



CER Economic Note

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Transport poverty and the Social Climate Fund

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1. Introduction

As part of the 2023 revision of the EU Emissions Trading System (ETS) Directive, a new and separate emissions trading system (ETS2) was established to address CO₂ emissions from sectors not covered under the existing ETS, such as combustion in buildings, road transport, and additional industries (European Commission). Similarly to existing ETS, ETS2 follows a “cap and trade” system and fully applies the polluter-pays principle by imposing the auctioning of all emission allowances. For this reason, ETS2 is expected to generate substantial revenues, ranging from €50 billion annually at a carbon price of €45 to €217 billion annually at a carbon price of €200 (Keliauskaitė, McWilliams, Sgaravatti, & Tagliapietra, 2024). At the same time, the inclusion of building and road transport emissions in the EU ETS will likely have significant social impacts. To mitigate these effects, the Social Climate Fund (European Commission) will receive a dedicated share of ETS2 revenues, representing the first EU fund explicitly designed to support a fair transition to climate neutrality.

This paper aims to investigate the role that railways could play in the context of the Social Climate Fund and in addressing transport poverty. Given that the set of recommendations (European Commission: Directorate-General for Climate Action, et al., 2024) and good practices (EGUM Subgroup, 2024) for the Social Climate Fund published by the European Commission places little focus on railways, this paper seeks to fill this gap. To do so, it examines Regulation 2023/955 (European Parliament and Council, 2023) on the creation of the Social Climate Fund (SCF Regulation), explores the concept of transport poverty, and investigates its dimensions, aiming to provide a clear definition. After discussing indicators of transport poverty and dealing with their associated limitations, this paper will discuss how railways could play a role in the Social Climate Fund, with some case studies complementing. Finally, the paper will conclude with key findings and insights.

2. The Social Climate Fund

According to Article 3(2) of SCF Regulation (European Parliament and Council, 2023), the Social Climate Fund is designed to support vulnerable households, vulnerable micro-enterprises, and vulnerable transport users. To achieve this, it can support national measures combining temporary direct income assistance with funding for investments that enhance buildings' energy efficiency and decarbonize heating and cooling systems (Article 4(3)). Of particular relevance to the transport sector is Article 4(4), which explicitly calls for national and, where relevant, local and regional measures and investments to promote sustainable mobility by increasing the adoption of zero- and low-emission mobility and transport solutions.

The Social Climate Fund allocates varying amount to each Member State, depending on an allocation methodology designed to support the most affected and impacted States. To make use of the resources made available by the Social Climate Fund, each Member State shall submit to the Commission a Social Climate Plan by 30 June 2025, outlining the set of national measures and investments they plan to implement to address the impact of carbon pricing policies on vulnerable households, micro-enterprises, and transport users (Article 4(1)). Additionally, according to Article 5(1), Member States shall submit a Plan only after conducting public consultations with local and regional authorities, representatives of economic and social partners, relevant city society organizations, youth organizations, and other stakeholders. Article 5(2) requires that the Social Plans include a summary of the consultations conducted, along with an explanation of how the inputs

provided by all relevant stakeholders reflect in the Plans. The Commission will then provide an assessment of each Climate Social Plan, based on its relevance, effectiveness, efficiency, and coherence (Article 16(3)). Besides that, the most relevant provisions of the SCF Regulation concern the eligibility of measures and investments and the requirement to pass-on benefits to vulnerable subjects.

Article 8 exhaustively lists all eligible measures and investments that Member States can include in their Social Climate Plans. To qualify for funding, projects shall meet at least one of the objectives outlined in Article 8(1), provided that they primarily target vulnerable households, micro-enterprises, and transport users. Notably, for the railway sector, subparagraph (g) is particularly relevant, as it aims to “incentivize the use of affordable and accessible public transport and support private and public entities, including cooperatives, in developing and providing sustainable mobility on demand, shared mobility services and active mobility options.”

While vulnerable households, micro-enterprises, and transport users are the primary and direct beneficiaries of the Social Climate Fund, Article 9(1) also allows other public or private entities to receive funding. However, this is only permitted if their measures and investments ultimately benefit such vulnerable targets. Under Article 9(2), Member States shall provide the necessary statutory and contractual safeguards to ensure benefits are passed on to vulnerable targets.

Finally, Article 10(1) makes available for the Social Climate Fund a maximum of €65 billion from 1 January 2026 to 31 December 2032. According to Article 15, Member States shall contribute to at least 25 % of the estimated total costs of their Plans.

2.1. Do no significant harm (DNSH) principle

According to Article 7(3) of the SCF Regulation, the Social Climate Fund may only finance measures and investments that adhere to the do no significant harm (DNSH) principle, as defined in Article 17 of Regulation (EU) 2020/852 (the Taxonomy Regulation). On 5 March 2025, the European Commission published a guidance (Commission, 2025) outlining the conditions under which measures and investments supporting activities and assets eligible under the SCF comply with the DNSH principle. Additionally, this communication included sector-specific annexes focused on eligible activities and assets that provide clearer guidance on its application.

For the purpose of this guidelines, activities and assets will be deemed compliant with the DNSH principle if they adhere to the following guiding principles:

1. Lyfe-cycle impacts: the environmental effects throughout the activity or asset's entire life cycle (from production to use and end-of-life) should be considered.
2. Direct and indirect impacts: activities and assets must avoid significant harm by considering both the direct (immediate project-level impacts) and indirect (future or external effects) impacts.
3. Prevention of lock-in effects: the activities should not result in long-term lock-in effects that are inconsistent with EU climate objectives. Such as carbon lock-ins due reliance on fossil fuels.
4. Best available levels of environmental and climate performance: for activities with feasible alternatives that have lower environmental or climate impact, compliance should be assessed by comparing the activity to the best available performance standards.

5. Consistency with overarching climate and environmental objectives in EU legislation: activities should align with the EU's broader climate goals, including climate-neutrality and climate adaptation, and be consistent with EU environmental legislation.

The annex to the Commission's guidelines outlines the activities and assets that fall within the scope of transport measures and investments. The following table summarizes the assessment for transport infrastructures, comparing road and railway. Per each DNSH criteria, evidence demonstrating compliance must be provided.

Activities and assets	DNSH criteria	
	For Road Public Transport	For Railway Public Transport
Individual infrastructure	· Compliance with applicable legislation is sufficient	· Compliance with applicable legislation is sufficient
Construction of linear infrastructure	<ul style="list-style-type: none"> · Climate Change Mitigation · Climate Change Adaptation · Protection and Restoration of Biodiversity and Ecosystem 	<ul style="list-style-type: none"> · Climate Change Adaptation · Protection and Restoration of Biodiversity and Ecosystem
Upgrade of linear infrastructure	-	· Climate Change Adaptation
Construction of non-linear infrastructure	<ul style="list-style-type: none"> · Climate Change Mitigation · Climate Change Adaptation · Transition to a Circular Economy · Protection and Restoration of Biodiversity and Ecosystem 	<ul style="list-style-type: none"> · Climate Change Adaptation · Transition to a Circular Economy · Protection and Restoration of Biodiversity and Ecosystem
Renovation or upgrade of non-linear infrastructure	<ul style="list-style-type: none"> · Climate Change Mitigation · Climate Change Adaptation · Transition to a Circular Economy 	<ul style="list-style-type: none"> · Climate Change Adaptation · Transition to a Circular Economy

For what concerns transport infrastructure measures and investments eligible under the SCF Regulation, railway is subject to fewer compliance criteria compared to road, which is associated to significantly higher greenhouse gas (GHG) emissions (climate change mitigation).

Finally, among the activities and assets listed in the annex, there are demand-driven measures such as monthly public transport tickets, shared mobility subscriptions, and on-demand transport services. For these measures, compliance with applicable legislation is sufficient. While, from the Commission's perspective, they seem to primarily target road transport services, they could potentially apply to railway as well.

3. Understanding transport poverty

The concept of transport poverty is relatively recent and, as a result, lacks a clear and universal definition in academic and policy literature. Before providing different available definitions, we will try to understand the concept of transport poverty by framing it within the recent and increasingly growing debate and investigating commonly associated dimensions.

The notion of transport poverty has gained prominence alongside the recent discussion surrounding the implementation of ETS2, which addresses emissions from fuel combustion in buildings, road transport, and other sectors. In contrast, the notion of “fuel poverty” is widely known and addressed by the literature, especially in the UK. As a matter of fact, the first definition of fuel poverty was provided in 1991 in the UK, as related to the inability “to obtain an adequate level of energy services, particularly warmth, for percent of household income” (Boardman, 1991).

In November 2024, the European Commission’s Directorate-General for Employment, Social Affairs, and Inclusion (DG EMP) published a comprehensive report on transport poverty, investigating its concept, definitions, indicators, determinants, and mitigation strategies (European Commission, 2024). According to the report, transport poverty is associated with three core dimensions: availability, accessibility, and affordability.

Availability is related to the presence of transport options. Households or individuals face availability issues when neither public nor private transport is available due to limited or non-existent transport options. Accessibility is linked to access to essential goods and services beyond transport itself. This issue arises when available transport options do not enable households or individuals to reach essential activities, services, or goods. It can result from the impossibility or extreme difficulty of reaching essential destinations or excessively long travel times. Finally, affordability concerns the ability to cover transportation costs in proportion to income. Households or individuals may struggle to afford the cost of transportation if it represents a high expenditure relative to their income or if they face budget trade-offs and associated debts.

Moreover, the Commission’s report highlights an additional cross-cutting dimension: adequacy. This refers to the usability of the transport system, which can be hampered by barriers to transport options, poor or insufficient safety and security, and a lack of information on travel possibilities.

Finally, the report considers availability, accessibility, and affordability as horizontal dimensions and they can be accordingly analysed across the entire population. However, it is also possible to examine each dimension vertically, considering how different sub-population groups are affected. Socio-economic and spatial characteristics play a crucial role in this respect, making them additional dimensions we can not disregard when discussing transport poverty.

4. Defining transport poverty

After investigating the concept of transport poverty throughout existing literature and discussing the different dimensions to which it is related, we will try to collect and evaluate the different definitions of transport poverty that have been adopted and proposed over time.

Article 2(2) of the SCF Regulation provides a broad and general definition of transport poverty. It describes it as the “inability or difficulty of individuals and households to meet the costs of private or public transport, or their lack of or limited access to transport needed for their access to essential socio-economic services and activities, taking into account the national and spatial context”. Additionally, the SCF Regulation also defines vulnerable transport users as “individuals and households in transport poverty, but also individuals and households, including low income and lower middle-income ones, that are significantly affected by the price impacts of the inclusion of greenhouse gas emissions from road transport within the scope of the ETS Directive and lack the means to purchase zero- and low-emission vehicles or to switch to alternative sustainable modes of transport, including public transport”.

Building from the definition of transport poverty provided by the SCF Regulation, the Polish Ministry of Transport adopts a supply-and-demand approach to the accessibility problem driven by transport poverty. When individuals and households face difficulties or are unable to meet the cost of private or public transportation, preventing them from fully accessing essential socio-economic services and activities, this constitutes the demand side of the phenomenon. On the other hand, when the lack of access or limited access to transport services prevents households or individuals from accessing essential services and activities, this represents the supply side of the phenomenon.

Another slightly different definition of transport poverty has been provided by the recent European Commission report on transport poverty, according to which “an individual or household is in transport poverty when they do not have (suitable) public or private transport (options) available to them and/or when the transport system limits access to (other) essential goods and services and/or when they have difficulty or are unable to meet the costs of transport”.

Finally, a broader and working definition of transport poverty, encompassing the many dimensions of the latter, has been proposed by Lucas et al. (2016) (Lucas, Mattioli, Verlinghieri, & Guzman, 2016). According to these authors, an individual is transport poor if, to satisfy their daily basic activity needs, at least one of the following conditions apply: i) he/she lacks transport options suitable for his/her physical condition and capabilities, ii) the existing transport options do not provide access to essential daily activities needed for a reasonable quality of life, iii) his/her residual income after subtracting transport expenses is below the official poverty line, iv) the traveling time is excessive, leading to time poverty or social isolation, v) travel conditions are dangerous, unsafe, or unhealthy for the individual.

5. Measuring transport poverty

5.1. Availability

The report published by the European Commission presents four potential indicators for measuring transport availability (European Commission, 2024).

Building on Mattioli (2017) (Mattioli, 2017) and the concept of “forced car ownership”, the report targets materially and socially deprived (MSD) individuals who own a car to track low-income people compelled to have a car because of a lack of alternatives. However, a simple limitation of this indicator is that car ownership can stem from different motivations,

the most significant being that cars are aspirational goods. As a result, not all MSD households that own a car are forced to have it.

A second potential indicator proposed by the European Commission report looks at the share of people that do not use public transport because the nearest stop is too far away. Similarly, one could analyse the share of the population reporting very difficult access to public transport, especially among individuals with reduced mobility. The main limitation concerning these indicators is the scarce availability of the necessary data for their construction.

5.2. Accessibility

When measuring the accessibility dimension of transport poverty, few indicators are available. One common approach is to look at travel duration. The European Commission's report proposes to analyse the time individuals spend commuting to work while calling for more extensive assessments that also take into account other essential needs, like education, health care, and shopping.

As with many availability indicators, issues might arise due to the lack of data availability or consistency over time and space, making it difficult to ensure reliability and replicability.

5.3. Affordability

The most common and straightforward metrics for measuring affordability assess transport expenditure as a share of income.

In the UK, the RAC Foundation adopted the 10% rule, which considers a household transport vulnerable if it spends more than 10% of its total expenditure on mobility needs, whether through private transport or short- to medium-distance public transport services. The European Commission's report adopts the same indicator but applies a lower threshold of 6%.

The Twice the National Median (2M) ((RAC Foundation, 2012), (European Commission, 2024)) rule defines a household as transport-vulnerable if its total transport expenditure, including all relevant goods and services, exceeds twice the national median, which is determined only from households that incur transport costs. This indicator identifies households that spend disproportionately to maintain necessary mobility due to their socio-economic situation.

The Low Income High Cost (LIHC) metric classifies a household as experiencing transport poverty if its disposable income, that is, after subtracting housing and transport costs, falls below the poverty threshold and if its transport expenditure exceeds the median (Alonso-Elpelde, García-Muros, & González-Eguino, 2023).

Moreover, the European Commission's report suggests analysing the share of individuals who consider public transport too expensive, provided relevant survey data are available. Additionally, it proposes using the share of individuals who can not afford a car as an affordability indicator. This measure heavily relies on available questionnaires collecting this information and, besides suffering from the usual limitations related to data availability and consistency over time and space, assumes that individuals who can not afford a car would like or need one.

5.4. Cross-cutting mobility dimensions

Finally, another common approach is to exploit mobility measures that allow for stratification across different social groups. The following variables may serve this purpose: the number of trips per person or household during a period, the trip duration, and the trip distance, which is also appropriate as an implicit measure of accessibility.

5.5. Proposal for a common index

As anticipated in the previous section, many indexes attempt to measure transport poverty but face significant issues and limitations related to data availability. As a matter of fact, most indicators rely on specific questionnaires and national statistics, which may not be consistent over time or across different geographical areas, thus hampering replicability and reliability. Alonso-Epelde et al. (2023) (Alonso-Epelde, García-Muros, & González-Eguino, 2023) propose a new measure that addresses both affordability and accessibility dimensions of transport poverty while being easily replicable across time and different geographical areas. This is possible because it relies on the Household Budget Survey (HBS), which provides information on households spending on goods and services, as well as on demographic and socio-economic characteristics. The advantage of using the HBS is that it is commonly carried out and standardized at the European level, ensuring a replicable and comparable methodology. Additionally, HBSs are frequently conducted outside Europe, making the approach applicable worldwide.

According to this indicator, defined as Vulnerable Transport User (VTU), a household is in transport poverty if it meets all the following criteria: i) its expenditure on transport is more than double the national median; ii) its income is below the median for all households; iii) its expenditure on public transport services is less than the national median, which is determined only by households that incur transport costs.

6. Railways' role in the Social Climate Fund

6.1. Maximum financial allocation for each Member State

Article 10 of the SCF Regulation establishes that the maximum amount made available by the Fund is €65 billion for the period 2026–2032. This will be financed through the auctioning of 50 million allowances under ETS1 and at least 150 million allowances under ETS2. On top of this, Member States are required to contribute by at least 25%, bringing the disposable amount to a minimum of €81.25 billion. Since the 25% contribution requirement for Member States represents only a lower bound, it is widely estimated that the disposable amount, with higher contributions from Member States, could increase to €86.7 billion.

Annex I of the SCF Regulation presents the methodology for the calculation of the maximum financial allocation for each Member State under the Fund. The formula for the maximum funding allocation for Member State i is:

$$MFA_i = \alpha_i \times MA$$

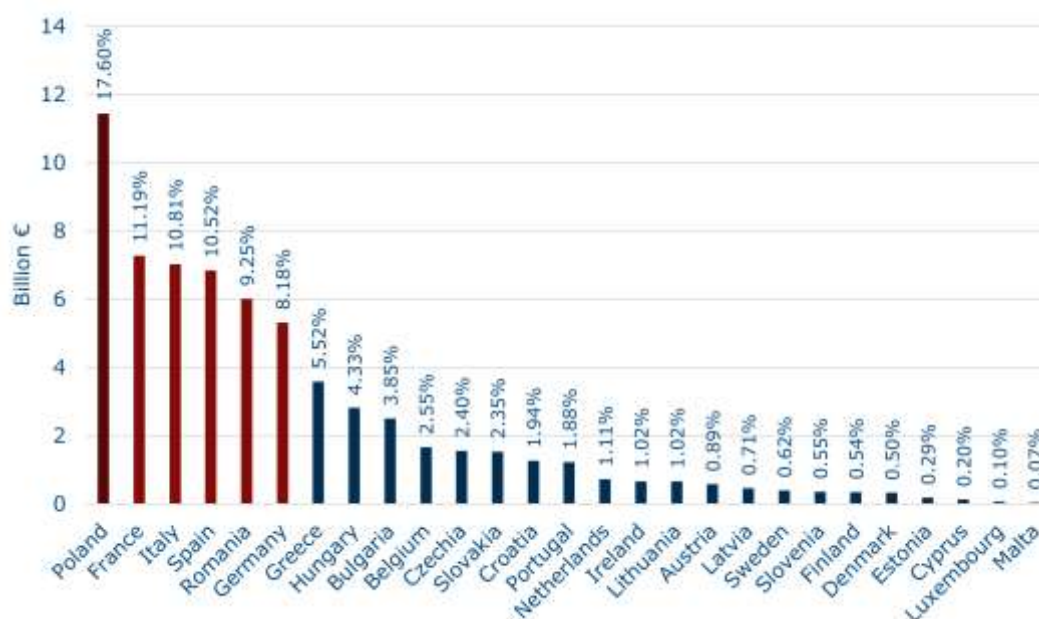
where MA is the maximum amount implemented by the Fund and α_i is the share of Member State i in the maximum amount, determined in the following way:

$$\alpha_i = (0.5 \times \beta_i + 0.5 \times \lambda_i) \times \frac{GNI_{PC_{EU}}}{GNI_{PC_i}}$$

In this way, the share of Member State is the weighted sum of two factors, β_i and λ_i , scaled by a final factor that adjusts the allocation based on per capita income, ensuring poorer Member States receive a larger share. β is calculated based on the share of a Member State's rural poor and total population compared to the EU total, while also adjusting for economic disparities. λ is derived from measures of carbon dioxide emissions from households fuel combustion and the Member State's share of energy payment arrears, similarly adjusting for economic disparities. Since β captures rural poverty, which is correlated with transport poverty, it serves a noisy proxy for transport poverty. On the other hand, λ is a more precise proxy for heating poverty, as it incorporates both households emissions from fuel consumption and energy arrears.

According to the calculations, as shown in Figure 1, the largest beneficiaries would be Poland (17.6% of total SCF funding), France (11.2%), Italy (10.8%), Spain (10.5%), Romania (9.3%), and Germany (8.2%).

Figure 1: Maximum financial allocation and relative share for each Member State under the Fund for 2026-2032



Note: Data presented in Annex II of the SCF Regulation. The allocation is pursuant to Article 10(1), first and second subparagraphs. EU27 total amount for 2026-2032 is €65 billion. Labels display the shares as % of this total for each Member State.

6.2. Railways' role, investments, and indicators

According to the methodology used to determine each Member State's share of financial allocations from the Fund, transport and heating poverty are given equal weight. For this reason, CER advocates for allocating funds in the same proportion to address both issues, ensuring that Member States dedicate 50% of their SCF allocation to investments and measures targeting transport poverty.

Article 24 of the Social Climate Fund Regulation requires Member States to report to the Commission on the implementation of their Plans together with their integrated national energy and climate progress reports by including indicators set out in Annex IV of the Regulation. Such indicators fall into three categories: context, output, and result. On the one hand, regarding what is relevant to our purpose, context indicators relate to the number of vulnerable transport users and households in transport poverty. In contrast, result indicators concern the reduction in those numbers attributable to the activities and assets financed through the Fund. On the other hand, output indicators specifically address the investments and projects implemented and aim to capture their direct effects, such as the number of people reached or the assets purchased.

Firstly, this paper argues that accurately assessing the impact of projects and investments requires consistency in context and result indicators, ensuring they rely on the same computation methodology. Secondly, given the various ways to measure the number of vulnerable transport users and households in transport poverty, as extensively discussed in Section 5, this paper recommends first identifying the dimensions most affected by each project. The focus should then be on selecting indicators that track vulnerable transport users and households in transport poverty according to those dimensions, ensuring a consistent use in computing context and result indicators.

Therefore, the following table provides a guiding framework for conducting the exercise required under Article 24. It groups activities and assets that the SCF could finance into broad conceptual categories and identifies the most impacted dimensions of transport poverty for each. Based on these dimensions, we propose relevant context and result indicators. At the same time, we incorporate output indicators from those suggested in Annex IV of the SCF regulation where available and propose new indicators otherwise.

Scope of activities and projects	Dimension impacted	Context and result indicators based on the impacted dimensions	Output indicators
Informing, educating, raising awareness, and advising on cost-effective measures, investments, and support for sustainable and affordable mobility and transport alternatives.	Accessibility Adequacy	Average time of travel duration. Average time spent commuting to work. Number of trips per person or households.	Number of users reached through the awareness and advising campaigns (<i>Proposal</i>).
Rail transport vouchers, reduced fares and tickets promoting the use of trains, rail-integrated on-demand services, and rail-based mobility-as-a-service platforms.	Affordability Adequacy	Number of households spending more than 10% of their total expenditure on mobility needs (10% rule). Number of households whose total transport expenditure exceeds twice the national mean (2M). Number of households whose disposable income (after subtracting housing and transport costs) falls below the poverty threshold and whose transport expenditure exceeds the median (low income high cost).	Number of users of public transport supported by measures and investments financed under the Fund, distinguishing between reduced and free tickets (<i>Common indicator from Annex IV of SCF Regulation</i>).
Intelligent transport systems integrating information and communication technologies among different transport modes to enhance user information, safety, coordination, and efficiency, reducing congestion, energy consumption, and emissions.	Accessibility Adequacy	Average time of travel duration. Average time spent commuting to work. Number of trips per person or households.	Number of users (e.g. number of downloads, website traffic, etc.) of the intelligent transport tools (<i>Proposal</i>).
Purchase, rental, leasing, upgrade or renewal of railways mobile assets (e.g. zero-emission railway, metro or tramway rolling stock, including its components, bimodal rolling stock).	Availability Adequacy	Share of individuals not using public transport because the nearest stop is too far away. Number of materially and socially deprived individuals (MSD) who own a car. Share of population reporting difficult access to public transport, especially among individuals with reduced mobility.	Number of zero-emissions or low-emissions vehicles purchased, rented, leased or upgraded (<i>Common indicator from Annex IV of SCF Regulation</i>). Number of users (or additional users in case of renovations) per asset. (<i>Proposal</i>).

Scope of activities and projects	Dimension impacted	Context and result indicators based on the impacted dimensions	Output indicators
Construction and upgrade of linear infrastructure for rail public transport, with a specific focus on rural areas.	Availability Accessibility	Share of individuals not using public transport because the nearest stop is too far away. Number of materially and socially deprived individuals (MSD) who own a car. Share of population reporting difficult access to public transport, especially among individuals with reduced mobility. Average time of travel duration. Average time spent commuting to work. Number of trips per person or households.	Number of new (or additional in case of upgrading) users of the route (<i>Proposal</i>).
Construction and renovation of non-linear infrastructure for rail public transport and integration with additional shared mobility and mobility on demand solution for provision of first- and last- mile solutions (e.g. development of hubs, nodes)	Availability Accessibility Affordability	Share of individuals not using public transport because the nearest stop is too far away. Number of materially and socially deprived individuals (MSD) who own a car. Share of population reporting difficult access to public transport, especially among individuals with reduced mobility. Average time of travel duration. Average time spent commuting to work. Number of trips per person or households. Number of households spending more than 10% of their total expenditure on mobility needs (10% rule). Number of households whose total transport expenditure exceeds twice the national mean (2M). Number of households whose disposable income (after subtracting housing and transport costs) falls below the poverty threshold and whose transport expenditure exceeds the median (low income high cost).	Number of users of shared mobility and mobility on demand solutions supported by measures and investments financed under the Fund (<i>Common indicator from Annex IV of SCF Regulation</i>). Number of users transiting the node or hub per day (<i>Proposal</i>).

7. Case studies

According to the UITP policy position paper on the Social Climate Fund, published in May 2024 (UITP, 2024), many European cities have already taken steps to address and combat transport poverty. The paper presents several case studies showcasing different measures. We will highlight the most relevant ones for the railway sector, as they could serve as good examples and inspiration for how Social Climate Fund funding could be leveraged by rails.

7.1. Barcelona

Barcelona has enhanced public transport accessibility and affordability in order to ensure that all residents, especially those with lower income, have access to essential services and job opportunities. This includes expanding the metro and the bus networks, offering subsidized fares for low-income residents, and introducing free travel cards for children under 16.

Moreover, across Spain, government measures adopted in 2022 in response to the crisis caused by the war in Ukraine have been extended until June 2025. These include subsidies for urban transport and free commuter and medium-distance train travel for all residents, regardless of age, income, or employment status.

7.2. Drenthe-Groningen

In the last decade, the Dutch provinces of Groningen and Drenthe, home to 1 million inhabitants, have redesigned their network with mobility hubs. Transport is organized into different layers, including high-quality frequent trains and buses, regional buses, and on-demand transport such as shared taxis and voluntary buses. These hubs serve as centers of social life, offering essential and recreational services while bringing together all layers of the transport system. In this way, transferring from one mode to another is easier, safer, and more efficient. The case is very relevant for addressing availability and affordability dimensions.

7.3. Hannover

In order to improve connectivity across municipalities in the Hannover region, the “Sprinti” service was developed. Accessible via a smartphone app, it integrates on-demand mobility solutions with frequently operating bus and train services, offering a well-integrated and efficient last- and first-mile mobility solution for the Region. The project demonstrates improved public transport accessibility and convenience.

8. Conclusions

The introduction of ETS2 and its coverage of CO2 emissions from combustion in buildings, road transport, and additional industries will have a significant societal impact. Transport poverty is already a pressing and concrete issue. However, due to the absence of a clear and universal definition, as well as widely accepted measures, it is not consistently or systematically addressed and tracked, leaving it partly overlooked. Since introducing carbon pricing policies for greenhouse gas emissions from combustion in buildings and

road transport will exacerbate this situation, the newly created Social Climate Fund will be a relevant tool to address it.

Moreover, since the methodology for calculating each Member State's share of the Fund gives equal weight to transport and heating poverty, CER advocates that Member States allocate their financial resources accordingly. Specifically, 50% of the SCF should be used to tackle transport poverty.

Railway transport has a huge potential to support a sustainable and just fair mobility system for the future by addressing both social and environmental challenges. A well-developed and connected railway network ensures access to essential services, job opportunities, education, and healthcare, especially for rural communities and lower-income individuals. At the same time, railways are one of the most energy-efficient modes of transport, playing a leading role in decarbonizing the transport sector. For this reason, CER strongly believes that railways could and should play a role in addressing transport poverty through the Social Climate Fund.

As discussed in the first section of this paper, the Social Climate Fund directly targets vulnerable households, vulnerable micro-enterprises, and vulnerable transport users. However, Article 9 of the SCF Regulation also allows other public or private entities to receive funding, given that the measures and investments they implement are ultimately proven to benefit such vulnerable targets. This would then provide room for railways to contribute to addressing transport poverty.

From this perspective, it is important to keep the following in mind. For the railway sector to receive a share of Member States' Social Climate Fund, it must be able to demonstrate how its investments and measures address transport poverty and ultimately benefit vulnerable transport users. For this purpose, the first essential step is to agree on key indicators for measuring transport poverty. Establishing these indicators is crucial for assessing the impact of projects and estimating their effects on vulnerable groups.

This paper provides a proposal to address eligible railways' projects under the SCF. In light of Article 24 of the SCF Regulation, which requires Member States to provide, parallel to their Social Climate Plans, relative indicators of projects' impact, CER proposes a guiding framework. To this end, this paper groups eligible activities and assets into broader conceptual categories and identifies the relatively most affected dimensions of transport poverty. Additionally, for each category, this paper proposes similar indicators for assessing the context and result scopes as suggested by Annex IV of the SCF Regulation while combining common indicators under the latter with a new proposal for indicators evaluating the output of the SCF activities and assets.

Finally, given the relevance attributed to consultations that Member States should carry out before submitting their Social Climate Plans to the Commission, good communication and debate should be started and built with governments and institutions.

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