalities (excluding don’t know/refused responses).
EU – Expected investment focus pre-pandemic

**INVESTMENT FOCUS, 2017-2019, BY REGION**

- Municipalities expected to increase the expenditure share of modernisation and adaptation to 40% over the coming five years, while that of maintenance and repair was expected to fall to 31%.
- This trend is particularly pronounced in Central and Eastern Europe, where half of the average expenditure would be dedicated to modernisation, as well as Southern Europe, where the share would rise to 43%.
- Across size classes, no deviations or trends are obvious.

*Base: All municipalities (excluding don’t know/refused responses).*

Q. Looking ahead to the next five years, will the largest share of your spend on infrastructure in each of these areas be for maintenance and repair, modernisation or the construction of new infrastructure?

**INVESTMENT FOCUS, 2017-2019, BY REGION AND MUNICIPALITY SIZE**

*Base: All municipalities (excluding don’t know/refused responses).*

Q. Looking ahead to the next five years, will the largest share of your spend on infrastructure in each of these areas be for maintenance and repair, modernisation or the construction of new infrastructure?
EU – Impact of COVID-19 on investments

**IMPACT OF COVID-19 ON INVESTMENT PLANS, BY ASSET**
(Net balances)

- By the summer of 2020, one-third of municipalities already anticipated changing their investment plans due to COVID-19.
- Of the municipalities that anticipated a change in plan, there was a clear focus on increasing investment in digital (38%) and social infrastructure (31%).
- Municipalities in Southern Europe were particularly inclined to perceive a need to increase investment, notably in social infrastructure (31%), and in digital infrastructure by (38%). Though the shares in Western and Northern Europe were smaller, their focus was the same. In Central and Eastern Europe, municipalities expected to change their plans, without any particular pattern emerging.
- The perceived need to increase infrastructure investment increases with municipality size.

**IMPACT OF COVID-19 ON INVESTMENT PLANS, BY REGION AND MUNICIPALITY SIZE**

Base: Municipalities that have changed their plans due to COVID-19 (excluding don’t know/refused responses).

Q. For each of the following areas will your municipality increase or decrease spending on infrastructure investment due to coronavirus, or have around the same level of spending on this area?

Base: All municipalities (excluding don’t know/refused responses).

Q. Thinking about your investment plans over the next five years, have you changed your plans at all due to coronavirus?

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By the summer of 2020, over a quarter of EU municipalities considered the resilience of health infrastructure to the COVID-19 pandemic to be lacking.

In Western and Northern Europe a small minority considered it lacking: In Central and Eastern as well as Southern Europe, this share exceeded 40%.

The resilience of municipal health infrastructure also varies by size. Micro municipalities report a lack of adequacy at a significantly higher rate, with 34% reporting a lack of ability to cope with the pandemic and 10% a substantial lack.

Contributing factors include: i) the spread of the pandemic by the time of the survey; ii) the impact of fiscal austerity on perceptions of infrastructure adequacy; iii) the relatively high share of smaller municipalities in Central and Eastern Europe.

Base: All municipalities (excluding don’t know/refused responses)

Q. To what extent is your health infrastructure able to cope with the current Covid-19 situation in your city?
EU – Resilience to COVID-19

RESILIENCE OF DIGITAL INFRASTRUCTURE, BY REGION

- By the summer of 2020, more than half of EU municipalities remained optimistic about the adequacy of their digital infrastructure to deal with the challenges posed by COVID-19.
- In Western and Northern Europe, one-quarter of municipalities were concerned about the adequacy of their digital infrastructure in the face of the pandemic, whereas the share was 37% of in Central and Eastern Europe and even 52% in Southern Europe. In part, this reflects the extent to which COVID-19 had spread across Southern Europe at the time of interview, as well as quality of infrastructure and the severity of lockdowns.
- No significant differences emerged across size classes.

RESILIENCE OF DIGITAL INFRASTRUCTURE, BY MUNICIPALITY SIZE

Base: All municipalities (excluding don’t know/refused responses).

Q. To what extent is your digital infrastructure able to cope with the current COVID-19 situation in your city?
In terms of barriers to investment, lack of funds (76%), length of regulatory process (85%) and regulatory uncertainty (83%) were the more frequently identified obstacles. More than half considered lack of funds to be a major obstacle, followed by regulatory red tape. Lack of technical capacity was a major obstacle for one-third of municipalities.

From a regional perspective, municipalities in Western and Northern Europe identify obstacles less frequently compared to other regions, particularly regarding lack of funds and technological uncertainty. In Southern Europe, agreement with stakeholders stands out.

No clear patterns emerge across size classes, aside from larger municipalities encountering more difficulty in obtaining stakeholder agreement (88%).
Municipalities were asked to identify the two main barriers to investment in green and climate change-related infrastructure. Lack of funds (69%) was named most frequently among these two and, indeed, typically as the first of the two obstacles.

The order of other barriers is similar to that for barriers more generally, with regulatory red tape and lack of technical capacity the obstacles that were named the next most frequently.

Base: All municipalities (excluding don’t know/refused responses).

Q. Thinking of green or climate related infrastructure investment, which are the two main obstacles to this type of investment?
Municipalities varied in their perceptions of how the transition to a zero-carbon economy will affect them. About half of municipalities see opportunities and challenges as broadly balanced. The net balance sees a slight majority anticipating more opportunities (27%) than challenges (21%).

Southern Europe is the main source of this optimism, with nearly twice as many seeing mainly opportunities than those seeing mainly challenges.

Large municipalities — relatively significant in the Southern European sample — exhibit a particularly positive net balance.

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**EU – Exposure to climate change**

**PERCEIVED IMPACT OF TRANSITION TO A CLIMATE-NEUTRAL ECONOMY, BY REGION**

- **Municipalities varied in their perceptions of how the transition to a zero-carbon economy will affect them. About half of municipalities see opportunities and challenges as broadly balanced. The net balance sees a slight majority anticipating more opportunities (27%) than challenges (21%).**

- **Southern Europe is the main source of this optimism, with nearly twice as many seeing mainly opportunities than those seeing mainly challenges.**

- **Large municipalities — relatively significant in the Southern European sample — exhibit a particularly positive net balance.**

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**PERCEIVED IMPACT OF TRANSITION TO A CLIMATE-NEUTRAL ECONOMY, BY SIZE**

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**Q. To what extent is each of the following an obstacle to the implementation of your infrastructure investment activities?**

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**Q. On balance, over the next five years what economic impact do you expect the climate change transition to have on your municipality?**
When asked about the impact of the physical risks associated with climate change, the majority of municipalities anticipated that associated challenges will outweigh opportunities.

A dominance of concerns is particularly evident in Southern Europe, where 63% are rather concerned vs. 6% that are on balance optimistic.

A U-shaped relationship appears to exist between the net balance of concerns and population size: concerns increase with size from micro to medium-sized municipalities, before tempering for large municipalities.

**PERCEIVED IMPACT OF PHYSICAL RISKS, BY SIZE**

Base: All municipalities (excluding don’t know/refused responses).

Q. Thinking about perceived climate change and changing weather patterns: over the next five years, what impact do you expect the physical risks associated with these weather events to have on your municipality?
INDEPENDENT EX-ANTE ASSESSMENTS

- The frequency of independent ex ante project assessments was relatively low and varied by type of assessment.
- Only 40% of municipalities regularly assessed financing options or socioeconomic cost-benefit analysis. This share rose to nearly 60% for budgetary implications and environmental impact.
- Geographically, ex ante assessments of environmental impact and budgetary implications were particularly frequent in Central and Eastern Europe; budget implications were also frequently assessed in Southern Europe.
- Micro municipalities conducted more ex ante assessments; large ones did so for environmental impact and budget.
- These results are in line with those gleaned from the 2017 edition.

INDEPENDENT EX-ANTE ASSESSMENTS, BY REGION AND MUNICIPALITY SIZE

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<th>EU</th>
<th>CEE</th>
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<td>Socioeconomic impact</td>
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<td>Environmental impact</td>
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</table>

Base: All municipalities (excluding don’t know/refused responses).

Q. Before going ahead with an infrastructure project, do you carry out an independent assessment of any of the following?
INTER-MUNICIPAL COORDINATION ON PROJECTS

- Concerning planning of infrastructure projects, less than 40% of municipalities coordinated with peers.
- Less than 20% coordinate with regional municipalities that are not neighbouring. Plausibly, such coordination may be conducted at a higher level of government, which may be more efficient.
- Only one-third have exchanges with cities in a common network.
- Aside from the prevalence of networking by Southern European municipalities, regional differences are not noteworthy.
- Coordination is most frequent with micro municipalities. In part, this may reflect that the scale of certain infrastructure projects exceeds the bounds of smaller municipalities.

Base: All municipalities (excluding don’t know/refused responses).

Q. Before going ahead with an infrastructure project, do you carry out an independent assessment of any of the following?

INTER-MUNICIPAL COORDINATION ON PROJECTS, BY REGION AND SIZE

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<thead>
<tr>
<th>Neighbouring municipalities</th>
<th>EU</th>
<th>CEE</th>
<th>SE</th>
<th>WN</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>38</td>
<td>36</td>
<td>40</td>
<td>51</td>
<td>34</td>
<td>33</td>
<td>36</td>
<td></td>
</tr>
<tr>
<td>Other municipalities in your region</td>
<td>18</td>
<td>17</td>
<td>20</td>
<td>17</td>
<td>28</td>
<td>15</td>
<td>13</td>
<td>16</td>
</tr>
<tr>
<td>Networks of municipalities</td>
<td>32</td>
<td>30</td>
<td>39</td>
<td>27</td>
<td>41</td>
<td>28</td>
<td>26</td>
<td>33</td>
</tr>
</tbody>
</table>

Base: All municipalities (excluding don’t know/refused responses).

Q. How often does your municipality coordinate its investment projects with...?
Regarding audits of the exposure of their assets and operations to climate-related risks, only a fifth of municipalities (21%) had carried these out, with the share in Central and Eastern Europe particularly low (15%). Large municipalities stand out with a relatively high share of audits (30%).

When it comes to energy efficiency, nearly two-thirds of municipalities (62%) had carried out audits. The incidence is relatively low in Western and Northern Europe as well as micro municipalities.

Base: All municipalities (excluding don’t know/refused responses).
Q. Have audits been carried out on the assets and operations of your municipality over the last three years?
At the EU level, the median share of municipal public buildings meeting the current national energy efficiency standards was one-third (32%).

Regional variation is important. A median share of one-quarter of municipalities in Southern Europe compares with 42% in Central and Eastern Europe and 37% in Western and Northern Europe.

The median share of energy efficient municipal public building tends to decline with size, being highest in micro municipalities and lowest in large municipalities.

Base: All municipalities (excluding don’t know/refused responses).

Q. Can you tell me the share of public buildings out of all public building stock whose energy rating meets the current national energy efficiency standards?
From a policy priority perspective, the action plans and development strategies of the large majority of municipalities seek to address climate change mitigation (85%), security of IT systems (85%) and circular economy measures (80%). Disaster management, including pandemics, were not included in the action plans of more than one-third of municipalities (37%).

From a size perspective, micro municipalities’ action plans are less likely to incorporate the items listed.

Base: All municipalities (excluding don’t know/refused responses).

Q. Does your municipality’s action plans or development strategies include any of the following?

<table>
<thead>
<tr>
<th>MUNICIPALITY’S ACTION PLANS, BY REGION AND SIZE</th>
<th>EU</th>
<th>CEE</th>
<th>SE</th>
<th>WN</th>
<th>Micro</th>
<th>Small</th>
<th>Medium</th>
<th>Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate change mitigation</td>
<td>85</td>
<td>93</td>
<td>78</td>
<td>87</td>
<td>71</td>
<td>89</td>
<td>85</td>
<td>94</td>
</tr>
<tr>
<td>Climate change adaptation</td>
<td>78</td>
<td>76</td>
<td>74</td>
<td>82</td>
<td>64</td>
<td>75</td>
<td>81</td>
<td>92</td>
</tr>
<tr>
<td>Security of IT systems</td>
<td>85</td>
<td>75</td>
<td>83</td>
<td>90</td>
<td>75</td>
<td>88</td>
<td>90</td>
<td>88</td>
</tr>
<tr>
<td>Circular economy measures</td>
<td>80</td>
<td>83</td>
<td>87</td>
<td>72</td>
<td>73</td>
<td>82</td>
<td>76</td>
<td>87</td>
</tr>
<tr>
<td>Disaster management</td>
<td>63</td>
<td>53</td>
<td>64</td>
<td>66</td>
<td>58</td>
<td>60</td>
<td>65</td>
<td>71</td>
</tr>
</tbody>
</table>

Base: All municipalities (excluding don’t know/refused responses).

Q. Does your municipality’s action plans or development strategies include any of the following?
MUNICIPALITIES’ INVESTMENT FINANCING

- The way in which municipalities finance their investment is very much dependent on institutional arrangements, which strongly differ across countries. Own resources or transfers from central government/EU funds are the most commonly used sources, on average accounting for 43% and 39% of municipalities investment financing. On average, EU municipalities sourced one-fifth (18%) of funding from external sources.

- The share of own funds is broadly stable across regions (40%). Reliance on transfers was highest in Southern European municipalities, where they account for half of the funding (48%); this share was still 43% for Central and Eastern Europe and only 30% in Western and Northern Europe. External financing is common only for municipalities in Western and Northern Europe, where it constitutes one quarter of funding (25%), whereas only a small share of funds (10%) was sourced externally by municipalities in Southern Europe.

- Micro municipalities exhibited the highest average share of transfers (46%); the share drops to one third for small municipalities, before rising towards 40% for large ones. The average share of external financing was about 20% for all but micro municipalities, for which it accounts for one-tenth.

- With almost 80% of EU municipalities considering lack of funding as a key impediment to investment, a deeper understanding of the underlying issues is important.

Base: All municipalities (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities in the last three years were financed by each of the following?
Of the respondents eligible to apply for external financing, more than 50% had received all the financing requested and one-third (32%) had no need for external financing.

Southern Europe exhibited the highest share of municipalities not requiring external financing, with 44% of them not requiring any as opposed to one-quarter for the remainder.

In terms of size, micro municipalities had the lowest need for external financing, with 50% of them not requiring any. For the remainder, the degree of reliance tends to diminish with size, with 15% of small municipalities not reliant on external finance rising to 23% for large ones.

**NO EXTERNAL FINANCING REQUIRED, BY REGION**

<table>
<thead>
<tr>
<th>Region</th>
<th>No external financing needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU</td>
<td>30</td>
</tr>
<tr>
<td>Central and Eastern</td>
<td>25</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>40</td>
</tr>
<tr>
<td>Western and Northern</td>
<td>15</td>
</tr>
</tbody>
</table>

**NO EXTERNAL FINANCING REQUIRED, BY SIZE**

<table>
<thead>
<tr>
<th>Size</th>
<th>No external financing needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Micro</td>
<td>50</td>
</tr>
<tr>
<td>Small</td>
<td>10</td>
</tr>
<tr>
<td>Medium</td>
<td>20</td>
</tr>
<tr>
<td>Large</td>
<td>25</td>
</tr>
</tbody>
</table>

**Base:** All municipalities that didn’t require external financing (excluding don’t know/refused responses).

Q. Your municipality did not use any external financing. Was this because no borrowing was required; the municipality's creditworthiness was not sufficient; the municipality’s debt limit was reached or borrowing blocked by a higher level of government?
**EXTERNAL FINANCE CONSTRAINED, BY REGION**

- The share of municipalities that were finance constrained is 15%. These municipalities are considered finance constrained because, in spite of being eligible to source external financing, either they did not receive all the funding they would have desired (11.5%); they already reached statutory debt limits (2%); or, based on their credit worthiness, they considered credit conditions prohibitive (1.5%).

- From a regional perspective, external credit constrained municipalities were clearly more prevalent in Central and Eastern Europe, where this affects one quarter of eligible municipalities, compared to one-tenth in Western and Northern Europe.

- As regards size, no clear pattern emerges.

**EXTERNAL FINANCE CONSTRAINED, BY SIZE**

Base: All municipalities that did not use external financing (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities in the last three years were financed by each of the following?

---

Base: All municipalities (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities in the last three years were financed by each of the following?
The share of municipalities that plan on benefiting from EU-funded financial instruments is set to continue rising. Compared to one-third of municipalities (36%) that have benefited from these instruments in the past three years, nearly two-thirds (63%) expected to benefit from them in the coming five years.

From a regional perspective, the share of municipalities that had benefitted from financial instruments was highest in Southern Europe, namely 60%, and lowest in Western and Northern Europe, where it was 17%; municipalities in Central and Eastern Europe were broadly in line with the EU average (38%).

Looking ahead, nearly all municipalities in Southern Europe (86%) were looking to benefit from EU financial instruments. The biggest increase in share is expected in Central and Eastern Europe, a doubling of share of with two-thirds of municipalities. The largest relative increase is expected in Western and Northern Europe, where it will nearly triple to 44%

The incidence of regional use of EU financial instruments contrasts with that of external financial constraints.

Base: All municipalities (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities in the last three years were financed by each of the following?
INVESTMENT FOCUS, BY USE OF EU FINANCIAL INSTRUMENTS

The share of municipalities intending to increase investment is significantly larger for those that expect to benefit from EU-funded financial instruments but have not yet done so. These municipalities are notably more inclined to increase investment in climate change mitigation (92%), digital infrastructure (82%) and social infrastructure (85%).

About half of municipalities expect to use public-private partnerships. More than two-thirds of those in Southern Europe expect to do so, compared to merely 37% in Western and Northern Europe.

EXPECTED USE OF PUBLIC-PRIVATE PARTNERSHIPS, 2017-2019

Q. In the next five years, in order to finance planned investment projects, does your municipality plan to benefit from public-private partnerships?

Q. And for each of the following areas, over the next five years, does your municipality expect to increase, decrease or have around the same level of spending on infrastructure investment?
The Municipality Infrastructure Investment module of the EIB Investment Survey gathered information from officials at local municipalities on local infrastructure investment activities and needs. This overview of the Eastern and Central European region presents selected findings based on telephone interviews with 255 municipalities. Interviews were carried out between May and August 2020. The results are weighted by the share of urban population.

### Key findings

| **Investment activity** | Nearly three-quarters of CEE municipalities increased investment in infrastructure in the three years leading up to the pandemic. Investments targeted digital infrastructure assets, water and waste utilities as well as those mitigating climate change. |
| **Investment gaps**     | The majority of municipalities considered that infrastructure investment has been lacking, particularly when it comes to climate change mitigation and adaptation. |
| **Administrative capacity** | CEE municipalities are looking to develop green administrative capacity and digital sophistication, with particular emphasis on closing the existing gap for green administrative capacity. |
| **Investment priorities** | Pre-pandemic, about three-quarters of CEE municipalities planned on increasing investment, focusing on areas where they had identified gaps, notably climate change mitigation and adaptation. Expenditure was equally distributed between modernisation, new build, and maintenance; modernisation is now to be emphasised. |
| **Impact of Covid-19**   | Already by the summer of 2020, nearly half of municipalities expected to revise investment plans due to the pandemic. No clear emphasis of type of infrastructure asset emerged, however. |
| **Investment barriers**  | The main barriers to infrastructure investments for CEE municipalities are lack of funding, the length of approval process and regulatory uncertainty. |
| **Investment planning**  | More than half of municipalities regularly conduct independent assessments before going ahead with infrastructure projects, however only 32% often evaluate their financing options. Less than 40% of municipalities consult with peers when it comes to the planning and implementation of those projects. |
| **Investment finance**   | CEE municipalities rely slightly more on capital transfers than on their own funds. Less than one-fifth of funding is sourced via external finance. More than one-third of municipalities reported having benefited from EU financial instruments, with the share set to increase significantly. The incidence of external credit constrained municipalities is relatively high. |
Q. Thinking back to between 2017 and 2019, did investment in your municipality increase, decrease or stay around the same in each of the following areas?

- The share of Central and Eastern European municipalities that have increased infrastructure investment from 2017 through 2019 exceeds the EU average.
- Investment increases were most frequently noted for water and waste utilities (68%), climate change mitigation (67%) and social infrastructure (66%).
- Climate change adaptation received the least attention, with just over one-third increasing investment in related assets.

Base: All municipalities (excluding don’t know/refused responses).

Q. Would you say that within your municipality the level of investment in infrastructure projects between 2017 and 2019 was broadly adequate, slightly lacking or substantially lacking in each of the following areas?

- Municipalities in Central and Eastern Europe more frequently identify gaps in their infrastructure than the EU average.
- The share of municipalities reporting a gap in infrastructure is particularly large for climate change mitigation (71%) and climate change adaptation (74%). The lack in these two asset classes is also frequently considered substantial for a large minority, 15% and 17%, respectively. The only asset class where a larger share of municipalities identify a substantial lack is urban transport (18%).

Base: All firms (excluding don’t know/refused responses).
• The majority of Central and Eastern European municipalities plan to increase their investments from 2020 through 2025.

• In particular, they plan on increasing their investment activities in climate change mitigation (75%) and adaptation (71%), which they identified as their main infrastructure gaps.

• By contrast, digital and urban transport infrastructure receive relatively little attention, with only half of municipalities expecting to increase investment in these areas. For urban transport, this contrasts with the severity of gaps identified.

Q. Thinking back to between 2017 and 2019, did investment in your municipality increase, decrease or stay around the same in each of the following areas?

• The state of local infrastructure investment in Europe: EIB Municipalities Survey 2020
RESILIENCE TO COVID-19: HEALTH AND DIGITAL INFRASTRUCTURE

- By the summer of 2020, 39% of Central and Eastern European municipalities had identified a lack of adequacy of their health infrastructure to the pandemic, compared to 28% of municipalities at the EU level. This is striking given the relatively limited spread of the pandemic in this region by the time of interview.

- Such a regional disparity is not evident when considering adequacy of digital infrastructure for COVID-19: 37% of Central and Eastern European municipalities, fully in line with the EU average.

\[
\begin{align*}
\text{EU} & \quad \text{Central and Eastern Europe} \\
\text{Health} & \quad \text{EU} & \quad \text{Central and Eastern Europe} \\
0 & \quad 0 & \quad 0 \\
20 & \quad 20 & \quad 20 \\
40 & \quad 40 & \quad 40 \\
60 & \quad 60 & \quad 60 \\
80 & \quad 80 & \quad 80 \\
100 & \quad 100 & \quad 100
\end{align*}
\]

Base: All municipalities (excluding don’t know/refused responses).

Q. Are your health and digital infrastructure adequate to respond to the COVID-19 crisis?

IMPACT OF COVID-19 ON INVESTMENT PLANS, OVERALL AND BY ASSET

- By the summer of 2020, every second Central European municipality expected that COVID-19 would affect their investment plans. This share exceeds that of the EU average (40%).

- In terms of the expected response by asset, however, no clear pattern emerged.

\[
\begin{align*}
\text{Social infrastructure} & \quad \text{Urban transport} & \quad \text{Digital infrastructure} & \quad \text{Water and waste utilities} & \quad \text{CCM} & \quad \text{CCA} \\
\text{Decrease infrastructure investment spend} & \quad \text{Decrease infrastructure investment spend} & \quad \text{Decrease infrastructure investment spend} & \quad \text{Decrease infrastructure investment spend} & \quad \text{Decrease infrastructure investment spend} & \quad \text{Decrease infrastructure investment spend} \\
\text{Around the same level of infrastructure} & \quad \text{Around the same level of infrastructure} & \quad \text{Around the same level of infrastructure} & \quad \text{Around the same level of infrastructure} & \quad \text{Around the same level of infrastructure} & \quad \text{Around the same level of infrastructure} \\
\text{Increase infrastructure investment spend} & \quad \text{Increase infrastructure investment spend} & \quad \text{Increase infrastructure investment spend} & \quad \text{Increase infrastructure investment spend} & \quad \text{Increase infrastructure investment spend} & \quad \text{Increase infrastructure investment spend}
\end{align*}
\]

Base: All firms (excluding don’t know/refused responses).

Q. Thinking about your investment plans over the next five years, have you changed your plans at all due to coronavirus?

Q. For each of the following areas will your municipality increase or decrease spending on infrastructure investment due to coronavirus, or have around the same level of spending on this area?
Municipalities’ administrative capacities in green and digital areas are key to stepping up the twin transition and, though municipalities in Central and Eastern Europe exhibit some gaps in both areas, they are looking to catch up swiftly to Western and Northern Europe. This shows both increased awareness of the issues at stake as well as pointing to potential areas where these municipalities could be assisted as they seek to tool up and ready themselves for implementing related investments.

Municipalities in Central and Eastern Europe viewed as neutral the perceived impact of climate change.

A large share views economic transition risks as broadly neutral, with those identifying downside risks balanced by those that see upside dominating.

As in the wider European Union, downside risks dominate when looking at the expected impact of physical risks: 50% of municipalities in the regions perceive it as a challenge while only 5% of municipalities in the region perceive it as an opportunity.

**IMPACT OF TRANSITION AND PHYSICAL RISKS**

*Base: All municipalities (excluding don’t know/refused responses).*

Q. For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

---

**GREEN CAPACITY**

- Included
- Plan to include
- No plans

**DIGITAL SOPHISTICATION**

- Included
- Plan to include
- No plans

---

**IMPACT OF TRANSITION AND PHYSICAL RISKS**

*Base: All firms (excluding don’t know/refused responses).*

Q. Would you say that within your municipality the level of investment in infrastructure projects between 2017 and 2019 was broadly adequate, slightly lacking or substantially lacking in each of the following areas?
**BARRIERS TO INFRASTRUCTURE INVESTMENT**

- Municipalities in Central and Eastern Europe considered a lack of funds as the principal obstacle, with every second one declaring it a major issue (53%). This was followed by length of regulatory process and regulatory uncertainty (47% said this was a major obstacle). These barriers are broadly in line with those identified at the EU level.

**BARRIERS TO GREEN INFRASTRUCTURE INVESTMENT**

- When asked to identify the two principal barriers to investment in green infrastructure, the vast majority of municipalities in Central and Eastern Europe identified availability of funding as one of these (87%). This share exceeds that of the EU level (69%).

- The next most-frequently named as among the top two barriers were length of regulatory process (34%) and regulatory uncertainty (28%); higher shares than in the wider EU.
EX ANTE ASSESSMENTS

- The share of municipalities in Central and Eastern Europe that carried out independent ex ante assessments of infrastructure projects is slightly above the EU average.

- The difference to the European Union is accentuated for socioeconomic as well as and environmental impact. Around 62% of municipalities in Central and Eastern Europe often perform a budgetary and economic cost benefit analysis, 50% evaluate socioeconomic impact of the project, and 65% evaluate its environmental impact, which are all above the respective EU averages. Only 32% often evaluate their financing options.

COORDINATION IN PLANNING AND IMPLEMENTATION

- Overall, Central and Eastern Europe’s share of municipalities coordinating with other state bodies was in line with the rest of the European Union.

- Central and Eastern European municipalities are most likely to cooperate with their neighbouring municipalities and with networks of municipalities with similar policy priorities, rather than with other municipalities in their region.
The sources of infrastructure investment finance of Central and Eastern European municipalities were in line with the EU average, with a slightly greater average share of capital transfers and correspondingly lower share of own resources.

Own resources (39%) and transfers (44%) fund most investment activities, with than 17% funded through external financing.

The share of municipalities in Central and Eastern Europe who did not require external borrowing was 21%, below the EU average of 30%.

External credit constrained municipalities were clearly more prevalent in Central and Eastern Europe (28%) than the European average (16%).
From 2017 through 2019, 38% of municipalities in Central and Eastern Europe claimed to have benefited from EU financial instruments.

This share is expected to double in the coming years, as more than two-thirds (69%) of municipalities in Eastern and Central Europe expect to benefit from EU financial instruments in the next five years.

From 2020 through 2025, 63% of municipalities in Central and Eastern Europe are looking to benefit from EU-funded financial instruments. These shares are slightly above the EU average.

Base: All municipalities (excluding don’t know/refused responses).

Q. In the last three years, has your municipality benefited from EU-funded instruments such as subsidised loans, guarantees and other risk bearing mechanisms?

Every second municipality is looking to making use of public-private partnerships in the next five years.

Base: All firms (excluding don’t know/refused responses).

Q. In the next five years, in order to finance planned investment projects, does your municipality plan to benefit from an EU-funded financial instrument or public-private partnerships?
The Municipality Infrastructure Investment module of the EIB Investment Survey gathered information from officials at local municipalities on local infrastructure investment activities and needs. This overview of Southern Europe presents selected findings based on telephone interviews with 162 municipalities. Interviews were carried out between May and August 2020. The results are weighted by the share of urban population.

### Key findings

<table>
<thead>
<tr>
<th><strong>Investment activity</strong></th>
<th>In contrast with the EU peers, the majority of Southern European municipalities decreased or kept constant investment. A notable exception is digital infrastructure, in which two-thirds increased investment. Investment was focused on maintenance and repair.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Investment gaps</strong></td>
<td>The majority of municipalities considered that infrastructure investment has been lacking in the years leading up to the pandemic, particularly for assets pertaining to climate change mitigation and adaptation, and to a lesser extent urban transport and digital infrastructure.</td>
</tr>
<tr>
<td><strong>Administrative capacity</strong></td>
<td>Southern European municipalities scored relatively poorly with respect to green administrative capacity, while they were broadly in line with the EU on the digital front. They plan to build these capacities in coming years.</td>
</tr>
<tr>
<td><strong>Investment priorities</strong></td>
<td>Pre-pandemic, the majority of municipalities in Southern Europe had planned on increasing infrastructure investment, especially in digital, and to a lesser extent in climate mitigation and adaptation. In spite of gaps identified in urban transport, the share intending to invest here is relatively low. In the next five years, modernisation &amp; adaptation are set to increase at the expense of new build.</td>
</tr>
<tr>
<td><strong>Impact of COVID-19</strong></td>
<td>By the summer of 2020, already 40% of Southern European municipalities expected that the pandemic would affect their investment plans, more then the EU average. The broad investment increase was to be focused on social and digital infrastructure.</td>
</tr>
<tr>
<td><strong>Investment barriers</strong></td>
<td>The main barriers to infrastructure investments in the region were the length of approval process, regulatory uncertainty and lack of funds.</td>
</tr>
<tr>
<td><strong>Investment efficiency</strong></td>
<td>About half the municipalities regularly conduct independent assessments before going ahead with infrastructure projects. Less than 40% of municipalities consulted with peers.</td>
</tr>
<tr>
<td><strong>Investment finance</strong></td>
<td>On average, nearly half of infrastructure investment was financed through capital transfers. With external finance playing a minor role, less than 14% of municipalities are external finance constrained. By contrast, 60% of municipalities had benefitted from financial instruments; this is set to rise to 85% in the coming five years.</td>
</tr>
</tbody>
</table>
In contrast to other EU regions where nearly three-quarters of municipalities increased infrastructure investment, in Southern Europe over half of municipalities decreased investment or kept it constant.

Investments had been particularly low in climate change adaptation (26%) and urban transport (28%).

A notable exception is digital infrastructure, in which 64% of municipalities reported having increased their investments.

The share of municipalities reporting infrastructure investment gaps was higher in Southern Europe than elsewhere.

Despite investments having increased from 2017 through 2019, a majority of municipalities (55%) deemed digital infrastructure as lacking.

Adequacy was most frequently deemed lacking for infrastructure assets pertaining to both climate change mitigation (76%), climate change adaptation (79%) and, to a lesser extent, urban transport (60%).

Q. Thinking back to between 2017 and 2019, did investment in your municipality increase, decrease or stay around the same in each of the following areas?

Q. Would you say that within your municipality the level of investment in infrastructure projects between 2017 and 2019 was broadly adequate, slightly lacking or substantially lacking in each of the following areas?
Municipalities in Southern Europe planned on significantly increasing their investment activities in digital infrastructure from 2020 through 2025 (71%), and to a lesser extent in climate change mitigation (58%) and adaptation (56%).

They had planned limited investments in urban infrastructure (only 43% of municipalities plan on investing in this sector), however, despite having identified this area as lacking investment.

In the three years to the pandemic, the shares of municipalities investing in maintenance and repair (41%), modernisation and adaptation (31%) and new build (28%) was in line with the EU average.

Plans for the next five years were to invest significantly less in new build (20%) and invest significantly more in modernisation and adaptation (43%). The share dedicated to maintenance and repair was expected to remain the same (38%), whereas it was expected to decrease at the EU level.
RESILIENCE TO COVID-19: HEALTH AND DIGITAL INFRASTRUCTURE

- By the summer of 2020, 43% of Southern European municipalities reported a lack of adequacy of their health infrastructure to the pandemic, compared to 28% of municipalities at the EU level.

- This gap persists when looking at the resilience of digital infrastructure to COVID-19: 53% of Southern European municipalities indicated poor adequacy, compared to 37% at the EU level.

- Just over every second Southern European municipality anticipated having to change their investment plans due to the pandemic, a larger share than the EU average (40%).

- Looking at impact of the pandemic on each type of asset, increased investments in social (63%) and digital infrastructure (62%) dominated.

Base: Municipalities whose investment plans were impacted by COVID-19 (excluding don't know/refused responses).

Q. For each of the following areas will your municipality increase or decrease spending on infrastructure investment due to coronavirus, or have around the same level of spending on this area?
Southern European respondents were, on balance, more optimistic than peers elsewhere regarding the impact of the transition to a lower carbon economy on their municipality. 41% of them associate transition with opportunities while 22% associate it with challenges.

In line with the remainder of the European Union, concerns dominated when looking at the expected impact of physical risks related to climate change: 69% of municipalities in the region perceived it as a challenge while only 7% perceived it as an opportunity.

Base: All municipalities (excluding don't know/refused responses).

Q. For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

- Municipalities in Southern Europe have developed digital capacities broadly in line with the EU average and plan to develop these further. They lag behind for green capacities, however, and though they intend to develop here, too, the pace at which they envisaged doing so would not see them closing the gap with their peers in the European Union.

**IMPACT OF TRANSITION AND PHYSICAL RISKS**

Base: All firms (excluding don’t know/refused responses).

Q. On balance, over the next five years what economic impact do you expect this transition to have on your municipality?

Q. Thinking about perceived climate change and changing weather patterns: over the next five years, what impact do you expect the physical risks associated with these weather events to have on your municipality?
Municipalities in Southern Europe more frequently identified barriers to investment, with major barriers much more common. Lack of funding was a major issue for two-thirds (68%), as was length of regulatory processes (67%) and regulatory uncertainty (64%). These barriers were also the principal barriers identified in the EU as a whole, only more frequent and severe. In addition to these, a lack of technical capacity and stakeholder coordination were still identified as major obstacles by one-third.

Municipalities in Southern Europe clearly identified availability of funding as the main barrier to green infrastructure investment (80%). This share exceeds what was observed at the European Union as a whole (69%). Length of regulatory process (29%) and regulatory uncertainty (38%) were also identified more frequently barriers than at the EU level, with lack of technical affecting one-fifth.
Independent impact assessment appeared not to be the norm for municipal infrastructure investment projects. The share of municipalities in Southern Europe that carried out such assessment is slightly higher than the EU average, however.

Around 62% of municipalities in Southern Europe often performed a budgetary and economic cost benefit analysis, 43% often evaluated the socioeconomic impact of the project, 47% often evaluated its environmental impact, and 43% often evaluated financing options.

The share of municipalities cooperating with other public bodies was in line with the rest of the European Union, except for networks of municipalities, with which they coordinate more often than the EU average (40% vs. 32%).
FINANCING COMPOSITION

- Almost half (48%) of the infrastructure of Southern European municipalities was financed via capital transfers from regional governments, national governments or the European Union.
- 43% of investment activities were funded through own resources.
- Only 9% was funded through external financing raised via capital markets or in the form of loans.

**Base:** All municipalities (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities were financed by each of the following in the last financial year?

NO BORROWING REQUIRED | EXTERNAL FINANCE CONSTRAINED

- The share of municipalities in Southern Europe that did not require external borrowing is 41%, above the EU average of 29%.
- The share of external credit constrained municipalities in Southern Europe (14%) was in line with the European average (14%).

**Base:** All municipalities (excluding don’t know/refused responses).

The left-hand graph shows the share of municipalities that did not rely on any external financing because they did not need any, expressed as a percentage of the total number of municipalities. The right-hand graph shows the share of municipalities that did not rely on any external financing because they were constrained, and the share of municipalities that relied on external financing but expressed as a percentage of the total number of municipalities.
USE OF EU FINANCIAL INSTRUMENTS

- Compared to the EU average, a large share of Southern European municipalities reported having benefited from EU financial instruments to fund their infrastructure investments.
- The share is set to increase from 60% that benefited from 2017 through 2019 to 86% in the next five years.

Base: All municipalities (excluding don’t know/refused responses).

Q. In the last three years, has your municipality benefitted from EU-funded instruments such as subsidised loans, guarantees and other risk-bearing mechanisms?

USE OF PUBLIC-PRIVATE PARTNERSHIPS, 2017-2019

- From 2020 through 2025, two-thirds of municipalities plan to make use of public-private partnerships.

Base: All firms (excluding don’t know/refused responses).

Q. In the next five years, in order to finance planned investment projects, does your municipality plan to benefit from EU-funded financial instruments or public-private partnerships?
### Key findings

**Investment activity**
- Nearly three-quarters of municipalities in Western and Northern Europe increased investment in infrastructure in the three years leading up to the pandemic. Investments targeted digital and social infrastructures, as well as those mitigating climate change.

**Investment gaps**
- Just over half of municipalities considered that pre-pandemic infrastructure investment has been adequate. Investments were most frequently deemed lacking for climate mitigation and adaptation, followed by digital infrastructures.

**Administrative capacity**
- Green administrative capacity and digital sophistication tend to be better developed in WN, though the rest of the EU is catching up.

**Investment priorities**
- Pre-pandemic, municipalities had planned on increasing infrastructure investment, especially in those areas where gaps had been identified, notably climate mitigation and adaptation, as well as digital infrastructure. Municipalities expected to significantly decrease the share spent on maintenance and repair.

**Impact of COVID-19**
- The majority of municipalities deemed their health and digital infrastructure adequate to cope with COVID-19. Still, municipalities' anticipate enhancing investment in social and digital infrastructures.

**Investment barriers**
- The most frequently reported barriers to infrastructure investments are regulatory red tape and lack of technical capacity. In terms of major barriers, lack of funds was the most noted one.

**Investment efficiency**
- Just over half of municipalities regularly conduct independent assessment before going ahead with infrastructure projects. Only one-third are in the habit of doing so to evaluate their financing options. Less than 40% of municipalities coordinate with peers.

**Investment finance**
- On average, municipalities fund 45% of investment via own funds, a third through capital transfers and a quarter through external finance. Only 17% of municipalities reported having benefited from EU financial instruments; the share is set to increase significantly. Over the coming five years Less than 10% of municipalities in WN are external credit constrained.
Nearly three-quarters of Western and Northern municipalities (72%) had increased their investments in infrastructure over the three years leading up to the pandemic.

Infrastructure investments increased particularly frequently in digital (78%), social (67%), and climate change mitigation (64%).

These are in line with the EU average, but stronger. Western and Northern European municipalities invest in climate change mitigation (64%) and adaptation (56%) more than the EU average.

The number of municipalities reporting infrastructure investment gaps is significantly lower in Western and Northern Europe than in the rest of the European Union.

Adequacy of investment is most frequently deemed lacking for infrastructure assets pertaining to both climate change mitigation (56%), climate change adaptation (60%) and, to a lesser extent, digital infrastructure (39%).
INFRASTRUCTURE INVESTMENT ACTIVITY, 2017-2019

From 2020 through 2025, Western and Northern European municipalities plan on significantly increasing their investment activities in areas where they identify gaps: digital (71%), climate change mitigation (71%), climate change adaptation (68%) and, to a lesser extent, social infrastructure (57%).

Urban transport and water and waste utilities receive relatively little attention.

INVESTMENT PRIORITIES

From 2017 through 2019, 41% of municipalities invested in maintenance and repair, 39% in modernisation and adaptation, and 28% in completely new infrastructure.

When looking at the next five years, the share of municipalities who plan on investing in maintenance and repair decreases (30%), while the share of municipalities who plan on investing in completely new infrastructure increases (33%). These numbers are in line with the EU average.
RESILIENCE TO COVID-19: HEALTH AND DIGITAL INFRASTRUCTURE

- Compared with EU peers, municipalities in Western and Northern Europe perceive their infrastructure to be more resilient to the pandemic.
- By the summer of 2020, only 11% of Western and Northern European municipalities reported a lack of adequacy of their health infrastructure to the pandemic, compared to 28% of municipalities at the EU level.
- Looking at the resilience of digital infrastructure to COVID-19: only 26% of Western and Northern European municipalities report a lack of adequacy, compared to 37% at the EU level.

Western European municipalities’ plans have been impacted by COVID-19 to a lesser extent than the EU average, as only 27% of them have changed their investment plans due to the pandemic.

Looking at the net balance of the pandemic’s impact on investments, municipalities in Western and Northern Europe were particularly inclined to perceive a need to increase investment in social infrastructure (31%) and digital infrastructure by (38%). Investments in other types of infrastructure have remained the same overall.
For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

- Their perception of the impact of the climate change transition is broadly balanced and very much in line with the EU average. 24% of municipalities associate transition risks with opportunities while 26% associate them with challenges.
- As elsewhere in the European Union, concerns dominate when looking at the expected impact of physical risks: two-thirds of municipalities in the region perceive it as a challenge while barely one in 20 perceive it as an opportunity.

Base: All municipalities (excluding don’t know/refused responses).

Q. For your municipality’s infrastructure investments, have you included, do you plan to include or do you have no plans to include in the next five years, any of the following considerations or types of projects?

- Municipalities in Western and Northern Europe tend to have more developed green administrative capacity and digital sophistication when compared to peers elsewhere in the European Union. They also intend to further develop these, though the pace is slowing, which would see municipalities in other regions catch up.

Base: All firms (excluding don’t know/refused responses).

Q. On balance, over the next five years what economic impact do you expect this transition to have on your municipality?

Q. Thinking about perceived climate change and changing weather patterns: over the next five years, what impact do you expect the physical risks associated with these weather events to have on your municipality?

Impact of transition and physical risks

Base: All firms (excluding don’t know/refused responses).

The state of local infrastructure investment in Europe: EIB Municipalities Survey 2020
BARRIERS TO INFRASTRUCTURE INVESTMENT

- Compared to their peers in the European Union, municipalities in Western and Northern Europe tended to identify barriers as severe less frequently. As elsewhere, a lack of funds was most frequently considered a major barrier (42%), followed by length of regulatory process (34%) and technical capacity (32%). When minor barriers are included, regulatory uncertainty and stakeholder agreement were also among the most frequently cited barriers.

Municipalities in Western and Northern Europe clearly identified the availability of funding as the main barrier to green infrastructure investment (58%); the share was well below the EU average, however.

This is followed by a lack of technical capacity, technological uncertainty and regulatory red tape. The fact that technical and technological concerns feature relatively frequently is probably linked to the complexity of the projects under consideration.

**Base:** All municipalities (excluding don’t know/refused responses).

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?

BARRIERS TO GREEN INFRASTRUCTURE INVESTMENT

- Municipalities in Western and Northern Europe clearly identified the availability of funding as the main barrier to green infrastructure investment (58%); the share was well below the EU average, however.

- This is followed by a lack of technical capacity, technological uncertainty and regulatory red tape. The fact that technical and technological concerns feature relatively frequently is probably linked to the complexity of the projects under consideration.

**Base:** All firms (excluding don’t know/refused responses).

Q. Thinking of green or climate related infrastructure investment, which are the two main obstacles to this type of investment?
EX ANTE ASSESSMENTS

- Independent impact assessments do not appear to be the norm for municipal infrastructure investment projects, and the share of municipalities in Western and Northern Europe that carry out such assessments is slightly below the EU average.

- Around half of municipalities often perform a budgetary and economic cost-benefit analysis, 40% often evaluate socioeconomic impact of the project, 82% often evaluate its environmental impact, and 39% often evaluate their financing options.

**Base**: All municipalities (excluding don’t know/refused responses).

**Q.** Before going ahead with an infrastructure project, how often does your municipality obtain an independent assessment of any of the following?

COORDINATION IN PLANNING AND IMPLEMENTATION

- Overall, Western and Northern Europe's share of municipalities coordinating with other bodies is in line with the rest of the EU.

- They are most likely to cooperate with their neighbouring municipalities (40%) and with networks of municipalities with similar policy priorities (27%), rather than other municipalities in their region (17%).

**Base**: All municipalities (excluding don’t know/refused responses).

**Q.** Thinking about planning and implementation of infrastructure projects, how often does your municipality coordinate its investment projects with …?
FINANCING COMPOSITION

- On average, 30% of the infrastructure of Western and Northern European municipalities is financed through projectspecific capital transfers from regional governments, national governments or the European Union. 44% of investment activities are funded through own resources. 25% is funded through external financing raised via capital markets or in the form of loans.

Base: All municipalities (excluding don’t know/refused responses).

Q. Can you tell me approximately what proportion of your infrastructure investment activities were financed by each of the following in the last financial year?

- NO BORROWING REQUIRED
- EXTERNAL FINANCE CONSTRUANED

- The share of municipalities in Western and Northern Europe that did not require external borrowing is 20%, slightly below the EU average of 26%.

- Only one in ten municipalities faces external credit constraints, below the European average (14%).

Base: Municipalities that didn’t rely on external finance (excluding don’t know/refused responses).

Q. Your municipality didn’t rely on external finance to fund its infrastructure investment activities in the last three years, was this because...? 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 in order to execute the planned investments, or only some of the external finance you sought?
USE OF EU FINANCIAL INSTRUMENTS

- Only 17% of Western and Northern European municipalities have benefited from EU financial instruments to fund their infrastructure investments from 2017 through 2019.
- This share is expected to reach 44% in the next five years, however this number remains well below the EU average of 63%.

Base: All municipalities (excluding don’t know/refused responses).

Q. In the last three years, has your municipality benefitted from EU-funded instruments such as subsidised loans, guarantees and other risk bearing mechanisms?

USE OF PUBLIC-PRIVATE PARTNERSHIPS, 2020-2025

- From 2020 through 2025, about 36% of municipalities are considering making use of public-private partnerships.

Base: All firms (excluding don’t know/refused responses).

Q. In the next five years, in order to finance planned investment projects, does your municipality plan to benefit from EU funded financial instrument or public-private partnerships?
Technical note

The sample comprises answers from 685 EU municipalities interviewed. Interviews were conducted between May and August 2020 in all Member States. The survey aims to be representative at the EU level, allocating the number of interviews to each Member State according to national shares of urban population in the European Union, subject to minimum and maximum thresholds. Minor deviations from this key occurred in spite of best efforts. Reported results are weighted according to national share of urban population. Results are presented for the aggregate of the European Union and for the three macro regions. For illustrative purposes, the distributions of size and degree of urbanisation for the various macro regions are graphically provided below.

NUMBER OF MUNICIPALITIES INCLUDED FOR EACH MACRO REGION

<table>
<thead>
<tr>
<th>Macro Region</th>
<th>Municipalities</th>
</tr>
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<tbody>
<tr>
<td>European Union</td>
<td>685</td>
</tr>
<tr>
<td>Central and Eastern Europe</td>
<td>255</td>
</tr>
<tr>
<td>Southern Europe</td>
<td>162</td>
</tr>
<tr>
<td>Western and Northern Europe</td>
<td>268</td>
</tr>
</tbody>
</table>

Degree of urbanisation by region

Size of municipalities by region

The state of local infrastructure investment in Europe: EIB Municipalities Survey 2020

Base: All municipalities.
### Glossary and abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>CCA</td>
<td>Climate change adaptation</td>
</tr>
<tr>
<td>CEE</td>
<td>Central and Eastern Europe, a regional grouping that includes the Member States: Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.</td>
</tr>
<tr>
<td>CCM</td>
<td>Climate change mitigation</td>
</tr>
<tr>
<td>COFOG</td>
<td>Classification of functions of government</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GFCF</td>
<td>Gross fixed capital formation</td>
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<tr>
<td>PPP</td>
<td>Public private partnership</td>
</tr>
<tr>
<td>SE</td>
<td>Southern Europe, a regional grouping that includes the Member States: Cyprus, Greece, Italy, Malta, Portugal and Spain.</td>
</tr>
<tr>
<td>WN</td>
<td>Western and Northern Europe, a regional grouping that includes the Member States: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands and Sweden.</td>
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