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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

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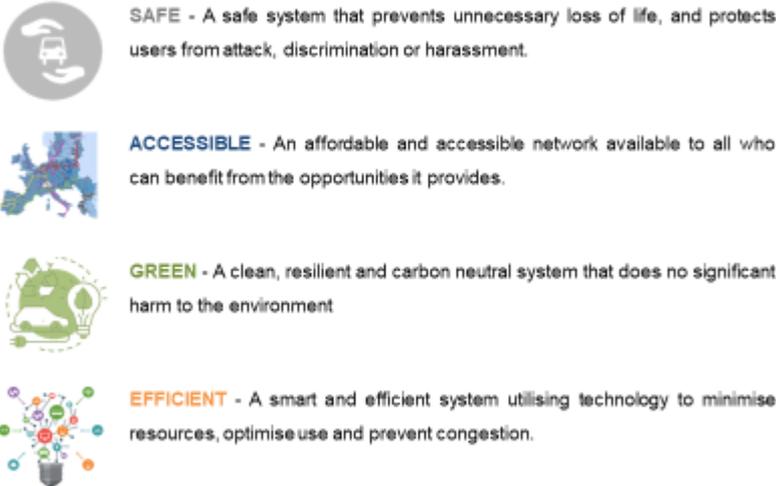
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Executive summary

- 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 the background of sweeping technological and social change, the sector must now at the same time modernise and rid itself of its dependence on fossil fuels. The challenges facing the sector are immense. Transport must lead the recovery, and transform itself towards 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 whose emissions of Greenhouse Gases (GHG) 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 act as a barrier to equality and opportunity. Such ‘transport poverty’ compounds social and financial disadvantage by denying adequate access to education, health care, work, leisure and social contact.
- 0.4 Most importantly, direct GHG emissions from transport will have to peak in the early 2020s and start to decline thereafter. This means that the current stock of transport vehicles will have to be replaced rapidly with clean vehicles, and that there will have to be significant investment in supporting infrastructure. Transport infrastructure must be adapted for use by clean and smart vehicles and to become climate resilient, and 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 necessitates huge investment volumes that must be carefully prioritised and implemented to achieve maximum impact at minimum cost.
- 0.5 The EU has committed to achieving climate neutrality by 2050 and the European Commission’s (EC) European Green Deal sets out policy initiatives to achieve this goal. As the EU’s Climate Bank, the European Investment Bank Group (EIB) 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 (CBR) 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. These criteria determine therefore the types of operations that are eligible for EIB support, and the EIB’s sector lending policies, including this Transport Lending Policy (TLP) must be fully aligned with the eligibilities specified in the CBR. Indeed, whereas the Transport Lending Policy adopted in 2011 was a stand-alone policy document, this new TLP is subordinated to the CBR.

- 0.6 This revised TLP identifies priorities for EIB support to the transport sector and the provision of mobility services, in line with the limits set by the CBR. These priorities seek to identify among the eligible types of investments in mobile assets as well as in transport infrastructure those that are expected to be the most effective in addressing the multiple challenges facing the transport sector and that, therefore, have the greatest impact in transforming transport and making it more sustainable.
- 0.7 The over-arching framework adopted in this TLP for prioritising EIB support for the transport sector draws on the United Nations' Sustainable Development Goals (SDG) as well as the European Commission's Green Deal¹ and the Sustainable and Smart Mobility Strategy². Over the course of the past few years the EIB has actively contributed to a growing consensus amongst transport policy stakeholders that a Sustainable Transport system must be at the same time 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:

Framework for sustainable mobility (SAGE)



- 0.8 Based on this framework, the priorities for the EIB's support to 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
 - Inter and multimodal transport
 - Safe System approach to road safety

¹ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en
² https://transport.ec.europa.eu/transport-themes/mobility-strategy_en

- Resilience of transport infrastructure, including the rehabilitation and upgrading of existing assets
- Completion of networks in all transport sectors, with particular focus on Trans-European Transport Networks (TEN-T), cross-border connections as well as on countries with significant investment or development needs

0.9 The priorities identified in this Policy allow the achievement of multiple objectives among Safety and Security, Accessibility, Greenness and Resilience as well as Efficiency simultaneously (SAGE). They allow the EIB to prioritise those projects and activities that help to accelerate the transformation of the unsustainable transport systems of today into sustainable transport systems of tomorrow.

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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 citizens and cities, businesses, industries and public services. Transport has also served historically 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 the background of sweeping technological and social change, the sector must now at the same time modernise and 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, and transform itself towards 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 (EU) 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 impacts of climate change. Old infrastructure requires enhanced maintenance and refurbishment, especially as 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 EU, 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 infrastructures will have 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 (henceforth EIB), as the EU's Climate Bank.
- 1.6 The transport sector has traditionally been among the main recipients of support by the EIB. 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 cover also 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 EU, so as to contribute to their connectivity as well as economic and social development.

- 1.7 The EIB's role as the EU's Climate Bank has changed the types of operations that the EIB supports. With the publication of its Climate Bank Roadmap (CBR)³, the Bank committed to aligning all of its lending to the Paris Agreement⁴, including increased ambition to support the decarbonisation of the transport sector.⁵ Following the adoption of the CBR, the EIB no longer supports increased airport capacity, and further support for capacity expansion of large⁶ 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 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 CBR.
- 1.8 The new Transport Lending Policy (TLP) is subject to and compatible with the provisions of the adopted CBR. The CBR 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 CBR review process, as specified in the CBR itself. This TLP will thus not contain any changes to eligibility criteria in the transport sector. Given those criteria, this TLP articulates the EIB's priorities in supporting the transformation of the transport sector. It responds to the major EU policy and regulatory changes, and replaces the previous policy published in 2011. This TLP 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 on-line 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 website⁷. The Bank would like to thank all those stakeholders who took the time to respond to this exercise.
- 1.10 The scope of the TLP is limited to EIB support to 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 guidance – notably covering indirect support (to SMEs for example) and through its support for research, development and innovation. It applies alongside these other EIB policies, principles, standards and guidelines, including the EIB's public policy goals; the Bank's targets for support to climate action and environmental sustainability as well as regional cohesion in the EU; EIB operational plan⁸ and targets specified therein; additionality and impact measurement framework⁹; environmental and social standards¹⁰; climate strategy¹¹;

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

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

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

⁶ As per the CBR, footnote 79, the terms "large" and "small" are used to denote projects with an investment cost of greater than, or less than EUR 25m respectively.

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

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

⁹ https://www.eib.org/attachments/publications/measuring_eib_group_impacts_en.pdf

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

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

energy lending policy¹²; adaptation plan¹³; credit risk guidelines¹⁴; other sectorial lending policies; guide to procurement¹⁵; guide to economic appraisal¹⁶; as well as strategy on gender equality¹⁷. The TLP applies to the EIB's operations both inside and outside the EU. It covers all lending operations in the transport sector. Although focussed on lending activities, it also refers to and benefits from the application of advisory and technical assistance activities in the transport sector. The TLP 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. It is therefore intended that this EIB TLP will be reviewed on a more regular and flexible basis than previously. This TLP is aimed at 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 the EU external action. This TLP could also be subject to an evaluation by the EIB Inspectorate General Evaluation Division at the end of its implementation period.

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

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

¹⁴ https://www.eib.org/en/about/governance-and-structure/control-evaluation/control_credit-risk.htm

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

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

¹⁷ <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 (TLP).

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, GHG 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 percent since 1990, those from transport have increased by as much as 30%¹⁸.

2.3 More than 70% of the GHG 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%¹⁹.

2.4 The European Union's (EU) ambition is to reach climate neutrality by 2050. To that end, the European Commission (EC) foresees the need to reduce transport emissions by 90 percent by 2050 (compared to 1990)²⁰ and the Commission has adopted the relevant legislation 'Fit for 55'²¹ to match the level of ambition and tighten the 2030 reduction targets. Although not the subject for 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 and therefore do not contribute to the decarbonisation of the sector. 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 rollout at

¹⁸ https://transport.ec.europa.eu/media-corner/publications/statistical-pocketbook-2020_en; (Section 3.2.3)

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

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

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

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 impacts 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 six-fold 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 obsolescent 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, disruption of such infrastructure will undoubtedly lead to disruption of the 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 EU will therefore play an important role in the activities of the new EIB development branch, EIB Global, also for the benefit of EU partner countries.

Resource efficiency and circular economy

- 2.12 Transport infrastructure and mobile assets presently represent an important 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. Whilst 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 in better longevity into new digital-electrical assets that will replace them.
- 2.14 In common with other sectors, the current take-make-use-dispose approach of the transport sector will have to change rapidly to a circular-economy-based approach aiming 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 a 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 claim 97 percent 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 UN 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 EC has mirrored this goal in the EU Road Safety Policy Framework 2021-2030 and Strategic Action Plan on Road Safety. The EC has also formulated a Zero Vision 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 throughout the project cycle on road projects.
- 2.17 Though governmental agencies have the primary responsibility to design and operate a safe road transport system, the role and influence of other actors are increasingly recognised as an important part of the Safe System approach. The private sector, civil society, academia, funders and other non-state actors can also contribute in important

ways. The collective, global power of public and private organizations adopting road safety practices as part of their contributions to the SDGs, together with their endorsement, leadership and purchasing power, is substantial.

- 2.18 Whilst 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, and the 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 particularly problem for women and girls, young men, LGBTIQ people, elderly and certain other groups depending on the context on public transport. 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 EU, 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 Networks for Transport (TEN-T) has been the infrastructure backbone of the Single Market, covering roads, railways, inland waterways, ports and airports. TEN-T also play an important role for the cohesion of the EU, aiming to provide efficient connections between central and peripheral regions of the EU, and therefore contributing to a balanced development across the Union. They also contribute to the EU Green Deal objectives and the climate targets by making incentives and requirements for the 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 upgrading of 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 logistic 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 have 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 more and 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 concerns also the integration of the EU 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 distance grows, and high value and time-critical freight still require efficient airborne links.
- 2.24 Whilst the problems of connectivity and market access still require significant investment in the EU, 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. A balanced and sustainable development of a country, and also of the EU, necessitates the promotion of equal access to mobility for all citizens, 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. Women's and single parents' high reliance on public and non-motorized transport, combined with their caring responsibilities, add to their relative transport poverty. The risks of gender based violence that in particular women and girls, young men and LGBTIQ people face on their way to and during their use of transport facilities also impact their mobility. Disabled access to transport services remains a persistent issue despite benefiting from a strong legislative support.
- 2.27 Women also remain largely underrepresented in the transport workforce, with only around 20 percent women in the EU's 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, programs 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 of car ownership and severe urban sprawl observed in many emerging economies, and of thereby reducing CO₂ 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 impacts 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, or in the same timescale, as is happening elsewhere. It is therefore important to take account of the local context, 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 equally concern freight transport and logistics as much as passenger transport.

- 2.35 Vehicles 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 of 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 infrastructures.
- 2.36 The latest developments in big data, robotics and artificial intelligence are bringing the next level of “autonomous driving” closer. 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. MaaS 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 socio-economic 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. Whilst the proximity of people, activities and resources bring societal benefits in terms of scale effects and efficiency of service provision, 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 which are not growing in population are also transforming and regenerating, resulting in evolving land use patterns bringing externalities which 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 impacts of transport from which cities can suffer. Density leads to a higher complexity of the 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 EU alone, the EC estimate that the EU's climate objectives translate into investment needs during 2021-2030 for vehicles and alternative fuel infrastructure that are up to EUR130 billion higher per year than in the preceding decade, and that additional investment needs in green transport infrastructure amount to some EUR100 billion a year.²² Resources are limited, so these investments must be prioritised to achieve maximum impact cost-effectively. When added to the significant under investment in maintaining the existing stock since the financial crisis that started in 2008-09 (some EUR50 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, the majority of the investment in transport infrastructure in more recent times has come from the public sector with users heavily subsidised by tax-payers. However, the sheer scale of investment needs in the sector, 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.

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

Other challenges

- 2.45 The transport sector impacts on almost every aspect of human activity, and the challenges it faces are often shared with 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 the challenges necessitates supportive public policies and rapid technological development, but it also requires the establishment and nourishment of new business models in the private sector.

DRAFT

3. EU mobility policy

- 3.1 The European Union (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 EU.
- 3.2 The EU aspires to achieve a climate-neutral Europe by 2050 – an economy with net-zero Greenhouse Gas (GHG) emissions – in line with the objectives of the Paris Agreement. The European Commission’s (EC) strategic long-term vision, “A Clean Planet for all”, was approved in late 2018. It foresees a radical transformation of the transport sector, alongside other sectors, so as 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 GHG emissions by 2030²³, followed by the Fit for 55 –package of legislative proposals²⁴. The EU’s policies and priorities for transport in the Multiannual Financial Framework 2021-2027 are articulated in a number of EU frameworks: the Global Gateway Strategy, Connecting Europe Facility (CEF), Cohesion Funds, Horizon Europe, InvestEU programme²⁵; as well as the EU Taxonomy for sustainable finance together with the recovery instrument NextGenerationEU.
- 3.3 The EC Sustainable and Smart Mobility Strategy²⁶ is the current EU roadmap for the sector. Influenced by the European Green Deal, the Paris Agreement on climate change, and building upon the previous White Paper for 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 the GHG emissions, and that it is the only sector for which these emissions have continued to grow. To achieve the EU’s climate neutrality 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 uptake of more sustainable transport modes both in urban and inter-urban 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, the Strategy identifies reinforcement of the single market, particularly through the TEN-T network, making mobility fair to all and stepping up transport safety and security across all modes.

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

²⁴ <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.>

²⁵ https://europa.eu/investeu/home_en

²⁶ https://transport.ec.europa.eu/transport-themes/mobility-strategy_en

- 3.5 In its long term scenarios, the EC foresees continued growth in transport demand through to 2050.²⁷ 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 EC, models of climate policies project an increase in the demand for passenger transport in the EU by 32-34 percent 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 percent.

²⁷ <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 mobility causes as its by-product.
 - 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 socio-biological 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 necessitate 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 societies' resources. In contrast, the 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 is fundamental in achieving many of the SDGs, so transforming transportation 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 course of the past few years the EIB has actively contributed to a growing consensus amongst transport policy stakeholders that a Sustainable Transport system must be at the same time 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 utilising technology to minimise the use of resources and to prevent congestion.

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

Safe and Secure Transport

- 4.6 Whilst safety and security are a primary concern in 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' (UN) Global Plan for the Decade of Action for Road Safety 2021-2030 along with the European Union's (EU) 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 multi-modal 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 socio-economic characteristics.
- 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 EU, where many rural areas and disadvantaged populations remain, 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 Networks for Transport (TEN-T) network to facilitate cross-border flows between member states and with the EU's 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 most important transformations the transport sector will face in the coming decades will be decarbonisation, and the scope and speed of decarbonisation 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 increasing frequency and severity of climate events. Safeguarding the climate resilience of transport assets will be an important 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 implies continuous promotion of, and investments in all low impact transport

modes, notably walking, cycling, and public and shared transport, green shipping, as well as in the electrification of transport fleets. Cleaner transport also implies resource efficiency, meaning not only economic use of resources during the manufacturing and operation of vehicles, trains, ships and airplanes 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 will be increasingly multimodal and international, the efficiency of door-to-door journeys of peoples and goods will be more and more 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 transformation towards 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 Transportation

- 4.20 A transport system that does not adequately address all of these four 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 in particular true for the 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 Transportation 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 imperative to move towards a more sustainable transport system, and the proposed EIB approach to Transforming Transportation provides the framework for EIB support. This chapter details the way in which EIB support to the transport sector will be prioritised over the period 2021-2027.

Requirements for all sectors

The priorities identified in the new Transport Lending Policy (TLP) will be subject to and consistent with the role of the EIB as the European Union's (EU) Climate Bank, together with other EIB policies, principles, standards and guidelines applicable. The Climate Bank Roadmap (CBR) 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 CBR and the EU policy and regulatory developments such as 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 CBR, 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 EU. However, the CBR also recognises that references to EU legislation, regulation and standards must be interpreted in local contexts outside the EU. The CBR refers to the principle of common but differentiated responsibilities and respective capacities in the light of different national circumstances. Moreover, the CBR highlights the relevance of the objectives of external mandates, and the impact of the Paris alignment on these mandates, for EIB activity outside the EU. Adopting the same approach below, some of the priorities inside the EU 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 EU coherent with EU procurement and trade policy and to proceed regularly to any relevant updates stemming from the evolution of EU procurement legislation as adjusted to the context of operations outside the EU. 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 the 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 (MDB). 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 alternatives solutions have been properly explored, the investment is proportional and economically justified, stakeholders have been meaningfully consulted and that 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 socio-economic 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 population world-wide 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 (GHG) emissions per transport unit. It is also one of the safest transport modes and it represents 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 lead to a 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 (EC) 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 CBR, 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 pre-requisite for the EIB's 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 EU. 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, metro and light rail systems, including 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 inside the EU. This may be very challenging to achieve outside the EU, 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. 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 (ITS) and digital solutions:** The EIB will prioritise investments in urban ITS and other digital solutions, in particular when they target the optimal and safer use of the existing infrastructure through support to for example: 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, providing 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 supporting for example, shared mobility services or city logistics operations. The deployment of E-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, combining IT and logistic 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 respect²⁸ and are therefore also considered a priority.

Extra-urban rail

- 5.20 As a collective transit mode, railways are the land transport mode consuming least energy and generating the least 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 EU is produced by electric trains. Both for passengers and freight, it offers the lowest marginal operating costs and GHG 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 transports is foreseen 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 EC priorities for rail include increasing rail passengers and freight by supporting further investments in the trackside infrastructure and on-board installations (such as European Rail Traffic Management System (ERTMS) equipment or automatic train couplings (DAC)), rolling stock, intermodal interfaces and digital tools supporting core planning, 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 and the deployment of relevant refuelling and renewable electricity generation infrastructure are necessary elements in the shift to zero-emission mobility in rail transport.
- 5.23 The EIB actively supports the rail market opening and implementation of the EU 4th 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, EIB is supporting investments into locomotives, coaches, freight, 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 EU's transport system into a network of rail, inland waterways, Short-Sea-Shipping routes and roads, which are linked to urban nodes. Multimodality is a prerequisite to modal shift and the

²⁸ https://www.eib.org/attachments/publications/eib_guide_to_finance_for_drone_projects_en.pdf

improvement of the sustainability of transport in all its dimensions. Investments in safe and green modes, like rail, need to be made in a multimodal context to harness their maximum potential, incorporating also last mile considerations into investment decisions concerning transport between hubs. Also, 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 into new and upgraded electrified rail infrastructure, particularly on the Trans-European Networks for Transport (TEN-T) 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 EU.
- 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, hydrogen powered 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 EU. Inside the EU, non-electric rolling stock will be a priority only as regards specialist track laying and maintenance vehicles. Rolling stock projects within the EU 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 with low-carbon hydrogen 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 improving the integration and connectivity between the different modes in the transport system.
- 5.30 In addition, the EIB will seek to develop innovative financing facilities enabling 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 by electric or hydrogen-powered propulsion, 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 an individual EIB involvement.

Extra-urban roads

- 5.31 Road infrastructure plays a key role in the efficient movement of goods of people due to the flexibility that road transport provides. Roads continue to be the dominant mode of transport carrying about 80 percent of passengers and 50% of freight in the EU. 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 EC policy priorities to enhance sustainability of road transport include the uptake of zero -emission vehicles, renewable and low-carbon fuels and deployment of related zero-emission infrastructure, enhancement of road safety, as well as smart and distance-based road charging.
- 5.33 EIB-supported projects in the EU are subject to road and tunnel safety and security, alternative fuels, ITS, road pricing and other requirements in line with relevant EU legislation and supplemented by EIB standards where applicable. Promoters shall demonstrate satisfactory management and financial arrangements to ensure adequate maintenance of the project.
- 5.34 Outside the EU, 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 cooperating with other international and multi-national development institutions.
- 5.35 As specified in the EIB Climate Bank Roadmap, large road capacity expansion projects with an investment cost of EUR25 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 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 EU 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 TEN-T 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 program or equivalent plans designed to ensure a balanced territorial development or to address issues of accessibility or transport poverty.

- 5.38 Support of strategic road projects outside the EU is considered a priority in line with provisions in the Bank's external mandates and subject to criteria in the CBR.
- 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, amongst 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's Global Plan and EU's 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 EU 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 the EU legislation²⁹. The EIB will continue the work 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 EU.
- 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:** 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

²⁹ Directives on Road Infrastructure Safety Management "RISM" (2008/96/EC, as amended by Directive (EU) 2019/1936).

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 prioritized.

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 the supply of important industrial centres and urban agglomerations, as well as for passenger transport. IWT infrastructure is particularly vulnerable to climate change effects, 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. IWT 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 IWT 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 the activity of IWT and Short-Sea-Shipping by 25% by 2030 and by 50% by 2050. This will require capacity extension of the waterways and the waterside infrastructure as well as trans-shipment facilities, as well as of the IWT fleet.
- 5.47 The EC policy priorities for waterborne transport also include the development of zero emission ports (electricity shore supply at berth) as well as the transition towards 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 plays a vital role.
- 5.48 In line with the CBR, 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 IWT infrastructure, including inland ports and their associated intermodal and/or logistic 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 EU, IWT projects must be consistent with the appropriate external mandate and will be a priority.
- 5.53 **Digitalisation:** Investments in support of the digitalisation of waterways and vessels, including the further deployment of River Information Systems technologies, automation, safety and security of the IWT sector will continue to be prioritised.
- 5.54 **Fleet Renewal:** Further investment is needed for the development of the environmental performance of the IWT fleet, many of which continue to use older marine gasoil engines. The EIB will prioritise the modernisation and technological development of inland navigation fleets, in particular with regards 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 both to facilitating international trade and to the transport of passengers and goods within the EU. More than 70% of the EU's external freight and one third of intra-EU exchanges in terms of ton-kilometres is seaborne. Maritime transport is crucial for ensuring 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 EU. 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, due to its scale and the distances covered, an important source of GHG and other emissions to the environment. 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 CBR, 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 conventional 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 EU and Neighbourhood, including their infrastructure, associated equipment, access enabling works and equipment, multimodal rail connections and other hinterland access infrastructure, related intermodal facilities and specialised vessels, such as tugs, ice breakers and pilot vessels, which are essential to achieve the operation of the TEN-T port network under conditions of adequate safety and security conditions. The EIB will require that port projects are economically sound, consistent with the development of the hinterland infrastructures, and framed within a

long-term transport and sustainable development strategy. A similar approach will be adopted to strategic ports outside the EU.

- 5.60 Support to other ports both inside and outside the EU will be considered a priority if the project is assessed to have a clear contribution to climate or environmental goals contributing to a more sustainable transport system, or where they make a significant contribution to alleviating transport poverty in less developed regions and partner countries outside the EU, 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:** EIB will prioritise the development and deployment of zero direct CO₂ 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 CBR.
- 5.64 Support to wholly conventionally-fuelled ships will be exceptional, and limited to lifeline and civil protection services such as medical, rescue, research or fire-fighting, and to ships essential for the operation of TEN-T ports under adequate safety conditions when 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, EIB will finance only ships operating under an EU flag to ensure compliance with European safety, operating and environmental norms. As a strict minimum, all shipping projects financed by the EIB will 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 shipbreaking of end-of-life assets, the EIB shall require that this is 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 circular economy.

Aviation

- 5.67 Aviation provides vital connectivity on a national, regional and international scale and is increasingly difficult to substitute as travel distance increases. 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 logistic

chains of high value added products. As a share of global shipments, aviation accounts for 1% in tonnage and by a third in value. Over the last twenty years, the EU's liberalisation of the internal market for air services and the substantial growth in demand within the EU and worldwide, have resulted in a 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 EC strategic long-term vision 'A Clean Planet for all' and the Sustainable and Smart Mobility Strategy – supported by the proposed Fit for 55 - identify a possible decarbonisation pathway for the sector based on the combined effect of an acknowledged basket of measures. The EC 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 the 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 CRB the EIB will refrain from supporting any increases in airport capacity. EIB support to conventionally-fuelled 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 EU, 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 multi-modality and increased use of public transport to access the terminals will also be supported as a priority.
- 5.75 **Aircraft:** The EIB will prioritise the development and deployment roll-out of zero direct CO₂ 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 CBR. In the meantime, support

to conventionally-fuelled 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 National Service Providers will also be prioritised.

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