

# Transport Lending Policy 2022

The Way Forward

Investing in a cleaner and  
smarter transport system



European  
Investment  
Bank

*The EIB bank*



# Transport Lending Policy 2022

The Way Forward

Investing in a cleaner and  
smarter transport system

## Transport Lending Policy 2022: The Way Forward – Investing in a cleaner and smarter transport system

© European Investment Bank, 2022.

All rights reserved.

All questions on rights and licensing should be addressed to [publications@eib.org](mailto:publications@eib.org)

For further information on the EIB's activities, please consult our website, [www.eib.org](http://www.eib.org).

You can also contact our info Desk, [info@eib.org](mailto:info@eib.org).

Published by the European Investment Bank.

European Investment Bank  
98-100, boulevard Konrad Adenauer  
L-2950 Luxembourg  
+352 4379-1  
[info@eib.org](mailto:info@eib.org)  
[www.eib.org](http://www.eib.org)  
[twitter.com/eib](https://twitter.com/eib)  
[facebook.com/europeaninvestmentbank](https://facebook.com/europeaninvestmentbank)  
[youtube.com/eibtheubank](https://youtube.com/eibtheubank)

To accommodate scheduling limitations, this publication has not undergone standard EIB copyediting and proofreading.

# Contents

Executive summary	v
<b>1. Introduction and scope</b>	<b>1</b>
<b>2. Challenges facing the transport sector</b>	<b>4</b>
Decarbonisation	4
Doing no significant harm to the environment	5
Resilient infrastructure	5
Resource efficiency and the circular economy	6
Safety and security	6
Connectivity	7
Equal accessibility	8
Development	9
Digitalisation and automation	10
Sustainable cities	11
Funding and financing	11
Other challenges	12
<b>3. EU mobility policy</b>	<b>13</b>
<b>4. From challenges to solutions</b>	<b>15</b>
Safe and secure transport	16
Accessible transport	17
Green and resilient transport	17
Efficient transport	18
Transforming transport	18
<b>5. Priorities for EIB support</b>	<b>19</b>
Requirements for all sectors	19
Urban mobility	20
Extra-urban rail	22
Extra-urban roads	24
Inland waterways	26
Maritime transport	28
Aviation	29



## Executive summary

- 0.1 Transport is of fundamental importance for economic growth, employment and equality. The free movement of people and goods supports livelihoods and underpins the global economic and social system reflected in the founding principles of the European Union (EU).
- 0.2 The transport sector is at a critical juncture in its development. Against a background of sweeping technological and social change, the sector must now modernise and at the same time rid itself of its dependence on fossil fuels. The challenges facing the sector are immense. Transport must lead the recovery by transforming into a new transport system; one that is both accessible and efficient, but also clean for the climate, green for the environment, resilient and safe — a truly sustainable transport system.
- 0.3 The negative climate, environmental, safety and congestion externalities of transport as well as its unequal availability to users have reached unacceptable levels. Transport is the only economic sector in which greenhouse gas emissions continue to grow. Road deaths and injuries have reached pandemic proportions. Increasing traffic volumes, especially in fast-growing urban areas, not only cause congestion, but also act as a barrier to equality and opportunity. Such transport poverty compounds social and financial disadvantages by denying adequate access to education, healthcare, work, leisure and social contact.
- 0.4 Most importantly, direct greenhouse gas emissions from transport will need to reach their peak in the early 2020s and start to decline thereafter. This means that the current stock of transport vehicles will need to be replaced rapidly with clean vehicles, and that significant investments in supporting infrastructure will be required. Transport infrastructure must be adapted for use by clean and smart vehicles and become climate resilient. It must also be expanded to meet future demand so as to avoid growth bottlenecks and congestion. This will require significant new investment, especially given that there is already a significant backlog of investment in transport infrastructure. The transformation of the transport sector therefore requires huge investment volumes that must be carefully prioritised and implemented to achieve maximum impact at minimum cost.
- 0.5 The European Union has committed to achieving climate neutrality by 2050. The European Commission's European Green Deal sets out policy initiatives to achieve this goal. As the EU climate bank, the European Investment Bank Group (EIB Group) is committed to ensuring that all its operations are in line with the objectives of the Paris Agreement. To that end, the EIB published a Climate Bank Roadmap in November 2020 detailing the criteria that must be met by all EIB-supported operations. The criteria specified in the roadmap cover all sectors of the EIB's activities, including transport. They determine the types of operations that are eligible for EIB support. The EIB's sector lending policies, including this Transport Lending Policy must be fully aligned with the eligibility criteria specified in the Climate Bank Roadmap. While the Transport Lending

Policy adopted in 2011 was a stand-alone policy document, this new Transport Lending Policy is subordinated to the Climate Bank Roadmap.

- 0.6 This revised Transport Lending Policy identifies priorities for EIB support for the transport sector and the provision of mobility services, in line with the limits set by the Climate Bank Roadmap. These priorities seek to identify, among the eligible types of investments in mobile assets and transport infrastructure, those that are expected to be the most effective in addressing the multiple challenges facing the transport sector and that will therefore have the greatest impact in transforming transport and making it more sustainable.
- 0.7 The overarching framework adopted in this Transport Lending Policy for prioritising EIB support for the transport sector draws on the United Nations' Sustainable Development Goals (SDGs), the European Commission's Green Deal<sup>1</sup> and the Sustainable and Smart Mobility Strategy<sup>2</sup>. Over the past few years, the EIB has actively contributed to a growing consensus among transport policy stakeholders that a sustainable transport system must also be safe, accessible, green and efficient. The EIB will henceforth prioritise its eligible investments based on their contribution to four fundamental and interdependent pillars of sustainable transport:



**SAFE AND SECURE** — A safe system that prevents unnecessary loss of life and protects users from attack, discrimination or harassment.



**ACCESSIBLE** — An affordable and accessible network available to all who can benefit from the opportunities it provides.



**GREEN AND RESILIENT** — A clean, carbon-neutral and resilient system that does no significant harm to the environment.



**EFFICIENT** — A smart and efficient system that achieves its benefits by using technology to minimise the use of resources and to prevent congestion.

<sup>1</sup> [https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en)

<sup>2</sup> [https://transport.ec.europa.eu/transport-themes/mobility-strategy\\_en](https://transport.ec.europa.eu/transport-themes/mobility-strategy_en)

0.8 Based on this framework, the priorities for EIB support for the transport sector identified in this document include, most notably, the following:

- Collective transport
- Shared and active transport, especially in cities
- Zero-emission transport vehicles
- Alternative fuel infrastructure
- Intelligent transport systems
- Intermodal and multimodal transport
- Safe System approach to road safety
- Resilience of transport infrastructure, including the rehabilitation and upgrade of existing assets
- Completion of networks in all transport sectors, with particular focus on Trans-European Transport Network (TEN-T), cross-border connections and countries with significant investment or development needs

0.9 The priorities identified in this policy will enable multiple objectives under the SAGE framework (safety and security, accessibility, greenness and resilience, efficiency) to be achieved simultaneously. They will also enable the EIB to prioritise projects and activities that will help to accelerate the transformation of the unsustainable transport systems of today into the sustainable transport systems of tomorrow.



# 1. Introduction and scope

- 1.1. Transport is of fundamental importance for economic growth, employment and equal opportunity. The movement of people and goods supports livelihoods and underpins the global economic and social system. From the supply of infrastructure and mobile assets to providing efficient mobility services, the transport system is crucial for connecting people and cities, businesses, industries and public services. Historically, transport has also served as an engine of technological change and a barometer of our times. From tall ships and steam trains to sleek jets, transport has both driven and enabled technological progress.
- 1.2. The transport sector, including the provision of transport services, is at a critical juncture in its development. Against a background of sweeping technological and social change, the sector must now modernise and at the same time rid itself of its dependence on fossil fuels. The challenges facing the sector are immense. Transport must lead the recovery from the pandemic and security crises by transforming into a new transport system; one that is both accessible and efficient, but also clean for the climate, green for the environment, resilient and safe — a truly sustainable transport system.
- 1.3. The investment needed in the European Union to transform transport is enormous. The entire current stock of mobile assets using fossil fuels must be replaced by clean vehicles and vessels. Transport infrastructure must be adapted to the requirements of clean vehicles and to the effects of climate change. Old infrastructure requires enhanced maintenance and refurbishment, especially as the maintenance backlog has increased significantly in recent years. In addition, new infrastructure is needed so that lack of capacity does not restrict the freedom of movement of people and goods in the future.
- 1.4. Within the European Union, the free movement of people is one of the fundamental rights of EU citizens, and the free movement of goods is also a cornerstone of the single market. In the absence of sufficient investment in transport infrastructure supporting clean transport, congestion will worsen and transport will become a bottleneck for the movement of people and goods, thus slowing down employment, growth and development in Europe and beyond. To allow transport to fulfil its enabling role, while minimising the cost of transport to the planet, investment in sustainable transport infrastructure will need to be made in parallel with the development of clean vehicle technologies and appropriate pricing policies. As transport infrastructure assets have economic lives extending over decades, that investment is an imperative already now.
- 1.5. This challenge also represents an opportunity for the European Investment Bank (EIB) as the EU climate bank.
- 1.6. The transport sector has traditionally been one of the main recipients of EIB support. Over the past six decades, the EIB has been a major source of finance for the construction of transport networks connecting the EU Member States. Over time, the EIB has expanded its support to also cover transport vehicles, most notably rolling stock

in the rail sector as well as vehicles for public transport and maritime shipping. It has also expanded its support geographically to countries and regions outside the European Union to contribute to their connectivity as well as economic and social development.

- 1.7. The EIB's role as the EU climate bank has changed the types of operations that it supports. With the publication of its Climate Bank Roadmap<sup>3</sup>, the Bank committed to aligning all of its lending with the Paris Agreement<sup>4</sup>, including an increased ambition to support the decarbonisation of the transport sector<sup>5</sup>. Following the adoption of the Climate Bank Roadmap, the EIB no longer supports increased airport capacity, and further support for the capacity expansion of large<sup>6</sup> roads is subject to a more stringent economic test, compatible with a shadow cost of carbon in line with climate neutrality by 2050 and slower growth of transport demand. The EIB no longer supports the storage and transport of fossil fuels, and it has also aligned itself with the emerging EU Sustainable Finance Taxonomy for transport vehicles, as specified in the Climate Bank Roadmap.
- 1.8. The new Transport Lending Policy is subject to and compatible with the provisions of the adopted Climate Bank Roadmap. The roadmap defines the criteria for investment projects to be eligible for EIB support, and any changes to those criteria will be considered in the context of the Climate Bank Roadmap review process, as specified in the roadmap itself. This Transport Lending Policy will thus not contain any changes to eligibility criteria in the transport sector. Given those criteria, this Transport Lending Policy outlines the EIB's priorities for supporting the transformation of the transport sector. It responds to major EU policy and regulatory changes, and replaces the previous policy published in 2011. This Transport Lending Policy therefore outlines the EIB's priorities among the eligible types of investment projects, covering both transport infrastructure and transport vehicles and mobility services.
- 1.9. As part of the review process, the EIB carried out a public consultation from 26 July to 29 October 2021, including an online public consultation event held on 14 October 2021, and received an extensive set of written contributions from a wide variety of stakeholders. The Bank's response to the public consultation can be found on the EIB website<sup>7</sup>. The Bank would like to thank all those stakeholders who took the time to respond to this exercise.
- 1.10. The scope of the Transport Lending Policy is limited to EIB support for the roll-out of new innovative technologies and to investment in mature Paris-aligned technologies in the transport sector and the provision of mobility services. The transport sector also benefits to some extent from EIB support through separate but related policies and

---

<sup>3</sup> <https://www.eib.org/en/publications/the-eib-group-climate-bank-roadmap>

<sup>4</sup> <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

<sup>5</sup> The Paris alignment criteria for transport are detailed in Annex 2, Table C, pp. 90-91 of the Climate Bank Roadmap.

<sup>6</sup> As per the Climate Bank Roadmap, footnote 79, the terms "large" and "small" are used to denote projects with an investment cost of greater than or less than €25 million, respectively.

<sup>7</sup> <https://consult.eib.org/consultation/tlp-2021-en/>

guidance, notably covering indirect support (for small and medium-sized enterprises for example) and through its support for research, development and innovation. The Transport Lending Policy applies alongside other EIB policies, principles, standards and guidelines, including the EIB's public policy goals; the Bank's targets for support for climate action and environmental sustainability as well as regional cohesion in the European Union; the EIB operational plan<sup>8</sup> and targets specified therein; the additionality and impact measurement framework<sup>9</sup>; the environmental and social standards<sup>10</sup>; the climate strategy<sup>11</sup>; the energy lending policy<sup>12</sup>; the adaptation plan<sup>13</sup>; the credit risk guidelines<sup>14</sup>; other sectorial lending policies; the guide to procurement<sup>15</sup>; the guide to economic appraisal<sup>16</sup>; and the strategy on gender equality<sup>17</sup>. The Transport Lending Policy applies to the EIB's operations within and beyond the European Union. It covers all lending operations in the transport sector. Although focused on lending activities, it also refers to and benefits from the application of advisory and technical assistance activities in the transport sector. The Transport Lending Policy applies to all types of instruments used to extend the EIB's support: investment loans, intermediated lending, as well as equity-type instruments, including investments in infrastructure funds.

- 1.11. The transport sector is changing fast, and many uncertainties remain. The effects of the current global health and security crisis have yet to reveal themselves clearly, and the decarbonisation pathways for some transport sectors remain uncertain. This EIB Transport Lending Policy is therefore expected to be reviewed on a more regular and flexible basis than previously. The policy covers the period 2021-2027 and will be subject to a mid-term review in 2025, or as otherwise warranted by developments in the Sustainable Finance Taxonomy or in the context of the European Green Deal and EU external action. It could also be subject to an evaluation by the EIB Inspectorate General Evaluation Division at the end of its implementation period.

---

<sup>8</sup> <https://www.eib.org/en/publications/operational-plan-2022>

<sup>9</sup> [https://www.eib.org/attachments/publications/measuring\\_eib\\_group\\_impacts\\_en.pdf](https://www.eib.org/attachments/publications/measuring_eib_group_impacts_en.pdf)

<sup>10</sup> <https://www.eib.org/en/publications/eib-environmental-and-social-standards>

<sup>11</sup> <https://www.eib.org/en/publications/eib-climate-strategy>

<sup>12</sup> <https://www.eib.org/en/publications/eib-energy-lending-policy>

<sup>13</sup> <https://www.eib.org/en/publications/the-eib-climate-adaptation-plan>

<sup>14</sup> [https://www.eib.org/en/about/governance-and-structure/control-evaluation/control\\_credit-risk.htm](https://www.eib.org/en/about/governance-and-structure/control-evaluation/control_credit-risk.htm)

<sup>15</sup> <https://www.eib.org/en/publications/guide-to-procurement>

<sup>16</sup> <https://www.eib.org/en/publications/economic-appraisal-of-investment-projects>

<sup>17</sup> <https://www.eib.org/en/about/initiatives/gender/index.htm>

## 2. Challenges facing the transport sector

2.1. At a time when the world is grappling with the impact of a global security crisis and health pandemic there is perhaps no need to emphasise the vulnerability of the transport sector to shocks. Historically, such shocks have tended to be short-lived, with the global economy and associated transport demand returning to growth within a few years. However, these shocks can also provide a catalyst for long-term societal change, making the future of the sector particularly uncertain at the moment. At the same time, the transport sector also faces a series of longer-term challenges, and the combination of these provide a particularly difficult backdrop for the new EIB Transport Lending Policy.

### Decarbonisation

2.2. The decarbonisation challenge in the transport sector is particularly large, and success in decarbonising transport will be crucial for the decarbonisation of the economy more broadly. In contrast to nearly all other sectors, greenhouse gas emissions from the transport sector continue to rise, as trend growth in mobility demand outstrips emission reductions from efficiency gains. While overall emissions have declined by some 20% since 1990, those from transport have increased by as much as 30%<sup>18</sup>.

2.3. More than 70% of the greenhouse gas emissions from transport come from road transport, with passenger cars responsible for nearly half of all road transport emissions. Aviation and waterborne transport account for the majority of the remainder of transport emissions, with rail accounting for less than 1%<sup>19</sup>.

2.4. The European Union's ambition is to reach climate neutrality by 2050. To that end, the European Commission specifies the need to reduce transport emissions by 90% by 2050 (compared to 1990)<sup>20</sup> and has adopted the relevant legislation (Fit for 55<sup>21</sup>) to match the level of ambition and tighten the 2030 reduction targets. Although not the subject of this policy, the decarbonisation of transport will also have a major impact on the energy sector.

2.5. The development of electromobility is the most advanced alternative technology for the motive power of transport. The new hydrogen-based economy is also put forward as potentially part of the solution to decarbonising the transport sector, and advanced biofuels are also being developed for transport applications.

2.6. However, some alternative fuels are themselves fossil fuel-based or derived from fossil fuels and therefore do not contribute to the decarbonisation of the sector.

---

<sup>18</sup> [https://transport.ec.europa.eu/media-corner/publications/statistical-pocketbook-2020\\_en](https://transport.ec.europa.eu/media-corner/publications/statistical-pocketbook-2020_en); (Section 3.2.3)

<sup>19</sup> [https://transport.ec.europa.eu/media-corner/publications/statistical-pocketbook-2020\\_en](https://transport.ec.europa.eu/media-corner/publications/statistical-pocketbook-2020_en); (Sections 3.2.12 and 3.2.14)

<sup>20</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1576150542719&uri=COM%3A2019%3A640%3AFIN>

<sup>21</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52021DC0550&from=EN>

The technology associated with the use and storage of low-carbon fuels is developing at different speeds. Many of the problems of electromobility have been solved, but its roll-out at scale has been problematic. Other fuel sources are even further from establishing themselves in the market.

## Doing no significant harm to the environment

- 2.7. The gradual phasing out of fossil fuels from the transport sector will undoubtedly be accompanied by a significant reduction in airborne pollution and noise from transport sources. However, transport has many other impacts on the environment, and the increased use of alternative fuels and motive powers will themselves pose new challenges for the environment. Furthermore, any major overhaul of transport systems has the potential to create social impacts, positive as well as negative, which will have to be identified, accounted for and, if necessary, mitigated. It is therefore important to continue to carefully assess the adverse effects of transport projects with a view to mitigating their impact to at least the level of doing no significant harm.

## Resilient infrastructure

- 2.8. Climate adaptation is a key challenge for the coming decades, notably to make current and future transport infrastructure resilient to climate change. Increasingly, adverse weather events have not only short-term disruptive effects on accessibility, efficiency and transport safety, but also long-term effects due to increased deterioration of critical infrastructure, sometimes requiring the infrastructure to be taken out of operation. According to the EU Joint Research Centre, the economic damage to critical transport infrastructure in Europe alone could multiply sixfold by mid-century due to climate change.
- 2.9. Ensuring the resilience of a transport system starts with the proper planning and design of new infrastructure, but equally important is the proper maintenance, rehabilitation and renewal of existing transport assets. The slow rate of renewal of life-expired assets, worsened by insufficient and deferred maintenance of existing assets, can make transport systems even more vulnerable, and have resulted in a number of tragic accidents in recent years. Increasingly, transport assets also risk becoming technically obsolete if not upgraded and modernised regularly.
- 2.10. The resilience challenge is therefore not to return assets to their original condition but to go beyond that — to modernise and upgrade infrastructure networks so that they are safer, future-proof and adaptive to diverse technological, institutional, economic and social developments as well as to global warming and its related changing environmental conditions.
- 2.11. Due to the complex and vulnerable supply chains and interdependencies between the single market and markets in developing partner countries, investment in resilient and quality infrastructure in partner countries is critical. As the EU economy is increasingly dependent on efficient infrastructure in third countries, the disruption of such infrastructure will undoubtedly lead to the disruption of global supply chains and have

a corresponding negative effect on the European economy. Investment in the transport networks of partnership and mandate countries outside the European Union will therefore play an important role in the activities of the new EIB development branch, EIB Global, which will also benefit EU partner countries.

## Resource efficiency and the circular economy

- 2.12. Transport infrastructure and mobile assets are currently a major drain on scarce resources. The Bank will appraise the economic case and proposed technical solution of projects to satisfy itself that they represent an efficient use of resources. While the most obvious are energy, concrete, steel and other metals, the progressive digitalisation and electrification of transport are increasingly placing unsustainable demands on other scarce raw materials. The assessment of these new demands will be incorporated into the Bank's appraisal methodologies.
- 2.13. The decarbonisation and digitalisation of transport provides a particular challenge for the resource efficiency of the transport industry. The challenge is twofold: what to do with assets associated with the internal combustion engine that are replaced before the end of their economic life, and how to build better longevity into new digital-electric assets that will replace them.
- 2.14. As in other sectors, the current take-make-use-dispose approach of the transport sector will have to change rapidly to a circular economy-based approach aimed at extending the useful life of products, materials and resources for as long as possible. The more efficient use of resources through extended life will also have to go hand in hand with the recovery of scarce resources at the end of asset life. Thus, resource efficiency and the circular economy are connected concepts in moving towards more sustainable industrial competitiveness.

## Safety and security

- 2.15. Safety is a primary concern across all means of transport. Accidents associated with public forms of transport are high profile but tend to be relatively infrequent. Air, rail and waterway transport are statistically the safest modes of transport, while road traffic accidents are responsible for 97% of all transport fatalities worldwide. Avoidable death and injury on the world's roads continue to be a scourge of our times, and despite the previous Decade of Action by the United Nations (UN), over 1.3 million unnecessary deaths and an estimated 50 million injuries still occur annually worldwide, making it the leading killer of children and young people. As things stand, they are set to cause a further estimated 13 million deaths and 500 million injuries during the next decade and hinder sustainable development, particularly in low and middle-income countries.
- 2.16. The United Nations has declared road deaths and injuries a crisis of epidemic proportions. It has included road safety in the Sustainable Development Goals and anchored it in the UN Decade of Action for Road Safety, which aims to cut road deaths by half before 2030. The European Commission has mirrored this goal in the EU Road

Safety Policy Framework 2021-2030 and the Strategic Action Plan on Road Safety. It has also formulated a Vision Zero for 2050, which promotes a Safe System approach that does not accept any road deaths. From inception to completion, these long-term principles and goals will need to be systematically reflected in road projects throughout the project cycle.

- 2.17. Although government agencies have primary responsibility for designing and operating a safe road transport system, the role and influence of other entities are increasingly recognised as an important part of the Safe System approach. The private sector, civil society, academia, funders and other non-state entities can also contribute in important ways. The collective, global power of public and private organisations adopting road safety practices as part of their contributions to the SDGs, together with their endorsement, leadership and purchasing power, is substantial.
- 2.18. While the main focus of safe travel is on reducing the risk of accidents, there is a growing need in the modern and interconnected world to also carefully consider the safety of users and freight from an increasingly wide set of security threats. Transport security is about the protection of passengers, staff, the public, infrastructure, vehicles and cargo against attacks, crime and intentional harm. This includes cybercrime and terrorist attacks on the transport system, which have become increasingly widespread, and extends to the security of freight, both from theft and damage, but also as a means of enabling and supporting other crimes.
- 2.19. Transport security also includes physical aggression, sexual harassment or other forms of unwelcome behaviour, which are a particular problem for women and girls, young men, LGBTIQ people, older people and certain other groups depending on the public transport environment. Affected groups might have to adjust their means of travel, change the time of travel, route or transport mode or even decide not travel, which can lead to reduced accessibility, inconvenience and increased costs. Insecurity is therefore a major contributor to the growing problem of transport poverty.

## Connectivity

- 2.20. Within the European Union, the single market seeks to unite the Member States as one territory without any internal borders or other regulatory obstacles to the free movement of people, goods, capital and services. Since the 1990s, the Trans-European Transport Network (TEN-T) has been the infrastructure backbone of the single market, covering roads, railways, inland waterways, ports and airports. TEN-T also plays an important role in EU cohesion, aiming to provide efficient connections between central and peripheral EU regions, and therefore contributing to balanced development across the European Union. It also contributes to the European Green Deal objectives and the climate targets by providing incentives and laying down requirements for infrastructure development, and delivers the infrastructure basis for alternative fuel deployment.
- 2.21. The TEN-T investment challenge is significant and the networks are far from complete, most notably in some Member States in Central and Eastern Europe, but also in many Western European countries. Many existing links now require upgrading and updating,

and the cross-border connections of the network have proved particularly intractable. The decarbonisation and digitalisation challenges will also require significant upgrades to some of the older existing links.

- 2.22. The completion and efficient functioning of the EU internal market is critically dependent on the connectivity of the logistics chains that support it, and therefore on the infrastructure and technology that enable these logistics chains. The growing demand for the transport of goods and freight will need to be managed in a cleaner and more efficient manner in the future. This will affect all modes of transport and the challenges are complex. The containerisation of freight has dramatically altered the transport of goods but bulk cargo is still required to feed resources into the economy, and high-value cargo still has a time premium. Economies of scale are an important consideration, and shipping and rail therefore have advantages for longer journeys, but increasingly more journeys start and end with short last mile trips that often take place in urban areas. Different solutions are therefore required at each stage of the supply chain, some of which imply the need for intermodal capability.
- 2.23. Connectivity also concerns the integration of the European Union into the global economy. In enabling trade between Europe and other parts of the world, maritime transport plays a key role but road and rail are still important for trade with neighbouring countries. For passenger transport, aviation becomes harder to substitute as distances grow, and high-value and time-critical freight still requires efficient airborne links.
- 2.24. While the problems of connectivity and market access still require significant investment in the European Union, the same issues are further magnified in emerging and developing countries outside Europe. High-quality core transport networks are needed as the basis for economic and social development.

## Equal accessibility

- 2.25. There are many dimensions to people's different abilities to access transport and mobility services. A lack of transport provision is increasingly referred to as "transport poverty," because the impact of reduced mobility on people's opportunities in life can be compared to the effects of financial poverty. The geographical dimension of transport poverty concerns the unequal access to mobility for people in different regions or countries. The balanced and sustainable development of a country, and also of the European Union, requires the promotion of equal access to mobility for everyone, regardless of where they live. A lack of rural transport services can contribute to transport poverty even in more developed regions.
- 2.26. The social dimension of transport poverty is related to this in that people from disadvantaged groups tend to have worse access to transport and the life opportunities that depend on it, in particular quality jobs and education. Low-income groups depend heavily on subsidised transport services, but even when these are available, they do not necessarily address the locational needs. Gender inequalities in society at large translate into inferior access to, use of, and benefit from transport-related services and

employment opportunities. Primary carers' and single parents' high reliance on public and non-motorised transport, combined with their caring responsibilities, add to their relative transport poverty. The risks of gender-based violence, which women and girls, young men and LGBTIQ people in particular face on their way to and while using transport facilities also impact their mobility. Disabled access to transport services remains a persistent issue despite strong legislative support.

- 2.27. Women also remain largely underrepresented in the transport workforce, with only around 20% women in the EU transport sector. A more gender-balanced workforce would help the transport sector to better address women's needs as customers and service users and apply a gender equality perspective in the planning and implementation of transport policies, programmes and projects.

## Development

- 2.28. The preparation of major transport projects is challenging everywhere, but emerging and developing countries face a combination of additional institutional, financial and technical problems. Most of these challenges are common to all transport sectors. Macroeconomic issues and borrowing capacity can compromise the implementation of an otherwise solid project. Corruption, fragile institutions, unclear decision-making, security risks and political interference all lead to a weak institutional capacity to finalise projects. Emerging and developing countries often face more rapid urbanisation without the financial means to make the concomitant investments, and exhibit a stronger dependence on vehicles using fossil fuels due to a lack of access to clean alternative fuels. At the same time, rural populations experience transport poverty and the inability to get goods to market.
- 2.29. Some challenges in emerging and developing countries are transport sector-specific. Surfaced roads in emerging and developing countries are too few and of too low quality, contributing to high transport costs and making accessibility to basic services and markets a serious challenge — including in terms of high accident fatality rates.
- 2.30. Urban transport has good potential to prevent the steep rise in car ownership and severe urban sprawl observed in many emerging economies, thereby reducing CO<sub>2</sub> emissions, but requires comprehensive long-term urban planning and, within such a planning framework, high investment levels to replace or complement old, inefficient public systems or uncoordinated informal private initiatives.
- 2.31. The availability of basic rail infrastructure is often inadequate, with the quality of services sometimes reaching a high level of neglect. Those countries without an adequate network often lack the financial resources to develop one, and even for those with a reasonable network, it is often not electrified or has been allowed to deteriorate.
- 2.32. Around two-thirds of trade originates in developing countries, with most handled by the ports sector. Specific challenges for investments in ports relate to weak regulatory frameworks, and the environmental and social impact of port development in countries

with highly sensitive ecosystems and vulnerable communities. The recent interest in privately financed port developments from many developing countries adds an additional layer of complexity in these cases.

- 2.33. It is therefore important not to assume that the same solutions can be deployed in emerging and developing countries as elsewhere, or on the same timescale. The local context needs to be taken into account, including the strong need for technical assistance. At the same time, it is important that international financial institutions do not contribute to “locking in” emerging and developing countries to a non-sustainable development path.

## Digitalisation and automation

- 2.34. The disruptive changes being brought about by digitalisation are being felt primarily in urban and road passenger transport, but the digitalisation and automation of transport concern all modes, with the European Rail Traffic Management System (ERTMS) and the Single European Sky (SESAR) being prime examples from other sectors addressing safety, congestion and competitiveness challenges. Moreover, digitalisation and automation concern freight transport and logistics as much as passenger transport.
- 2.35. Vehicle and road infrastructure sensors and actuators are increasingly being rolled out in the transport sector, and are becoming gradually interconnected as part of the internet of things. They generate big data on traffic flows, the position and the status of vehicles, or the status of the road infrastructure itself. Access to this data in real time presents a significant opportunity for the transport sector, but travellers’ data privacy will need to be ensured, and investment in cybersecurity will help protect digital transport infrastructure.
- 2.36. The latest developments in big data, robotics and artificial intelligence are bringing us closer to the next level of autonomous driving. The increasing automation of vehicles and driving is expected to have substantial safety benefits. Autonomous driving represents an opportunity to develop new mobility solutions, and will help in offering mass transit solutions to people in locations where it was previously difficult because of high operational costs.
- 2.37. The digital revolution will also enable the more widespread development of mobility as a service (MaaS) solutions that have the potential to disrupt the existing economics of transport services. This involves a move away from a transport model based on transport asset ownership towards mobility solutions that are consumed as a service. Its key promise is to suggest the most suitable mobility solution based on traveller’s needs. It can also offer flexibility, for instance by allowing access to public vehicles that can be used as easily and instantly as private vehicles. The main challenge for the more extensive roll-out of these services will be their integration into the physical, legal and operational architecture of existing transport systems, involving cooperation among mobility agencies and service providers, as well as the interoperability of new and existing mobility systems.

## Sustainable cities

- 2.38. The world population is becoming increasingly urbanised, with cities providing the engine of socioeconomic development. With 80% of Europeans expected to live in cities by 2050, up from 70% today, the demand for urban mobility is expected to continue to grow.
- 2.39. The growth of cities provides unique challenges for transport planners. While the proximity of people, activities and resources brings societal benefits in terms of scale effects and the efficiency of services, it is clear that without careful planning, the resulting land use patterns can also lead to growing negative social, environmental and human health externalities. Similarly, cities that are not growing in population are also transforming and regenerating, resulting in evolving land use patterns and bringing externalities that have to be carefully managed. Urban planning, including sustainable mobility planning, is critical in enabling sustainable urban development and regeneration.
- 2.40. The competition for space in densely developed areas requires the careful allocation of space to ensure that the demands of these growing populations can be met in an equitable and sustainable manner and without increasing the negative impact that transport can have on cities. Density leads to a more complex urban fabric, making transport infrastructure more costly and time-consuming to develop, and requiring strong financial support from transport authorities. This is particularly the case where a lack of forward planning results in the need to retrofit expensive mass transit infrastructure or goods distribution systems into an existing high-density urban environment.
- 2.41. To achieve clean, accessible and climate-neutral cities, a global shift to public transport, shared mobility, walking and cycling is needed, reducing car dependency alongside a transition to zero-emission vehicles. Active modes of transport such as cycling and walking have the potential to play a significant role in urban mobility. Similarly, at-grade public transport can play a complementary role to mass transit systems, such as underground networks, which limits at-grade interfaces and land consumption but comes with high costs that need to be justified in terms of high demand.
- 2.42. The characteristics of urban areas also provide particular opportunities for the roll-out of new technology and innovation in the transport sector. The twin challenges of digitalisation and decarbonisation will give rise to different solutions in urban areas, which in many ways can serve as incubators for new ideas.

## Funding and financing

- 2.43. In the European Union alone, the Commission estimates that EU climate objectives translate into investment needs during 2021-2030 for vehicles and alternative fuel infrastructure that are up to €130 billion higher per year than in the preceding decade, and that additional investment needs in green transport infrastructure amount to some

€100 billion a year<sup>22</sup>. Resources are limited, so these investments must be prioritised to achieve maximum impact cost-effectively. When added to the significant underinvestment in maintaining the existing stock since the financial crisis that started in 2008-2009 (some €50 billion per year below sustainable long-term investment levels), the total investment needs of the sector represent a huge challenge.

2.44. The long history of the transport sector has left it with a complex patchwork of private and public involvement. The basic infrastructure for road, maritime and rail remains largely in public ownership and is largely publicly funded, although the provision of services is more a mixture of public and private provision. The aviation sector tends to have more private sector involvement. Nonetheless, most transport infrastructure investments in more recent times have come from the public sector, with users heavily subsidised by taxpayers. However, the sheer scale of the sector's investment needs, combined with dwindling public resources and a desire to follow the twin EU principles of "user pays" and "polluter pays" has stimulated the search for increasing private sector involvement and alternative financing and business models.

## Other challenges

2.45. The transport sector has an impact on almost every aspect of human activity, and the challenges it faces are often shared by other sectors. The challenges outlined above are put forward as the key areas for action, but there are many more: for example, the underinvestment in basic maintenance, leisure travel and tourism, international value chains, the management of urban airspace (urban air mobility), and high-speed travel.

2.46. Furthermore, the development of solutions to these challenges requires supportive public policies and rapid technological development, but it also requires the establishment and nourishment of new business models in the private sector.

---

<sup>22</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0331&from=EN>

### 3. EU mobility policy

- 3.1. The EU transport policy supports the functioning of the European single market. Its current transport policy aims to foster green, smart and affordable mobility, underpinning the internal market and free movement of goods and people across the European Union.
- 3.2. The European Union aspires to achieve a climate-neutral Europe by 2050 — an economy with net-zero greenhouse gas emissions — in line with the objectives of the Paris Agreement. The European Commission’s strategic long-term vision, “A Clean Planet for all,” was approved in late 2018. It provides for a radical transformation of the transport sector, alongside other sectors, to achieve greenhouse gas emissions neutrality by 2050. The European Council endorsed a binding EU target of a net domestic reduction of at least 55% in greenhouse gas emissions by 2030<sup>23</sup>, followed by the Fit for 55 package of legislative proposals<sup>24</sup>. The European Union’s policies and priorities for transport in the Multiannual Financial Framework 2021-2027 are included in a number of EU frameworks: the Global Gateway Strategy, the Connecting Europe Facility (CEF), Cohesion Funds, Horizon Europe, the InvestEU programme<sup>25</sup>, and the EU Taxonomy for sustainable finance, together with the NextGenerationEU recovery instrument.
- 3.3. The European Commission’s Sustainable and Smart Mobility Strategy<sup>26</sup> is the current EU roadmap for the sector. Influenced by the European Green Deal and the Paris Agreement on climate change, and building upon the previous White Paper on Transport, the strategy lays the foundation for how the EU transport system can achieve its green and digital transformation and become more resilient to future crises. It recognises that transport accounts for a quarter of greenhouse gas emissions, and that it is the only sector in which these emissions have continued to grow. To achieve the European Union’s climate neutrality goal by 2050, a 90% reduction in transport emissions is needed. Thus, the strategy has set a number of milestones for all transport modes by 2030, 2035 and 2050 and identified a number of initiatives across ten areas of action covering sustainable, smart and resilient transport.
- 3.4. For transport to become sustainable, the strategy highlights boosting the uptake of zero-emission vehicles and related infrastructure, creating zero-emission airports and ports, increasing the uptake of more sustainable transport modes both in urban and interurban contexts, greening freight transport, pricing carbon and providing better incentives for users. On smart transport, the strategy focuses on making connected and automated mobility a reality and boosting innovation and the use of data and artificial intelligence (AI) for smarter mobility. In relation to a more resilient transport system,

---

<sup>23</sup> <https://data.consilium.europa.eu/doc/document/ST-22-2020-INIT/en/pdf>

<sup>24</sup> <https://www.consilium.europa.eu/en/policies/green-deal/fit-for-55-the-eu-plan-for-a-green-transition/#:~:text=Fit%20for%2055%20refers%20to,line%20with%20the%202030%20goal.>

<sup>25</sup> [https://europa.eu/investeu/home\\_en](https://europa.eu/investeu/home_en)

<sup>26</sup> [https://transport.ec.europa.eu/transport-themes/mobility-strategy\\_en](https://transport.ec.europa.eu/transport-themes/mobility-strategy_en)

the strategy identifies reinforcement of the single market, particularly through the Trans-European Transport Network, making mobility fair to all and stepping up transport safety and security across all modes.

- 3.5. In its long-term scenarios, the European Commission predicts continued growth in transport demand through to 2050<sup>27</sup>. All scenarios close the gap needed to deliver the transport contribution to the 2030 Climate Target Plan and to climate neutrality by 2050. Thus, transport demand is projected to grow even in the scenario with the biggest reduction in emissions from transport, reflecting the temperature target of the Paris Agreement and the objective of a climate-neutral Europe by 2050. The climate policy instruments considered included carbon pricing, regulation and combinations of both.
- 3.6. According to the European Commission, climate policy models project a 32-34% increase in demand for passenger transport in the European Union between 2015 and 2050. Freight transport by rail, in turn, is projected to grow particularly strongly, with an expected doubling of growth between 2015 and 2050. Road and inland waterway freight transport will grow by some 40%.

---

<sup>27</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0331&from=EN>

## 4. From challenges to solutions

- 4.1. The challenges listed above facing the transport sector fall into four distinct groups, with the sustainability of increased urbanisation encompassing elements from all of them:
- Decarbonisation, environmental protection, resilience and resource efficiency concern the negative climate and environmental impacts that are a by-product of mobility.
  - Safety and security concern the higher risks that a growing number of passengers and vehicles cause for one another, particularly road safety.
  - Connectivity and equal accessibility concern disparities in people's ability to use transport to access work, goods and services, and human contact depending on where they live, how wealthy they are, or what specific sociobiological characteristics they may have.
  - Digitalisation and automation concern the efficiency of transport and the need to manage the increasing demand for mobility without worsening congestion and its negative climate, environmental and safety consequences.
- 4.2. These challenges require a transformational approach to the transport sector. The current transport systems are characterised by harmful emissions and pollution; epidemic loss of life and health; transport poverty in many locations and for many groups of people; as well as inefficiency and waste of society's resources. In contrast, future transport systems must aspire to be safe, accessible, green and efficient in order to achieve broader policy objectives at global, regional, national or local level.
- 4.3. The move towards a more sustainable world is led by the United Nations' 2030 Agenda for Sustainable Development and the Sustainable Development Goals (SDGs). The SDGs are comprehensive and recognise that any transformation must balance social, economic and environmental aspects of sustainability. Sustainable transport and mobility are fundamental to achieving many of the SDGs, so transforming transport means finding a balance between all these aspects.
- 4.4. A sustainable transport system must meet the needs of the present by providing the necessary mobility services, but without compromising the ability of future generations to meet their own needs. Over the past few years, the EIB has actively contributed to a growing consensus among transport policy stakeholders that a sustainable transport system must also be safe, accessible, green and efficient.



**SAFE AND SECURE** — A safe system that prevents unnecessary loss of life and protects users from attack, discrimination or harassment.



**ACCESSIBLE** — An affordable and accessible network available to all who can benefit from the opportunities it provides.



**GREEN AND RESILIENT** — A clean, carbon-neutral and resilient system that does no significant harm to the environment.



**EFFICIENT** — A smart and efficient system that achieves its benefits by using technology to minimise the use of resources and to prevent congestion.

- 4.5. These principles of sustainable transport will underpin EIB support for the transport sector, providing a value framework within which to help tackle the many pressing problems it faces and prioritise EIB support.

## Safe and secure transport

- 4.6. While safety and security are a primary concern across all transport modes, there is no doubt that the most urgent priority for investment at the moment is the hidden global pandemic of road safety.
- 4.7. Road safety is underfunded in most countries. Long-term, sustainable investment is required for the development of safe road infrastructure as well as for interventions that can improve road safety. There are significant opportunities to leverage existing investments in broader areas of transport, particularly transport and network planning, public transport, road construction, traffic operation and maintenance. Rather than serving as an “add-on” to these broader transport activities, road safety must be embedded in, and integral to, transport decision-making.
- 4.8. The United Nations’ Global Plan for the Decade of Action for Road Safety 2021-2030, along with the European Commission’s EU Road Safety Policy Framework 2021-2030 — Next steps towards “Vision Zero,” describes what is needed to achieve the 50% reduction target by 2030, and calls on governments and partners to implement an integrated Safe System approach.
- 4.9. The Safe System approach recognises that the road transport system is complex and places the safety of the individual at its core. It recognises that a multimodal planning

process, road users, vehicles, road infrastructure, enforcement and post-crash care must interact and be integrated in a way that engenders a higher level of safety.

- 4.10. It is self-evident that transport ought to be free from accidents and associated fatalities and injuries. However, transport systems are increasingly the subject of deliberate attack and so should also be secure for users and society. Critical transport systems will increasingly need to be protected from threats by terrorist and criminal activity. Secure transport also needs to address the needs of vulnerable users, who are reluctant to travel when subjected to criminal activity or harassment.

## **Accessible transport**

- 4.11. Given that transport is pivotal to the development of a more equitable world, and to ensure that no one is left behind, people should have access to transport services that meet their needs. These services must not only meet the needs of the many, but also those disadvantaged by geographies, gender, age, physical ability and economic hardship. Access to employment and education opportunities, essential services such as hospitals and emergency services, leisure activities and goods deliveries should be equally available to all regardless of a person's socioeconomic status.
- 4.12. Improving accessibility will be particularly important for many developing countries, where universal accessibility is still far from reality and where considerable transport poverty persists. However, tackling transport poverty is equally important within the European Union, where there are still many rural areas and disadvantaged populations, in particular in the hinterlands of urban areas. Cross-border accessibility also lies at the heart of the European Union and its single market, and completion of the Trans-European Transport Network to facilitate cross-border flows between Member States and with the EU neighbourhood still requires major investment.

## **Green and resilient transport**

- 4.13. Transport must become more climate neutral as well as resilient to future changes. One of the greatest transformations the transport sector will face in the coming decades will be decarbonisation, the scope and speed of which will differ between regions and countries depending on affordability and also on the viability of alternative fuel options.
- 4.14. Some level of climate change is now inevitable and much of our transport infrastructure will therefore need to be made resilient and adaptive to the increasing frequency and severity of climate events. Safeguarding the climate resilience of transport assets will be a major driver of investment in the sector, especially in infrastructure. The resilience of transport infrastructure assets can be enhanced through engineering choices throughout their lifecycle, but it also hinges on planning and investment in other sectors. Depending on its location, the protection of transport infrastructure may require significant changes to land use, including investments in flood protection and water retention.

4.15. Transport must also reduce its environmental footprint, being much cleaner, reducing the impact of air pollution and noise, in particular when located close to sensitive areas such as dense urban areas or natural conservation areas, and reducing its overall land take. This will require the continuous promotion of and investments in all low-impact transport modes, notably walking, cycling, public and shared transport, and green shipping, as well as in the electrification of transport fleets. Cleaner transport also requires resource efficiency, meaning not only the economic use of resources during the manufacturing and operation of vehicles, trains, ships and aeroplanes, but also scrapping procedures that reuse and recycle when and where possible.

## Efficient transport

4.16. Transport must meet the demands placed on it, and systems must be predictable, reliable, timely and cost-effective. Despite recent financial, security and health shocks, demand for transport is expected to continue to grow in the long term in line with population and economic activity.

4.17. Transport projects need to provide sufficient capacity to keep pace with the needs of an efficient economy, avoiding a damaging “capacity crunch.”

4.18. Customer expectations for speed and low cost have reached new heights in the “always-on,” digital and global world. As transport becomes increasingly multimodal and international, the efficiency of door-to-door journeys of people and goods will be increasingly dependent on seamless connections between different transport modes and between countries, in particular within the single market of the European Union.

4.19. Improving travel times, reliability and operating costs will therefore remain the bedrock of transport planning and the transition to more sustainable transport. Automation and digitalisation will greatly help, and smart solutions such as intelligent transport systems and mobility as a service will fundamentally transform travel.

## Transforming transport

4.20. A transport system that does not adequately address all four of these dimensions will not be sustainable in the long term. The current transport system, with its overreliance on fossil fuels and its adverse impacts on climate and the environment, needs urgent reform. While much future investment will be needed to shift transport systems onto a low-polluting and climate-resilient path, future transport must at the same time maintain and further improve safety, accessibility and efficiency. This is particularly true for countries in the developing world.

4.21. Together with the European Commission and other multilateral development banks, the EIB will support investments that contribute to transforming transport into a more sustainable system, making transport systems safer, more accessible, greener and more efficient, and ensuring that mobility can meet the needs of the current generation without compromising its legacy for future generations.

## 5. Priorities for EIB support

- 5.1. In light of the unprecedented challenges facing the sector, the EIB recognises the need to move towards a more sustainable transport system. The proposed EIB approach to transforming transport provides the framework for EIB support. This chapter details the way in which EIB support for the transport sector will be prioritised over the period 2021-2027.

### Requirements for all sectors

The priorities identified in the new Transport Lending Policy will be subject to and consistent with the role of the EIB as the EU climate bank, together with other applicable EIB policies, principles, standards and guidelines. The Climate Bank Roadmap details the criteria for investments, both in transport vehicles and in infrastructure, to be considered Paris-aligned, and therefore eligible for EIB support. These eligibility criteria for the transport sector may therefore be subject to future revisions in the context of the Climate Bank Roadmap and EU policy and regulatory developments such as the EU Sustainable Finance Taxonomy.

- 5.2. All eligible transport investments are potentially suitable for EIB support, but given the limited availability of resources, these are prioritised as detailed in this section, and in full alignment with all other relevant EIB policies and guidelines. The EIB will continue to refine its existing set of tools and to develop new tools to aid the selection and prioritisation of investment projects for its support.
- 5.3. The EIB takes a technology-neutral approach to its support for the deployment of all transport technologies, including different alternative fuels, provided that they are, or have the potential to be, Paris-aligned.
- 5.4. In full alignment with the approach in the Climate Bank Roadmap, which sets out a Paris alignment framework for all operations globally and without carve-outs for specific geographies, the priorities identified below apply both inside and outside the European Union. However, the Climate Bank Roadmap also recognises that references to EU legislation, regulations and standards must be interpreted in local contexts outside the European Union. The Climate Bank Roadmap refers to the principle of common but differentiated responsibilities and respective capacities in the light of different national circumstances. Moreover, it highlights the relevance of the objectives of external mandates and the impact of Paris alignment on these mandates for EIB activity outside the European Union. Adopting the same approach below, some of the priorities in the European Union are not directly and immediately applicable outside the EU. Such instances are explicitly identified and justified below.
- 5.5. As the EU bank, the EIB intends to keep its approach to lending inside and outside the European Union coherent with EU procurement and trade policy and to proceed regularly with any relevant updates stemming from the evolution of EU procurement

legislation, adjusted to the context of operations outside the European Union. In addition, given the distorting effect that foreign subsidies may have on the EU internal market, the Bank will maintain an enhanced dialogue exploring jointly with the appropriate services of the Commission how the EIB could apply certain recommendations on levelling the playing field on public procurement in EIB operations. When considering support for transport projects, the EIB will continue to check that prices in projects are in line with market prices and will monitor any instance of abnormally low tenders in line with the main mechanisms of the EU procurement directives and international best practice as agreed among multilateral development banks. In particular, the Bank will ensure consistency with EU trade policy, in close cooperation with the Commission services responsible, and in line with its policies and procedures such as the EIB Guide to Procurement, for any issues concerning local content requirements, market access barriers, misappropriation of intellectual property, and forced joint venture requirements.

- 5.6. The EIB also recognises the importance of a robust planning framework in the transport sector. The size and/or complexity of transport-related investments mean that they often have a long gestation period and multiple stakeholders. Although the EIB can be invited to participate in investment projects at all stages of preparation, acceptable and successful projects are usually the product of a stable and inclusive planning process that ensures that alternative solutions have been properly explored, the investment is proportional and economically justified, stakeholders have been meaningfully consulted and adequate climate change mitigation measures will be implemented in a timely manner. Through its advisory and technical assistance offer, the EIB is able to provide help and advice to its clients and stakeholders on the establishment and assessment of investment programmes and individual projects.

## Urban mobility

- 5.7. The world population is becoming increasingly urbanised, with cities providing the engine of socioeconomic development. Urban mobility is a vital enabler for the sustainable development of urban areas, as it provides the necessary access to education, jobs and leisure, and allows markets to operate efficiently. With 80% of Europeans and nearly 70% of the global population expected to live in cities by 2050, up from 70% and some 50% today, the demand for urban mobility is expected to continue to grow.
- 5.8. The provision of collective transport is the most efficient option for sustainable urban mobility for high passenger volumes. It comes with the lowest operating costs and spatial footprint, as well as the lowest pollutants, noise and greenhouse gas emissions per transport unit. It is also one of the safest transport modes and the most affordable solution for those economically, socially or physically disadvantaged groups of city dwellers who do not have access to individual motorised transport.
- 5.9. Digitalisation has a promising potential to drive behavioural changes and to promote the more efficient management and use of transport assets, in particular in congested urban areas. The increased use of real-time multimodal information and efficient

pricing, the deployment of intelligent transport systems, vehicle automation, and the increasing spread of mobility as a service could reduce car ownership and foster multimodality, efficiency and safety in urban mobility and beyond.

- 5.10. The European Commission's policy priorities concerning urban mobility are the promotion of the shift from individual car use to public and collective transport, walking and cycling and the adoption of zero-emission transport technologies for the decarbonisation of public fleets, with the development of related infrastructure.
- 5.11. As specified in the Climate Bank Roadmap, the EIB will take into account both land use and transport strategies in its project appraisal. Approved sustainable urban mobility plans and land use master plans or equivalent are a prerequisite for EIB support.
- 5.12. The EIB's priorities and particular considerations in supporting urban transport are as follows:
- 5.13. **Collective mobility schemes:** Support for collective transport will continue to be a priority of the EIB's contribution to sustainable urban mobility inside and outside the European Union. High-capacity rail schemes provide a land use efficient alternative to road vehicle access to dense urban areas, encouraging more sustainable urban development. Such schemes include suburban railways, and metro and light rail systems such as tramways.
- 5.14. For road-based collective transport, such as bus networks and bus rapid transit (BRT) systems, vehicles with zero tailpipe emissions will be prioritised in the European Union. This may be very challenging to achieve outside the European Union, where all eligible collective mobility investments are considered a priority.
- 5.15. **Active and shared mobility schemes:** To complement collective transport projects, the EIB will prioritise investments in assets supporting active mobility modes, such as walking and cycling. Due to their relatively small investment size, these are usually bundled with other transport schemes in comprehensive urban or regional development programmes and justified in that context. Although urban areas provide the greatest potential for walking and cycling, priority will also be given to regional and interurban active mobility projects, including stand-alone projects or as part of a wider programme. The EIB will also prioritise support for investments in the development of zero direct emission vehicle sharing services, to foster efficiency in the use of space and vehicles.
- 5.16. **Intelligent transport systems and digital solutions:** The EIB will prioritise investments in urban intelligent transport systems and other digital solutions, in particular when they target the optimal and safer use of the existing infrastructure through support for traffic management and passenger information systems, automation, security and surveillance, mobility as a service including on-demand public transport services, and integrated ticketing and intermodal solutions.
- 5.17. **Urban roads and streets:** The EIB will prioritise integrated urban development programmes, provided they are consistent with sustainable urban mobility plans. Such

investments will be assessed and justified as part of the urban development of which they form part, where the primary objective is to support collective transport and active modes, road safety, traffic calming, climate change adaptation or the deployment of charging infrastructure for zero-emission vehicles.

- 5.18. All urban plans that include road components must incorporate adequate road safety measures.
- 5.19. **Other road vehicle fleets; logistics and intermodal solutions:** The EIB will prioritise support for fleets of zero-emission vehicles and associated charging infrastructure for shared mobility services or city logistics operations, for example. The deployment of electric buses, taxis and automated shuttles, as well as other clean vehicles, will also be a priority for the EIB. Investments in intermodal and logistics hubs will also be a priority, including in the context of urban regeneration and reorganisation, increasing proximity and transport efficiency, and combining IT and logistics platforms to improve the efficiency of urban freight and reduce its environmental impacts, in particular for last mile delivery. Urban air mobility, notably drones, can have significant potential in this respect<sup>28</sup> and are therefore also considered a priority.

## Extra-urban rail

- 5.20. As a collective transit mode, railways are the land transport mode that consume the least energy and generate the lowest external cost per transport unit. More than half of the EU rail network is electrified, including all high-speed lines. Over 80% of passenger and freight performance on rail in the European Union is produced by electric trains. Both for passengers and freight, it offers the lowest marginal operating costs and greenhouse gas emissions per transport unit, and is one of the safest modes of transport.
- 5.21. The achievement of a substantially larger modal share of rail both in passenger and goods transport is necessary in order to meet the decarbonisation path for the transport sector set out by the European Commission. This will require significant investments in the railway system.
- 5.22. The European Commission's priorities for rail include increasing rail passengers and freight by supporting further investments in trackside infrastructure and on-board installations (such as European Rail Traffic Management System (ERTMS) equipment or automatic train couplings (DAC)), rolling stock, and intermodal interfaces and digital tools supporting core planning and operational and commercial processes. This goes hand in hand with a need to also increase the interoperability of the network, as well as further efforts towards digitalisation, in particular the deployment of ERTMS. Finally, the electrification of the rail network for those sections not yet electrified and the research, demonstration and deployment of hydrogen fuel cell trains (hydrogen as defined in the Climate Bank Roadmap) and the deployment of relevant refuelling and renewable electricity generation infrastructure are necessary elements in the shift to zero-emission mobility in rail transport.

---

<sup>28</sup> [https://www.eib.org/attachments/publications/eib\\_guide\\_to\\_finance\\_for\\_drone\\_projects\\_en.pdf](https://www.eib.org/attachments/publications/eib_guide_to_finance_for_drone_projects_en.pdf)

- 5.23. The EIB actively supports the rail market opening and implementation of the EU fourth railway package, seeking to rectify existing market failures. Once the rolling stock provision is decoupled from the operation of rail services, new market players can compete with incumbents on a level playing field. In the important segment of passenger services operated under public service obligations, the EIB has developed financing models supporting rolling stock pools, regional ownership models, or lease arrangements. The rolling stock is then made available to the successful winner of public tenders for the provision of rail services under public service contracts. In the commercial segment, the EIB is supporting investments in locomotives, coaches, freight, and intermodal and high-speed passenger rolling stock, and seeks opportunities to increase its engagement.
- 5.24. The rail sector is also key in improving the multimodality of the European Union's transport system, transforming it into a network of rail, inland waterways, short sea shipping routes and roads that are linked to urban nodes. Multimodality is a prerequisite for modal shift and improvements in the sustainability of transport across all its dimensions. Investments in safe and green modes such as rail need to be made in a multimodal context to harness their maximum potential, and also incorporate last mile considerations into investment decisions concerning transport between hubs. In addition, supporting investments in digitalisation are needed for efficient multimodality, both in freight and in passenger transport.
- 5.25. The EIB's priorities and particular considerations in supporting extra-urban rail transport are as follows:
- 5.26. **Rail infrastructure:** Investments in new and upgraded electrified rail infrastructure, particularly on the Trans-European Transport Network, will be a priority for EIB support. The financing of non-electrified rail infrastructure will remain possible under specific circumstances in line with the EU Sustainable Finance Taxonomy and the EIB Climate Bank Roadmap, but it will be considered a priority only outside the European Union.
- 5.27. **Rolling stock:** In addition to supporting electric rolling stock, an increasing share of new fleets for lines carrying lighter traffic will be battery-electric, powered by hydrogen (as defined in the Climate Bank Roadmap) or bi-mode rolling stock, and these will also be a priority for EIB support. The financing of non-electric rolling stock will only be considered a priority outside the European Union. Inside the European Union, non-electric rolling stock will be a priority only as regards specialist track laying and maintenance vehicles. Rolling stock projects within the European Union must also meet the relevant standards for interoperability.
- 5.28. **Rail freight:** The EIB will continue to prioritise the financing of electric locomotives, and will in future also support locomotives powered by hydrogen (as defined in the Climate Bank Roadmap) as these reach market maturity. The EIB will continue to pursue and prioritise combined transport and more efficient rail corridors through the financing of rail motorways, intermodal centres and combined transport terminals.

- 5.29. **Digitalisation and automation:** The EIB financing of infrastructure investments for digitalisation and automation will continue to be a priority as a means of optimising the use of rail resources and capacities and improving safety and interoperability, as well as improving the integration and connectivity between different modes in the transport system.
- 5.30. In addition, the EIB will seek to develop innovative financing facilities enabling the modernisation, retrofitting, digitalisation and automation of railway rolling stock, train and locomotive fleets — all priorities for EIB support. Such investments may concern, for example, the replacement of diesel engines with electric or hydrogen-powered propulsion (as defined in the Climate Bank Roadmap), the introduction of automatic couplings for freight rolling stock, or the installation of on-board ERTMS and automatic train operation equipment. Facilities pooling and consolidating such investments will be developed to enable EIB support, as often the investment needs per vehicle are below the thresholds justifying individual EIB involvement.

## Extra-urban roads

- 5.31. Road infrastructure plays a key role in the efficient movement of goods and people due to the flexibility that road transport provides. Roads continue to be the dominant mode of transport, carrying about 80% of passengers and 50% of freight in the European Union. A clear decarbonisation path exists for about 73% of road sector emissions (those originating from passenger cars and vans) and technological solutions for the remainder are already on the horizon.
- 5.32. The European Commission's policy priorities to enhance the sustainability of road transport include the uptake of zero-emission vehicles, and renewable and low-carbon fuels, the deployment of related zero-emission infrastructure, the enhancement of road safety, as well as smart and distance-based road charging.
- 5.33. EIB-supported projects in the European Union are subject to road and tunnel safety and security, alternative fuels, intelligent transport systems, road pricing and other requirements in line with relevant EU legislation and supplemented by EIB standards where applicable. Promoters must demonstrate satisfactory management and financial arrangements to ensure adequate maintenance of the project.
- 5.34. Outside the European Union, projects will be required to comply with EIB standards and safeguards, and appropriate advice and support will be provided where necessary as a condition of EIB support. This is often delivered within a framework of co-financing and cooperation with other international and multinational development institutions.
- 5.35. As specified in the EIB Climate Bank Roadmap, large road capacity expansion projects with an investment cost of €25 million or greater will be subject to an adapted economic test incorporating carbon prices and traffic profiles compatible with the 2050 climate neutrality target. This adapted economic test will provide a framework to confirm the Paris alignment of new road capacity expansion projects. In particular, demand forecasts will be adapted in line with recognised long-term modelling studies, with due

attention to the penetration rates of electric vehicles. Net emissions from the project will be valued at a shadow cost of carbon, which is consistent with the path towards a 2050 climate neutrality target. Justified investments in the European Union will also have to demonstrate adequate provision of alternative fuel infrastructure, in line with relevant EU requirements.

5.36. The EIB's priorities and particular considerations in supporting extra-urban roads are as follows:

5.37. **Strategic networks:** In line with EU policy, the EIB will consider operations on the TEN-T core and comprehensive networks and extensions into neighbouring countries as a priority. The stock of road infrastructure is currently unequally distributed across Europe and further development of the Trans-European Transport Network is still required, particularly in those countries that lag behind in development, including TEN-T parking and service areas equipped with alternative fuel infrastructure. Elsewhere, although the TEN-T network may be well developed, some parts are suffering congestion or poor maintenance, and underinvestment is leading to deteriorating infrastructure. The EIB will also prioritise road projects implemented in the context of an integrated regional development programme or equivalent plans designed to ensure balanced territorial development or to address issues of accessibility or transport poverty.

5.38. Supporting strategic road projects outside the European Union is considered a priority in line with provisions in the Bank's external mandates and subject to criteria in the Climate Bank Roadmap.

5.39. **Intelligent transport systems and digital solutions:** Effective road asset management can help allocate road capacity efficiently, reduce damage to the environment and enhance road safety. In addition to traffic management and tolling systems, the increasing use of surveillance and sensors to collect analytical data for the more effective and safer use of road infrastructure will be a priority for the EIB. Digital solutions and enhanced data management, among others, creating an enabling environment for advanced driver assistance systems (ADAS) and autonomous vehicles, will also be a priority.

5.40. **Road safety:** All road projects supported by the EIB must be developed with due attention to road safety. Road safety will be a priority of EIB road financing operations and an important element of the Safe System approach as defined both in the UN Global Plan and the EU Road Safety Policy Framework 2021-2030. The EIB will therefore continue to develop its approach to the advisory support and financing of road safety projects before the mid-term review of this policy in 2025.

5.41. Any road project within the European Union must adhere to minimum recognised standards for it to be considered at an acceptable level of safety in line with the principles and process described in EU legislation<sup>29</sup>. The EIB will continue the work

---

<sup>29</sup> Directive 2008/96/EC on road infrastructure safety management (RISM), as amended by Directive (EU) 2019/1936.

through advisory facilities and its partnerships with international organisations, government agencies, corporations, as well as bilateral and multilateral development banks to support beneficiaries in their application of a Safe System approach both inside and outside the European Union.

- 5.42. The EIB will also continue to provide advisory services for capacity building for road safety professionals working for the government, the private sector, civil society and research institutions. The lack of specialist knowledge is a major barrier to the development of a Safe System approach and to adapting the United Nations' Safe System principles to local conditions, and there is a need to effectively collect and analyse road safety data, as well as to carry out quality road safety research.
- 5.43. **Infrastructure upgrade and rehabilitation:** The rehabilitation and upgrading of existing road networks will be a priority for EIB support, including to improve their resilience against climate change. The total road asset capital stock is a significant and valuable economic asset, and resilience upgrades and rehabilitation are essential to preserve network sections suffering from delayed maintenance and climate change impacts and to improve road safety. Resilience and rehabilitation operations are primarily contained within existing rights of way. Where operations also comprise elements of capacity expansion, these will also be subject to the adapted economic test.
- 5.44. **Road vehicle fleets:** The EIB will prioritise support for the deployment of zero direct emission vehicles, or net-zero solutions that meet Paris alignment criteria, both for heavy and mid/long-distance range vehicles. The associated charging and refuelling infrastructure of low-carbon alternative fuels compatible with the EU Sustainable Finance Taxonomy will also be prioritised.

## Inland waterways

- 5.45. Inland waterway transport (IWT) remains relatively underused as a mode, especially when it comes to the hinterland connection of seaports and supplying major industrial centres and urban agglomerations, as well as for passenger transport. Inland waterway transport infrastructure is particularly vulnerable to the effects of climate change, specifically to the variation of water levels in the waterways. The EU regulatory framework requires rivers, canals and lakes, and their associated infrastructure, to be maintained so as to preserve good navigation status, while respecting the applicable environmental law. Inland waterway transport represents a relatively efficient means to transport freight, particularly bulk freight, and is therefore considered to be a sustainable alternative to the transport of freight by road. The EIB will therefore prioritise economically justified investments in the inland waterway transport sector.
- 5.46. The European Green Deal calls for a substantial part of the 75% of inland (road) transport to shift to alternative modes, such as rail and inland waterways/short sea shipping. The objective is to increase inland waterway transport and short sea shipping activity by 25% by 2030 and by 50% by 2050. This will require a capacity extension of waterways and waterside infrastructure and trans-shipment facilities, as well as of the inland waterway transport fleet.

- 5.47. The European Commission's policy priorities for waterborne transport also include the development of zero-emission ports (electricity shore supply at berth) as well as the transition to zero and low-emission vessels, both of which are actions promoted by the Smart and Sustainable Mobility Strategy. In this context, new vessels as well as the retrofit of the existing fleet and infrastructure for alternative fuels for zero-emission fleets play a vital role.
- 5.48. In line with the Climate Bank Roadmap, facilities exclusively dedicated to the handling and/or storage of fossil fuels will not be eligible for EIB support. Vessels dedicated to the transport of fossil fuels will not be eligible for EIB support.
- 5.49. The EIB's priorities and particular considerations in supporting inland waterways transport are as follows:
- 5.50. **Infrastructure upgrade and rehabilitation:** The EIB will prioritise the rehabilitation and upgrade of inland navigation infrastructure, as well as economically justified investments in new inland waterway transport infrastructure, including inland ports and their associated intermodal and/or logistics facilities and equipment.
- 5.51. Priority will be given to the financing of projects that eliminate bottlenecks on the existing networks, giving attention to the consistency of interventions along the main corridors. Expansion projects forming part of the TEN-T network of inland waterways that show an acceptable economic justification will also be a priority.
- 5.52. Outside the European Union, inland waterway transport projects must be consistent with the appropriate external mandate and will be a priority.
- 5.53. **Digitalisation:** Investments supporting the digitalisation of waterways and vessels, including the further deployment of River Information Systems technologies, automation, and the safety and security of the inland waterway transport sector will continue to be prioritised.
- 5.54. **Fleet renewal:** Further investment is needed to improve the environmental performance of the inland waterway transport fleet, much of which continues to use older marine gasoil engines. The EIB will prioritise the modernisation and technological development of inland navigation fleets, in particular with regard to their environmental performance, efficiency and safety, through the financing of new builds as well as the retrofitting of existing vessels.

## Maritime transport

- 5.55. Maritime transport is central to facilitating international trade and to the transport of passengers and goods within the European Union. More than 70% of the EU's external freight and one-third of intra-EU exchanges in terms of tonne-kilometres is seaborne. Maritime transport is crucial for ensuring the security of supply of energy, food, other commodities and raw materials. It allows European firms to export their goods around the globe and as such drives economic growth and creates welfare in the European Union. Maritime transport also provides vital connections to regions that would otherwise be isolated. Seaports and intermodal logistics play a key role in an integrated and sustainable global supply chain system.
- 5.56. Although maritime transport is one of the most energy-efficient means of transport, it is also a major source of greenhouse gas and other emissions into the environment due to its scale and the distances covered. The international nature of the sector means that a large part of the regulatory framework is agreed multilaterally in the International Maritime Organization (IMO), and EU regulation can only partly address its environmental performance.
- 5.57. In line with the Climate Bank Roadmap, facilities exclusively dedicated to the handling and/or storage of fossil fuels will not be eligible for EIB support. The EIB will no longer support vessels powered by heavy fuel oil.
- 5.58. The EIB's priorities and particular considerations in supporting maritime transport are as follows:
- 5.59. **Strategic port infrastructure:** The EIB will continue to prioritise the development of TEN-T ports in the European Union and EU Neighbourhood, including their infrastructure, associated equipment, access enabling works and equipment, multimodal rail connections and other hinterland access infrastructure, and related intermodal facilities and specialised vessels, such as tugs, ice breakers and pilot vessels, which are essential for the operation of the TEN-T port network under adequate safety and security conditions. The EIB will require port projects to be economically sound, consistent with the development of hinterland infrastructure, and framed within a long-term transport and sustainable development strategy. A similar approach will be adopted for strategic ports outside the European Union.
- 5.60. Support for other ports both inside and outside the European Union will be considered a priority if the project is assessed as making a clear contribution to climate or environmental goals that promote a more sustainable transport system, or if it significantly contributes to alleviating transport poverty in less developed regions and partner countries outside the European Union, where the EIB will continue to support port projects in line with its mandates in the respective countries and regions.
- 5.61. **Digitalisation and decarbonisation:** The EIB will also prioritise investments in terminal handling equipment, automation, cargo storage and logistics infrastructure, electric power supply at berth and alternative fuelling infrastructure, port/terminal security

equipment, and information technology systems and information and communications technology (ICT) solutions aimed at reducing congestion and improving the efficiency of the supply chain.

- 5.62. **Shipping:** The EIB will prioritise the development and deployment of zero direct CO<sub>2</sub> emission ships via pilot and demonstration projects.
- 5.63. The EIB will consider supporting the deployment of commercially available technologies and alternative fuels compatible with the Climate Bank Roadmap.
- 5.64. Support for wholly fossil fuel-powered ships will be exceptional, and limited to lifeline and civil protection services such as medical, rescue, research or firefighting, and to ships essential for the operation of TEN-T ports under adequate safety conditions if it is technically or economically not feasible to use lower or zero-carbon fuelled vessels for this purpose.
- 5.65. Vessels financed by the EIB will be expected to call at EU ports and, unless duly justified by the particular features of a project, the EIB will finance only ships operating under an EU flag to ensure compliance with European safety, operating and environmental standards. As a strict minimum, all shipping projects financed by the EIB must adhere to all EU and IMO safety and environmental rules and regulations with regard to the construction and operation of vessels.
- 5.66. Shipping projects financed by the EIB must also meet the requirements of the EU Ship Recycling Regulation (SRR) and the IMO Hong Kong Convention for the Safe and Environmentally Sound Recycling of Ships. Moreover, when a project supported by the EIB includes the shipbreaking of end-of-life assets, the EIB must require this to be performed in yards included in the European List of Ship Recycling Facilities, meeting the relevant EU safety and environmental requirements and in line with the principles of the circular economy.

## Aviation

- 5.67. Aviation provides vital connectivity on a national, regional and international scale and is increasingly difficult to substitute as travel distances increase. Air transport fosters territorial cohesion and grants accessibility to remote regions or islands where it is usually the only viable means of mobility. It also plays an essential role in logistics chains of high value added products. As a share of global shipments, aviation accounts for 1% in tonnage and one-third in value. Over the last 20 years, the European Union's liberalisation of the internal market for air services and the substantial growth in demand within the European Union and worldwide have resulted in significant development of the European civil aviation sector.
- 5.68. This significant development now needs to be reconciled with reducing aviation's environmental footprint and meeting EU climate targets, while maintaining high standards of service, safety and security.

- 5.69. The decarbonisation of the sector is possible, but requires significant investments and institutional support. The European Commission’s strategic long-term vision, “A Clean Planet for all,” and the Sustainable and Smart Mobility Strategy — supported by the proposed Fit for 55 package — identify a possible decarbonisation pathway for the sector based on the combined effect of an acknowledged basket of measures. The European Commission’s policy priorities in aviation include the greening of airports, fleets and related services in general; safety; security; and digitalisation, including the improvement and digitalisation of the air traffic management system. It should be emphasised that there is a general consensus among industry stakeholders for an ambitious decarbonisation pathway as expressed in the 2022 Aviation Summit Toulouse Declaration and the private sector flagship sustainability initiative, “Destination 2050.”
- 5.70. In line with the Climate Bank Roadmap, the EIB will refrain from supporting any increases in airport capacity. EIB support for fossil fuel-powered aircraft will be exceptional, and limited to lifeline and civil protection services such as medical, rescue or firefighting.
- 5.71. However, the decarbonisation pathway for aviation faces a number of market failures, institutional barriers and technological challenges.
- 5.72. The EIB’s priorities and particular considerations in supporting aviation are as follows:
- 5.73. **Decarbonisation and operational resilience:** Environmental and operational resilience investments in TEN-T airports, including health measures to prevent the spread of disease, and safety and security investments, will be a priority for EIB support. Support for the refurbishment, upgrading and replacement of life-expired infrastructure and equipment, particularly outside the European Union, will also be a priority.
- 5.74. The EIB will prioritise the financing of projects that will overcome existing efficiency constraints and explicit decarbonisation measures such as the greening of ground service fleets, energy efficiency programmes and enabling infrastructure to service sustainable aviation fuels (SAFs) and low-emission aircraft. Airport connections to the TEN-T railway network and investments aimed at encouraging multimodality and the increased use of public transport to access terminals will also be supported as a priority.
- 5.75. **Aircraft:** The EIB will prioritise the development and deployment roll-out of zero direct CO<sub>2</sub> emission aircraft via pilot and demonstration projects.
- 5.76. The EIB will consider supporting the deployment of commercially available technologies and alternative fuels compatible with the Climate Bank Roadmap. In the meantime, support for fossil fuel-powered aircraft will be exceptional, and limited to lifeline and civil protection services such as medical, rescue or firefighting.
- 5.77. **Digitalisation:** Investments that will increase the digitalisation of the sector, including projects contributing to the implementation of the Single European Sky, a central element of European aviation policy, will be considered a priority. In addition, the replacement and modernisation of air traffic management facilities, and equipment supplied by air navigation service providers will also be prioritised.



# Transport Lending Policy 2022

The Way Forward  
Investing in a cleaner and  
smarter transport system



**European  
Investment  
Bank**

*The EIB bank*

**European Investment Bank**  
98-100, boulevard Konrad Adenauer  
L-2950 Luxembourg  
+352 4379-22000  
[www.eib.org](http://www.eib.org) – [info@eib.org](mailto:info@eib.org)